From Farm to Firm: Canadian Tobacco c. 1860-1950

by

Jonathan Robert McQuarrie

A Thesis submitted in conformity with the requirements for the Degree
of Doctor of Philosophy
Department of History
University of Toronto

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2016

Abstract

This dissertation examines the transformation of Canadian tobacco cultivation from its roots in local markets and personal consumption to a multi-million dollar concern featuring corporate plantations and multi-acre tobacco farms. It focuses on how tools of agricultural modernization— abstraction, expertise, experimentation, fertilization, government policy, land ownership, and marketing associations—produced unanticipated challenges that complicated any linear development of tobacco cultivation. The dissertation places everyday experiences of tobacco cultivation alongside the broader sweep of agricultural modernization to argue that the deployment of the tools of modernization produced new limitations over expert control of the environment and markets.

The dissertation considers cultivation in Ontario, Quebec, and British Columbia, and includes moments of rapid expansion, such as the rise of the flue-cured tobacco "New Belt" in Norfolk and Elgin counties during the late 1920s, and instances of gradual failure, like efforts to encourage commercial tobacco in the Okanagan and Sumas Valley regions of B.C. Various farmer organizations and cooperatives feature in the exploration of the responses and initiative of farmers to the evolving requirements of tobacco companies for their raw material.

The role of both federal and provincial government officials also receives considerable attention, as they promoted modern, commercial-orientated tobacco cultivation while attempting to remain an intermediary force between farmers and corporations. The records of the federal Tobacco Division and various government investigations collectively demonstrate that this position was not always tenable, as the government would find itself drawn into fierce disputes over farm prices and the monopolistic character of Imperial Tobacco. These disputes illustrate how modernization produced instabilities even as it improved farm revenues.

Collectively, this dissertation's consideration of farm work, environmental change, and markets demonstrate how the possibilities of agricultural innovation produced their own tensions and limitations that are fundamental to understanding the lived experience of capitalism and modernization in rural Canada.

Acknowledgements

Firstly, thanks to anyone who kept listening to me talk about my project after discovering I don't smoke. The descriptions of the tobacco flavours I encountered during my research occasionally tempted me, but fortunately, whiskey proved a suitable replacement.

A number of institutions made this dissertation possible. Thanks must go to the estate of Jeanne Armour and to the Rotenburg fund, which provided money for a research expedition to Britain. I am also grateful for support from two Ontario Graduate Scholarships and the University of Toronto graduate fellowship. While conducting research, I benefited from the work of librarians and archivists at Archives Ontario, the Bibliothèque et Archives Nationale in Montreal, Libraries and Archives Canada, the Canadian Agriculture Library in Ottawa, the Kelowna Museum Public Archives, and the Elgin County Archive. Judy Livingston provided me with some very useful information at the Delhi Tobacco Museum and Heritage Centre. I also gratefully acknowledge the work of BANQ, the Multicultural History Society of Ontario and Our Digital World (previously Our Ontario) for digitizing and making a wide array of newspapers and interviews freely accessible to researchers. Their work made combing through newspapers easier and a lot more comfortable.

Institutional support is necessary, but it provides just the bare skeleton. Without professional and personal support from scholars, friends, and families, dissertations do not happen. My initial interest in graduate studies was sparked by a wonderful collection of history, philosophy, and political science professors at Thompson Rivers University in Kamloops, who provided an excellent learning environment and who have made me a life-long advocate of the importance of smaller universities. I benefited tremendously from the support of a large number of professors at the University of Toronto, where I did my MA and PhD. My master's supervisor, Lori Loeb, provided a perfect mixture of support and critique to make acquiring master degree a remarkably amendable experience for someone who had moved across the country. Courses with Ritu Birla, Dan Bender, Paul Cohen, Russ Kazal, Jennifer Mori, and Paul Rutherford all influenced my understanding of the craft and uses of history in different ways. I also thank Brian Gettler and Paula Hastings for agreeing to be reviewers—I particularly thank Paula for a couple years of being a great professor and person to work with as a teaching assistant.

Many scholars beyond the University of Toronto have also been of great help. Jarrett Rudy's work on tobacco consumption sparked some early ideas; his participation as an external reviewer is most fitting and appreciated. The Toronto Network of Environmental Historians provided a relaxed and insightful forum to workshop papers—I particularly thank Ben Bradley, Jim Clifford, Colin Coates, Jessica van Horssen, Sean Kheraj, Andrew Watson, Jay Young, and David Zylberberg for their comments on a couple chapters. I also thank Craig Heron for facilitating participation in the Toronto-based Labour History group, and to John Van West for the newspapers. Thanks also go to Jodey Nurse and Catharine Wilson at the Rural History Roundtable based in the University of Guelph.

I have benefited from taking a course, a comprehensive field, and being a teaching assistant for Ian Radforth, who has taught me a great deal about immigration, labour, and about how to navigate a balance between criticism and constructiveness, all while being a generous committee member with time (and several post workshop beers). Ruth Sandwell has provided me with insights from her exceptional knowledge of rural Canada, and pushed me to think more deeply about what tobacco means in the larger narrative of Canadian rural life and the limitations of the human capacity to manage the land, particularly within a capitalist context. I knew I wanted to work with my supervisor, Steve Penfold, only a couple classes into a graduate seminar I took with him during my MA. I'm not sure he would admit to it, but he has a great knack for delivering feedback and ideas that, while forcing a considerable amount of rethinking and rewriting, are always valuable. Of course, I didn't have to listen to him. I was often given that option. However, the final product would have been incalculably weaker. I can't imagine finishing the dissertation without the many candid and thoughtful conversations we had.

I am lucky enough to have made an extraordinary group of friends during my time in Toronto and at the University of Toronto. We chatted, drank, danced, debated, laughed, fretted, and just generally made living in Toronto awesome. As often as not, we would talk about anything *but* history, which is frankly just as important when getting through the program. To Daniel Bay, Kelly Butler, Stephanie Cavanaugh, Stephanie Corazza, Véronique Church-Duplessis, Bret Edwards, Dustin Harris, Stacy Hushion, Beth Jewett, Brett Lintott, Victoria Loucks, Gabrielle Major, Brad Mallett, Peter Mersereau, Dan Rosenthal, Andrew Robinson, Michael Savage, Elizabeth Shaw, Lindsay Sidders, Mathieu Vallieres, Alexandra Wieland, Caleb Wellum, and

Mike Wilcox—thanks for being such smart, awesome people, and for sharing ups and downs. To my lifelong friends Amanda Olson and James Stevenson—thanks for making the rejuvenating trips back home to B.C. something I treasure.

Finally, to my family in Alberta and B.C.—I don't see you as much as I like, but you have all sustained me during the last few years. Thanks to my brother William (Adam), and to Karen, Kyle, Zack, Cameron, and Lauren; hope to make it to Minburn soon. To my parents, Bill and Angela, thanks for being loving and supporting, and for giving me a place to go to recharge. And to Amanda Brooks, who has been my partner during the entire thing, I dedicate this dissertation. It's not a great gift, but it's the least I can do after so many years of conversations, companionship, and love.

Table of Contents

List of Tables

List of Figures

Introduction

Between the 1860s and the 1950s, Canadian tobacco cultivation transformed from a garden-grown crop to a specialization covering thousands of acres in Ontario and Quebec. During the 19th century, manufacturers used Canadian grown leaf only sparingly, and much of it circulated in informal markets. The head of the largest tobacco concern in 19th century Canada, William C. Macdonald, openly disparaged the commercial possibilities for the crop, importing leaves from the United States to produce his wares. By 1949, Canadian tobacco manufacturers imported less than one percent of their raw leaf tobacco; over ninety-nine percent of it came from Canadian farms, reaching a farm value of just over fifty-five million dollars.[1] The rise of a lucrative agricultural sector, defying predictions about the impossibility of raising good commercial tobacco in a cold country, seemed to vindicate the modernizing efforts of farmers, government, and corporations. It is these efforts, which reshaped work, farms, environment, and markets alike that this dissertation explores. At the heart of this exploration is consideration of the various tools of agricultural modernization, including abstraction, expertise, experimentation, fertilization, government policy, land ownership, and marketing associations. Studying these various tools reveals that the linear narrative of the rise of a lucrative agricultural sector is bound to a dialectical relationship between the possibilities and limitations that these different tools produced. This study insists that the tools disrupted as they created their own narratives of progress that confined some understandings of tobacco and its growth to the past. Farmers, government officials, and corporations all brought their own assumptions and interests to bear when drawing on these tools; these interests converged and diverged as the tobacco sector grew, both between and within groups.

For much of the period, the queue remained a key part of this market development. Many factors often hinged on a single moment—the industry buyer at the barn of the farmer, grading and negotiating. The arrangement to purchase tobacco led to farmers agreeing to deliver their crop to a buyer, usually sometime in the winter. Farmers had to queue to complete their delivery, which indicated the end to their role in the creation of a tobacco production. Buyers, who held much of the power on tobacco delivery days—controlling the location and pace of the sale, and rejecting

[1] N.A. MacRae, "Progress Report 1949-1953," Central Experimental Farm, Tobacco Division, (Ottawa, 1954), 9.

improperly tied or graded leaf—took the leaf to manufacturers in Montreal, Toronto, Hamilton, or Britain, where it might be made into tobacco for pipes, plug, cigar, or cigarettes. The line functioned as a manifestation of a link in a commodity chain, a place where the dull experience of waiting in a slow moving line coincided with a global industry that had a powerful role in transforming consumer society. The tobacco sold could help generate a bit of extra revenue to support the next generation of farmers, even as it did considerable damage to societal health. The possibilities for Canadian tobacco expanded considerably over the latter part of the 19th century and into the 20th, but the anxiety of the buyer visiting the farm and the tedium of waiting in line remained equally salient parts of the development of Canadian tobacco. When examining work, environment, and markets, this dissertation seeks to put the broad sweep of things like global commodity chains and modernization alongside prosaic moments like line-ups whenever possible.

Figure 1: "Tobacco Shipping Day at Essex, 1914." Annual Report, November 1st, 1913 to November 1st, 1914, Essex Agricultural Representative Reports, RG16-66, B266720, Archives Ontario.

The narrative has three major locations: the cultivation of pipe and cigar tobaccos in Quebec, particularly in Lanaudière and Montérégie regions, the cultivation of Burley and flue-cured tobacco in Ontario's 'Old Belt' (Essex and Kent Counties), and the rise of the flue-cured 'New Belt' predominately in Norfolk County and stretching into Elgin, Middlesex, and Oxford Counties.[2] Efforts to raise commercial tobaccos of all varieties in British Columbia, particularly in the Okanagan and Sumas valleys, receive brief attention. Temporally, the discussion considers the rise and stabilization of commercial tobacco cultivation in Quebec between the 1860s and 1920s, with brief notes on the emergence of flue-cured production there during the late 1930s, the rise and fall of Old Belt cultivation between 1897 and 1930, and the emergence of the New Belt from the mid-1920s into the 1950s. These transitions broadly coincide with the rise of increasingly tobacco-specialized farms, though multi-acre farms devoted to tobacco cultivation emerged as early as 1880. The role of flue-cured tobacco, the light tasting, kiln-cured, tobacco destined for cigarettes, features prominently in all of the chapters, though considerable space is given to the cultivation of the different varieties of pipe and cigar tobaccos, as well as Burley, an air-cured variety that could be used for pipe or cigarette tobacco.[3]

[2] I use the modern administrative regions of Quebec here for shorthand; specific counties are considered later in the text.

[3] The term 'flue-cured tobacco' is used as a convenient shorthand to encompass a wide range of tobacco varieties that were flue cured, including Warne, Virginia Bright, Bonanza, and Yellow Mammoth.

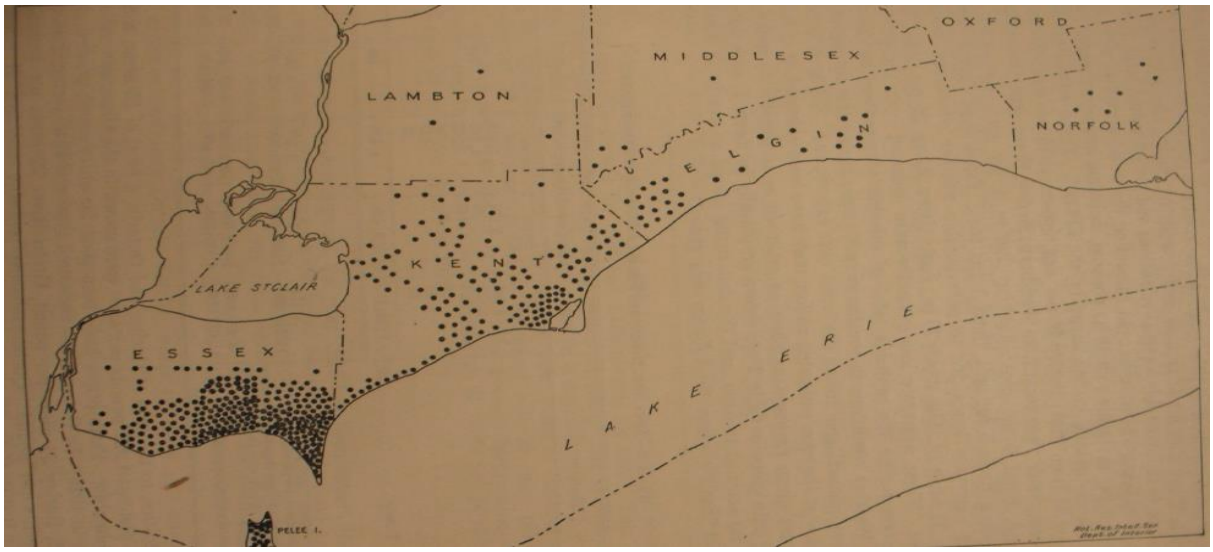

Figure 2: Tobacco farming in Ontario, c. 1926. Each dot roughly represents 50 acres of tobacco cultivation. This map captures the very early stages of the transition from the Old Belt of Essex and Kent to the New Belt centred around Elgin and Norfolk. Source: Tobacco Division, "Report of the Chief of the Division, C.M. Slagg, for the Year 1926" Department of Agriculture, Dominion Experimental Farms, (Ottawa, 1927), 5.

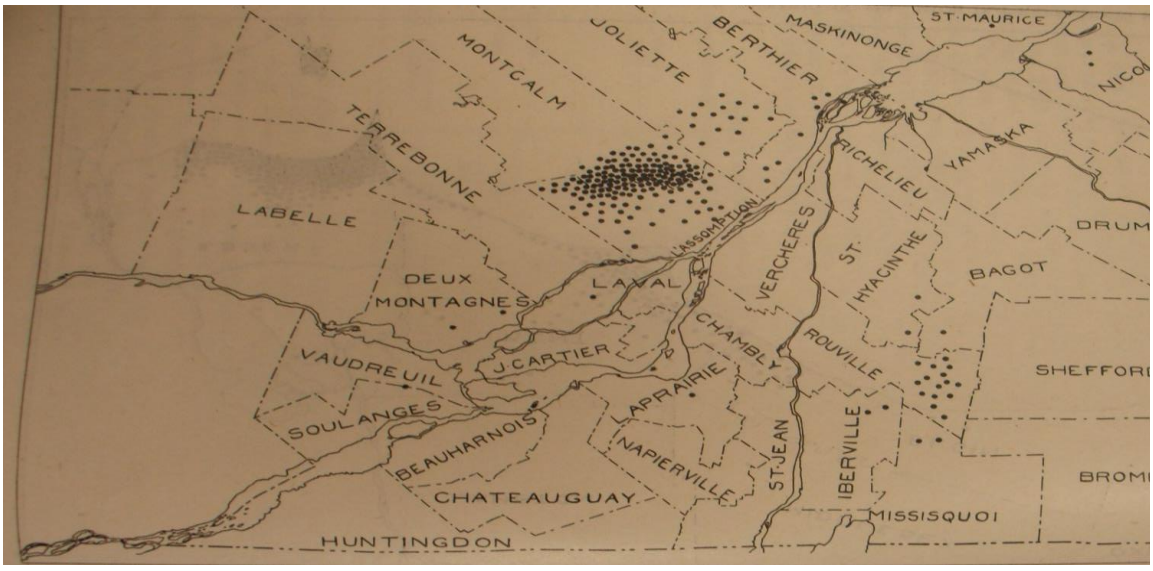

Figure 3: Tobacco farming in Quebec, c. 1925. Each dot roughly represents 50 acres. Note that this map does not capture any garden based cultivation of tobacco, which persisted through the 1920s. Source: Tobacco Division, "Report of the Chief of the Division, C.M. Slagg, for the year 1925." Department of Agriculture, Dominion Experimental Farms, (Ottawa, 1926), 6.

Farmers feature prominently in this discussion, for it was their decisions, their sweat, and their stresses that made the tobacco industry, even as the industry and nature shaped the tobacco they grew. The period explored here encompasses the rise of cigarettes, the most modern form of tobacco consumption, though pipes and cigars persisted. The cigarette came to be associated with so many keywords of the modern capitalist society: branding, liberation, sophistication, standardization, time.[4] Use of the cigarette expanded following the First World War, a war that revealed the violent face of modernity—the coincidence of the timing of the rise of the cigarette and the colossal health ramifications of its use are quite fitting.[5] It was farm families, sharecroppers, and labourers that had to prepare the soil, build the greenhouses, top and sucker the plants, harvest and cure the leaves that were subject to constantly evolving technological interventions. Barbara Hahn recently argued that tobacco is a technology, in the sense that it is a plant with a range of genetically indistinct varieties developed by human made systems of commerce and consumption shifted and modified around the globe.[6] This feature meant that the decisions farmers made about how and where to plant, fertilize, cultivate, and cure their tobacco had significant influence on their product. This also meant that environment had a key role to play in how the tobacco smoked. The environmental aspect is best captured by Edmund Russell's use of the term "biotechnology" to examine the history of living technology, like tobacco.[7] Tobacco

[4] I draw here on a considerable literature that explores (and questions) links between the cigarette and modernity, including: Matthew Hilton, *Smoking in British popular culture,* (Manchester: Manchester University Press, 2000); Howard Cox, *The Global Cigarette: Origins and Evolution of British American Tobacco,* (Oxford: Oxford University Press, 2000); Jarrett Rudy, *The Freedom to Smoke: Tobacco Consumption and Identity*, (Montreal and Kingston: McGill-Queen's University Press, 2005); Allan M. Brandt, *The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America,* (New York: Basic Books, 2007); Penny Tinkler and Cheryl Krasnick Warsh, "Feminine Modernity in Interwar Britain and North America: Corsets, Cars, and Cigarettes," *Journal of Women's History*, Vol. 20 No. 3 (2008): 113-143; Carol Benedict, *Golden Silk Smoke: A History of Tobacco in China, 1550-2010, (*Berkeley: University of California Press, 2011); Sharon Anne Cook, *Sex, Lies, and Cigarettes*, (Montreal and Kingston: McGill-Queen's University Press, 2012).

[5] On World War One and the cigarette, see Cassandra Tate, *Cigarette Wars: the Triumph of the Little White 'Slaver'* (Oxford: University of Oxford Press, 1999); Brandt, *The Cigarette Century*, chpt. 3. A recent and exhaustive summary of the health ramifications based on released tobacco industry archives can be found in Robert N. Proctor, *Golden Holocaust: Origins of the Cigarette Catastrophe and the Case for Abolition*, (Berkeley: University of California Press, 2011).

[6] Barbara Hahn, "Paradox of Precision: Bright Tobacco as Technology Transfer, 1880-1937," *Agricultural History*, Vol. 82, No. 2 (April 2008): 220-235; *Making Tobacco Bright: Creating an American Commodity, 1617-1937*, (Baltimore: Johns Hopkins University Press, 2011).

[7] Edmund Russell, "The Garden in the Machine: Towards an Evolutionary History of Technology," in Susan R. Schrepher and Phillip Scranton, eds., *Industrializing Organisms: Introducing Evolutionary History*, (New York: Routledge, 2004), 7.

modernizers sought to order both farmer and environment in their efforts to make cigarettes, pipe tobacco, and cigars predictable.

This tobacco-modernizing project is best defined in terms of relationships in order to avoid a narrative that casts government officials and capitalist corporations as modern, dragging farmers behind them. Seeking to distill the definition of modernity beyond concepts that all related to modernity (such as individualism, urbanization, monetization, and democracy) Colin Duncan wrote, "a society is modern to the extent that its households consume little of what they themselves produce and produce little of what they themselves consume."[8] Such a definition provides ample space for developing a spectrum of positions taken by farmers vis-à-vis the market, from the settlers of Saltspring Island who defied easy narratives of agricultural progress to the wheat monocultures of the Prairies, where farmer enthusiasm for marketing wheat outpaced government desire for specialization.[9] Tobacco provides an interesting example of Duncan's definition of modernity because the amount of tobacco a household could consume was quite limited. The production of a garden had sated even a heavy smoker for generations in Quebec. When farmers decided to raise tobacco as a cash crop, or when they decided to specialize in tobacco, they moved towards a market-defined modernity, but there remained considerable space for farmers to influence the terms of their modernization, since modernity is a term that is open to multiple meanings.[10]

A Brief Overview of Raising Tobacco

A key area where farmers defined the terms of modernization was during the cultivation of the crop. Growing tobacco is a labour-intensive process, whether raising two acres of cigar leaf or twenty acres of flue-cured. While a considerable number of changes in how farmers raised tobacco took place over the period considered, a broad account of the process behind commercial tobacco

[8] Colin Duncan, *The Centrality of Agriculture: Between Humankind and the Rest of Nature*, (Montreal and Kingston: McGill-Queen's University Press, 1996), 26. John Varty considers this definition to useful ends in his "Growing Bread: Technoscience, Environment, and Modern Wheat," (PhD Dissertation, Queen's University, 2005), 3-4.
[9] R.W. Sandwell, *Contesting Rural Space: Land Policy and Practices of Resettlement on Saltspring Island, 1859-1891,* (Montreal and Kingston: McGill-Queen's University Press, 2005); Rod Bantjes, *Improved Earth: Prairie Space as Modern Artifact, 1869-1944*, (Toronto: University of Toronto Press, 2005).
[10] For Keith Walden, "modernity defied, and defies, definition in formulaic terms." *Becoming Modern in Toronto*, (University of Toronto Press, 1997), 333.

cultivation reminds us that sweat and work made the commodity chain function. The reliance on labour and farmer judgment contributed to the considerable difficulties in standardizing tobacco farming practice. The material, hard to abstract realities based on variety or soil type, the work of families or hired labour, or the fact that farmers did not always have the time or inclination to complete all the tasks will be developed over the course of the dissertation.[11]

The season began in the seedbeds in April, where farmers sowed seeds to germinate. Farmers who had seedbeds covered them with cotton or glass sashes, and filled them with a relatively rich, loose soil, steamed with high-pressure hot water and enriched with both organic and inorganic fertilizers. Families transplanted the seedlings in mid-May or early June into a field that had been cultivated, ridged, and fertilized with manure or (increasingly) chemical fertilizer, or a combination of the two; the field might have been planted with a nitrogen-fixing crop, like rye or legumes, during the prior season.

After transplanting the seedlings, farmers had to weed steadily, and cultivate by using hoes and horse drawn cultivators to keep the soil loose without cultivating too closely to the roots. Once the plants had enough leaves, the farmer had to top the plant by cutting off the flowering bud, typically leaving twelve to twenty leaves. After topping, the tobacco plant would begin to develop suckers, or shoots that would produce new plants. These needed to be removed, painstakingly and by hand, lest they drain nutrients from the leaves of the main stem, retarding their growth and maturation. Throughout the process, farm families kept vigilant watch for the myriad pests that preyed on tobacco leaves: coddling moths, cutworms, hornworms, and aphids. Remedies for pests included use of Paris green (a copper arsenate), lead arsenate, and fingers and thumbs. None worked comprehensively.

The exact timing of the harvest depended on the weather of the season and on when farmers were able to transplant their crop, but harvesting generally began between mid-August and early

[11] Because this discuss tends to flatten the agricultural process for simplicity, it draws from a chronologically wide range of sources, including Louis V. Labelle, *Traité de la culture et de l'industrie du tabac,* (Québec: Dussault & Proulx, 1898); F. Charlan, "Tobacco Growing in Canada," Department of Agriculture, Dominion Experimental Farms, Bulletin No. 25, Second Series, (Ottawa, 1915); H.A. Freeman, 'White Burley Tobacco in Canada,' Department of Agriculture, Dominion Experimental Farms, Bulletin No. 66, New Series, (Ottawa, 1926); N.A. McRae, 'Tobacco Growing in Canada,' Tobacco Division, Dominion Experimental Farms, Bulletin No. 176, New Series, (Ottawa, 1935); Lyal Tait, *Tobacco in Canada*, (Tillsonburg: Ontario Flue-Cured Tobacco Growers' Marketing Board, 1967), chpt. 6.

September, and lasted until the first frosts. Crops were ready for harvesting once the leaves started to develop yellow spots, curve inward, and become granular in texture. Stalk splitting and priming were the two main methods for harvesting. For most of the period under consideration, stalk splitting was the most common method of harvesting and involved cutting the plant stalk, allowing it to wilt, and then spearing it onto a lath before bringing it into the barn. However, by the 1930s, priming became more common; farmers removed leaves individually as they ripened and tied the leaves together with string before hanging them on laths. This shift primarily occurred because flue-curing required leaves that were more uniformly ripe to be cured together, which fulfilled the more exacting standards of curing demanded by the manufacturers who purchased flue-cured tobacco. Priming evokes the widely known image of the stooped worker, plucking leaves one by one, and loading them onto waiting trucks—this task influences the name of the National Film Board's 1959 documentary, *The Back-Breaking Leaf*, and demonstrates that modern tobacco cultivation relied on decidedly pre-modern human exertion. Priming significantly increased the labour requirements for farms, and never did away with the need for individual farmer judgment to determine just when a leaf was ripe.

Once the leaves or stalks were harvested, they were taken to a curing barn (in the case of plug, pipe, and cigar leaf) or a kiln (in the case of flue-cured tobacco). In curing barns, the tobacco hung on scaffolds that went up several layers, ideally in a way that allowed the air to circulate. To cure the best tobacco, the barns needed to have good ventilation with flaps that could be closed during the nights or during damp, cool days, and a main door that faced away from cold northerly winds. Curing might be done simply through controlling the air circulation and depending on the heat and humidity given off by the leaves themselves (known as "air curing"), though a charcoal, gas, or wood furnace could be used during particularly cold seasons. The process of air curing would last into the winter until the leaves turned the desired colour, so that they would be brought into "case," which meant that the cured leaves had enough moisture to be handled without breaking, but not so much moisture as to create mould or affect the combustibility of the leaf.

Flue-curing tobacco, which began to emerge in Ontario by the mid-1920s, was faster, but it was also extremely difficult. A kiln of tobacco typically took approximately three to five days to cure. One kiln could handle approximately five or six acres of tobacco. Curers typically used kilns multiple times to cure the tobacco harvest, and many flue-cured farms had more than one kiln.

Using the kiln, the curer would heat the tobacco through a furnace fuelled by wood, coal, or natural gas. The heat from the furnace would run through the flues in the bottom of the kiln, and rapidly warm the rows of tobacco leaves hanging inside. The objective of the curer was to raise the temperature to a degree that would turn the leaves a bright yellow, and then dry them without burning them. After the curers dried and cured the leaves, they would open the kiln vents to allow enough moisture to bring them into case.

Once brought into case, the tobacco leaves were ready for the process known as bulking. If the tobacco plants were harvested by the stalk method, the leaves had to be removed from the stems. Whether flue or air cured, the aim of bulking was to improve the cure of the leaves and to prepare them for bailing or tying. After the leaves were tied into 'hands' of around a dozen, the hands were then bulked, which meant wrapping a large collection of similar-grade leaves into a bail of some sixty pounds covered in paper and bound with twine. Once bulked, the tobacco was ready to be fermented. Originally, farmers carried out this stage but manufacturers gradually took over the process as part of their standardization efforts. The fermentation process essentially finished the leaf for use by heating the bales in an air-tight box for several weeks and then allowing the tobacco to age from six months to a year.

This simplified portrait of tobacco cultivation does not entirely capture the importance of discontinuities, such as the increase in average tobacco acreage per farm, the rise of chemical fertilizers from a supplement within the fertilization method to the dominant mode of fertilization, or the spread of horse drawn tobacco planters worked by two people to accelerate the rate of transplanting. However, certain continuities within the process are undeniable. For instance, at no point during this period was the method of harvesting mechanized, and curing consistently ranked as one of the greatest challenges that faced the aspiring tobacco farmer. Considering the various stages also flags the difficulty in creating a consistent tobacco economy, since there were many points where the decisions of individual farmers could and did lead to different tasting tobaccos. The capitalist manufacturers at the end of the tobacco commodity chain, which increasingly ended with standardized, branded products, always had to deal with the challenges arising from the fact that any tobacco farm would produce leaves of varying cure and quality because of the multiple stages of the tobacco raising process. Because of the variation arising from the agricultural process, it is best to think in terms of multiple relationships between different farmers, the government, and

corporations, rather than in terms of farmers as a singular bloc that engaged with the other two groups. These positions can be traced in the oral interviews, newspaper accounts, and government reports that this dissertation draws on.

Theoretical Approaches

Several approaches are used to explore the multiple, modernizing, relationships between farmers, corporations, governments, and the environment. Recently, scholars have been approaching the study of products like tobacco by exploring the commodity chains that link producer, manufacturer, retailer, and consumer (along with the many ancillary connections that those links create). The great advantage of the commodity-chain approach is that it seeks to explore market relations in terms of process. Macroeconomic conditions, government regulations and goals, producer aims, manufacturer margins, and consumer desires all shape the chain; the metaphor of the chain impresses that these factors combine as a whole process that moves the commodity to market. These various factors do not influence the commodity discretely. Commodity chains also have the advantage of ensuring that no participant on the chain is rendered entirely passive by a monolithic market. Power exists, and it is uneven, but it is not absolute. Using this approach, historians have explored a staggering array of commodities that span the globe, from aluminium to wheat, tracing the economic, social, and political consequences that emerge from those chains.[12] Recently, historians at York University, the University of Saskatchewan, and the University of Edinburgh drew on the massive global databases to develop methods for visualizing these chains.[13] This dissertation foregrounds the Canadian link of the tobacco commodity chain, connecting it to American expertise and to British tastes, to give two examples. It draws on commodity-chain

[12] Ian MacLachlan, *Kill and Chill: Restructuring Canada's Beef Commodity Chain*, (Toronto: University of Toronto Press, 2001); John Soluri, *Banana Cultures: Agriculture, Consumption, and Environmental Change in Honduras and the United States*, (Austin: University of Texas Press, 2005); Steven Topik, Carlos Marichal, and Zephyr L. Frank, eds., *From Silver to Cocaine: Latin American Commodity Chains and the Building of the World Economy, 1500-2000*, (Durham, NC: Duke University Press, 2006); Sterling Evans, *Bound in Twine : the History and Ecology of the Henequen-wheat Complex for Mexico and the American and Canadian Plains, 1880-1950* (College Station, TX: Texas A&M University Press, 2007); Jennifer Bair, ed., *Frontiers of Commodity Chain Research*, (Stanford: Stanford University Press, 2009); Matthew Evenden, "Aluminum, Commodity Chains, and the Environmental History of the Second World War," *Environmental History* 16, no. 1 (January 2011): 69–93; Joshua MacFadyen, "Fashioning Flax: Industry, Region, and Work in North American Fiber and Linseed Oil," (PhD Dissertation, University of Guelph, 2011); Perhaps the most famous example of a work organized around commodity chains remains William Cronon's *Nature's Metropolis: Chicago and the Great West*, (New York, 1991).

[13] "Trading Consequences" website, http://tcqdev.edina.ac.uk/search/commodity/ This dissertation does not contribute significantly to the visualization of commodity flows.

theory to explore the lived experiences of farmers and experts who sought to both participate in and alter the great process that moved their commodity to market.

The creation and deployment of the various tools of modern agriculture link to the broader project of making the modern capitalist economy. Running through all of the chapters is consideration of the various ways in which government and farmers engaged with and articulated their understandings of a capitalist economy. Government, both federal and provincial, saw such an economy as a fact, as something to be encouraged, as something to be shaped. They raised tariffs and created commissions, they employed experts and divined corporate demand. These experts used corporate prices and responses as a measure, and they inscribed the capitalist economy in the land through experiments, fertilizers, and surveys. Farmers brought their own understandings to bear, deriving value from their work, seeking to stabilize their families, developing notions of fairness. Positions were not static. Government's interest in managing the tobacco economy grew, farmers developed different relationships with the market based on their tobacco varieties, farm sizes, ethnicity, land tenure status, and geographic location—and, geography and environment mattered tremendously for making this crop modern.

Tobacco is an apt crop for exploring the growth of the modern, capitalist countryside because it is predominately a cash crop, with few substitute uses. Farmers could only smoke so much tobacco, or poison so many bugs with nicotine. Tobacco is not intrinsically modern or capitalistic, and other meanings exist. For instance, the Haudenosaunee used tobacco as a fee during the medicinal False Face ceremony, offering it to spirits as payment.[14] Through trade networks that flowed through the Great Lakes, the Haudenosaunee acquired their tobacco from peoples like the Attawandaron and the Tionontati, who lived and farmed in the sandy loam soils later treasured by colonial farmers.[15] As colonial farmers reshaped the trade networks, tobacco continued to function as an important crop for trade, but it also retained some of its mystique as white connoisseurs, particularly of cigars, continued to derive significant cultural meaning from the rituals associated with smoking. The cigar was never disenchanted.[16] The cigarette, on the other hand, had its own rituals and

[14] William Nelson Fenton, *False Faces of the Iroquois*, (Norman: University of Oklahoma Press, 1987), 267-277.
[15] Abraham Rotstein, "The Mystery of the Neutral Indians," in Roger Hall, William Westfall, and Laurel Sefton MacDowell, eds., *Patterns of the Past: Interpreting Ontario's History*, (Toronto: Dundurn, 1988),11-36; Gary A. Warrick, *A Population History of the Huron-Petun*, (Cambridge: Cambridge University Press, 2008).
[16] Rudy, *The Freedom to Smoke*, chpt. 2; see also Marcy Norton, *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World*, (Ithaca: Cornell University Press, 2008).

mythologies (such as the rugged, independent, Marlboro Man), but they were ones amenable to modernity's pace. As Guillermo Cabrera Infante noted in his paean to the cigar, "Cigarettes are of the instant, cigars are for eternity."[17] Nevertheless, when confronted by a buyer, alternative understandings of tobacco tended to disappear into a market governed by grades determined by manufacturer demand.

Broadly, then, this dissertation seeks to contribute to the literature concerning the various historical processes by which the capitalist economy was made and enforced. Following Karl Polanyi's assertion that "the idea of the self-adjusting market implied a stark utopia," scholars have sought to historicize how this idea was made, applied, naturalized, and enforced.[18] One key way in which modernizers encouraged the idea that production and consumption belong to the abstract, amoral realm of economy was through the development and use of specialized knowledge. Experts distinguished the economy from culture through laws, maps, grades, and statistics. Local knowledge and labour-based understanding of skill were devalued. Such projects have been tightly bound to the rise of the nation-state.[19] According to Timothy Mitchell, "In the twentieth century...the economy became arguably the most important set of practices for organizing what appears to be the separation of the real world from its representations, of things from their values, of actions from intentions, of an object world from the realm of ideas."[20] What makes agriculture, and particularly tobacco, an interesting topic to approach from this angle is the fact that the gulf between the abstracting tendencies of economy and the material conditions of farming is substantial and needs to be constantly confronted. The various stages of tobacco cultivation

[17] *Holy Smoke* (Woodstock: The Overlook Press, 1997), 85. Jackson Lears, *Fables of Abundance: A Cultural History of Advertising in America* (New York: Basic Books, 1994) remains a key text for considering the interplay between mythmaking and professionalization in the advertising world.
[18] Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, (Boston: Beacon Press, 2001 [1957]), 3.
[19] These assertions draw on a range of works, including James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, (New Haven: Yale University Press, 1998); John L. Comaroff and Jean Comaroff, "Millennial Capitalism: First Thoughts on a Second Coming," in *Millennial Capitalism and the Culture of Neoliberalism*, (Durham, NC: Duke University Press, 2001), 2-56; Benedict Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism*, revised ed., (London: Verso, 2006), chpt. 10; and Nico Stehr, Christop Henning, and Bernd Weiler, eds., *The Moralization of Markets*, (New Brunswick, NJ: Transaction Publishers, 2006), Introduction; Ritu Birla, *Stages of Capital: Law, Culture, and Market Governance in Late Colonial India*, (Durham, NC: Duke University Press, 2009.
[20] Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity*, (Berkeley: University of California Press, 2002), 6.

referred to above draw our attention to this material reality. As economy rose in importance over the early twentieth century, this gulf required increasingly urgent management.

Much of the theoretical literature on the creation of economy as a core means of measuring and assessing progress foregrounds encounters between colonizer and colonized, drawing on Immanuel Wallerstein's world-system analysis. Wallerstein posited that, since the long sixteenth century, when Dutch merchants fashioned the first hegemonic power through their banks, exchange markets (and their related tools of abstraction, like futures markets), growing bureaucracy, and vast shipping routes, a world economy with core, peripheral and semi-peripheral zones emerged.[21] This world system was shaped by the capitalist impulse for endless accumulation, and merchants in the core economies relied on state power to impose systems of trade through patents, tariffs, import/export quotas, and subsidies, and on centrist liberal ideology to develop "value-neutral" and professional ideas about the economy (market), political science (state), and sociology (civil society).[22] Colonial experts used these ideas, founded on assumed universal traits about the individual, rational, economic human, to measure modernity globally, and to develop yardsticks for assessing how developed a nation was.[23] It was against these measurements based on the rational individual, for instance, that John Stuart Mill deemed the "East" to be frozen in time because of "the despotism of Custom."[24]

As a settler colony, Canada fits a bit awkwardly in the sweep of world-system analysis, and this dissertation is not designed to prove or disprove the utility of the notions of core and peripheral economies in a Canadian context. Such an aim would reopen the long-standing debates over staples theory, which long guided discussion over the Canadian economy within the British Empire. Staples analysis was most valuable for impressing the importance of primary product export for the development of the Canadian economy, and for noting some challenges that reliance on staples

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[21] For a concise summary, see Immanuel Wallerstein, *The Modern World System IV: Centrist Liberalism Triumphant*, (Berkeley: University of California Press, 2011), preface; for more on Dutch economic institutions, see Andrew C. Sobel, *Birth of Hegemony: Crisis, Financial Revolution, and Emerging Global Networks*, (Chicago: University of Chicago Press, 2012), chpt. 3.

[22] The importance of state power to the formation of a global commodity, cotton, has recently been impressed by Sven Beckert, who calls the period where the global cotton trade was reformed by imperial expansion 'war capitalism." See *Empire of Cotton: A Global History*, (New York: Alfred A. Knopf, 2014), introduction.

[23] Wallerstein, *The Modern World System IV*, chpt 5; see also Wallerstein, *World-Systems Analysis: An Introduction*, (Durham: Duke University Press, 2004), 2-10.

[24] John Stuart Mill, *On Liberty*, in *The Basic Writings of John Stuart Mill*, (New York: The Modern Library, 2002), 73.

had for capturing economic linkages for processing and manufacturing.[25] I broadly accept Douglas McCalla's contention that a focus on staples exports underestimates the importance of local markets in economic development, and Ruth Sandwell's contention that analysis of rural Canada based on development in both local and export markets has tended to rely on standards of modernization, standards that had been used to find Quebec agriculture wanting in particular.[26] Study of tobacco farming reveals the existence of significant links between Ontario and Quebec cultivation practices. Further, non-Indigenous Canadian farmers were not subject to the full weight of oppressive state powers that imposed modernity to the extent that we see in the colonial contexts explored by the historians noted above.[27] Generally speaking, the Canadian farmer enjoyed a wider horizon of options for responding to state and capitalist power than did producers in peripheral economies, and they were generally more familiar with the language of western liberal capitalism.[28] Nevertheless, similar networks of tobacco experimental stations dedicated to tobacco modernization emerged at the turn of the century throughout the world, so Canada was hardly divorced from a global trend.[29] The new modes of knowledge created by liberal capitalist world systems and fostered by states are highly relevant to the story of Canadian tobacco, since Canadian tobacco, and particularly Ontario tobacco, was a success story in these terms. From the seized

[25] A useful overview of the staples debate, as it pertains to wheat, can be found in Peter A. Russell, *How Agriculture Made Canada: Farming in the Nineteenth Century*, (Montreal and Kingston: McGill-Queen's University Press, 2012), chpt. 4. A very useful work for exploring how economic linkages might be "captured" by the metropole is Rosemary Ommer, *From Outpost to Outport: A Structural Analysis of the Jersey-Gaspé Cod Fishery, 1767-1886*, (Montreal and Kingston: McGill-Queen's University Press, 1991).

[26] Douglas McCalla, *Planting the Province: The Economic History of Upper Canada, 1784-1870*, (Toronto: University of Toronto Press, 1995), 5; R.W. Sandwell, "Rural Reconstruction: Towards a New Synthesis in Canadian History," *Histoire Sociale/Social History*, Vol. 27 No. 53 (1994): 7-10. The use of a modified staples theory to assess relative performances of development is most notable in John McCallum, *Unequal Beginnings: Agricultural and Economic Development in Quebec and Ontario until 1870*, (Toronto: University of Toronto Press, 1980), though it should be noted that McCallum was seeking to break free of stereotypical cultural explanations for explaining the Quebec farmer's 'failure' to modernize, and contributed considerably to this effort.

[27] On the Canadian state incompletely imposing agricultural modernity on Indigenous peoples, see Sarah Carter, "Two Acres and a Cow: 'Peasant' Farming for the Indians of the Northwest, 1889-1897," *Canadian Historical Review*, Vol. 70 No. 1, (1989):476-499 and James Daschuk, *Clearing the Plains: Disease, Politics of Starvation, and Loss the of Aboriginal Life*, (Regina, University of Regina Press, 2013), chpt. 8.

[28] For an example of the emergence of a market culture in the mid 19th century, see Béatrice Craig, *Backwoods Consumers and Homespun Capitalists: The Rise of a Market Culture in Eastern Canada*, (Toronto: University of Toronto Press, 2009).

[29] Michiel Baud, *Peasants and Tobacco in the Dominican Republic*, (Knoxville: University of Tennessee Press, 1995), chpt. 8; Steven C. Rubert, *A Most Promising Weed: A History of Tobacco Farming and Labor in Colonial Zimbabwe,* (Athens: Ohio University Center for International Studies, 1998), 27-28; Teresita A. Levy, "The History of Tobacco Cultivation in Puerto Rico, 1899-1940," (PhD Dissertation, City University of New York, 2007).

lands of Indigenous peoples sprang forth a lucrative agricultural industry, one that excluded the original cultivators of the plant.

Discussion of tobacco, subject as it was to regulations, taxes, and tariffs, contributes to the study of Canadian political economy. Canadian historians have long been interested in the interplay of the state and economic development. As H.V. Nelles observed in the context of Ontario hydro, mining, and forestry, businessmen found state intervention useful, even during an era of commitment to laissez-faire capitalism. In his view, the Ontario government spoke a business-friendly language of development, correlating the prosperity of resource companies to that of the population.[30] This model of state interest in fostering liberal capitalist development has been traced in the fruit orchards and irrigation projects of the Okanagan and Sumas valleys, the encouragement of dry farming in the Prairies, the construction of hydropower drawn from the Saguenay River, and the efforts to create a prosperous rural Nova Scotia. While the broad trend is evident, these historians have also emphasized the particularities of their cases, all of which puncture the narrative of steady liberal capitalist development: the unexpected difficulties of market and nature that confronted the clear vision of B.C.'s Land Settlement Board, the frustrations of farmers on the Prairies who challenged the government freight rates, the anger of those who lost their land to Premier Taschereau's decision to raise Lac Saint-Jean, the problem of land shortages that plagued the efforts of Nova Scotia's modernizers.[31] This dissertation contributes to these studies by drawing on records produced by both provincial and federal governments to explore the state's role in making the tobacco economy, particularly following the activities of the federal Tobacco Division, which functioned as part of the Department of Agriculture's Experimental Farm branch. The Division functioned primarily using experimental farms and through distributing pamphlets

[30] H.V. Nelles, *The Politics of Development: Forests, Mines, and Hydro-Electric Power in Ontario, 1849-1941*, 2nd ed., (Montreal and Kingston: McGill-Queen's University Press, 2005). Similar examples can be found in Tom Traves, *The State and Enterprise: Canadian Manufacturers and the Federal Government, 1917-1931*, (Toronto: University of Toronto Press, 1979).

[31] James Murton, *Creating a Modern Countryside: Liberalism and Land Resettlement in British Columbia*, (Vancouver: UBC Press, 2007); Vernon C. Fowke, *National Policy and the Wheat Economy*, (Toronto: University of Toronto Press, 1973); Jeremy Adelman, *Frontier Development: Land, Labour, and Capital on the Wheatlands of Argentina and Canada, 1890-1914*, (Oxford: Oxford University Press, 1994); David Perera Massell, *Amassing Power: J.B. Duke and the Saguenay River, 1897-1927*, (Montreal and Kingston: McGill-Queen's University Press, 2000); Daniel Sampson, *The Spirit of Industry and Improvement: Liberal Government and Rural-Industrial Society, Nova Scotia, 1790-1862*, (Montreal and Kingston: McGill-Queen's University Press, 2008).

in B.C, Ontario, and Quebec.[32] Their records and reports serve as a major archive for this project. This relatively small group of tobacco experts was the lynchpin of state efforts to foster modern tobacco farming. As is often the case in Canadian history, there was a considerable gap between the aspirations of state modernizers and the actual size of the organization devoted to enacting modernization.

Discussion of the operation of liberalism in Canada is indebted to Ian McKay's liberal order framework. Although this discussion is more concerned with capitalism, liberalism, especially articulated through individual land ownership, is relevant to any discussion of western modernity. Of particular interest is McKay's emphasis on liberalism's belief in "the epistemological and ontological primacy of the category individual."[33] Liberal thought associated the primacy of the individual with modernity. According to McKay, this form of liberalism began its ascent to hegemony following the end of the Rebellions of 1837-38.[34] In refining his theory, McKay notes the importance of property rights in defining and enforcing the liberal order in the everyday. He argues that, "from the 1840s to the 1940s, property rights in land became increasingly individualized, exclusive, and formulized, with a growing tendency to state-regulated freehold tenure."[35] John Weaver's *The Great Land Rush* also reveals this tendency, noting how the formation of a legal regime orientated around individual property rights and an ideology of liberal improvement was fundamental to the project of displacing First Nations claims to land.[36] The primacy of individual rights, and individual property rights in particular, is expressed in more immediate terms by farmers, who defined their interest in property rights by their desire for owning

[32] The Tobacco Division was enfolded into the Dominion Experimental Farm branch in 1914. Between 1905 and 1913, it had been a branch of the broader Department of Agriculture.
[33] Ian McKay, "The Liberal Order Framework: A Prospectus for a Reconnaissance of Canadian History," *Canadian Historical Review*, Vol. 81 (2000): 623; reemphasized in McKay, "Canada as a Long Liberal Revolution: On Writing the History of Actually Existing Canadian Liberalisms," in Jean-François Constant and Michel Ducharme, eds., *Liberalism and Hegemony: Debating the Canadian Liberal Revolution*, (Toronto, University of Toronto Press, 2009), 356-357.
[34] McKay, 'Liberal Order Framework,' 627. This chronology seems to be supported by Michel Ducharme's contention that the Rebellions represented the climax of a dispute between 'modern' liberals who emphasized individual, property based rights and 'republican' liberals who foregrounded the civil society and community, with the former group eventually triumphing and consolidating their power following the rebellions. See Michel Ducharme, *Le concept de liberté au Canada à l'époque des revolutions Atlantiques*, (Montreal and Kingston: McGill-Queen's University Press, 2010).
[35] McKay, "Canada as a Long Liberal Revolution," 382.
[36] John C. Weaver, *The Great Land Rush and the Making of the Modern World*, (Montreal and Kingston: McGill-Queen's Press, 2003), chpt. 2. See also the profile of British liberal land reformers in Samson, *The Spirit of Industry and Improvement,* chpt 2.

land clear (without mortgage), or continuing to hold onto the family farm. Tobacco could serve as a useful cash crop for achieving these aims.

McKay's definition of liberalism has produced considerable debate. Ruth Sandwell has argued that historians need to be cognisant of the many Canadians whose lives and motivations are inadequately captured by the liberal order framework. From the microhistorical perspective, she analyzes the settlers of Saltspring Island whose interest in land acquisition co-existed with a preferred lifestyle that emphasized "security over risk, ease over hard work, and a modest sufficiency over the accumulation of wealth."[37] She argues that many Canadians do not act in ways that are congenial to liberal individualism particularly in the context of family relationships and in rural settings. Instead, they are motivated by and rely on family labour and ties, community ties, and occupational plurality, and that these elements existed "outside, and alongside, the liberal order in rural Canada."[38] This dissertation presents many examples of these motivations.

The role of capitalism as it relates to the liberal order also needs further consideration. For all its crises and for all the articulated alternatives, capitalism, rooted in the principal of capital's (in the form of land, specie, securities, material, etc.) fundamental role being creating the maximum amount of capital possible for private owners through free markets constituted by legally enforceable contracts, emerged as a powerful economic articulation of the liberal individualist impulse in Canada.[39] This dissertation considers the various articulations of ideal market outcomes, including the desire for profit sharing among cooperative members, the desire for stable and more predictable returns from government officials (who fretted over the political implications of price fluctuations), and the insistence by capitalists that their investments and purchasing decisions entitled them to their profits. Certainly, not all tobacco farmers were capitalist, in the sense that they prioritized profit maximization, but, barring farmers engaged in the informal

[37] R.W. Sandwell, *Contesting Rural Space: Land Policy and Practices of Resettlement on Saltspring Island, 1859-1891*, (Montreal and Kingston: McGill-Queen's University Press, 2005), 6.
[38] R.W. Sandwell, "Missing Canadians: Reclaiming the A-Liberal Past," in Constant and Ducharme, eds., *Liberalism and Hegemony*, 260.
[39] This definition is adopted from Samuel Freeman, "Capitalism in the Classical and High Liberal Traditions," in Ellen Franklin Paul, Fred D. Miller, Jr., and Jeffrey Paul, eds., *Liberalism and Capitalism*, (Cambridge: Cambridge University Press, 2011), 22-23. As both Freeman and McKay note, liberalism can support different articulations of capitalism, so they are not analogous.

economy, all tobacco farmers had to *engage* with the capitalist economy that emerged during the course of this study.[40]

The six chapters of this dissertation address these themes by exploring the changing work of farmers, the creation and application of expert knowledge, and the development of capitalist tobacco markets. Chapter one provides a brief overview of the structure of tobacco farming in Canada, noting developments like the rise of flue-cured plantation farming and the persistence of sharecropping. It draws on transcripts of oral interviews and newspaper interviews to explore the motivations of farmers who decided to raise tobacco. It explores the interplay of liberal land ownership and capitalist markets, expressed through factors like the movement up the agricultural ladder from tenant to farm owner and farmer responses to market demand, with factors like family stability, ethnic ties, and material relationships with crops – elements of rural life that are not readily captured by an exclusive focus on liberal capitalism. I begin with farmers and their motivations to impress that much of the knowledge about tobacco cultivation flowed from their work.

Chapter two explores the formation of different groups of tobacco expertise in Canada, paying particular attention to how the 'market idiom' served as a means to naturalize capitalist market-based understandings for tobacco and bestow experts with the capacity to adjudicate good tobacco. It also traces the flow of expert information from the United States into Canada, through industry buyers, government hires, and flue-cured tobacco curers, and it considers the origins of the Federal Tobacco Division, which served as the foremost government body for shaping tobacco cultivation in Canada.

Chapters three and four take an environmental turn. Chapter three specifically considers the importance of soil, which had a tremendous influence on tobacco cultivation. First, tobacco has long frustrated farmers because it depletes soil of its nutrients so rapidly.[41] Secondly, the taste of tobacco depended greatly on the soil in which it grew. According to a historian of Virginian tobacco, "The sharp differentiation from plant to plant occurs because, unlike most other plants,

[40] The reference to profit maximization as a means to define capitalism among farmers draws from Craig, *Backwoods Consumers*, 19-20.
[41] Alan L. Olmstead and Paul W. Rhode, *Creating Abundance: Biological Innovation and American Agricultural Development*, (Cambridge: Cambridge University Press, 2008), 214.

tobacco is true not to its seed but to the soil it is grown in."[42] This very material factor, combined with the turn-of-the-century skepticism that Canada could even grow commercial tobacco, made the project to map and classify soils all the more urgent. However, as the chapter shows, the charting of soil depended heavily on the experiences of farmers, even those practices stretching back centuries, such as the cultivation of *tabac canadien* in Quebec, which experts sought to overturn. Furthermore, the classification scheme was necessary, but not sufficient, for successful tobacco cultivation, as testing in British Columbia revealed. Chapter four explores the dialectic between humans and nature, arguing that developments in tobacco agriculture, such as new forms of chemical fertilizer and pesticides, engineered new and unexpected limitations to the capacity of humans to manage nature. It draws on environmental history to impress that nature, expressed through hail, bugs, viruses, and fungi, was far from being a passive stage on which human activity plays out, but took on an active role in shaping and responding to the modernizing project. Here, expert and farmer alike would be equally frustrated.

Finally, chapters five and six foreground the role of government and farmers in shaping and defining the tobacco market. Chapter five explores the various government interventions into the tobacco market. This included commissions, such as the 1902 Royal Commission Regarding the Tobacco Trade and the 1933 Royal Commission on Price Spreads, tariff adjustments (vociferously demanded by farmers in both Quebec and Ontario), and prohibitions on sales of tobacco products to minors. It traces the tensions between the ideal of supply and demand and markets as something external to social and cultural factors and the realities faced by legislators. For instance, the federal government had to contend with widespread accusations that the American Tobacco Company of Canada (ATCC), which became the Imperial Tobacco Company of Canada, held as a monopoly, therefore circumventing what was widely understood to be the "proper" functioning of the market.[43] Other cultural factors, from lingering perceptions of the innate inferiority of French Canadian tobacco to continued connection to the British Empire all shaped the operation of the supposedly abstract economy. Chapter six shifts the focus to the tobacco cooperatives, marketing associations, and marketing boards that emerged in Ontario following World War One. It

[42] Frederick F. Siegel, *The Roots of Southern Distinctiveness: Tobacco and Society in Danville, Virginia, 1780-1865*, (Chapel Hill: University of North Carolina Press, 1987), 94.
[43] For farmers, the ATCC/Imperial was more technically a monopsony, where a single buyer dominates the market, but I generally stick to the language employed by my documents in this matter.

particularly explores how these organizations sought to use the tools of modernity, such as measurement and abstraction, to create a stable market for farmers. However, this search for stability produced its own instabilities, including exclusion of some farmers from the market, disputes over the role of manufacturers in making markets stable, and revelations over the shortcomings of grading, which never captured the complexity of tobacco. Disputes over the merits of stability also demonstrated the fact that there were multiple interests and motivations amongst tobacco farmers. Throughout the chapter, both government and corporations assume large roles in shaping the terms of the debate over how to make stability the watchword of the tobacco market, eventually leading to the formation of marketing schemes in 1934, 1936, and 1957, all of which drew on and enforced the government's capacity to define the tobacco market.

Chapter 1
The Rich Rewards of the Leaf

Starting in the late 1890s, tobacco farmers in Ontario and Quebec raised tobacco for the capitalist market, altering when and how the crop was grown. Most of the hallmarks of modern agriculture came to define tobacco production in Canada, as farmers increasingly relied on specific varieties sought by large corporations and on chemical fertilizers. The garden-based production of tobacco, which almost any farmer could cultivate in a small plot devoted to the crop, increasingly made way for specialized farms that planted dozens of acres destined for commodity chains that linked their farm to tobacco manufacturing firms, especially the Montreal-based Imperial Tobacco Company of Canada. The tobacco commodity chain was relatively simple. As a crop with no significant use other than smoking, the demands of the tobacco manufacturer constrained the practices of tobacco farmer. The tobacco farmer was bound to the development of a potent corporate capitalist structure spearheaded by the Imperial Tobacco Company of Canada, during a period where Canadians were becoming increasingly familiar with the characteristics of a capitalist society, from stock issues to class conflict.[1]

This chapter explores the encounter between tobacco farm families and the emerging liberal capitalist order, being attentive to the changes that this order enforced as well as the persistent aspects of tobacco cultivation that predated the capitalist incursion. It does so in two sections. The first section keeps closely to the measurements used by modernizers, largely reproducing much of their logic, by providing a sense of where and how much tobacco was being raised in Quebec and Ontario. It traces the proliferation of commercial tobacco as part of a mixed farming to the emergence of specialized tobacco plantations. These transitions also allow for some initial consideration of the different tobaccos that farmers grew, including cigar leaf, Burley, and flue-cured tobacco. It relates these developments to discussion of land tenure, noting the important role sharecropping played in tobacco cultivation, and traces the relationship between different types of tobacco and economies of scale. As capital demands for tobacco cultivation, in the form of chemical fertilizers, building expenses, pesticides, and labour increased, farmers increasingly

[1] Michael Bliss, *Northern Enterprise: Five Centuries of Canadian Business*, (Toronto: McClelland and Stewart, 1987), chpt. 12; Christopher Armstrong, *Blue Skies and Boiler-Rooms: Buying and Selling Securities in Canada*, (Toronto: University of Toronto Press, 1997); Craig Heron, "The Second Industrial Revolution in Canada," in Deian R. Hopkin and Gregory Kealey, eds., *Class, Community, and the Labour Movement: Wales and Canada, 1850-1930*, (St. John's, Committee on Canadian Labour History, 1989), 48-59.

found it economical to move from tobacco as part of a mixed farming regime to tobacco specialization, even if that meant assuming higher exposure to debt through mortgages.

The second and third sections then explore these transitions through the experiences of the families who had to grow this tobacco and make these decisions. They draw on oral interviews conducted in the 1970s and 1980s and on newspaper reports to explore factors related to, but not necessarily explained by, the changing tobacco economy, factors like the search for family stability, the importance of ethnic identity, and the material nature of the work that people did in the fields. In contrast to the liberal emphasis on the individual rational man and his decisions, the entire family had to plant crops, use tools, and haul crops. Farmers fretted over the risk of a ruined crop, the pain of falling short of expectations. Tobacco farmers often described their crop as a chance or as a gamble, language that both fits within the capitalist rubric of risk and reward but also has origins and meanings outside of capitalism.[2] As the commodity chain increasingly ended in cigarettes, farmers had to contend with the market discipline enforced by large buyers.

The tension between the modernizing process outlined in the first section, and the numerous practices and goals that are not readily accounted by the metrics of capitalism considered in the second can be analysed through Dipesh Chakrabarty's formulation of the two histories of capital. In an important chapter of *Provincializing Europe*, Chakrabarty interprets a largely under-examined element of Marx's discussion of global capital that abstracts people into the category labour in the service of capital. Marx acknowledged that the abstracting of people into the controllable and reified category "labour," whereby people were seen only in terms of their output, can never be fully completed; capitalists acknowledged this fact when they sought to minimize human labour with the "dead" labour of technology.[3] The cotton mill and the Fordist assembly line are talismanic representatives of this phenomenon, but of course, there are other examples.[4] Chakrabarty labels the historical process by which capital abstracted labour in service of a capitalist society, a process that has been traced by historians inspired by E.P. Thompson (if the

[2] On 'casino capitalism,' see Comaroff and Comaroff, "Millennial Capitalism," 22-23.
[3] Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference*, (Princeton: Princeton University Press, 2000), 61.
[4] "Machinery means discipline in industrial relations." 'An Old Potter,' quoted in E.P. Thompson, "Time, Work-Discipline, and Industrial Capitalism," *Past and Present* Vol 38 (1967), 76; David A. Hounshell, *From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States,* (Baltimore: Johns Hopkins University Press, 1985), chpt. 6.

generalization will be forgiven), "History 1." However, History 1 encounters a number of elements that are antecedent to but exist within global capitalism. These elements are not necessarily part of the project of capitalism, nor are they necessarily oppositional to capital (religion serves as a ready example, though the specific manifestations of this relationship are infinitely complex). Chakrabarty calls these elements "History 2."

Chakrabarty uses the example of the piano (an example drawn from Marx's own consideration of a History 2) to illustrate how History 1 and History 2 interact. In this example, capitalist forces make the piano—the capitalist factory owner who derives profit from its production and the factory worker whose abstracted labour went into the production. The concert organizer pays the pianist a wage for her performance. Presumably, the audience also participates in the capitalist economy, which allowed them to buy tickets to the recital. However, "We do not all have the same musical ear." An audience, however capitalist it may be, does not experience the concert in the same way. Likewise, the pianist might play the piece differently than another pianist, because each pianist has a particular relationship to the instrument or tool.[5] Theoretically, Chakrabarty, following Martin Heidegger's project of a theory of being that is profoundly attentive to a person's relationship with the world, labels this relationship as "ready-at-hand,"[6] a term that gestures towards "the everyday, preanalytical, unobjectifying relationships we have to tools, relationships critical to the process of making a world of this earth."[7] This relationship with tools does not somehow transcend or (necessarily) conflict with capitalism's historical force, but it also is not fully implicated within the logic of capital, particularly the logic that leads to capitalists abstracting the labour fundamental to the production of commodities.

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[5] Chakrabarty, *Provincializing Europe*, 68.

[6] It is difficult to disentangle this concept from Heidegger's broader philosophical project, which is no less than developing a theory of being. He puts the project thusly: "Being is found in thatness and whatness, reality, the objective presence of things, subsistence, validity, existence, and in the 'there is'." The essential point for the purposes of this dissertation is the fact that Heidegger's theory of being sought to be attentive to both the power of broad historical trends that prioritized certain ontologies and the power of being in the world and having everyday experiences. (He was particularly concerned with dualisms that placed the theoretician in an abstract position of observing the relationships between subjects and objects. So, when a philosopher pondered whether God existed, Heidegger wanted more attention paid to what 'to exist' means, and how the philosopher pondering the question experienced existence) The quotation comes from Martin Heidegger, *Being and Time*, trans. Joan Stambaugh, Revised Edition, (Albany: State University of New York Press, 2010), 6. See also Stephen Mulhall, *Heidegger's Being and Time*, (New York: Routledge, 2013), 39-46; Timothy A. Clark, *Martin Heidegger*, (New York: Routledge, 2001); Michael Wheeler, "Martin Heidegger," *The Stanford Encyclopedia of Philosophy* (Fall 2014 edition), http://plato.stanford.edu/archives/fall2014/entries/heidegger.

[7] Chakrabarty, *Provincializing Europe*, 68.

Returning to the farm, families were aware of and responded to the changes by which corporations influenced tobacco cultivation. However, the distinction between History 1 and History 2 carves space to consider farmer practices that were antecedent to capitalism's rise, which relates particularly to how and why farmers initially chose to raise tobacco. The framework also alters the focus from an exclusive interest in the shift to capitalist agriculture to a more nuanced understanding that capitalism's alteration of the cultivation and market for tobacco was not absolute.

By definition, it is impossible to account fully for History 2, since no archive or interview would ever adequately reproduce "the person's bodily habits, […] unselfconscious collective practices, in his or her reflexes about what it means to relate to objects in the world as a human being and together with other human beings in his given environment."[8] Liza Piper's discussion of the bodily forms of knowledge in the hard rock mines in the Mackenzie River basin serve as a precedent in this regard, as she argues, "mining men valued their exploitation of subarctic natural resources as a creative engagement that extended the possibilities of life and work into hostile surface and sub-surface places."[9] In her account, miners articulated their environment through bodily metaphors: mineral *veins*, ore *bodies* that were cut open, and so forth. One can see this in tobacco with the reference to the *hands* of tobacco that workers tied together. Also vital are the labour histories that considered the skills of workers, skills that workers hoped would defy mechanization or other means of deskilling. For instance, in the forests of Northern Ontario, companies like Abitibi could measure the man-days required for cutting, hauling, and driving the logs, but these measurements do not entirely capture the knowledge of the axeman who labelled where to cut so the tree would fall where he wanted, or the teamster who kept a wary eye on his load and his horse alike.[10]

Structure of Tobacco Cultivation and the Rise of Specialization

In the counties of Montcalm, L'Assomption, Joliette, Berthier, and Rouville, some farmers shifted their tobacco production from the practice of growing tobacco in gardens to producing cigar leaf and pipe tobaccos in designated sections of their fields as early as the 1860s. This shift was

[8] Chakrabarty, *Provincializing Europe*, 66.
[9] Liza Piper, "Subterranean Bodies: Mining the Large Lakes of North-west Canada, 1921-1960," *Environment and History*, Vol. 13 (2007): 157.
[10] Ian Radforth, *Bushworkers and Bosses: Logging in Northern Ontario, 1900-1980*, (Toronto: University of Toronto Press, 1987), chpt. 3.

amenable to manufacturers like the prominent cigar maker J.M. Fortier and to Mortimer Davis, who came to head the American Tobacco Company of Canada, and later, Imperial Tobacco of Canada.[11] Several factors encouraged the movement towards the concentration of tobacco culture, including the location of manufacturers, soil, and high prices. The first surge in commercial tobacco cultivation occurred because of increased demand for tobacco in the United States during the Civil War.[12] While prices declined following the Civil War, the precedent was set. Joseph Dupuis, who began to grow tobacco in the mid-1800s in St. Jacques, Montcalm County, described tobacco cultivation as "one of the most paying branches in the vicinity."[13] Between 1891 and 1901, the five counties' share of commercial tobacco cultivation in Quebec increased from 45.89 percent to 73.69 percent.[14] While we should be cautious of census figures from this period—tobacco tended to be under-reported because much of the raw leaf trade went undetected—modernizers could take pleasure in the rise in specialization.[15]

The increased concentration influenced the town of Joliette, which had been established in 1824 as the village of Industrie by the seigneur and businessman Barthélemy Joliette. A railway connection, established in 1850, enhanced the town's status as a mid-sized manufacturing centre and lumber town.[16] Médéric Foucher, the owner of Quebec's first tobacco plantation at Saint-Jacques-de l'Achigan, opened the town's first tobacco manufacturing facility in 1882.[17] Not long after, a group of local businessmen founded the Joliette Tobacco Company, which was sold to the ATCC in 1899.[18] Manufacturers coexisted with other buyers. Testifying to the Royal Commission regarding the Tobacco Trade, Dupuis estimated that "at least" fifteen traders in Joliette district

[11] Occasionally, I use the names of the modern administrative regions as a convenient shorthand for discussing the counties in Quebec that raised tobacco, including Joliette, l'Assomption, Berthier, Montcalm, and Yamaska.
[12] Normand Brouillette, Pierre Lanthier, et Jocelyn Morneau, *Histoire du Lanaudière*, (Québec: Presses de l'Université Laval, 2009), 410; 'Culture du tabac,' *Gazette des campagnes*, Vol. 3 No. 24 (15 octobre 1864); 'Culture du tabac et du lin,' *Gazette des campagnes*, Vol. 4 No. 3 (5 décembre 1864).
[13] Evidence of Joseph Dupuis, *Royal Commission regarding the Tobacco Trade in Canada*, RG13-A-2, Volume 2317, File 1903-349, LAC, 874. (Hereafter RCTTC)
[14] Canada, *Census of Canada*, *1890-91*, Vol. IV (Ottawa, 1897); Canada, *Fourth Census of Canada*, Vol. II (Ottawa, 1904).
[15] Rudy, *Freedom to Smoke*, 76-77. Jean Hamelin and Yves Roy note that a similar process of concentration and proliferation in cheese production took place in Quebec during the same period, see Jean Hamelin et Yves Roby, *Histoire économique du Québec*, *1851-1896*, (Montreal: Fides, 1971), 198-200.
[16] Jean-Claude Robert, "Joliette, Barthélemy," *DCB*, Vol. 7, (University of Toronto/Université Laval, 2013). http://www.biographi.ca/en/bio.php?id_nbr=3467
[17] On Foucher's plantation, see "La culture du tabac," *Journal d'Agriculture Illustré*, Vol. 5 No. 5 (juin 1882), 72-3; for another plantation, see 'Competition of Agricultural Merit,' *Journal of Agriculture and Horticulture*, Vol. 3 No. 1 (1 July 1899).
[18] Evidence of George Adolphe Renaud, *Royal Commission regarding the Tobacco Trade in Canada*, , 881-882.

purchased tobacco.[19] However, Montreal, site of the major manufacturers and small cigarmakers alike, had twenty-nine tobacco manufacturers in 1901, giving that city the most influence over Quebec tobacco.[20]

For the most part, Quebec farmers raised the vast majority of tobacco on a small scale, even as regional specialization began to emerge. A list of farmers who raised tobacco assembled in 1904 by the merchant Pierre Denis of St. Césaire, Rouville County, gives a better impression of the role tobacco typically played for farmers. He listed 55 farmers that he spoke to, mostly around St. Césaire, and sporadically recorded total acreage and acreage devoted to tobacco. On average, the farmers he visited had approximately 123 acres of farmland (n=44) and raised 3 acres of tobacco (n=36). Farmers produced an array of other farm products, including dairy, hay, rye, and oats. The averages are reasonably representative. Pierre Leduc raised the largest crop, planting 10 acres of tobacco on his 150-acre farm.[21]

In late 19th-century Ontario, Burley tobacco production rapidly emerged in Essex and Kent Counties, and was enfolded into existing mixed agricultural practices. Burley, a category of air-cured tobaccos, was suited for both pipes and cigarettes. The counties produced 60,000 pounds of tobacco in 1895 and 3,250,000 pounds in 1900.[22] Many farmers in Essex had to manage their land carefully. According to the 1891 census, of the 7320 farms accounted for in Essex, 6489 of them were of less than 100 acres, and most of them were significantly smaller.[23] As wheat lost prominence in the area, tobacco joined livestock, fruit, corn, and vegetables in reshaping Ontario's countryside.[24] Tobacco, which could provide high revenues per acre during years when prices were high, was an attractive crop in a mixed agricultural setting because most farmers could not afford to commit the labour needed to raise more than a few acres. Like Quebec, there were a couple

[19] Evidence of Joseph Dupuis, 879.
[20] Canada Census, Vol. 3, 1901.
[21] Pierre Denis to O'Halloran, 24 June 1904. RG 17, Vol. 984, File 157247, LAC. Leduc's farm was exceptional enough for the federal Tobacco Division to use it for experiments in rotations and fertilization. See F. Charlan and O. Chevalier, "Experimental Work Carried on in 1908," Dominion Department of Agriculture, Tobacco Division, Tobacco Bulletin A-6, (Ottawa, 1909), 26.
[22] 'Tobacco Department,' *Leamington Post*, 7 February 1907.
[23] Canada *Census*, Vol. 2, 1891; Canada *Census*, Vol. IV, 1911. This trend continued into 1911, where 5614 of the total 6479 farms in the county were less than 100 acres
[24] Marvin McInnis, "The Changing Structure of Canadian Agriculture, 1867-1897," *The Journal of Economic History*, Vol. 42 No.1 (March 1982): 191-198; Ian Drummond, *Progress without Planning: The Economic History of Ontario from Confederation to the Second World War,* (Toronto: University of Toronto Press, 1987), Sandwell, "Rural Reconstruction," 9.

major tobacco operations. The Walker family of distillery fame opened one of the first (and largest) tobacco plantations in Essex County, spanning over 200 acres. However, the reported average crop in 1910 was four to six acres.[25]

Mixed farming had direct benefits for tobacco cultivation. First, having multiple crops facilitated crop rotation, which was important because farmers and experts alike knew tobacco to be a nutrient-depleting crop. However, on smaller farms, rotation could be difficult. A 1917 report in the tobacco industry's *Canadian Cigar and Tobacco Journal* estimated that the average farm in South Essex was about 35 acres, too small for a "proper rotation."[26] Nevertheless, some farmers did follow a steady rotation. John James Wilkinson of Mersea rotated his 4.5 acres of tobacco in a "commonsense system of rotation" on his 50-acre farm. The profits, the report read, were sufficient to purchase a farm "for each of his half-dozen sons, who are all tobacco growers and prosperous farmers."[27] Here, rotations and cash crops led to a triumph of rural liberalism: the judicious, market savvy father and the land-owning children. The reference to "commonsense" [*sic*] knowledge also gestures to the persistence of pre-capitalist (History 2) understandings of farming in a farm approved of by an organ of the capitalist economy, a trade journal. Secondly, mixed farming, particularly with chickens and cows, could provide much-needed manure for the farmer.[28] Finally, ensuring that tobacco took up only a portion of one's crop hedged the agricultural bet and ensured long-term stability. W.H. Bole of West Lorne, Elgin County, put the case nicely:

> The man who is already doing well in mixed farming should hesitate before he throws over a productive industry for a large venture, a crop that is somewhat hazardous. I know men who do general farming and who every year grow five or six acres of tobacco for a cash crop. These men frequently store away a neat sum.[29]

[25] Walker plantation as largest: J.W. Robinson to James Miller, 1 April 1903, RG17, Vol. 999, File 165198, National Archive; Average acreage: 'What Tobacco Gave to Essex,' *Leamington Post and News*, 4 August 1910.
[26] 'The Tobacco Crop in Essex and Kent: Acreage about Same as Last Year with Equal Returns,' reprinted in *Leamington Post and News*, 23 August 1917. The implications of insufficient rotations will be considered more thoroughly in chapter 4.
[27] 'Tobacco Interests in the Leamington District,' *Leamington Post and News*, 18 January 1917.
[28] No title, *Essex Free Press*, 15 March 1895; 'Tobacco Department,' *Leamington Post*, 7 February 1907.
[29] John Kenneth Galbraith, 'Tobacco Yield Much Higher Here Than in Virginia,' in *'Does it Pay?'*, ed. Jenny Phillips, (Dutton, ON: Village Crier, 2010), 222.

Bole's assessment speaks to a lingering association between specialization and risk, an association borne of the intuitive sense that emerged from material experience to "not put all the eggs in one basket." The tension that emerged as a result of the association between specialization and risk ran through the entire modernization project.[30]

By the mid to late 1920s, the pressures to achieve economies of scale, the shift of the tobacco market towards cigarettes, and the higher costs associated with flue-cured tobacco required for cigarettes encouraged a shift towards specialized tobacco farms. A 1925 report from the Ontario Agricultural College provides a valuable snapshot of the structure of tobacco farming in Essex and Elgin Counties. It was an auspicious time to launch such a survey, for it caught several trends. The OAC conducted the survey during the period when flue-cured tobacco began to consolidate its position as the primary tobacco variety as a result of increasing cigarette consumption and during a year when tobacco acreages in Ontario had begun to rebound following a price collapse in 1920. At the time, the corn borer was ravaging through the province, encouraging farmers to return to tobacco.[31] The inclusion of Elgin County also presaged the gradual shift from the 'Old Belt' to the 'New Belt' of tobacco production in Canada. However, the transition had not quite happened at this point, for of the 228 farms surveyed, only 14 were in Elgin County (the author used only 209 farms in the final tabulations).

The survey was primarily concerned with measuring the farm income of tobacco farms, with an eye to making recommendations for the most profitable way to raise the crop. Of particular interest is the survey's reflection of the fluid nature of tobacco cultivation in the 1920s. To wit:

> Of the 209 farms studied 61 produced practically nothing but tobacco and 44 produced tobacco and special crops, such as tomatoes, cabbages and potatoes…the balance 104 farms produced tobacco, livestock and mixed farming products.[32]

[30] Norfolk agricultural representative G.G. Bramhill indicated the persistence of this challenge in his article "Mix General Farming with Tobacco Growing," *The Tillsonburg News*, 25 July 1940.
[31] Lawson Caesar, "The European Corn Borer," Ontario Department of Agriculture, Ontario Agricultural College, Bulletin No. 334 (March 1928)
[32] G.W. Michael, "Tobacco Farming in South Western Ontario," (Guelph, ON: Ontario Agricultural College, Department of Agricultural Economics, 1926), 4.

Of the 61 farms devoted to tobacco, 51 planted particularly heavily in flue-cured tobacco, and the majority of them were less than 45 acres; 31 of those farmers also had a sharecropper.[33] The potential for tobacco to give a farmer ready cash encouraged sharecroppers to take up the crop; a few good years could mean acquiring sufficient capital to purchase a farm. Census records indicate that Quebec farmers also saw tobacco as a useful product for sharecropping. For instance, in 1921 Montcalm township also had more tenants than the typical township in Quebec, with 13.77% of farms (n=53) occupied by tenants or part tenants/part owners, compared to a provincial average of 5.05 percent of farms.[34]

The recollections of people raised in the 1910s and 1920s in Essex County impress the importance of mixed farming there. Between 1984 and 1987, Dr. Alan Brookes at the University of Guelph coordinated a project to record the memoires of farm people from a number of counties. Nineteen men and women interviewed about their experiences specifically recalled raising tobacco, and all of them indicated that they grew up on general farms, with livestock particularly featuring in their recollections. Few indicated that tobacco took up more than a few acres on their farms. Farmers enfolded tobacco into the rhythm of the farm. For instance, one farmer recalled that on their 100-acre farm along Talbot Lane in Essex, tobacco harvesting took place at the same time as the tomatoes, making for long, hot, busy days. He remembered those days viscerally, providing a rare historical glimpse into the bodily History 2: "Oh my God, sometimes your back would ache so much you couldn't even straighten up."[35] Another farmer recalled that his parents would send the farm poultry into the tobacco fields to eat the worms that infested the crops, and a third recalled that in a year when Imperial tobacco offered extraordinarily low prices, his uncle used the leaves to kill chicken lice—a response that very much indicated that understandings pre-dating capitalism of tobacco persisted.[36] Of course, the farmer could always smoke tobacco as well. Another farmer

[33] Michael, "Tobacco Farming in South Western Ontario," 19-20
[34] All figures from Canada, *Census of Canada*, *1921* Vol. V, Agriculture (Ottawa, 1925) and *Census of Canada*, 1931 Vol. VIII, Agriculture (Ottawa, 1936). All percentages have been rounded to the hundredth decimal point.
[35] Interview E-9, 'Farm Work and Farm Life in Ontario Since 1900 Oral History Project.' RG16-200, DVD 567, Archives Ontario. Note that all names are omitted, as the project was not to disclose the names of the participants for 30 years after the interviews were completed.
[36] Interview E-30 and Interview E-19, 'Farm Work and Farm Life in Ontario Since 1900 Oral History Project.' Other articles recommended both of these alternative uses. For instance, see W.A. Barnet, 'Report on the Tobacco Industry in Ontario,' Tobacco Division, Dominion Department of Agriculture, Bulletin A-4, (Ottawa, 1909), 11.

distinctly remembered seeing a woman on a neighbouring farm enjoy a pipe, much as the farmers of Quebec did.[37]

Specialization meant needing to construct new barns to dry the tobacco. Nicholas Phelps recalled that his grandfather typically grew two to three acres of tobacco on their 100-acre farm in Blytheswood, Mersea Township. The culture proved attractive enough to construct a specialized tobacco barn for air curing and put 35 acres of tobacco into the fields. Alas, nature was capricious, and a great windstorm blew down the barn while he was inside. Miraculously, he was unharmed. The farm's bottom line was likewise salvaged, for the storm came after they had managed to cure and strip the Burley. Their neighbours came and helped them clean the debris and store the tobacco, but their tobacco ambitions largely collapsed with the barn.[38] Fire also threatened the best laid plans of tobacco farmers after many farmers decided to install heaters to help dry their tobacco, creating a new risk. Newspapers were filled with accounts of barn fires, and while financial losses were readily accounted for, the lost time and effort of the family were not. The sense of loss and frustration felt by farmers might be gleaned from the fact that when Fletcher Norwood lost his barn with some 30,000 pounds of tobacco, about 150 neighbours showed up to watch and help as best they could.[39] The sense of risk and reward in tobacco was a shared experience, even if the losses could be lonely.

In 1923, Ontario's tobacco production permanently overtook Quebec's.[40] However, this did not mean an end to Quebec's tobacco growing. Two major trends shaped tobacco production in that province in the early stages of the 20th century: the continued specialization in cigar leaf and pipe tobaccos, and the continued growth of the so-called 'southern district' of tobacco cultivation in Quebec along the Yamaska River, particularly near Sainte-Césaire. Southern district tobacco farmers organized sufficiently enough to establish a cooperative for their cigar leaf in 1911.[41] The federal Tobacco Division provides a glimpse of the continued, yet uneven, tobacco specialization. During the 1924 season, Division officials who visited 2,915 tobacco farmers in the province

[37] Interview E-14, 'Farm Work and Farm Life in Ontario Since 1900 Oral History Project.'
[38] Interview E-20, 'Farm Work and Farm Life in Ontario Since 1900 Oral History Project.'
[39] "Barn and Tobacco Destroyed by Fire," *Leamington Post and News*, 17 March 1921.
[40] Canada, Dominion Bureau of Statistics, "Canadian Tobacco Crop of 1931," *Monthly Bulletin of Agricultural* Statistics, Vol 25 No. 283 (March, 1932), 64.
[41] Léo Lafortune, *La Société cooperative agricole du tabac du district de Joliette*, (MA Thesis, Laval Université, 1949), 11.

calculated the average tobacco cultivation at 2.76 acres compared to 9.52 acres grown by 1,452 farmers visited in Ontario. Tobacco cultivation remained more dispersed in Quebec, where 15.8 percent of all Quebec farms reported growing some tobacco for the 1921 census, compared to only 2.4 percent of Ontario farms.[42] The continued dispersal of tobacco cultivation indicates that the rural informal economy continued to operate, providing small markets to a wide array of farmers. However, the figure also understates the entrenched regional focus of Quebec tobacco cultivation, as 79.53 percent of commercial tobacco grew in the counties of Berthier, Joliette, L'Assomption, Montcalm, and Rouville.[43] The report indicated that while Quebec farmers increasingly specialized in pipe and cigar leaf, farmers still paid insufficient attention to the specific varieties of pipe and cigar leaf they planted. This was particularly the case in the northern district (Joliette, Montcalm, and l'Assomption), where the majority of farmers were located (for a visual reminder, see Map 2 in the Introduction).[44]

Whereas a farmer could specialize in a leaf destined for a pipe or a cigar, a farmer who intended to raise flue-cured tobacco felt increasingly pressured to see specialization as a necessity. Comparing the capital requirements for Burley versus flue-cured tobacco indicates one reason why this is the case. In 1921, the Tobacco Division station at Harrow, Essex, directly compared the costs of the two, finding production of one acre of Burley cost $0.1136, while one acre of flue-cured tobacco cost nearly double, $0.218. In a separate experiment at the Farnham, Quebec station, they estimated that a pound of cigar leaf (Comstock Spanish) cost $0.1591 a pound.[45] The major factors accounting for the increased cost of producing flue-cured tobacco were fertilizer and the construction, operation, and fuel for the kilns. However, the potential returns were also higher. The survey also found that a flue cured farmer on an efficient farm made $0.06 profit on a pound of flue-cured tobacco, though 1925 was a particularly good year for flue-cured prices.[46]

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[42] Tobacco Division, 'Report of the Chief of the Division, C.M. Slagg,' Department of Agriculture, Dominion Experimental Farms, (Ottawa, 1925), 4-6.
[43] *Census of Canada*, *1921* Vol. V, Agriculture (Ottawa, 1925)
[44] Of the 2,915 farmers visited, partial addresses and names of 2,587 survive in the national archive. The numbers by county break down as follows: Montcalm: 902, L'Assomption: 677, Joliette: 364, Rouville: 271, Berthier: 180, Deux Montagnes: 73, Iberville: 40, others: 80. RG 17, Vol. 3228, File 315698, LAC.
[45] 'Cost of Growing Tobacco in Ontario,' *Leamington Post and News*, 18 May 1922; Tobacco Division, 'Interim Report of the Officer in Charge, F. Charlan, for the Year Ending March 31, 1921,' Department of Agriculture, Dominion Experimental Farms, (Ottawa, 1922), 32.
[46] Michael, 'Tobacco Farming in South Western Ontario,' 23.

The rise of flue-cured tobacco portended the decline of the Essex and Kent Old Belt. In 1931, flue-cured tobacco overtook Burley tobacco production in Ontario, and the so-called New Belt in the Norfolk Sand Plain overtook Old Belt production in the same year.[47] The two events were related. The sandy, well-draining soil predominately found in Norfolk County proved suitable for producing the light-tasting cigarette tobacco demanded by Imperial Tobacco (among others). The increased popularity of cigarettes, which were generally (though not exclusively) made with flue-cured tobacco, provided a tremendously tempting market for farmers and capitalists alike. This is not to suggest that Burley, Quebec pipe, or cigar tobacco disappeared altogether. Indeed, consumption of manufactured smoking tobacco hovered near twenty million pounds during the 1930s, but cigarette consumption had increased from around 2 million cigarettes in 1922 to 5.6 million cigarettes by 1936.[48] These shifts challenged Old Belt growers, where only small patches of sandy soil, particularly around Leamington and Ruthven, were ideal for flue-cured tobacco.[49] Further, tobacco exhausted many of the Old Belt lands after decades of use.

The cheap land prices of Norfolk, particularly when compared to Essex, encouraged the growth of plantations in the former county.[50] For instance, in 1927, the Norfolk Tobacco Plantations, managed by former Tobacco Division chief H.A. Freeman, acquired 1800 acres of flue-cured land.[51] The company, based in Toronto, was capitalized at $500,000, selling shares at $100 each.[52] An estimate by J.K. Perrett, who worked for the Ontario Department of Agriculture as a tobacco specialist, found that in 1927, plantations controlled some 40 percent of the flue-cured crop in Norfolk County. As the grower-historian of tobacco, Lyal Tait, had it, plantations "became familiar names throughout the tobacco belt."[53] Plantations were important for bringing in Americans as managers, linking Canadian flue-cured tobacco to the more established practices of the south.

[47] Canada, Dominion Bureau of Statistics, 'Tobacco Crop Report,' *Monthly Bulletin of Agricultural Statistics*, Vol. 31, No. 359 (July, 1938), 222-226; Ontario Sessional Papers, Part V, No. 22. 'Annual Report of the Statistics Branch, 1931,' 3.
[48] Canada, Department of Trade and Commerce, 'Report on the Tobacco Industries in Canada,' (Ottawa, 1938), 4.
[49] Tobacco Division, 'Report from the Tobacco Division, for the Year Ending March 31, 1915,' (Ottawa, 1916), 1204.
[50] The 1931 Census has average land prices as $74.56/acre in Essex versus $34.14 in Norfolk. *Census of Canada*, 1931 Vol. VIII, Agriculture (Ottawa, 1936).
[51] 'Big Transaction in Tobacco Land,' *Leamington Post and News*, 20 October 1927.
[52] Issue in *Simcoe Reformer*, 24 November 1927.
[53] Lyal Tait, *Tobacco in Canada*, (Tillsonburg, ON: Ontario Flue-Cured Marketing Board, 1967), 68

Many of them parcelled their land out to share farmers.[54] However, plantations did not dominate production. In 1932, plantation control of the tobacco crop was estimated to be only around 26 percent.[55] This estimate may be a bit low, but by the 1940s, smaller owners were increasingly holding their tobacco acreages.[56] Shareholder owned plantations are a clear sign of capitalist agriculture, but they were not the only force in play, even in this most capital-intensive form of tobacco cultivation.

Two other developments conclude this overview of tobacco cultivation. First, Quebec tobacco farmers, particularly around Joliette, began raising flue-cured tobacco in earnest by the end of the 1930s. By 1939, farmers grew about 5,710 acres of flue-cured tobacco, predominately in the Joliette region (compared to 69,840 acres in Ontario).[57] This acreage remained consistently cultivated by a relatively small number of farmers. In 1950, 136 farmers, averaging approximately 34 acres a farm, raised some 4,619 acres of flue-cured tobacco.[58] More generally, tobacco cultivation in Quebec continued to follow patterns established in the early 20th century. The five counties (Berthier, Joliette, l'Assomption, Montcalm, and Rouville) that had controlled most tobacco production continued to do so. According to the 1940 census, these counties accounted for 80.39 percent of total measured tobacco production, flue-cured and otherwise, in the province. Notably, these five counties constituted only 38.6 percent of the total farms that reported growing some tobacco, indicating that pipe and cigar leaf still found a wide place as part of a mixed agricultural regime, that older habits of raising the leaf continued.[59]

Throughout this period, there were also efforts to convert parts of the Okanagan Valley and the Sumas region of British Columbia to tobacco. Experiments with commercial tobacco production took place in the late 19th century, as a few farmers sought to supply the Lower Mainland

[54] C.J. Coke, 'The Big Business of Tobacco Growing,' *Tillsonburg News*, 16 March 1933; for American managers, see Multicultural History Society of Ontario Papers, Series 61, Delhi Tobacco Belt Project Papers, F1405, B440614, MU 9961, Files 9960.1, Archives Ontario. (Hereafter Delhi Tobacco Belt Project).
[55] J.K. Perrett, 'Report of Field Work Accomplished During 1932 in Norfolk Tobacco District,' Agricultural Representative Reports, Norfolk County, RG16-66, B266739, Archives Ontario.
[56] R. Cameron Vance, 'The Tobacco Economy and its Effect on the Peoples in those Portions of the New Belt Lying in the Counties of Norfolk, Elgin, Oxford, Middlesex and Brant,' (MA Thesis, University of Western Ontario, 1952), 37; Carol Stewart, 'Agricultural Restructuring and Ontario Tobacco Production,' (MSc Thesis, University of Western Ontario, 1996), 36.
[57] 'Statistics,' *The Lighter*, Vol. XI No. 3 (January 1941), 2; Brouillette et al., *Histoire de Lanaudière*, 413.
[58] 'Progress of the Canadian Tobacco Crop,' *The Lighter*, Vol. 21 No. 3 (August 1951), 6.
[59] Canada, *Eighth Census of Canada: Québec Census of Agriculture*, (Ottawa, 1945).

manufacturers with cigar leaf.[60] Experiments with cigar leaf, Burley, and eventually, flue-cured tobacco, all took place. Land companies were interested in promoting tobacco as a paying crop to justify the expense of purchasing land in the agricultural regions of the province.[61] The Tobacco Division conducted a survey of tobacco farmers in the province in 1927. The 175 farmers surveyed raised 401.5 acres of tobacco (predominately Burley and Connecticut cigar leaf), averaging 2.29 acres. The acreage average somewhat overstates how much tobacco most farmers raised, since six Kelowna region farmers accounted for 91 of those acres.[62] The 1930s saw increased efforts to expand flue-cured tobacco production in the province, which reached a peak of 640 acres in 1941.[63] Ultimately, distance from domestic manufacturers and the British market, challenges in acquiring equipment, and the tobacco price collapse during the Depression all contributed to the decline of British Columbia tobacco.[64]

Keeping the Family Stable

Regardless of whether a farmer raised flue, barley, dark, or cigar tobacco, family was central to the endeavour. Family stability generally motivated the land tenure decisions of the farm owner, and that farmer could seldom raise tobacco without family labour. This was as true in Canada as it was globally. In the Dominican Republic and Puerto Rico, tobacco cultivation gave farm families with smallholdings access to export markets, and provided farmers with a ready cash crop they could grow along with their food crops.[65] Tobacco cultivation had long connections to slave labour, but following emancipation in Brazil and the U.S. South, it could also serve as a ready cash crop for black farmers who had limited amounts of land or who grew crops on shareholdings. However, white buyers often claimed that tobacco raised by black people was inferior in both its handling and curing. Returns from tobacco cultivation were also often insufficient to free

[60] William Tietjen to J. McKenzie, 8th February 1895, 'Culture of Tobacco in Canada,' RG17, Vol. 724, Microfilm T-12490, LAC.
[61] 'Okanagan Valley Fruit Lands,' Central Okanagan Land & Orchard Company, Ltd., (n.d.), 19; Felix Charlan, 'Tobacco Growing in British Columbia,' Department of Agriculture, Tobacco Division, Tobacco Bulletin No. A-10 (Ottawa, 1910), 5.
[62] List in letter from E. Archibald to A.T. Charron, 22 February 1928, RG 17, Vol. 3228, File 315698, LAC.
[63] Statistics, *The Lighter*, Vol. XII, No. 1 (January 1942), 4; Tait, *Tobacco in Canada*, 91.
[64] Helen Payne, 'The Tobacco Industry in Kelowna,' File 'Tobacco,' Kelowna Archives.
[65] Baud, *Peasants and Tobacco in the Dominican Republic*, chpt. 4; Levy, 'The History of Tobacco Cultivation in Puerto Rico, 1899-1940,' chpt 1.

sharecroppers from the burdensome debts and crop liens imposed by landowners.[66] Long hours of family labour were a necessity for tobacco cultivation, but the long hours often did not receive their just desserts. Nevertheless, it remained an important cash crop for marginalized producers.

From Brazil to Canada, many farmers entered into tobacco cultivation with the hopes of providing a measure of economic stability for the family. Stability and family motivated tobacco cultivation more than profit. Emphasis on familial motivations have led Canadian rural historians to revise narratives that foreground straightforward transitions from mixed, subsistence-based agriculture to commercial agriculture, even though there are many situations where commercial agriculture came to dominate. For instance, Gérard Bouchard's study of the Saguenay makes clear that an increasing specialization in dairying was not the only trend shaping the area's production, as it co-existed in a system of "multi-activity" where farmer families took on a range of other economic activities, including forestry and other off-farm work.[67] In essence, his findings challenged the linear narrative that the advent of dairying brought about a transition from mixed farming to capitalist agriculture. In Montcalm, Manitoba, Kenneth Sylvester notes how French Canadian settlers also prioritized establishing the next generation of farmers in a capitalist context, where mortgages, credit, and mechanization all shaped farming conditions. However, this is not a story of resisting capitalism either, for Sylvester also argues that the working lives of the families "became commoditized and costed by the calculus of the market."[68] Returning to the theoretical apparatus, History 1 (capitalism) and History 2 (family) are not antithetical; History 1 *encounters* History 2, capitalism encounters family. The value of this approach is to emphasise how there are multiple paths towards modernization within a context largely dominated by capitalist development.

Farmer interest in providing for their family could mesh with the aims of modernizers to create agriculture orientated towards capitalist production. Testimony of farmers before the 1902 Royal

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[66] Michiel Baud and Kees Koonings, "*A lavoura dos pobres:* Tobacco Farming and the Development of Commercial Agriculture in Bahia, 1870-1930," *Journal of Latin American Studies*, Vol. 31 (1999): 287-329; Tracy Campbell, *The Politics of Despair: Power and Resistance in the Tobacco Wars*, (Lexington: University Press of Kentucky, 1993), chpt.1; Jeffrey R. Kerr-Ritchie, *Freedpeople in the Tobacco South, 1860-1900*, (Chapel Hill: University of North Carolina Press, 1999), chpt. 6.

[67] On dairying specifically, see Gérard Bouchard, *Quelques arpents d'Amérique: population, économie, famille au Saguenay, 1838-1971*, (Montréal: Boréal, 1996), chpt. 4.

[68] Kenneth Michael Sylvester, *The Limits of Rural Capitalism: Family, Culture, and Markets in Montcalm, Manitoba*, (Toronto: University of Toronto Press, 2001), 4.

Commission Regarding the Tobacco Trade shows the two histories in operation. In his testimony, Montcalm MP Albert Octave Dugas captured the rewards and risks behind tobacco cultivation just as the ATCC increased its influence in the area and began to lower prices to as low as 4 or 5 cents per pound:

> I must say that at St. Jacques, for example, it is one of the richest parishes in the Dominion, and we are now in danger of losing this culture of tobacco…farmers are obliged to sell their farms and having sold them they will have to leave the country[.][69]

On the same day, Montcalm farmer Joseph Desrochers observed, "I think that this culture was one that was paying the most in the country. This is the reason that kept me in the country."[70] Pierre Denis' survey, referred to above, recorded Simone Gadeau, owner of a 150-acre farm, who describes the stakes that some farmers placed in tobacco, "I have a big family, and by planting tobacco I can keep them at home."[71] These declarations were of considerable importance during a period when Quebec elites in government and church fretted about the significant impact of emigration.[72] Unmentioned, but equally important, keeping the family at home also allowed Gadeau, and others like him, to draw on their labour. In these statements, the relationship between maximizing returns and family stability intertwine.

For all the perceived differences between Quebec and Ontario agriculture, family stability also motivated most Old Belt farmers. Tobacco cultivation acquired a reputation for being a 'mortgage buster' for farmers in Essex County, who farmed on land typically costing over $100 an acre.[73] For instance, the *Leamington Post* reported in 1907 about a farmer whose $1280 return on his tobacco enabled him to pay off the $400 that remained on his mortgage.[74] Another report in the *Essex Free Press* cited testimony from a banker in Chatham who noted that tobacco receipts were leading farmers to pay off their mortgages.[75] 'Mortgage buster' is going too far--tobacco's

[69] Evidence of Albert Octave Dugas, *RCTTC,* 905.
[70] Evidence of Joseph Desrochers, *RCTTC*, 933.
[71]Pierre Denis to O'Halloran, 24 June 1904. RG 17, Vol. 984, File 157247, LAC.
[72] Bruno Rameriez, *On the Move: French Canadian and Italian Migrants in the North Atlantic Economy*, (Toronto: Oxford University Press, 1991), chpt. 2.
[73] Michael, 'Tobacco Farming in South West Ontario,' 7; George Haythorne and Leonard Marsh, *Land and Labour: A Social Survey of Agriculture and the Farm Labour Market in Central Canada*, (Toronto: Oxford University Press, 1941), 130.
[74] 'Tobacco is a Mortgage Lifter,' *Leamington Post*, 25 April 1907.
[75] 'Prosperity in Essex County,' *Essex Free Press*, 18 December 1914.

potential to pay off mortgages was not absolute. The 1931 Census, the first to record farm mortgages, reported that 50.32 percent of farms in Essex and 48.68 percent in Kent were "fully owned," compared to a provincial average of 41.02 percent.[76] Still, people were highly motivated to use tobacco in an effort to pay off their mortgage. Keen desires to fight against the perceived flight from the country by making the farm life seem as attractive and dignified as possible shaped much of farm rhetoric during the period.[77] Onerous mortgages were anathema to this desire. As geographers Richard Harris and Doris Rogonetti note, "a mortgage was long regarded by some people with shame and by many as a necessary evil."[78] Such sentiment evoked the older "culture of debt" that has been traced in the Tidewater plantations of Virginia, where debt assumed a powerful cultural role among the Virginians, leading to a shared sense of grievance among farmers and planters indebted to British merchants.[79] There was little economic reason for this sentiment, but it speaks to a desire to ensure that a family property is not beholden to outside, destabilizing influences.

We hear echoes of this sentiment in the voices of the people who gave their recollections in the mid-1980s. One of the men interviewed in the Essex project recalled that his father held 75 acres clear Cottam. He sought to expand his operation, and took a $5000 mortgage on his original acreage to acquire another 25 acres near his original farm. However, during the Depression, he lost the mortgaged acreage along with his original farm, "but then he turned around," and a few years later acquired another 100 acres. The man remembered visiting his father on this second farm, where he proudly showed him the papers indicating that he had paid off the mortgage. "He redeemed himself, I guess," the son observed.[80] Burley tobacco, which experienced a sharp drop in prices during the early years of the Depression, plays a role in these transactions. The account can be read as a series of economic decisions; his father sought an opportunity to expand his farm and returns, initially failed, and then eventually succeeded. This clearly fits within a model of

[76] Canada, *Seventh Census of Canada, 1931*, Vol. VIII, (Ottawa, 1936).
[77] Adam Crerar, "Ties that Bind: Farming, Agrarian Ideals, and Life in Ontario, 1890-1930," (PhD Dissertation, University of Toronto, 1999), 67-68
[78] Richard Harris and Doris Ragonetti, "Where Credit is Due: Residential Mortgage Finance in Canada, 1901 to 1954," *Journal of Real Estate Finance and Economics*, Vol. 16 No. 2 (1998): 226.
[79] T.H. Breen, *Tobacco Culture: The Mentality of the Great Tidewater Planters on the Eve of Revolution*, (Princeton: Princeton University Press, 1985).
[80] Interview E-14, 'Farm Work and Farm Life in Ontario Since 1900 Oral History Project.' RG 16-200, DVD 567, Archives Ontario. The interviewees identities are protected for 30 years, so participants are identified only by interviewee number.

farmers adjusting to the conditions of capitalist agriculture. However, redemption has a fundamentally moral component, not captured by stories of agricultural transition. Losing on a mortgage was a moment of fundamental, disorientating instability. Owning land clear was stability, success.

Immigrants Acquiring the Family Farm

Tobacco cultivation also fulfilled the desire for stability sought by thousands of immigrants. For the Belgians, Hungarians, Dutch, Poles, and Lithuanians who came to Canada, flue-cured tobacco cultivation shortened the agricultural ladder, allowing some fortunate souls to jump from labourer to sharecropper to mortgagee to farm owner in a few years. Even more remarkably, some of these immigrants were able to make these transitions during the Depression years. For instance, in 1926, 30-year-old Arthur Devos arrived in Essex from Belgium and worked for a season as a tobacco hand. The next year, he sharecropped in Harrow, before moving to Langton, Norfolk to sharecrop for a few years in the growing flue-cured fields there. By 1934, he had raised enough money to purchase his own farm, and by 1940 he had a second farm. In later years, two of his sons followed him in tobacco growing.[81] Devos' story is notable for the speed and extent to which he succeeded in adapting to specialized and profitable farming, but it is not unique. Profit motivated Devos—buying a second farm specializing in tobacco speaks to this—yet the fact that he identifies establishing his sons on their own farms as a key accomplishment demonstrates that older, non-capitalist motives persisted even in the advent of specialized, commercial agriculture.

The high returns from flue-cured tobacco, particularly during the late 1920s and again in the late 1930s, made possible the experience of Devos, and others like him. Hundreds of Belgians had been attracted to Southwestern Ontario and Michigan due to their knowledge of sugar beets, which enjoyed a brief spurt of popularity at the turn of the 20th century.[82] In Essex, sugar beet and tobacco cultivation intertwined. Some years, farmers tried their hand at raising both, and in other years,

[81] Delhi Tobacco Belt Project, Files 9959.1, Archives Ontario.
[82] Serge Jaumain, 'Survol historique de l'immigration belge au Canada,' in Serge Jaumain, ed., *Les immigrants préférés, les Belges*, (Ottawa: Presses de l'Université d'Ottawa, 1999), 40; Joan Magee, *The Belgians in Ontario: A History*, (Toronto: Dundurn Press, 1987), 27-33. Sugar beets was more than a spurt in several European countries, including Belgium, see Horacio Crespo, "Trade Regimes and the International Sugar Market, 1850-1980: Protectionism, Subsidies, and Regulation," in *From Silver to Cocaine*, 153.

sugar beets functioned as an alternative to Burley tobacco when farmers anticipated low prices.[83] Many of the Essex farmers interviewed recalled Belgians hired by sugar beet companies coming to their farms to help thin and top the sugar beets in the field (a practice with similarities to topping and suckering tobacco), as the plant tended to grow too extensively, sapping the sugar from the beet.[84] Some Belgians worked sugar beets and tobacco in the same year.[85] Belgians also began sharecropping tobacco and buying farms in Essex, and newspapers recorded their success. In 1923, the *Kingsville Reporter* recorded how an (unnamed) Belgian grew a flue-cured crop on his farm that yielded him an astonishing $12,000, after he had purchased the farm for $4000 to $5000. In 1925, the *Essex Free Post* noted that many Belgians were returning to their home country for the Christmas season after making $4000 to $5000 on their shares.[86]

The creation of the New Belt fundamentally relied on immigrant labour and risk. Belgians featured in the narrative of how farmers and capitalists made the New Belt, and reshaped Norfolk County. Francis Gregory, an important Imperial buyer and tobacco plantation owner, claimed that he attracted the first Belgians to work on his plantation in the area, and the *Tillsonburg News* credited P.C. Vandekamer with establishing one of the first commercial flue-cured tobacco farms in Norfolk.[87] Cornelius Jaenen estimates that by 1929, Belgians raised some 12,000 acres of tobacco around Tillsonburg and Delhi (just over 15,000 acres were raised in Canada that year), and Gregory estimated that Belgians raised three-quarters of the 1931 flue-cured crop around Delhi.[88] There were also a large number of Dutch migrants. Indeed, the 1931 Census indicates that there were more Dutch (2,502) than Belgians (1,282) in the county, though Belgians are more frequently associated with tobacco cultivation. According to a report by C.J. Coke of the federal Department of Agriculture, Belgians, Dutch, and Americans from the U.S. South formed the vast majority of tenants on the tobacco plantations in the county.[89] These migrants found welcoming hosts. The

[83] 'Tobacco in Essex County,' *Essex Free Press*, 30 October 1908; 'Drop in Tobacco,' *Essex Free Press*, 25 May 1928; 'Drop in Tobacco Crop this Year,' *Leamington Post and News*, 17 May 1928.
[84] Interview E-17; Interview E-18; Interview E-22; Interview E-25; 'Farm Work and Farm Life in Ontario Since 1900 Oral History Project.'
[85] 'Cottam,' *Essex Free Press*, 16 October 1925.
[86] 'Town and County,' *Essex Free Press*, 25 December 1925;
[87] 'Half-Million Dollar Tobacco Plant to be Built in Delhi,' *Tillsonburg News*, 13 March 1930;
[88] Cornelius J. Jaenen, 'Quelques aspects des activités professionnelles des immigrants belge (XIX-XXe siècles), in in Serge Jaumain, ed., *Les immigrants préférés, les Belges*, (Ottawa: Presses de l'Université d'Ottawa, 1999), 150; 'World Leader Tobacco Factory in Delhi Visited,' *Tillsonburg News*, 23 July 1931; Dominion Bureau of Statistics, "Monthy Crop Report," *Monthly Bulletin of Agricultural Statistics*, Vol. 31 No. 359 (July, 1938), 222-226
[89] C.J. Coke, 'The Big Business of Tobacco Growing,' *Tillsonburg News*, 16 March 1933

Simcoe Reformer editorialized "We know what the Belgians and the Dutch are capable of in the way of developing agricultural projects to which they set their hand."[90] These immigrants faced risks, certainly, but their generally positive reception facilitated their climb up the agricultural ladder.

Hungarians constituted a third major group of immigrants who worked and settled in the New Belt. As Carmela Patrias notes, many Hungarians were attracted to Canada by the prospect of land, estimating that 83.5 percent of Hungarian immigrants to Canada between 1928 and 1930 were agriculturalists.[91] Hungarians met some resistance from the Anglo society, and papers also accused Hungarians of stirring up labour agitation during a brief strike by workers in during the 1937 harvest.[92] However, not every report was hostile. An article in the *Simcoe Reformer* reported on the presence of a 'little Budapest' in a forest near the town. It noted that the small shelters the Hungarian workers constructed were 'neat,' and that police reported that things seemed to be in order. It concluded, "All in all, the community appears to be serving a very real purpose in caring for the handlers of Norfolk's tobacco crop."[93] Reports such as this indicate that many Hungarians came to the New Belt as harvest workers, without settling in the area permanently.

Hungarians who did settle in the New Belt began to come to the area in larger numbers a little after the Belgians and Dutch, though they soon came to shape the area as much as the earlier groups. Ambrus Lorincz, a Székely who acquired three tobacco farms over his lifetime, recalled that there were so many Hungarians in the area, his English actually regressed for a period.[94] Another Hungarian claimed that by the end of the 1930s, only five percent of tobacco farmers were English-Canadian, and that "one third of the tobacco farms belong to Hungarians and Schwabs." This claim speaks to the fluid nature of the term 'Hungarian' in the area, for many migrants who came from Hungary to the New Belt were ethnically and linguistically German.[95] Ignatz and Katherine Habl's

[90] 'Here and There,' *The Simcoe Reformer*, 31 May 1928.
[91] Carmela Patrias, *Patriots and Proletarians: Politicizing Hungarian Immigrants in Interwar Canada*, (Montreal and Kingston: McGill-Queen's University Press, 1994), 23.
[92] 'Labour Situation in Norfolk Will Right Itself, is Belief of Growers,' *St. Thomas Times Journal*, 24 July 1937;
[93] "'Little Budapest' Springs Up in the Heart of 'New Virginia,'" *Simcoe Reformer*, 1 September 1933.
[94] Linda Dégh, *People in the Tobacco Belt: Four Lives*, (Ottawa: National Museums of Canada, 1975), 249.
[95] Dégh, *People in the Tobacco Belt*, xvii. The reference to 'Schwabs,' or Swabians, speaks to a particular challenge in discussing the role of Hungarians in developing tobacco in Norfolk. Many of the Hungarians whose memories have been recorded by various historians were German speaking and ethnically German Swabians, even though they are identified as Hungarian by reports and classified as such in oral interviews. The 'Swabian' identity itself tends to be a fluid one that often shifts based on the broader social and economic context the individual finds himself in.

experiences speak to this fluid identity. Both were born in Högyesz, Hungary, identified ethnically as 'Schwäbisch,' spoke and read Hungarian and German, and went to the German Hall in Delhi for recreation.[96] Regardless of whether or not Hungarians (German and Hungarian speaking alike) indeed raised one-third of tobacco, there was a broader sense of pride that immigrant farmers had in their role in remaking Norfolk (and, to a lesser extent, Elgin), through tobacco cultivation. Norfolk was a 'desert' before the Belgians arrived, the Hungarian interviewed above noted, immigrants being the hands that made the New Belt prosperous.

In the narratives of the Hungarians, Belgians, and Dutch, land functioned as more than capital. It fixed their families to the area. For instance, George Fulop recalled that while "90 percent" of Hungarians intended to return to Hungary, the combination of owning land, the Depression, and the returns from their tobacco farm induced them to stay.[97] Tony and Mary Schafer, two German-speaking Hungarians, recalled that they had planned to return to Hungary due to their difficulties in learning English. However, they received a $1000 loan from his brother, and began raising tobacco in 1933. After a difficult year and another loan, they made enough on a crop to repay the loans and have $500 remaining. For ten more years, they grew on shares and when World War II began, they felt that there was little purpose in returning home, so they purchased a 50 acre farm in 1943. Bound by family ties and land, they were permanently rooted in Canada, and they ended up retiring to Delhi in 1963.[98] Successful Belgian farmers also became attached to the area, though they did not lose sight of their homeland. They became known for taking annual trips back to their

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Judging by the work of both Dégh and Patrias, the distinction between a Swabian Hungarian and a Hungarian of a different ethnic origin seems to be less material than their class divisions, and when they arrived in Canada. For instance, Patrias' *Patriots and Proletariats* has only one reference to Swabians, noting that the Swabian proletariat Joseph Magyar used his German language skills to connect to the German community. Further, in an interview, Clare Feth, a Swabian, recalled that German and Hungarian speakers tended to interact less in her hometown, but when she was in Canada, she relied on German and Hungarians alike to gather information about employment. '1956 Hungarian Memorial Oral History Project,' Multicultural History Society of Ontario (MHSO), http://www.multiculturalcanada.ca/contentdm_results/pager/6/75/hungarian. Further, K.M. McLaughlin notes that German numbers tend to be difficult to determine during the interwar years, as many Germans separated themselves from their German nation-state identity for obvious political reasons. "The Germans in Canada," Canada's Ethnic Groups, Canadian Historical Association Booklet No. 11 (Ottawa, 1985), 13.
See also Patrias, *Patriots and Proletarians*, 224; Anna M. Wittmann, 'From Hungary to Germany to Canada: Gheorghiu's Twenty-fifth Hour and Shifting Swabian Identities,' in Heinz Antor et al. eds., *Refractions of Germany in Canadian Literature and Culture*, (New York, 2003).

[96] Delhi Tobacco Belt Project, File 9961.5.

[97] George Fulup, '1956 Hungarian Memorial Oral History Project,' MHSO.

[98] Delhi Tobacco Belt Project, File 9959.4

home country during the winter months after the stripping was done. During World War II, Belgians and Dutch alike sent as much material aid to family back home as they could.[99]

TILLSONBURG DISTRICT TOBACCO GROWERS

Each year, at the close of the tobacco season, a large number of Belgian Growers return to spend the Christmas holidays in the Old Home Land. The above photograph shows a group of Belgian Growers from the Tillsonburg district taken on board the Canadian Pacific steamship "Duchess of Bedford" upon its arrival at Halifax on March 8th. Henri Bouchaert, the genial steamship agent for the Belgian people, booked the majority in this group, co-operating with Mr. Norman of the local office, who looked after the rail tickets for them. Although they encountered severe weather both ways, the party reports having a very enjoyable time on board and spoke very highly of the courteous attention from all the Steamship officials.

Figure 4: Belgian tobacco growers returning to the Tillsonburg area from Belgium after Christmas, *Tillsonburg News*, 4 April 1935.

With such importance associated with climbing the agricultural ladder, failing to do so caused considerable distress among some farmers. As Catharine Wilson warns us, the agricultural ladder is a limited framework for assessing strategies, since it contains normative judgments about the inherent value of land ownership and neglects to consider whether some families determined it to be economically rational to continue to rent or work as a tenant farmer.[100] Indeed, tenancy remained a significant part of tobacco farming; 16.8 percent of Norfolk farms had sharecroppers

[99] 'Belgians and Hollanders want to help,' *Tillsonburg News*, 16 May 1940; 'British Victory Will Restore Belgium's Freedom' *Tillsonburg News*, 20 February 1941.
[100] Catharine Anne Wilson, *Tenants in Time: Family Strategies, Land, and Liberalism in Upper Canada, 1799-1871*, (Montreal and Kingston: McGill-Queen's University Press, 2009), chpt. 9; see also John H. Houdek and Charles F. Heller, Jr., "Part Owner Operators in Nineteenth-Century Michigan: Forerunners of Today's Commercial Farmers," *Agricultural History*, Vol. 76 No. 3 (Summer, 2002): 546-577; Adelman, *Frontier Development,* 143.

in 1941.[101] Sharecropping was valuable for new farmers who needed assistance accessing the kilns and machinery needed for flue-cured tobacco. A typical sharecropping arrangement also had the farm owner help cover the costs of seed and fertilizer.[102] However, a number of flue-cured farmers keenly felt that sharecropping was supposed to be a transition. One Belgian who chose to remain anonymous noted that, since he had not been able to acquire land, he did not see himself as having earned a satisfactory living in Canada. Sándor Gál, who arrived from Hungary in 1928, also never acquired land and thus claimed that his economic opportunities ended up being no better in Canada than they would have been in his homeland. However, he did note with pride that his son had become a university professor; success can take many forms.[103] There are indications that "failing" to transition from share-cropping to farm-owning was a lasting stigma. Discussing her experiences in the 1960s, Eva Huszar recalled being ashamed when, at a church meeting, she overheard someone say about her husband, "Oh, are you talking to that one? He hasn't got even one tobacco farm."[104] Sharecropping might have been economically rational, but there seems to have been pressure to see it as only a step. The pressure to obtain and own a tobacco farm, pressure that adhered to the logic of modern rural capitalism, did not only emanate from capitalist motives. Huszar's anecdote partially obscures other lived realities, since sharecropping remained a core part of tobacco cultivation in the New Belt right through the 1940s. Indeed, even into the 1960s, some 1,200 sharegrowers were registered with the Ontario Flue-Cured Tobacco Growers' Marketing Board.[105]

The recollections of people recorded by the Multicultural History Society of Ontario indicate the importance of mortgages in the story of the development of the New Belt. Many of those interviewed indicated that they took out a mortgage to buy their first farm after sharecropping for a period of time. Mortgages could come from several sources. John Drotos, a Hungarian who came to Canada in 1925, had worked as a sharegrower in Courtland, but then received a government loan and purchased a farm in Otterville. While Drotos is not specific about which government body furnished the loan, it is quite probable that he received it through the Canada Farm Loan

[101] Canada, *Eighth Census of Canada, 1941: Ontario Census of Agriculture*, (Ottawa, 1946).
[102] Michael, 'Tobacco Growing in Southwestern Ontario,' 19-20. see also Interview E-19, 'Farm Work and Farm Life in Ontario Since 1900 Oral History Project.'
[103] Delhi Tobacco Belt Project, File 9959.1, File 9961.1.
[104] Dégh, *People in the Tobacco Belt*, 199.
[105] Tait, *Tobacco in Canada*, 69.

Board, which significantly increased its lending operations after 1934.[106] The Belgian Peter Bacrd, who arrived in 1927, worked with his family in sugar beet and tobacco farms before saving enough to acquire his own tobacco farm in 1943 with the help of a bank loan. Paul Rapai, another Hungarian, recalled that he paid off his mortgage, which he acquired after eight years of sharecropping, via savings and a lien on his crops.[107] The lien became particularly popular after World War II, as tobacco farmers increasingly acquired their property though a "quarter-crop payment plan," where a bank would claim one-quarter of the gross proceeds of the tobacco crop as payment for the interest and principal of a loan.[108] The system was designed to allow sharecroppers to acquire property with a lower down payment (as low as 10 percent of the total value of the farm), while being flexible on annual payments, given the annual variation in tobacco prices.[109] Whether through government or bank loan, or by lien, the growing prevalence of mortgages and loans indicates that tobacco cultivation was firmly entrenched in the commercial, capitalist market.

However, banks and governments—the formal economy—were not the only source for loans. Many of the people interviewed also recalled their family providing financial assistance. The experience of Albert Augustine, a Lithuanian, shows how family credit served as critical a role as bank or government credit. He began working on his father's farm in 1939, and then in 1944, his father gave him $2000 to buy a tobacco farm with his brother. In 1950, he married, sold his share to his brother, and purchased a new tobacco farm in LaSallette with help from his in-laws.[110] The van de Maele's had a similar experience. They arrived in 1928, and joined relatives to work in sugar beets and Burley tobacco. The couple then began to grow on shares in Stratfordville, and then, with the help of a brother, acquired a tobacco farm near Tillsonburg in 1941. They noted with pride that two of their children continued to raise tobacco. Belgians were particularly adept at passing farms from parents to children. Of the fifty Belgians in the file who indicated that they owned a farm, forty of them noted that their children also had tobacco farms.[111] The fact that they

[106] W.T. Easterbrook, *Farm Credit in Canada*, (Toronto: University of Toronto Press, 1938), 134-137.
[107] Drotos: Delhi Tobacco Belt Project, File 9961.1; Bacrd: Delhi Tobacco Project, File 9959.2; Rapai: Delhi Tobacco Belt Project, File 9959.3
[108] The 1941 census reported only 107 Norfolk farms reporting liens, so this is more of a post war phenomenon. Canada, *Eighth Census of Canada*, *1941*, *Ontario: Census of Agriculture*, (Ottawa, 1946).
[109] Tait, *Tobacco in Canada*, 69-70; Vance, "The Tobacco Economy and its Effects on People in the New Belt," 39-45.
[110] Delhi Tobacco Belt Project, File 9960.4
[111] Delhi Tobacco Belt Project, File 9959.1

were among the earliest immigrant groups to establish themselves as tobacco farmers undoubtedly assisted in this success, since it allowed for the early creation of networks of family credit—networks within the informal rural economy—that helped establish new farmers.

Field Work

For decades, French habitants raised their *tabac canadien*, a catch-all term used to describe a variety of local and personally orientated tobacco grown in small garden plots. In many cases, women raised the seedlings, transplanted, weeded, watered, and pruned the tobacco.[112] Rather than seeing only a discontinuity between women raising domestic tobacco in New France/Lower Canada and men raising commercial tobacco, we should acknowledge the strong thread of women's work woven between the two methods of cultivation. Although women's role in tobacco cultivation altered as the crop became more commercially orientated, their work remained fundamental to a successful crop. As Marjorie Cohen notes, women's farm work was often confined to the category of 'help,' and the domestication (and devaluation) of their work intensified during the transition to industrial capitalism.[113] However, evidence also suggests that the line between domestic work and field work often blurred in tobacco production, right through to the 1940s. This blurring has been noted in other contexts where family work and capitalism intersected, including dairying operations in Montcalm, Manitoba, and upstate New York.[114] As a labour-intensive crop, tobacco required the sweat of all its family members during its growth and especially during the harvest.

The oral accounts of farm families in both the Old Belt and the New Belt provide first-hand accounts of women's work on the tobacco farm. For instance, one interviewee of the Essex oral project provided a remarkable account of her life and work on her father's farm. She remembered how tobacco wove itself into her life: "As soon as we got home from school it was change your clothes and strip tobacco." That certainly was not her only job. She recalled having to lead horses for disking the soil when her father got ill. She also hoed and suckered the tobacco from age 12

[112] Marie Dumont, Micheline Jean, and Michèle Lavigne, *Quebec Women: A History*, trans. Roger Gannon and Rosalind Gill, (Toronto: Canadian Scholars Press, 1990), 146-147.
[113] Marjorie Griffin Cohen, *Women's Work, Markets, and Economic Development in Nineteenth Century Ontario*, (Toronto: University of Toronto Press, 1988), 71, chpt 6.
[114] Sylvester, *The Limits of Rural Capitalism*, 63; Nancy Grey Osterud, *Putting the Barn Before the Horse: Women and Family Farming in Early Twentieth Century New York*, (Ithaca: Cornell University Press, 2012), chpt. 5.

onward. She became adept at suckering and recalled leading the two or three hired workers that the family employed over the summer. During the harvest, she was in the fields spearing the tobacco stocks onto laths and hauling them to the barn for drying. She remembered one frustrating year in particular, when she was too busy suckering tobacco to join her friends on a picnic. Her work was at least partially recognized when her father presented her with a new fur coat for Christmas, a kind gesture, though one that also demonstrates that her work was cast as help, since wages were not paid. Eventually, she also took employment off the farm at the Heinz factory in Leamington; 'multi-activity' was hardly confined to men. Another woman interviewed for the project remembered that her status as the oldest sibling gave her increased responsibilities. As she recalled, "Anything a boy done, I done…I had to be the boy to help Dad."[115] The oral accounts make it clear the help of young women was fundamental to a successful tobacco crop.

Killing tobacco worms was a particularly gruesome job taken on by both boys and girls. Another woman remembered that during the summer, she and her siblings would have to go out to kill the "long, squirmy green things" that sapped the tobacco leaves of their vital nutrients (and value), leaving them brown and molted. She remembered that the boys delighted in splitting the worms in half with an eye on disgusting the girls. More than once, she had to dodge a thrown worm. Evidently, some boys might have been disappointed in their object, since one woman interviewed remembered that she had "a lot of fun" picking the worms.[116] Some advice literature seemed to recognize that the joy some children derived in picking and squishing bugs could be harnessed in service of a marketable crop. The early modernizer Felix Charlan deemed the hunt for bugs on the underside of the broad tobacco leaf a job suited for "women and children," while an early report from the *Kingsville Reporter* indicated that the number of tobacco plants found in the field would mean that "about every man, woman, and child" in the area would be out suckering and hunting bugs.[117] Boys and girls alike reared on the need to squish tobacco worms gave everyone a visceral, "ready at hand" understanding of the crop that determined much of their economic fortune. The sound and feel of a crushed worm eludes historical description, but it is nonetheless part of the tobacco experience.

[115] Interview E-3 and Interview E-10, 'Farm Work and Farm Life in Ontario Since 1900 Oral History Project.'
[116] Interview E-1 and Interview E-9, 'Farm Work and Farm Life in Ontario since 1900 Oral History Project.'
[117] Felix Charlan, "The Growing of Tobacco," Tobacco Division, Department of Agriculture, Bulletin on Tobacco A-8, (Ottawa, 1907), 14; 'Tobacco Growers," *Kingsville Reporter*, 17 March 1898.

Women's field work was also fundamental for an immigrant family seeking to acquire a farm. Elizabeth Czerlau's experiences speak to this. Her father came to Canada in 1929, and her mother in 1933. Czerlau remained in Hungary with her sisters until she joined her parents in Tillsonburg in 1936. The very day after she arrived where her parents were sharecropping, she was in the field helping cultivate the tobacco.[118] Spouses also moved around together as working units. The van Belles arrived from Belgium in 1927 and found work working on sugar-beet acreage in Essex. They moved to working in a creamery in Detroit, and then went to a Burley farm. In 1937, the two of them began sharegrowing tobacco near Delhi, and they saved enough to become farm owners in 1946. To their satisfaction, three of their children also became tobacco farm owners.[119] An Elgin farmer, W.H. Bole, noted how Hungarian men and women both worked in the field in equal measure, claiming that, "they [women] prefer to have a share of the work outside."[120] Newspaper reports from the period also commented on the work of men and women in the fields, like in this evocative passage from the *Tillsonburg News*:

> For the past two weeks the tobacco area which comprises almost the entire north and southwestern portion of the county has presented a picture of industry of the most active sort. In the fields there have been gathered men, women, and sometimes children of many nationalities, from the familiar Canadian to the Southerner, the Belgian, the Hollander, and the Russian. All have been lured to Norfolk by the rich rewards of the leaf, some to face disappointment, but the majority to realize well from the hard season's labor.[121]

Indeed, some did face disappointment, or did not intend to settle into tobacco permanently, but making the transition to becoming a liberal, individual landowner required the generally unpaid labour of the entire family.

The double burden of domestic and farm work certainly applied to women during the harvest. Universally, women interviewed recalled the harvest period as a tremendously busy time. During the harvest, farm-owning families would typically hire wage labour—this was the case in both

[118] Joe and Elizabeth Czerlau, '1956 Hungarian Memorial Oral History Project,' MHSO, http://www.multiculturalcanada.ca/contentdm_results/pager/6/75/hungarian
[119] Delhi Tobacco Belt Project, File 9959.2.
[120] Galbraith, 'Tobacco Yield Much Higher Here Than in Virginia,' in *'Does it Pay?'*, 222.
[121] 'Norfolk Growers Complete Harvest of Crop,' *Tillsonburg News*, 2 October 1930, 3.

Burley and flue-cured tobacco farms. The herculean tasks of feeding gangs of men, while contributing to the harvest either in the fields or by tying together the leaves onto lathes (or both) are not adequately captured by a focus on the transition to individually orientated, capitalist agriculture.[122] Clare Feth recalled having to cook for the gangs, which meant getting up at 4 or 5 in the morning to make sausages, salads, and pies, after which she would help in the field for a spell before returning to serve the meal and clean up afterwards.[123] The stakes were high—if a worker deemed the meal inadequate, he might leave (though, this was less of a problem for the sharecropper or farm owner during the depths of the Depression).[124] Some women also found work as cooks during the harvest season. Magdalena Heil joined her husband in 1935 while he was working on shares at a tobacco plantation. Employed by the plantation as a cook, she contributed to the family savings, which allowed the couple to acquire their own farm in 1939. Magdalena Weber recalled that as she and her husband sharecropped, she also went to cook for harvest gangs of twenty-one people.[125] The long hours facing women during harvest and the taste buds of the male worker intersected with the expansion of sharecropping on plantations that supplied the expanding cigarette market.

As the long hours of cooking suggests, the transition to flue-cured tobacco also meant that a growing number of harvest workers were required. Priming tobacco, which meant taking individual leaves as they cured rather than cutting down the entire stalk, contributed to the cultivation of tobacco that cured more evenly, but it also contributed to higher labour costs for farm owners or sharecroppers who hired harvest workers. While the exact number of workers hired varied based on factors like the number of family members a farmer had, the size of the farm, and the money farmers had to pay wages, J.B. Norwood, a North Carolinian immigrant who raised 38 acres of flue-cured tobacco with his father, gives us an idea of labour requirements: "We count on four men for a crop this size until topping. When that time comes we employ six men. When suckering comes we require at least nine men."[126] The need for labourers became acute during

[122] On the lasting difficulties of women's work in rural Ontario during increased agricultural specialization, see Terry Crowley, "Experience and Representation: Southern Ontario Farm Women and Agricultural Change, 1870-1914." *Agricultural History*, Vol. 73 No. 2 (April 1999): 238-251.
[123] Clare Feth, '1956 Hungarian Memorial Oral History Project.'
[124] *The Backbreaking Leaf*, directed by Terence Macartney Filgate, National Film Board, 1959.
[125] Delhi Tobacco Belt Project, File 9961.4; File 9961.5
[126] 'North Carolina Man on Tobacco Growing,' *Tillsonburg News*, 22 September 1927, 11. The increased labour demands brought by suckering was also acknowledged by Ontario's Tobacco Field Specialist; see 'Annual Report,

World War II, when Archibald Leitch, the head of the Ontario Flue Cured Association, estimated that of the 40,000 estimated workers required for the 1943 harvest, at least 20,000 were women and children, and farmers had managed to secure the services of another 10,000 workers, leaving a 10,000 worker gap.[127]

Figure 5: An unnamed Belgian woman and the harvest gang at a farm near Delhi, Ontario, c. 1928-1929. Achiel Lannoo photographs, Series F1405-4-1, B115530, Archives Ontario.

People who worked with tobacco developed an intimate relationship with the crop. A remarkable feature of tobacco cultivation is that, despite the fact that all tobacco is genetically identical, the specific flavour of the leaf depends on multiple factors, all of which stemmed from the decisions of the farmers, their family, and their workers.[128] Farmers had to make the decisions about what to plant, when to plant, and when to harvest. Tobacco workers required a very close relationship with their crop as they removed it from the earth; they determined when to top it, searched undersides

Norfolk County, 1927-28,' Agricultural Representative Reports, Norfolk County, RG 16-66, B266739, Archives Ontario.

[127] 'Tobacco Labour Shortage Discussed at Meeting,' *Tillsonburg News*, 15 July 1943. See also 'District Farmers Busy in Harvest Operations," *Tillsonburg News*, 19 August 1943.

[128] On genetic identity, see Hahn, *Making Tobacco Bright*, 3-4.

of leaves to find pests, and sought suckers. Their work patterns were filled with small decisions that could make a great difference in the grade that the leaves were given in the marketplace. A hint of this emerges from a stanza in an anonymous poem, 'The Primer's Lament;' "'Now then, there's your row, and before you go//I'll show you what I mean.//You just pick the ripe,' was the boss's gripe,//'And be sure that you leave the green.'" Priming was among the most difficult of jobs facing the farm family and their workers. It meant long, hot days of being stooped over. "How the hours dragged by as the sun climbed high//It seemed I'd soon be dead.//There was not a break, I was one whole ache//From my toenails up to my head."[129]

Commentators encapsulated the need to cultivate a relationship with the plant with the word "experience." An early Leamington flue-cured grower noted, "I have this to say that any make who undertakes to learn the tobacco game will find that experience keeps a dear school…You can't tobacco-farm from an automobile or by proxy. It simply cannot be done."[130] To be grown properly, tobacco needed to be touched, monitored, understood. For instance, it is simple to understand that a tobacco plant, to mature to commercial standards, needed to have some leaves removed. However, judging how many leaves to keep on the plant was up to the individual farmer. A *Leamington Post and News* article noted that only "experience" could tell how many leaves to keep on a plant. A 1938 article in the *Tillsonburg News* captures the variable factors left up to farmer discretion well: "The farmer judges the ripeness of his tobacco largely by appearance. There are characteristic color changes which accompany maturity, although the appearance of ripe tobacco differs with the soil on which it is grown to a considerable extent, and also with cultural practices such as height of topping."[131] Deciding when to top depended on the experience of the farmer, the farm family, and the farm labourer with the plant they held in one hand, while wielding a tobacco knife in the other.

T.J. Major of the federal Tobacco Division noted that, for all the market power and influence of manufacturers, they remained bound to the experience of the farmer: "In any event the manufacturer does not produce his own raw material. He is dependent on the intelligence, labour

[129] Quoted in Tait, *Tobacco in Canada*, 105-106.
[130] Galbraith, "Leamington Grower thinks Tobacco has Come to Stay," in *Does it Pay?*, 329.
[131] 'The Farm: Topping Tobacco," *Leamington Post and News*, 11 July 1918'; "Tobacco Topics: Ripening of Flue-Cured Tobacco," *Tillsonburg News*, 4 August 1938.

and capital of the farmer."[132] "Farmer" is itself an obscuring term that does not entirely capture the work of the farm family or the labourer. However, Major's observation opens space for an element in the history of the transition of tobacco from garden to commercial crop that is not captured by acreage or yield statistics. There are elements of tobacco cultivation—the decision of when to top, the stomach of the labour crew, the need for the labour of women and children, the desire to achieve stability for the family—that are conditioned by the orientation towards capitalist production, but are not defined by that production. At one level, the tobacco plant itself defined the relationship between farm worker and crop more than capitalist forces. By secreting a sap filled with nicotine, the plant caused hands to become sticky and could lead to what was later identified as Green Tobacco Sickness, which caused people to collapse during the harvest.[133]

Conclusion

In many ways, this is a story of the development of a specialized cash crop sold to major corporations who then marketed and sold the product to a growing market. Farmers committed increasing amounts of acreage and capital to ensure that the tobacco they raised adhered to the standards set by the tobacco corporations. They took on mortgages and invested considerable amounts of sweat equity—and that of their family and employed workers—in an effort to maximize returns on the crop. The multi acre flue-cured tobacco plantations had only passing resemblance to the small garden crop raised by *habitants*, and even less to the *nicotina rustica* raised by First Nations people along the shores of Lake Erie. These transitions led to the relative decline of Quebec and the Old Belt in favour of the New Belt as the centre of tobacco production.

Yet, and as this chapter has sought to emphasize, specialization and capitalization captures only part of the tobacco story. Other elements of tobacco cultivation emerge in the many oral testimonies and questionnaires filled out by farmers during the 1970s and 1980s, and from the newspapers of the time. For instance, we find that stability emerges as a more salient guiding factor for farm families than an emphasis on the growth of capitalist agriculture suggests. Profit maximizing—or, finding a paying crop—is important, but generally in the service of paying down

[132] T.J. Major, "The Basis of the Industry," *The Lighter*, Vol. 3 No. 3 (1933), 1.
[133] Jeffrey S. McBride, David G. Altman, Melissa Klein, Wain White, "Green Tobacco Sickness," *Tobacco Control* Vol 7 (1998): 294-298. I have yet to see a report that noted this phenomenon during the period under consideration here. The documentary *The Back-Breaking Leaf* noted that some workers collapsed during harvest, but attributed this collapse to heat and exhaustion, not nicotine poisoning.

a mortgage or establishing the next generation on the farm. A number of immigrants from Belgium, Hungary, and elsewhere were able to end several years of itinerant labour, moving from the prairies to the factories to the fields, through cultivating tobacco. Not all immigrants ended up owning land; many remained sharecroppers. We must guard against deeming those people as having fallen short of objectives set by the broader assumptions of liberal capitalism, though we must also acknowledge that at least some of those people felt the pain of falling short of expectations. For some of them, the decision to come to Canada seemed to offer no greater rewards than what might have been found at home.

The work of women and children similarly becomes obscured in a story that emphasizes the transition to capitalist agriculture. This chapter adds to the work of many other scholars of rural North America by insisting on the fundamental role their labour had in establishing male farm heads as land owners. The fact that generally unpaid labour is foundational to farming destabilizes the individual basis of land ownership predicated by a liberal regime. When liberal ideology ascribes improvement to individual ownership, it overlooks the sweat of the family that enables that improvement. Tobacco, as a labour-intensive crop, illustrates this point well.

Finally, drawing on the notion of the two histories of capital helps to consider how the broad story of the growth of capitalism exists simultaneously with moments, trends, and patterns that are within the story of this growth, but not *of* the story of this growth. During the course of this chapter, Imperial Tobacco of Canada, with accompanying roles from other companies like Macdonald and from the federal government, developed hegemonic control over all aspects of the tobacco industry, a control informed by the precepts of modernity. This meant controlling nature—killing worms, topping tobacco, priming leaves. However, because tobacco was a crop that relied considerably on the experience of the person who worked with it, there was a ready-at-hand relationship that farmers, their families, and their workers developed with the crop. This relationship is not captured by census records, acreage reports, or even prices, though it did shape how farmers valued their crop. The tension between the two histories is fundamental to understanding how farmers reacted to the advice and demands with which corporate and government experts inundated them.

Chapter 2
Creating Tobacco Expertise, c. 1870-1940

Who gets to be a tobacco "expert" in Canada? How did they establish and assert their expertise? These are the fundamental questions of the chapter. During the expansion of commercial tobacco production in the 1860s, there was scarcely a recognized tobacco expert in Canada. By the 1930s, tobacco farmers were inundated by advice and knowledge from a number of experts employed by the federal and provincial governments, from the curers they hired from the Southern United States, and from the tobacco companies that brought their production. As tobacco cultivation grew from Quebec to Ontario, from gardens to plantations, government and industry, farmers and workers all expanded and defined tobacco expertise in Canada. This is not to suggest that a neat symmetry existed between the various groups—ultimately, the government and tobacco companies had the greatest stake and the most power in defining expertise. However, even government and corporations had to speak the language of experience to sway farmers: an expert without experience in raising tobacco was no more likely to sway farmers than an academic writing about the history of tobacco. Examining the negotiation of expertise and experience or, less abstractly, people who wrote about tobacco farming and people who farmed tobacco constitutes the main approach for analyzing how expertise functioned.

I contend that tobacco expertise relied on a tobacco market idiom shaped largely, but not exclusively, by manufacturing interests. "Idiom" is a useful term because it draws attention to how language can be used to create and naturalize market categories, and to how the language used can be altered or used in new ways to normalize new market relations. For example, Ritu Birla explores how indigenous capitalists had their understandings of kinship and caste incorporated as idioms of market practice in late colonial India. In a different context, New York Stock Exchange executives drew on Populist idioms protecting the rights of the "everyman," particularly concerning access to markets, to attack federal government efforts to expand regulation of the exchange.[1] It also speaks to how terms are used in a way that implies self-evident meaning, but actually rely on cultural construction. The assumed superiority of American tobacco figures as a key example of this

[1] Birla, *Stages of Capital*, 12; Julia C. Ott, "'The Free and Open People's Market': Political Ideology and Retail Brokerage at the New York Stock Exchange, 1913-1933," *Journal of American History*, Vol. 96 No. 1 (June 2009): 50.

process. This reliance meant that it was often difficult to disentangle state and corporate interests in promoting modern tobacco cultivation, but it also allowed for an unexpected group—white male itinerant tobacco curers from the U.S. South—to receive expert credentials. Moreover, it provided for some space for farmers to interpret how to best modernize tobacco cultivation.

Considering the definition and operation of expertise fulfills two main objectives. First, it contextualizes my use of the term in subsequent chapters, which consider the influence of "expert" opinion on assessing tobacco soil (and soil depletion), and analysing market conditions. It explores the process of making expertise from the early efforts to modernize tobacco cultivation in Quebec in the 1880s to the rise of flue-cured tobacco cultivation in Norfolk and Elgin counties in Ontario and around Joliette in Quebec in the 1930s. Taking this relatively long period of about half a century facilitates considering the important and lasting role of a "tobacco market idiom" to define what constitutes good tobacco. The particularities of the idiom changed, but the ability of the manufacturers and buyers in retaining control over the idiom, thus possessing the power to define expertise, remained remarkably consistent. It allows consideration of how the relationship between farmer, state, and industry changed over time as new institutions were created and new forms of tobacco cultivation introduced. The Tobacco Division, a branch of the Federal Department of Agriculture's Experimental Farm System, is the key state institution. Established in 1905 and first headed by Felix Charlan, the Division produced many of the documents used here to understand the historical development of tobacco cultivation.

The chronology also facilitates contributing to the burgeoning effort by scholars to historicize the operation and deployment of expertise in a variety of settings, to trace the networks of knowledge, and to unveil the political, racial, and gendered power experts relied on to modernize the world from the late 19th to mid-20th century.[2] The sense of possibility and potential that shapes so many primary sources of this period gives it tremendous appeal, but the fact that so much of this possibility was predicated on uneven power relations, that a "search for order" created and enforced categories of worthiness and unworthiness, requires the careful attention of the historian.[3]

[2] With this time range, I follow Daniel T. Rodger's argument that the 'tools' of Progressivism used by experts lasted beyond the First World War. See "In Search of Progressivism," *Reviews in American History* Vol. 10 (December 1982): 113-132 and *Atlantic Crossings: Social Politics in a Progressive Age*, (Cambridge, MA: Harvard University Press, 1998), especially chapter 10.

[3] From Robert H. Wiebe's classic *The Search for Order, 1877-1920*, (New York: Hill and Wang, 1967) comes the emphasis on the efforts of middle class bureaucrats (not unlike those in the Tobacco Division) to recast the United

Closer to this topic, Jarrett Rudy's work reminds us that the adjudication of "good" and "bad" tobacco was fundamentally linked to asymmetrical power structures predicated on distinctions in class, ethnicity, and gender.[4]

This chapter also establishes how the dissertation speaks to the growing literature on the relationship between government, expertise, and the natural world. A great deal of this scholarship has been in conversation with James C. Scott's *Seeing like a State*, which compelled historians to consider the process of simplification and classification that officials with power undertook in their efforts to manage nature and the people who lived on it. "High modernity"—the positivist faith in the ability of science and technology to rationalize and control nature and manage contingency on a large scale—has become a familiar term in environmental history and beyond. However, studies of modernity indicate that even in humbler pursuits than creating a dam, nature proved difficult to manage. In a powerful chapter concerning agricultural science, Scott suggested a core limitation of experimental farms, such as those established by the Tobacco Division: "Even under the best of circumstances, the laboratory results and the data from the experimental plots of research stations are a long country mile from the human and natural environments where they must ultimately find a home."[5] The struggles in applying experimental farm knowledge will occupy attention over the next three chapters.

Timothy Mitchell's *Rule of Experts* also invites us to historicize the binaries formed by social sciences to make the world knowable. Human/nonhuman, culture/nature, objects/ideas—all of these divisions are disrupted by his investigation of the contingencies that experts struggled to control. In his evocative chapter, "Can the Mosquito Speak?," Mitchell demonstrates that colonial "experts" introduced numerous projects, including use of chemical fertilizers, crop spraying, and planting of high yielding corn cultivars, as solutions to food shortages and malaria outbreaks,

States in a more orderly mould after the upheavals of racial tension, strikes, Populism, and urbanization. Michael McGerr's *A Fierce Discontent: The Rise and Fall of the Progressive Movement in America, 1870-1920* (Oxford: Oxford University Press, 2003), also emphasizes the middle class, but focuses more on movements beyond the government and on their more 'radical' articulation of a sober and publically spirited society—a society that struggled to incorporate African Americans. Likewise, Mariana Valverde's *The Age of Light, Soap, and Water: Moral Reform in English Canada, 1885-1925*, 2nd ed., (Toronto: University of Toronto Press, 2008) impresses the racial power structures behind much of the reform impulse of this era.

[4] Rudy, *The Freedom to Smoke*, especially chapter 2; also see Hilton, *Smoking in British Popular Culture*, chpt. 1.

[5] James C. Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition have Failed*, (New Haven: Yale University Press, 1999), 288.

without acknowledging that these solutions were in response to another grand modern project—the Aswan Dam. As he puts it, "it was an important aspect of the politics of technical expertise that these failures and adjustments were overlooked, in fact actively covered up."[6] In his story, mosquitos were as much an agent as the colonial experts who introduced DDT to kill the mosquitos, collapsing the human agent/nonhuman subject binary that experts relied on. Nevertheless, the experts were able to introduce DDT because of their social and political power. Likewise, in this chapter, the focus will be on considering how buyers managed to create binaries, while attempting to deny that the binaries that they made were products of political and economic power, but rather, natural extensions of market logic.

Dams, like the Aswan, often feature in stories about expertise and environmental change. This is hardly surprising or unjustified. They compel people to deal with entirely altered landscapes. They relocate communities. They provoke fierce debate, and, occasionally, they are stopped.[7] Recently, there has been a turn towards exploring the messy, contingent, and often frustrating experiences expert planners and other agents of high modernity had in actually building these dams. From two rather different contexts, Tina Loo and Meg Stanley for British Columbia and Aaron Stephen Moore for Japanese-occupied Korea, historians are arguing for more attention to the role of local knowledges and negotiations between different levels of bureaucrats in disrupting the application of expert knowledge. Loo and Stanley compellingly argue for more appreciation of a "high modernist local knowledge" when studying the construction of dams in the Peace and Columbia Rivers, while Moore emphasizes how conflict and negotiation between Korean and Japanese bureaucrats and capitalists was at the heart of the construction of the Sup'ung dam.[8] While the

[6] Timothy Mitchell, *The Rule of Experts: Egypt, Techno-Politics, Modernity*, (Berkeley: University of California Press, 2002), 42.

[7] A representative, but hardly exhaustive, list of works on dams and environmental change in North America include Tina Loo, "People in the Way: Modernity, Environment, and Society on the Arrow Lakes," *BC Studies*, 142/143 (Summer 2004): 161-196; Joy Parr, *Sensing Changes: Technologies, Environments, and the Everyday*, (Vancouver: UBC Press, 2010), chpt. 5; Matthew D. Evenden, *Fish versus Power: An Environmental History of the Fraser River*, (Cambridge: Cambridge University Press, 2004); Christopher Armstrong, Matthew Evenden, and H.V. Nelles, *The River Returns: An Environmental History of the Bow*, (Montreal and Kingston: McGill-Queen's University Press, 2009), chpt.5; Richard White, *The Organic Machine: The Remaking of the Columbia River*, (New York: Hill and Wang, 1995), chpt. 3.

[8] Tina Loo and Meg Stanley, "An Environmental History of Progress: Damming the Peace and Columbia Rivers," *Canadian Historical Review*, Vol. 92 No. 3 (2011), 407; Aaron Stephen Moore, "'The Yalu River Era of Developing Asia': Japanese Expertise, Colonial Power, and the Construction of the Sup'ung Dam," *The Journal of Asian Studies* Vol. 72 No. 1 (February 2013): 115-139. Another example of experts both gaining and confronting local knowledge and environment can be found in Daniel Macfarlane, *Negotiating a River: Canada, the U.S., and the Creation of the St. Lawrence Seaway*. (Vancouver: UBC Press, 2014).

relative political power of the local people and the modernizers varied in these cases, the need for bureaucrats and modernizers to contend with local realities emerged in both cases. The power required by experts is contingent on local knowledge and experience, and subject to intra-expert negotiation. Both of these forces are important to understanding the operation of expertise in Canadian tobacco, although it should be added that modernization of tobacco farming does not quite fit into the high modernist framework because a key element of high modernity is the use of state sponsored megaprojects, like dams. Nevertheless, the tensions between state and local knowledges traced by historians of high modernity remain relevant here. The production of market based modernity, be it the high modernity of the state megaproject or the more prosaic modernity arising from changes in the selection of a plant and the choice of a fertilizer, generates tensions and demands negotiation.

These ways of understanding the definition of expertise, power, and negotiation form much of the underlying reading of the formation of tobacco expertise in Canada. The Tobacco Division and industry buyers, who constitute two key groups of agents in this chapter, did form categories and binaries in order to establish themselves as people who could adjudicate good and bad tobacco. They generally relied on the combined power of the state and tobacco corporations to justify their classifications. In most cases, they acted with the confidence that they could develop solutions to problems in tobacco cultivation through experimentation and education. However, it is important to note that Scott and Mitchell both developed their influential discussions of expertise in a colonial context—Scott expansively and Mitchell in Egypt. In both their works, the power of expert and of farmer was far more asymmetrical than it was when a Canadian-based expert engaged with a farmer in Ontario or Quebec. The power of experts in excluding First Nations tobacco cultivation does recall the disdain that Scott's experts had for West African polycultural farming.[9] However, when it comes to commercial tobacco farming, the relative power between farmer and expert allowed space for negotiation and contestation. The experts needed farmers to respond at least as much as farmers desired information about new trends in tobacco cultivation.

To explore the formation of expertise, this chapter will proceed in four main sections, each based around a particular (but not mutually exclusive) cluster of experts. First, there are the *early experts*

[9] Scott, *Seeing like a State*, chpt. 8.

of late 19th century Quebec, writers like Médéric Foucher and Louis Labelle, who sought to orientate tobacco cultivation from personal and small market production to wider Montreal and export based manufacturing. While there were significant limitations to their influence, they set important precedents that were expanded on through the 20th century. Secondly, there are the *state experts*, both federal and provincial, who sought to articulate particular visions of modern tobacco cultivation. I focus particularly on the first head of the Tobacco Division, Felix Charlan, as a revelatory example of the mentality and difficulties of state experts. While they often saw themselves as servicing farmers, and indeed, I argue that farmers were quite active in encouraging the government to bring in state experts, they often had difficulty maintaining their desired status as existing between farmer and manufacturer interest, and were vulnerable to accusations that they favoured the latter at the expense of the former. Thirdly, there are the *manufacturer experts*, represented by William and Francis Gregory, who worked with the American Tobacco Company of Canada (later, the Imperial Tobacco Company of Canada) and encouraged farmers to connect their agricultural practices to the buyer interests. The manufacturer experts were also important in bringing over the fourth group, the *itinerant experts* who came when Canadian farmers began raising flue-cured tobacco. These men (and they were almost exclusively men) came from North Carolina, Virginia, and Kentucky to work as tobacco curers, a job that required tremendous skill—to the point where they were frequently referred to as "experts" in press and in practice. The identification of curers as experts indicates that there remained flexibility in defining who an expert was, though their presence in Canada was still closely tied to the tobacco market idiom.

Expertise by Experience: Foucher, Labelle, and Dugas

The vast majority of early interventions in tobacco cultivation occurred in Quebec, where tobacco production was widespread. The prospect of re-orientating tobacco production in the province from domestic and local market production towards a modern type of tobacco that Montreal manufacturers favoured constituted the core challenge for the reformers Médéric Foucher, Louis V. Labelle, and J. Blais Dugas. Their ambitions linked to a wider effort by agrarian reformers to promote specialization in agricultural production. Such efforts were most pronounced in dairying, a sector that saw substantial increases in the number of producers, manufacturers, and exports, especially from the 1890s onwards. More generally, several scholars have cast Quebec farmers as beginning to shift from autarky to external market orientation during the latter part of the 19th

century, a movement that accelerated in the early stages of the 20th century.[10] Tobacco featured in this shift. For decades, habitants grew the crop in gardens, paying limited attention to what particular variety of tobacco they raised. The core challenge for reformers was to discourage the cultivation of the difficult-to-categorize *tabac canadien* and orientate tobacco cultivation in the province towards carefully defined and selected tobacco varieties, most notably cigar leaf, which, they believed, would attract the highest prices. While the reformers felt such a reorientation would have self-evident benefits for farmers in the form of higher prices, the specialization of tobacco production in Quebec took decades to achieve.

The Board of Agriculture, established by the Lower Canadian government in 1852, was instrumental to this agenda. The Board established a number of *sociétés d'agriculture* and sponsored the publication of periodicals, all with the aim of impressing the need for agrarian reform. The *sociétés* also sponsored a number of county fairs designed to provide both prize incentives and practical examples of marketable tobacco leaves. As Elsbeth Heaman notes, these fairs constituted a key site where agricultural reformers sought to educate farmers into becoming "homo economicus"' by linking market-orientated reforms to both cash prizes and local prestige.[11] There is evidence to suggest that such contests had their influence, as newspapers and periodicals steadily published the results of agricultural fairs held in various counties in Quebec. [12] By 1906, L'Association des planteurs de tabac du district de Joliette began holding annual contests offering prizes for specific varieties of cigar and pipe tobacco, rather than just having one category for tobacco.[13] Such contests served as visible and annual reminders of the reforming ambitions of the *sociétés*.

[10] Yves Roby and Jean Hamelin, *Historie économique de Québec, 1851-1896*, (Montréal: Fides, 1977), 193-204; Normand Séguin, "L'historie de l'agriculture et de la colonisation au Québec depuis 1850," in Normand Séguin, ed., *Agriculture et colonisation au Québec: aspects historiques*, (Montréal: Boréal Express, 1980), 12; Serge Couville and Normand Séguin, *Rural Life in nineteenth century Quebec,* (Ottawa: Canadian Historical Association pamphlet, 1988), 18; David Dupont, *Une brève historie de l'agriculture au Québec: de la conquête du sol à la mondialisation*, (Montréal: Fides, 2009), 38-40.
[11] Elsbeth Heaman, *The Inglorious Arts of Peace: Exhibitions in Canadian Society during the Nineteenth Century*, (Toronto: University of Toronto Press, 1999), chpt. 2.
[12] 'Société d'Agriculture du Comté de Montcalm: Distribution des primes,' *La Gazette de Joliette*, 26 octobre 1875; 'Liste des prix accorde par la Société d'Agriculture du Comte de Joliette,' *La Gazette de Joliette*, 8 octobre 1878; "Concours agricole du Cercle de St-Thomas," *L'Étoile du Nord*, 12 mai 1899.
[13] 'Concours Annuel de l'Association des Planteurs de tabac au district de Joliette,' *L'Étoile du Nord*, 15 février 1906.

Médéric Foucher established himself as the ideal homo economicus by winning a number of prolific prizes. His passion and interest in developing tobacco was such that his *Dictionary of Canadian Biography* author, François Lanoue, notes that Foucher had been hailed as the "pioneer of large-scale tobacco farming in Canada."[14] This is a dubious claim. In a recent history of Lanaudiuère region, which encompasses Foucher's 36 *arpent* plantation, Jocelyn Morneau rightfully notes that people had been experimenting with multi-*arpent* tobacco crops since the 1860s.[15] Nevertheless, Foucher was the first to link his larger-scale production to the tangible result of international accolade. In 1887, Foucher won a gold medal at an agricultural exhibition in Ottawa. The judges marvelled at the fact that to their taste, the tobacco he presented was indistinguishable from foreign varieties. The acclaim of the fairs highlights a key feature of the tobacco market idiom in Canada—"foreign" tobacco, particularly American, is good tobacco. He also successfully presented his tobacco at the Chicago Columbian Exhibition in 1893. Newspapers and agricultural literature eagerly presented these triumphs as a model for what Quebec tobacco could be.[16]

However, advocates for fairs also faced firm limitations. The first was membership: Elsbeth Heaman estimates that somewhere over 21 percent of Joliette farmers were members of *sociétés* in 1881, as were anywhere between 11 and 20 percent of farmers in the Montcalm region.[17] While such numbers are not insignificant, they indicate that the majority of farmers had limited contact with the literature and contests emanating from the *sociétés*. A second limitation was the clashes that the *sociétés* had with *cercles agricoles*, which were more informal groups formed by leading farmers of a parish. Unlike the *sociétés*, they were not reliant on information from the Board. Despite the fact that the *cercles* had operated since the 1870s, and were encouraged by agricultural modernizers like Édouard-André Barnard, editor of *Le Journal d'Agriculture Illustré*, it was not until 1893 that the Quebec Council of Agriculture (which replaced the Board after Confederation)

[14] François Lanoue, "Foucher, Médéric," *DCB*, Vol. XIII. See also Léo Lafortune, *La Société Coopérative Agricole De Tabac Du District De Joliette,* (MA Thesis, Laval Université, 1949), 3.
[15] Normand Brouillette, Pierre Lanthier, and Jocelyn Morneau, *Histoire De Lanaudière* (Saint-Foy, Québec: Presses de l'Université Laval, 2009), 415.
[16]"Choses et autres," *GAZETTE DES CAMPAGNES*, Vol. 24 No. 51 (13 octobre 1887), 407; "Le Tabac Canadien," *L'Étoile du Nord,*
(21 novembre 1887); No Title, *L'Étoile du Nord*, (16 mars 1893).
[17] Heaman, *The Inglorious Arts of Peace*, 66.

formally recognized the role of the *cercles* and began to circulate information through them.[18] However, even this recognition did not resolve the tensions. In 1895, the *Gazette des Campagnes*, a journal that had written in favour of *cercles*, reported that "Everyone knows that in certain places there is a great antipathy between the *sociétés d'agriculture* and the *cercles agricoles*[.]"[19] This antipathy strongly illustrates the fact that there was never one smooth path to modernization, and that different visions for how to disseminate and foster agricultural reform existed.

Foucher was particularly aware that multiple perceptions of proper tobacco cultivation existed. This is clear in the aforementioned letter he wrote to *L'Étoile du Nord*. After providing a range of advice on soil, selection of leaves, and soil selection, Foucher was quick to insist that his methods were not universal:

> […]I do not want to impose my method of growing this plant and to tell your many readers: act in such and such a manner, this is the only way for harvesting good tobacco—no, I do not have this presumption and in accepting your invitation, the account of my experiences and my successes and my disappointments will, I hope, have the merit of lifting obstacles and many difficulties for novices and introduce them little by little to the operation of a pleasant and paying industry.[20]

Foucher also impressed his connections to other farmers. He wrote with pride that later in 1889, around twenty farmers in his parish of Saint-Jacques-de-l'Achigan erected purpose-specific drying barns for their tobacco. While he was careful not to take direct credit, the letter indicates that he did see his plantation as a model worthy of emulation.[21] Occasionally, he prefaced his letters by

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[18] Normand Perron, *L'État et le changement agricole dans Charlevoix, 1850-1950*, (Sainte-Foy: Presses de l'Universite Laval, 2003, 99; Bruno Jean, "Barnard, Édouard-André," *Dictionary of Canadian Biography,* Vol. XII, (Toronto and Quebec, 2000).

[19] "Les sociétés d'agriculture et les cercles agricoles," *Gazette des campagnes* Vol. 30 No. 41 (5 janvier 1895), 323. The full quote reads 'Personne n'ignore que dans certains localités, il y a une grande antipathie entre les sociétés d'agriculture et les cercles agricoles que l'on voudrait, les unes ou les autres, voir disparaître, parce que ces associations nuisent à des ambitions particulières ou à des interest personnels."

[20] Foucher, 'Tabac Canadien,' *L'Étoile du Nord*, 27 juin 1889. "[J]e ne veux pas imposer ma méthode de cultiver cette plante et dire à vos nombreux lecteurs: agisséz de telle et telle manière, c'est le seul moyen de récolter du bon tabac,--non,--je n'ai pas cette presumption et en acceptant votre invitation, le compte rendu que j'ai l'intention de vous faire de mes expériences, de mes succès et de mes déceptions aura, je l'espère, le mérite de lever bien des obstacles et bien des difficultés pour les novices et les initier peu à peu dans l'exploitation d'une industrie aussi agréable que payante."

[21] Médéric Foucher, 'Le tabac canadien,' *L'Étoile du Nord*, 19 septembre 1889.

noting that he chose topics in response to queries from curious farmers.[22] For Foucher, a bit of circumspection was important to his identity as an agrarian leader.

Narcisse Forest was more forthcoming when praising Foucher's abilities, for he sought to draw him into a narrative where agriculture was modernizing alongside tastes in tobacco. Forest, one of the brothers of the Montreal tobacco firm Forest Frères Ltd, was an interested commentator—as an early industrializer of the Canadian crop, he sought a tobacco that suited the growing market of urban middle class tastes—the sort of tobacco Foucher grew and encouraged.[23] Evoking efforts of industrialists to produce a less pungent tobacco than the *tabac canadien* of the countryside, Forest praised the approximately 400 farmers who attended a lecture tour by Foucher as "good smokers" (*bon fumeurs*). In the developing tobacco idiom, Forest's phrase alluded to the fact the farmers smoked tobacco that smelt milder, more like what the modern Montrealer smoked. In his praise of the agrarian modernizer, Forest touches on key attributes that agricultural experts were expected to have—in 1930 as much as in 1890: "This is not a theoretician, this is above all a practical man, and his information, drawn from long experience and serious study, is of the highest importance and the greatest utility."[24] Practicality, utility, experience, and good smoking—these are the keywords that draw the tobacco countryside into modernity.

However, elements of these keywords also left space for early practices to persist, as farmers drew on their own experiences and practical solutions. They continued to use methods that had satisfied their own tastes. In the same issue of *L'Étoile du Nord* where Forest praised the abilities of Foucher, Louis Labelle decried the habits of the French Canadian tobacco farmer. Farmers, Labelle sniffed, still relied on a "system of poles and strings which give the worst result" for drying the leaves. Worse yet, they failed to remove suckers (offshoots) from the growing plants, leading to stunted leaves, as some farmers preferred trying to get more leaves from their harvests.[25] Like Foucher, Labelle hailed from Sainte-Jacques-de-l'Achigan. Also like Foucher, Labelle impressed the practical experience of his knowledge. He signed his 1898 tract, *Traité de la Culture et de*

[22] For example, 'Plants de tabac en couche chaude,' *Gazette des campagnes*, Vol. 26 No. 26 (23 mai 1889), 203.
[23] Jarrett Rudy, "Manufacturing French Canadian Tradition: *tabac canadien* and the Construction of French Canadian Identity, 1880-1950," *Historie Sociale/Social History*, Vol. 39 No. 77 (2006), 214.
[24] Narcisse Forest, "M.F.A. Med. Foucher et la culture du tabac canadien,' *L'Étoile du Nord*, 3 avril 1890. "Ce n'est pas un théoricien, c'est avant tout un homme pratique, et ses renseignements, fruits de longues expérences et d'études serieuse, sont de la plus haute importance et de la plus grande utilité."
[25] L[ouis] V. L[abelle], 'A propos de tabac,' *L'Étoile du Nord*, 10 avril 1890. This article continuation of a series he began for the paper the week before.

l'Industrie du Tabac, as Louis V. Labelle, *Planteur*. Unlike Foucher, Labelle was more forthcoming in asserting his knowledge, arguing that his tract presented information on a topic that had seen limited writing for its development.[26] His argument neglected the fact that a rather large body of literature on tobacco cultivation had circulated in Quebec for some time.[27] However, his belief is somewhat instructive for considering the extent to which these previous tracts had penetrated the Quebec countryside—evidently, not very much. The trouble with defining one's expertise through practicality is that different farmers had different practical experiences through pre-existing patterns of farming.

By the end of the 19th century, the federal government began to take a greater interest in fostering reforms in tobacco cultivation and developing new means for encouraging modern, market-orientated tobacco. In 1897, the Laurier administration enacted a 10 cent per pound tariff on the importation of raw leaf tobacco, stimulating interest in the growth of commercial tobacco.[28] In 1902, the Department of Agriculture commissioned J. Blais Dugas, a tobacco farmer and manufacturer who lived near Labelle, to visit Antwerp and Liverpool with the samples of Montcalm, Joliette, and l'Assomption grown cigar leaf. Dugas' report brought encouragement. It provided specific reports from five Belgian dealers that criticised the packing and sorting of the leaves, but gave generally optimistic indications that better agricultural practice, from selecting better seeds to more attention with curing, would produce good tobacco. Dugas concluded from the report that there was potential for Quebec tobacco in the export market, but only if the Department begin to issue printed reports and extend assistance to farmer groups for acquiring seed and information about commercial tobacco cultivation.[29] The report contributed to several objectives: it countered a persistent belief that Canada could not raise marketable tobacco, carved a larger place for government in improving tobacco cultivation, impressed the need for greater

[26] Louis V. Labelle, *Traité de la Culture et de l'Industrie du Tabac,* (Quebec, 1898), 7.
[27] For instance, Dr. G Laroque, *Culture et Préparation du tabac*, (Lèvis, 1881); a second edition of his work was published in 1897. Also, B. Lippens, *Conférences agricoles: la culture du tabac*, (Montreal, 1882); A.D. Porcheron, *Traitement et culture du tabac canadien*, (Montreal, 1882); Octave Cuisset, *La Père Coulange, ou entretiens sur la culture et la préparation du tabac*, (Quebec, 1876).
[28] 60-61 *Victoria*, Chapter 19, 'An Act to further amend the Inland Revenue Act,' 1897. I discuss the influence over tariffs more extensively in chapter 5.
[29] '1902 Report of J. Blais Dugas on 'Canadian Tobacco,' RG17, Vol. 984, File 157274, LAC.

categorization in both seeds and sorting, and provided employment opportunities for those who sought to position themselves as interpreters of the tobacco market.[30]

Foreign prices and reactions provided reformers with a metric for their adjudication of quality. They used categories formed by exporters. One can see Mitchell's observation that expertise depended on the formation of binaries (even when the binaries were manifestly unstable) in order to create manageable and knowable categories playing out in the dealers' observations about the tobacco samples they received.[31] Stanislas Pauwels of Antwerp offered one of the most concise examples of this making of binaries in action—in this case, human/nonhuman—when he wrote concisely about of one sample of cigar leaf: "This lot is wild."[32] Yet, when the sample was shipped, it was described thusly: "'MIXED HAVANA and CONNECTICUT', smokes well." To characterize the sample as wild was absurd, in a sense—how can Pauwel dismiss a plant produced by human intervention and defined by human categories as a product of nonhuman nature? Yet, since buyers had long established perceptions of what good cigar filler (the leaves inside the cigar wrapper) was, and 'wild' tobacco had an immediate association with strong tasting and smoking leaf, Pauwels' classification seemed logical within the tobacco market idiom. Increased human intervention was needed in order to rid the tobacco of its nonhuman nature. Dugas did not question the criticisms of Pauwels and other buyers in his report, instead commenting almost exclusively on how Quebec farmers could adjust their sorting, fermenting, and use of soil in order to conform to market expectations and to ensure that no cultivated tobacco be mistaken as 'wild'. Market logic and categories dictated the path of reform; the challenge for reformers was to convince others to follow it.

Creating the Tobacco Division

Export markets and market logic were not the only things prompting Fisher and the Department of Agriculture's interest in tobacco cultivation. In 1901, Liberal MP Joseph Arthur Éthier (Deux Montagnes) sent Fisher a resolution of the Montreal Chamber of Commerce calling for

[30] Of course, it did not do all this alone; later in the House of Commons, Conservative MP Frederick Monk alleged that the Dugas report had little impact, and had merely been "buried in the records." However, given that he declared this during a debate raised by his party to criticise the Liberal record for fostering tobacco cultivation, Monk's characterization of the report should be taken with a grain of salt. Canada, *House of Commons Debates*, 10th Parliament, 4th Session (9 April 1908), 6514.
[31] Mitchell, *Rule of Experts*, 11
[32] 1902 Report of Mr. J. Blais Dugas on 'Canadian Tobacco,' RG17, Vol 984, File 157247, LAC.

government assistance in establishing subsidized experimental farms, employing government inspectors for monitoring sale, and supplying farmers with seed for raising tobacco. Five other bodies endorsed the resolution: the county councils of Deux Montagnes and Verchères, the municipal council of Ste-Eustache, and the *cercles* of Verchères and Ste-Rose.[33] The origin of the petition, the Montreal Chamber of Commerce, limits the extent to which we can see the petition as representative of "farmer" interest. However, it also speaks to the ties between the city and rural modernizers, like those in the *cercles,* who sought government assistance in creating exportable tobacco.

Two other related documents shed light on the role of farmers in encouraging government intervention into tobacco cultivation. The first is a 1903 petition sent to Fisher by three Liberal MPs who represented the prominent tobacco regions of Quebec: François Dugas (Montcalm), Charles Bazinet (Joliette), and Romuald-Charlemagne Laurier (l'Assomption). The second are reports from Dugas and Pierre Denis, a tobacco manufacturer, recording during their lecture tour around Quebec. Taken together, they shed light on the origin of the federal Tobacco Division, and reveal that farmers had some mediated input into the creation of the organization that would establish itself as a primary source for tobacco expertise in Canada.

The 1903 petition was crafted as a response to Dugas' report from Belgium. Arising from a meeting of farmers held at St. Jacques, the resolution began by appreciating the department's decision to send Dugas to Belgium and England, and acknowledged that the report indicated that improvements were required. To this end, the petition called for the department to send "a person from this District, practiced in this culture and also qualified, to go to the States of Wisconsin, Connecticut, and Pennsylvania," with the aim of providing advice for fostering an exportable product.[34] The language of experience and local connections blends intriguingly with a call for greater awareness of foreign markets here. A residency requirement for expertise remained relevant. Given that over 450 farmers included their names on the petition, it was no small affair, at least in the world of Quebec tobacco cultivation. The petition was also separated by community, and included signatories from Ste. Ambroise de Kildare, St. Paul, Ste. Élisabeth, St. Lin,

[33] J.A. Éthier to Fisher, 2 avril 1901. RG17, Vol 984, File 157247, LAC.
[34] Petition as part of a letter sent by F.O. Dugas, C. Bazinet, and R.C. Laurier to Sydney Fisher, 28 mai 1903. RG17, Vol. 984, File 157247, LAC. "[…]d'une personne de ce District, pratiquant cette culture et qualifiée, d'ailleurs[…]"

l'Épiphanie, Ste. Alexis, and elsewhere in Montcalm, Berthier, Joliette and l'Assomption counties.[35] Certainly, an interest in improving tobacco production along the path endorsed by Dugas existed in the area.

In response to the petition, and as a way to expand on the results of the 1902 report, Fisher sent Dugas and Pierre Denis, a tobacconist and dry goods merchant of St. Césaire, to Wisconsin in 1904, where they particularly focused on methods for raising cigar leaf.[36] The government also commissioned the pair to tour a number of counties in Quebec to share their findings on tobacco culture in the state. Eager to demonstrate the value of their research, Denis recorded the responses of some farmers around St. Césaire whom he visited with information in June 1904. For instance, Michael Lamoureux, a farmer holding 200 acres, including 1 to 4 acres of tobacco, expressed his "satisfaction to see the government help them in tobacco growing industry."[37] As with the petition, the farmers who Denis reported are a selective list. All of the 54 farmers he noted expressed some interest in expanding commercial tobacco production, and were clearly selected to demonstrate his argument that "farmers seem to be glad to receive instruction."[38] Still, if we take seriously the idea that farmers, as a group, could have multiple views, it seems reasonable to assert that some did welcome government instruction.

The results of a more extensive tour, done between February and April 1905 were more equivocal. Some meetings went well. In St. Lin (Montcalm), about 200 farmers attended, and Dugas reported an 'inquisitive' crowd at L'Épiphaine (l'Assomption). Those sorts of meetings could last until 10 PM with farmer questions. The more successful meetings were facilitated by organization and promotion from local *sociétés* and parish priests.[39] Others fell victim to the logistical challenges offered by Quebec winters. The meeting in St. Jacques, for instance, had poor attendance despite it being a key site of early tobacco cultivation due to bad weather and roads.[40] Dugas was surprised

[35] Ibid. I say 'approximately 450', to account for any miscounting, though I counted 466 names in total. The precise number does not seem especially material.
[36] "Report of J. Blais Dugas and Pierre Dennis on the Methods of Tobacco Culture Employed in the State of Wisconsin," RG17, Vol.984, File 157247, LAC.
[37] Pierre Denis to Deputy Minister O'Halloran, 24 June 1904, RG17, Vol. 984, File 157247, LAC.
[38] Ibid.
[39] Pierre Denis to O'Halloran, 16 February 1905; J. Blais Dugas to O'Halloran, 22 February 1905; Dugas to O'Halloran, 26 February 1905; Dugas to O'Halloran, 16 May 1905. RG17, Vol. 999 File 165198, LAC. See also 'Réunion agricole à Joliette,' *L'Étoile du Nord*, 16 mars 1905.
[40] Dugas to O'Halloran, 19 February 1905. RG17, Vol. 999 File 165198, LAC.

when a meeting in St. Alexis (Montcalm) failed to generate a crowd, given that farmers had been raising tobacco in the area for some time. Upon inquiring into the attendance, he was informed that while farmers were indeed interested in "American methods," they considered the region a "Conservative stronghold" and were loath to support a project with Liberal origins. The head of the local *cercle* was conspicuously absent from the meeting.[41] Not all *cercles* were opposed to the tour. The head of the Iberville group supported the meeting and contributed to a higher than expected attendance, while J. Ferland of the Lanoraie *cercle* wrote to the Department, complimenting them for sponsoring the lecture.[42] Here, partisan rivalry served as a disruptive moment of History 2, shaping and disrupting modernization efforts. From mundane weather reports to unanticipated local political rivalries, Denis and Dugas' reports indicate some of the difficulties in spreading newfound understanding to rural areas. Local knowledge could be difficult to abstract when one was stuck in the mud.

Divisions between Dugas and Denis revealed that as the federal government sought to occupy space as a promoter of market-driven agricultural reforms, they also wanted to situate themselves as above market interactions. Pierre Denis challenged this desire through his rather different interpretations for how he was to interact with farmers. Dugas seems to have seen himself as an agricultural advisor with knowledge to share from both his own farming and from his tours. Denis, by contrast, saw some opportunity to associate his store with improved tobacco methods. He began offering tobacco seeds for sale during meetings, charging 60 cents an ounce. In a letter to Deputy Minister O'Halloran, Dugas reported his discomfort with this practice, particularly after an "important" farmer in l'Épiphanie, a Mr. Riopel, asked whether the department would guarantee the performance of the seed sold during the meetings. According to Dugas, Riopel insinuated that if the seed performed poorly, "it would be to the discredit of the Department's lecturers."[43] This report provoked a sharp response from O'Halloran, who forcefully reminded Denis that he strictly prohibited selling seed while on department business. Denis defended himself by claiming that his sales were merely a response to farmer demand—farmers were approaching him for seed. O'Halloran responded phlegmatically: "I note your explanation in regard to the selling of seed,"

[41] Dugas to O'Halloran, 28 February 1905. RG17, Vol. 999 File 165198, LAC.
[42] Ferland à le deputé ministré d'agriculture, 10 mars 1905; Dugas to O'Halloran, 20 March 1905. RG17, Vol. 999 File 165198, LAC.
[43] Dugas to O'Halloran, 22 February 1905, RG 17, Vol. 999, File 165198, LAC.

but he continued to impress that the sale of seed was to be discouraged.[44] The government response impressed its desire to forge a space for itself as a disinterested promoter of tobacco knowledge, even while it promoted a particular knowledge guided by an interest in promoting cultivation of tobacco plants that could be readily categorized. The success of this initiative, in O'Halloran's view, meant that the lines between government, industry, and land farmer also remained distinct. However, the market shaping the language of tobacco could lead to blurring, a problem that re-emerged throughout the Tobacco Division's existence.

In the two decades between Foucher's first medals and the tours of Dugas and Denis, tobacco farming in Quebec had undergone enough change to whet the appetite of both government and some farmers for further initiatives. Market standards, defined by the preferences and practices of foreign tobacco interests and their attendant insistence on the need to move beyond "wild" tobacco, were increasing their purchase in Quebec. However, changes were most gradual, and there remained no recognizable institutional setting for experts to develop tobacco cultivation in Canada. A petition signed by forty-seven farmers from around Joliette impressed the lack of a formal system for experiments and called for Fisher to establish experimental farms to facilitate the development of the industry. An unsigned and translated report associated with the petition discussed who might lead such an institution: "It is possible that it may be necessary to put this establishment under the direction of a foreign expert, but we do not see that that would be a serious objection, and in the case where we cannot point out among us some one whose competence is undeniable we will see with pleasure a foreigner at the head of this establishment."[45] The petition indicates that farmers looking for more information felt that the government could and must do more, but the relatively small number of signatories also suggests that a number of farmers remained beyond the auspice of reform efforts. Modernization and expertise necessitated decades more of hard won experience and not every farmer would be so welcoming of foreign experts.

State Experts: Felix Charlan and the Tobacco Division

[44] Dugas to O'Halloran, 22 February 1905; O'Halloran to Denis, 24 February 1905; Denis to O'Halloran, 28 February 1905; O'Halloran to Denis, 1 March 1905. RG 17, Vol. 999, File 165198. LAC

[45] The petition and report are associated with the letter from L.P. Brodeur to Sydney Fisher, 7 février 1905, RG 17 Vol 999 File 165198. Intriguingly, J. Blais Dugas signed the Joliette petition—whether he hoped to lead such a farm or simply wanted to have one established is unclear.

Around the time Dugas and Denis were touring parts of Quebec, the Department of Agriculture received a letter from tobacco growers around Kingsville, Essex County. Like the Joliette petition, the Kingsville petition called for the creation of experimental farms for tobacco, arguing that tobacco farmers in the area had not received the attention enjoyed by other agricultural sectors.[46] Tobacco farmers in Essex and Kent counties had begun planting tobacco more extensively since the protective tariff established in 1897, but had been frustrated by the rapid rise and fall of a tobacco manufacturing scheme launched by H.C. Ward of Detroit and the low prices being offered by the ATCC.[47] Like the farmers who attended meetings and signed petitions in Quebec, these Kingsville farmers saw increased access to knowledge derived from experimentation and from understanding of the later links of the commodity chain as a means to augment the prices of their crop.

By the end of 1905, the Department of Agriculture appointed Felix Charlan to be that expert. Charlan had the foreign credentials, having worked for the French government as a tobacco specialist; this appointment set a lasting precedent of hiring experts from beyond Canada's borders. A letter from Fisher to the MP François Dugas regarding the appointment made it clear that the government intended to foster the development of tobacco in Quebec and Ontario simultaneously. Dugas suggested that Charlan would be best positioned in an experimental farm at St. Jacques, the place where Foucher and Labelle had their success. Fisher politely disagreed, noting that they planned to post Charlan at the Central Experimental Farm in Ottawa, where he could benefit all of Ontario and Quebec.[48] In the case of tobacco, federal government-sponsored agricultural expertise necessitated due attention to provincial jealousies.

To ground his reforming agenda and carve his space as an important intervener in Canadian tobacco cultivation, Charlan solicited market opinion, represented by some thirty-five cigar manufacturers located throughout Canada. In August 1906, he sent samples of cigar leaf to the manufacturers, with the caveat that the samples were the product of his early experiments to properly dry and ferment the leaves with the assistance of the Dominion Tobacco Co. of Montreal.

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[46] Petition attached to A.H. Clarke to Sydney Fisher, 13 March 1905. RG 17 Vol 999 File 165198.
[47] On the H.C. Ward incident, see 'Town and County,' *Essex Free Press*, 1 March 1901; 'Was he going to skip?,' *Kingsville Reporter*, 2 March 1902; 'Ward's Tobacco,' *Essex Free Press*, 28 March 1902; 'Non-jury sittings,' *Essex Free Press*, 27 June 1902. The low prices and investigation of a trust run by the ATCC is investigated more thoroughly in chapter 5.
[48] F. Dugas to Fisher, 22 novembre 1905; Fisher to Dugas, 2 décembre 1905. RG 17, Vol. 999, File 165198, LAC.

Charlan noted that that the responses from the thirty five firms were "*contradictoires*," and indeed, they were about evenly split between those who felt the samples were good and those who were sharply critical. Regionally, the most positive feedback came from Quebec, while all five British Columbian respondents gave negative opinions, though shipping to the distant province was evidently a problem (as it was for farmers who later sought to establish commercial farming there). However, only two of the respondents contended that there was no hope for commercial tobacco in Canada. By opening possibilities for improving tobacco in Canada, the manufacturer responses both demonstrated the shortcomings of reform efforts thus far, while carving a space for further expert intervention. Consider the response of the ATCC, the largest buyer in the market: "We have no doubt that with further experiments you will be able to produce a tobacco showing further advance quality, and we wish you every success in your undertaking."[49] Charlan and manufacturers shared a tobacco market idiom, where particular types of texture, burn, and flavour denoted value. The mixed opinions received by Charlan were a challenge, certainly, but they were also a research agenda with a set end—to produce a tobacco that flowed smoothly along the commodity chain.

Farmers were not necessarily opposed to this agenda. The petitions calling for experimental stations and the interest in lectures speak to this interest. However, not all were convinced that Charlan was the best translator of market idiom, in no small part because he had difficulty translating his ideas to English. In the spring of 1906, Charlan toured areas where farmers were raising tobacco. The trip allowed him to generate a number of opinions about the state of tobacco cultivation in Canada (mostly negative), but it also provided opportunities for farmers to assess their new expert. The reviews were mixed. During Charlan's first visit to Ontario, he was unable to offer much advice to farmers because of his limited English.[50] The M.P. for Essex, A.H. Clarke, reported to Fisher that many Ontario farmers were taking umbrage at Charlan's tendency to respond to letters and inquiries in French.[51] For instance, Charles Knight wrote a revealing letter to A.H. Clarke:

[49] Report from Charlan to Fisher, Septembre 1906. RG 17, Vol. 999, File 165198, LAC.
[50] 'Town and Vicinity,' *Essex Free Press*, 24 November 1905.
[51] A.H. Clarke to Fisher, 26 March 1906, RG 17, Vol. 999, File 165198, LAC.

> [N]ow you are well aware that though we have better soil for producing a smoking tobacco, we are not up to the times in curing. The Gov. had better spend a few dollars along this line than paying a French Expert to spend his time in Ottawa processing a few lbs. of our crop, such is the opinion of all the tobacco growers in Essex Co.[52]

Clearly, Knight was no stickler for intervention leading to improvements—he acknowledged deficiencies in the tobacco cultivation and saw no fundamental problem in government assistance. He gladly raised a new type of cigar leaf for an experiment to find paying varieties of tobacco. There was no fundamental objection to Charlan's project here, just objections to his language and his perceived work.

The distance between modernizers was vocational, spatial, and linguistic. Charlan's physical distance from the people he was to advise constituted a key problem for his credibility, particularly in Ontario. *The Leamington Post and News*, which frequently ran articles on tobacco cultivation, printed one of the sharpest critiques of Charlan. Distance and language combine in their complaint:

> Q. Who is Mr. Charlan?
> A. He is a gentleman from France who speaks French only, draws a salary of several thousand dollars a year and writes about 'The export market for Canadian leaf.'
> Q. What else does he do?
> A. In winter he spends much time in 'curing leaf tobacco' in Ottawa and in summer he draws his salary.[53]

Perceived inaction on tariff reform for tobacco farmers was behind much of the frustration of the editorialist—Sydney Fisher was as much a target of the editorial as Charlan. Nevertheless, the reference to Charlan's summer activity is particularly pointed; surely, no self-respecting farmer would have time to write pamphlets and draw salary during the summer. This allegation gestured towards excluding Charlan from the experiences of the Essex tobacco farmer—what would an Ottawa man, one who could barely speak English, know about the troubles of the Ontario farmer?

[52] Chas. Knight to A.H. Clarke, 19 March 1906, RG 17, Vol. 999, File 165198, LAC.
[53] 'Shorter Catechism,' *Leamington Post,* 18 April 1907.

Around the same time as Ontario farmers were complaining about Charlan, the French expert was having a successful tour in Quebec, lecturing to farmers and examining tobacco samples in Joliette, St. Jacques de l'Achigan, and St. Ambroise de Kildare.[54] *L'Étoile du Nord*, which continued its tradition of reporting on tobacco, gladly printed lengthy columns submitted by Charlan, prefacing them with the statement that the paper hoped that tobacco farmers would carefully read the advice in order to improve the quality of their tobacco.[55] The lack of pointed criticism of Charlan did not lead to him taking a more favourable view of production in the province. As he reported in 1910, "If any part of Canada stood in need of improvement at that time, so far as methods of growing and curing were concerned, it cannot be doubted that this part was the province of Quebec." Meanwhile, in Ontario, "the growers of Essex county, more enlightened or better advised…were carrying on the tobacco industry for a purely manufacturing purpose, the Burley being their almost exclusive product."[56] Charlan might have struggled with English and editorials when he first came to Canada, but he felt Ontario growers understood the importance of the commodity chain more clearly than their Quebec counterparts did.

"Improving" tobacco cultivation in Quebec and Ontario (and later, to a lesser extent, British Columbia), relied on an intensification of categorization. Growing tobacco for a manufacturing purpose meant that crops had to be predictable. Not knowing the variety of tobacco grown was tantamount to growing "wild" tobacco, and as we saw, manufacturers demanded clear distinctions between human defined and natural strains. Ontario tobacco farmers were growing Burley, a variety of tobacco suited for plug and pipe tobacco that had emerged after experimentation by American farmers.[57] Comparatively, when Charlan examined Havana and Comstock-Spanish tobacco (both typically used for cigars) grown in Montcalm, he discovered that "there were not any significant difference between these two varieties…in all cases, that both varieties, very close

[54] 'Conférences agricoles à Joliette,' *L'Étoile du Nord*, 15 février 1906; 'St. Jacques de l'Achigan: la culture du tabac canadien,' *L'Étoile du Nord*, 1 mars 1906; 'Chez nous et autour de nours,' *L'Étoile du Nord*, 25 mai 1906.
[55] 'La culture du tabac,' *L'Étoile du Nord*, 31 mai 1906.
[56] Felix Charlan, "Tobacco Division: Report for the Year 1910," Dominion Department of Agriculture, Tobacco Division, Tobacco Bulletin A-12 (Ottawa, 1911), 41.
[57] Specifically, they were growing White Burley, a variety of tobacco developed in Ohio in 1866. 'Burley' is itself a simplification, as a number of Burley strains were developed during the early 20th century. See H.A. Freeman, *White Burley Tobacco in Canada*, Dominion of Canada, Department of Agriculture, Bulletin No. 66—New Series, (Ottawa, 1926); John Van Willigen and Susan C. Eastwood, *Tobacco Culture: Farming Kentucky's Burley Belt*, (Lexington: University Press of Kentucky, 1998), 11-12.

indeed, were found intimately mixed in the majority of harvests."[58] From its inception, the Tobacco Division would devote considerable effort to ensuring that farmers used "pure" seeds, supplied by the Division, seed distributors, or procured by careful use of seed plants. This anxiety about purity in farming was certainly not confined to tobacco. According to Margaret Derry, as more "true breeders" began attempting to define good breeding habits for chickens, "Purity in breeding meat ensured repeatability; lack of purity meant unknown results."[59] Categorization demanded knowable results, which buyers would ideally reward with higher prices.

If growers seeking to raise tobacco for manufacture were vexing for Charlan, farmers raising pipe tobacco for personal use were positively bewildering. *Tabac canadien*, which attracted the attention of early reformers like Foucher and Labelle, was a fluid category that contained any number of varietal strains. *Tabac canadien* could refer to one of any number of strong pipe tobaccos, including Quesnel, '*Le Canadien*', Petit Havane, Tabac Rouge (or Petit Rouge), and so on.[60] While Charlan noted that some of these varieties could have value as pipe tobaccos, particularly Petit Havane, most of these tobaccos were mixed and stem from a period "when the culture and trade of Canadian tobaccos were in the embryo stage….these cheap products are too often composed entirely of raw tobaccos sometimes of very doubtful quality."[61] As a category for the tobacco expert, *tabac canadien* was far too fluid to be of value. It was best left to people like Henri Bourassa to smoke as a symbol of their commitment to their ideal rural French Canada—and emotional ties to a romantic rural past certainly had no place in rational tobacco typologies.[62] Of course, Charlan would never have appreciated that his creation of categories was as idiomatic as Bourassa's clay pipe.

In order to foster widespread use of the modern categories, Charlan and the Tobacco Division established a small network of experimental farms, each with a local supervisor. By 1909, three

[58] Felix Charlan to S.A. Fisher, Sept 1906, RG17 Vol. 999 File 165198, LAC. "il n'y avait pas de différence sensible entre ces deux variétés…dans tous les cas, que les deux variétés, très voisines d'ailleurs, se trouvaient intimément mélangées dans la plupart des récoltes."
[59] Margaret Derry, *Art and Science in Breeding: Creating Better Chickens*, (Toronto: University of Toronto Press, 2012), 67.
[60] Rudy, 'Manufacturing French Canadien Tradition," 207; Laroque, *Culture et preparation du tabac*, 2nd ed., 12-13; Felix Charlan, 'Tobacco Culture in Canada,' Department of Agriculture, Tobacco Division, Tobacco Bulletin A-11 (Ottawa, 1911), 7.
[61] Charlan, 'Tobacco Culture in Canada,' 9-10.
[62] Rudy, *Freedom to Smoke*, 69-74.

stations were operational: two in Quebec (St. Jacques de l'Achigan and St. Césaire) and a 38-acre farm on leased land at Harrow, Essex County. The Quebec stations were on leased land, and one near Farnham replaced the small seven-acre St. Césaire station, located on Pierre Leduc's farm, after the government and Leduc agreed to cancel the lease.[63] The stations had a variety of functions. Some of their roles, such as their efforts to encourage commercial fertilizer use and testing the relationship between soil type and tobacco variety, will receive more attention in the following chapters. Another key function was to conduct experiments on tobacco varieties and create new hybrid strains to match local conditions, and continue their work to encourage regional specialization (Essex and Kent in Burley, Quebec in cigar tobacco). For instance, Omer Chevalier worked on developing a hybrid Comstock x Sumatra cigar leaf, which the Division optimistically reported would adapt to the heavier soils and shorter growing season in Quebec while still producing a leaf with fine texture and shape.[64] The development of hybrids also indicates the flexible use of 'purity.' Mixing seed was not in itself unacceptable; it was whether it was done by accident (nonhuman happenstance) or by deliberate manipulation (human artifice). The credentials and status of members of the Tobacco Division allowed them to mix seeds in their pursuit to create local manufacturing specialities, a privilege not afforded to those who grew *tabac canadien*. This is not to suggest that deliberate hybridization is the same as simply allowing varieties to mix—the laws of genetic inheritance behind creating hybrid strains of plants had been discovered in mid-19th century, when the Moravian monk Gregor Mendel experimented with peas and flowers and determined the importance of dominant and recessive genes, though his findings were not widely shared until the 20th century.[65] However, the difference between a hybrid and a "wild" plant also rested on the claims of expertise, which were themselves based on the power of the manufacturing concern.

[63] For the sizes, see "Memorandum re. the St. Césaire Station," 8 February 1912; "Memorandum to Minister," 17 January 1913; "Memorandum for the Minister re Experimental Station at Harrow," 8 May 1913, RG 17, Vol. 1121, File 234869, LAC.
[64] Tobacco Division, 'Work of Experimental Stations in 1909," Department of Agriculture, Tobacco Bulletin A-9 (Ottawa, 1910), 5-6.
[65] For a lively account of this process, see Jonathan Silvertown, *An Orchard Invisible: A Natural History of Seeds*, (Chicago, University of Chicago Press, 2009), chpt. 5 Of course, hybridization occurred even without a full understanding of the genetic process; for examples in wheat and cotton, see Alan L. Olmstead and Paul W. Rhode, *Creating Abundance: Biological Innovation and American Agricultural Development*, (New York: Cambridge University Press, 2008), 29-30; 100-102.

Establishing stations also spoke to the need to connect to farmers by experiencing and working with local conditions. Reports from the heads of the local stations—Chevailer in Quebec, and Wilfred A. Barnet (a graduate of the Ontario Agricultural College) in Harrow—tended to begin with discussion of weather conditions, when farmers were able to set their crops in fields, and when harvests began. Like the farmers around them, they experienced early frosts, too much or too little rain, and other climatic challenges, which shaped their reports about their yearly experiments. For instance, following the 1915 season, Charlan reported that "It would hardly be fair to make a definite statement regarding the merits or demerits of varieties grown in such an unfavourable season[.]"[66] Nevertheless, by linking new varieties to local conditions, the Division sought to legitimize and encourage their use.

Perhaps the most important way for the Division to encourage farmers to use the verifiable varieties was through their free distribution of seeds. This proved to be one of the most popular functions of the experimental stations.[67] For instance, in 1914 Charlan reported that the Division received 3980 applications for seeds, and that they were able to distribute sample packages (typically a quarter ounce) to 3640 of the applicants. However, this distribution of modern and pure seed was subject to some of the preferences and inputs of farmers. Charlan noted some confusion over the variety of seeds selected:

> Among the requests for tobacco seed received each year from growers in the province of Quebec, those for the Connecticuts, General Grant, and Big Havana have increased noticeably during the last two years…It is difficult to understand the economic reasons which have caused this return to the growing of varieties comparatively slow in maturing and which rarely escape damage from the early autumn frosts…It would seem that the low price paid during the last two or three years, unfavourable ones for the northern-grown Comstocks, have discouraged these growers.[68]

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[66] Department of Agriculture, Dominion Experimental Farms, 'Report from the Tobacco Division for the Year Ending March 31, 1916," (Ottawa, 1917), 1394.

[67] The distribution of seed was regularly advertised in newspapers. For example, in the *Essex Free Press*, an ad for free seed printed on 1 March 1910 was followed by a short report in the paper on 15 April that the advertised seed was eagerly taken up.

[68] Stats on distribution of seed and quotation from Department of Agriculture, Dominion Experimental Farms, 'Report from the Tobacco Division for the Year Ending March 31, 1914," (Ottawa, 1915), 1001-1005.

Evidently, farmers were often perfectly willing to modernize by using pure seeds, but they might not necessarily modernize in ways that conformed to Division expectations. Connecticut Seed Leaf, for instance, produced large leaves and had been cultivated by farmers since the 1860s, so farmers stuck with it.[69] Local understandings of yields, prices, and frost could both converse with and disrupt modern ideas of ideal tobacco practice.

Another way for the Division to reach farmers was through the publication of bulletins and articles in newspapers. For instance, despite the *Leamington Post and News'* initial reservations about Charlan, by the 1910s it began printing articles by him (it perhaps helped that his English had improved over the years).[70] Few raw numbers seem to exist on the number of bulletins issued, though when the department was publishing the first bulletins in 1906, Charlan recommended they print some 10,000 for Quebec and 5000 for Ontario. Inadvertently impressing ties between government and manufacturing purpose, the letter had the Dominion Tobacco Company's letterhead (the company that assisted Charlan in his early fermentation experiments).[71] Unfortunately, there is limited direct evidence concerning what extent to which farmers actually read the bulletins, or how they read them. The Division might have been strongly shaken by S.P. Brown's assessment, made during a 1921 meeting of the University of Western Ontario's Alumni Association that focused on tobacco cultivation, when he declared, "that the bulletins were worth the paper they were written on. They were so unintelligible that the average farmer did not know what or where to look for things."[72] In part, Brown's assessment is striking for its capacity to underestimate farmer intelligence as much as it is a critique of the bulletins. However, it is also worth noting that the members were not opposed to experimental farms; they asserted that Harrow needed more support.

The most serious challenge to Charlan's position as a reliable expert emerged when farmers in both Quebec and Ontario challenged his neutrality and contended that he aligned too closely with manufacturer interests. The first allegations came from the Société Cooperative Agricole de la

[69] For instance, a *Gazette des Campaigns* article noted that the Connecticut Seed Leaf variety was expanding rapidly back in the 1860s. "Culture du tabac," *Gazette des Campagnes*, 15 octobré 1864.
[70] "Tobacco Culture in Ontario," *Leamington Post*, 12 December 1912; 'A Serious Tobacco Disease,' *Leamington Post and News*, 28 October 1915; "Canadian Tobaccos and their Future: Constant Progress Made in the Industry," *Leamington Post and News*, 13 June 1918.
[71] F. Charlan to O'Halloran, 9 janvier 1906, RG 17, Vol. 999, File 165198.
[72] 'Dominion Government Snoring at the Helm,' *Leamington Post and News*, 3 March 1921.

Vallée d'Yamaska, following the cooperative's efforts to establish a building for sorting, fermenting, and storing tobacco for its members. In 1911, the Yamaska cooperative petitioned the federal government for a grant for assistance constructing the building, having already received a grant from Quebec's Minister of Agriculture, Joseph-Édouard Caron.[73] They managed to secure a promise for assistance from Sydney Fisher, but during the project, Borden's Conservatives came to power, and the British Columbian fruit farmer Martin Burrell became the new Minister of Agriculture. The vehement opposition from a number of Quebec tobacco manufacturers, including the well-known cigar manufacturer J.M. Fortier, further complicated the status of the grant. To Fortier and others, a farmers' cooperative had no business constructing a building for sorting and fermentation—they alleged that this clearly was the role of manufacturers.[74] With the ministry in flux, they sought Charlan's position on the state of the cooperative. The Tobacco Division's head gave a decidedly mixed report. In particular, Charlan fretted that the cooperative was guilty of overexpansion, and that the building they planned to erect was far too large for their requirements.

Charlan relied on a manufacturer-based definition of the tobacco commodity chain to justify his role as well. He argued that whereas butter and cheese cooperatives were agricultural operations, "the handling of tobacco is essentially an industrial enterprise, the classification of the product is even more difficult than determining the quality of milk brought by a farmer an can raise numberless difficulties." He further noted that whereas the dairy industry could remove intermediaries, tobacco required the intervention of a manufacturer. "This [manufacturing] is therefore not an agricultural operation, it is properly speaking a commercial and industrial operation."[75] This designation reflected the extent to which Charlan was committed to a commodity chain that linked to a manufacturer, since the earlier forms of tobacco cultivation, such as *tabac canadien*, demonstrated that tobacco was not innately industrial. By deploying the industrial argument, Charlan also drew on the manufacturer idioms for quality tobacco. Despite this argument, Burrell decided to give the cooperative a grant of $5000, though he would later

[73] On the support of Quebec's government for the project, see J.E. Caron to Martin Burrell, 26 November 1911, RG17, Vol. 1164, File 220294, LAC.
[74] J.M. Fortier to Martin Burrell, 16 November 1911; J. Bruce Payne to Burrell, 14 November 1911; Standard Leaf Tobacco Co. to Burrell, 28 November 1911. RG17, Vol. 1164, File 220294, LAC.
[75] Felix Charlan to Monsieur le Député Ministre [O'Halloran], 15 novembre 1911, RG17, Vol. 1164, File 220294, LAC. "[L]a manipulation des tabacs constitue une entreprise essentiellement industrielle, le classement du produit est beaucoup plus difficile que la determination de la qualité du lait apporté par un fermier et peut soulever des difficultés sans nomber." "Ce n'est donc plus une opération agricole, c'est bien une opération commercial et industrielle proprement dite."

indicate that he did so only because he decided to fulfill Fisher's promise.[76] Political expediency could interfere with clear definitions of commodity chains.

While the Yamaska Cooperative was pleased to receive a grant, they alleged that Charlan was hostile to their efforts. In 1915, Dr. H. Dubreuil wrote on behalf of the cooperative to ask for another grant to help hire an inspector. He ended the appeal by asking that Burrell not rely on Charlan for information, as the cooperative was convinced that he was opposed to their warehouse.[77] In the same year, Omer Chevalier informed Charlan that a number of local growers were convinced that Charlan was too close to Fortier and other manufacturers. Chevalier's letter also revealed a surprisingly condescending attitude towards some of the farmers: "[T]here is nothing more stupid than a peasant [*paysan*] and as they necessarily strike stupidly it is sometimes good to be forewarned."[78] Chevalier was in part reacting out of an interest of defending his long-time colleague, and was clearly upset by the insinuations when he heard them ("I rarely had such an unpleasant moment") so the tone should not be interpreted as his entire attitude towards the farmers he worked with.[79] Nevertheless, clear gulfs existed between farmer and Division, in no small part due to a deep-seated difference regarding what elements of tobacco production in which farmers should be able to participate.

Ontario farmers were no happier with the Chief of the Tobacco Division. While Burley farmers enjoyed high prices during World War One, the end of the war contributed to a collapse in those prices.[80] Like their Yamaska counterparts, Essex and Kent Burley farmers read the collapse as evidence that the Tobacco Division had connections to manufacturers, since they encouraged expanding production. In 1921, a group of tobacco farmers gathered in Leamington to decry the 'propaganda' spread by Charlan, claiming that the Division's articles on production were "colored too much in the interest of the manufacturers at the expense of the growers."[81] E.S. Archibald, the Director of the Experimental Farm Branch and Charlan's immediate superior, regretfully noted

[76] Burrell to Caron, 15 January 1912; Burrell to Dr. H. Dubreuil, 26 September 1912. RG17, Vol. 1164, File 220294, LAC.
[77] Dr. H. Dubreuil to Burrell, 28 mars 1915. RG17, Vol. 1164, File 220294, LAC.
[78] O. Chevalier to Charlan, 8 avril 1915, RG17, Vol. 1164, File 220294, LAC. "il n'y a rien de plus bête qu'un paysan et comme nécessairement ils frappent bêtement il est quelquefois bon d'être prévenu."
[79] Ibid. "J'ai rarement passé un moment aussi désagréable"
[80] Burley prices: 1918: 25-32 cents/lb; 1919: 34-42 cents/lb; 1920: 10-13.5 cents/lb; 1921: 17-20 cents/lb. Estimates from various articles in the *Leamington Post and News*.
[81] 'Tobacco Growers Condemn Misleading Propaganda,' *Leamington Post and News*, 3 March 1921.

that the tobacco growers "seem to be still just as adverse to a frank and open discussion with Mr. Charlan as they were previously opposed to follow his advice."[82] Despite the misgivings of the farmers, Charlan remained the head of the Division until 1924.

The fallout with tobacco growers in Yamaska, and in Essex and Kent, both function as potent examples of the rocky relationship between government modernity and local modernity. In both cases, the aggrieved farmers were modern in the sense that they sought to grow crops orientated for manufacturing interests. They focused on a particular type of tobacco—Yamaska farmers in cigar leaf, and Essex/Kent in Burley—and, as the next chapters indicate, they were aware of new developments concerning fertilizer and soil. As farmers modernized, they produced new challenges for the Tobacco Division, which struggled to establish itself as a reliable group of experts. The problem that emerged in 1903 when Pierre Denis sold his seed to farmers while working as a government representative never resolved itself. The Tobacco Division was able to assert categories for tobacco types, but it had difficulty creating an institutional category for itself. Consequently, the position of the state tobacco expert blurred with those of corporate experts during much of Charlan's tenure and beyond, hindering its efficacy in acting as a disinterested interpreter of modernity, even as the countryside became more modern.

Industry Experts: The Gregory Brothers

In 1895, James Buchanan Duke's American Tobacco Company purchased Mortimer Davis' tobacco firms, including S. Davis and Sons and D. Ritchie and Company, forming the ATCC. The Canadian branch of Duke's powerful tobacco trust then purchased the Montreal-based Empire Tobacco in 1898, and in 1903, the purchase of B. Houde and Company left the ATCC with control of 80 percent of the small but growing Canadian cigarette market, and 60 percent of the plug, pipe, and chewing tobacco (*tabac canadien* is not included in this calculation).[83] This company was the key manufacturer interest for Canadian tobacco. Judge D.B. MacTavish, who oversaw the Royal Commission on the Tobacco Trade in Canada (RCTT), which sat in 1902 and reported in 1903, defined that interest by stating, "The manufacturer is interested in getting the farmer to produce the very best quality of leaf tobacco, and he encourages the farmer to follow scientific methods in

[82] E.S. Archibald to Dr. Grisdale, 3 November 1920, RG 17, Vol. 2834, Microfilm T-6992, LAC.
[83] Joanne Burgess, "Davis, Sir Mortimer Barnett," *Dictionary of Canadian Biography*, Vol. XV, (University of Toronto/Université Laval, 2005), http://www.biographi.ca/en/bio/davis_mortimer_barnett_15E.html.

its growth and cure."[84] The brothers William and Francis Gregory, who moved from North Carolina around 1899 to represent the ATCC as agricultural advisors, experimenters, and buyers, earnestly carried out this interest. Combined, the Gregory's influence over tobacco cultivation, particularly in Ontario, spanned some sixty years. This period saw substantial changes in the landscape of the tobacco industry. The ATCC and Empire Tobacco absorbed into the Imperial Tobacco Company of Canada (1908),[85] and much of Ontario's tobacco production shifted from Burley in Essex and Kent counties towards cigarette-orientated flue-cured tobacco in Norfolk and Elgin.[86] Tobacco historian Lyal Tait credited the brothers with experimenting with the first crop of flue-cured tobacco near Leamington in 1900.[87] Combining market power with American origin and extensive farming experience, they were the manufacturing experts *par excellence*. They spoke and enforced the tobacco market idiom.

The arrival of the Gregory brothers in Leamington was not without local support. Lewis Wigle, the Conservative South Essex MPP (1875-1882) and MP (1882-1887) and Leamington merchant and mayor (1902-1904), was a critical early supporter of the Gregory brothers, and of American Tobacco of Canada more generally, eventually taking a job as a buyer for the company.[88] The Wigles were a prolific family in Essex County, having descended from the German American Loyalist, Wendel Wigle (Wiegele), who migrated in 1786.[89] When before Judge MacTavish at the RCTT, Lewis traced the origin of Burley tobacco in Essex to the efforts of industrial buyers. According to Wigle, in 1895 John Archibald of Empire Tobacco came to the area and worked with Lewis and others to encourage cultivation of Burley tobacco.[90] Subsequently, William Gregory accelerated this trend by bringing from the South seed packets of White Burley (a particularly popular variety of Burley, favoured for its lighter taste), which would then be sold for forty or fifty

[84] *Report of Commissioner (Judge McTavish) in the Tobacco Trade of Canada*, April 11, 1903, (Ottawa, 1904), 4.a
[85] The Imperial Tobacco Company of Canada was itself under the auspices of British-American Tobacco, a joint venture between Duke and the American Tobacco Company and the directors of Imperial Tobacco of Great Britain. See Howard Cox, *The Global Cigarette: Origins and Evolution of British American Tobacco, 1880-1945*, (Oxford: Oxford University Press, 2000), 103-106.
[86] In Quebec, the concentration on cigar leaf continued to develop, and the late 1930s saw the introduction of flue-cured tobacco, but the Gregory brothers had little contact with those farmers.
[87] Lyal Tait, *Tobacco in Canada*, (Tillsonburg: The Ontario Flue-Cured Tobacco Growers' Marketing Board, 1968), 64-65.
[88] A useful summary of his life can be found in his obituary: 'Lewis Wigle,' *Kingsville Reporter*, 2 August 1934.
[89] John Clarke, *The Ordinary People of Essex: Environment, Culture, and Economy on the Frontier of Upper Canada*, (Montreal and Kingston: McGill-Queen's University Press, 2010), 452-456.
[90] Evidence of Lewis Wigle, *RCTTC*, 166-168.

cents an ounce. Without the seed, Wigle contended, Essex tobacco would revert to a heavy "old black tobacco" that would not attract purchasers.[91] Gregory also instructed farmers on how to raise Burley, offering prizes for curing and packing, emphasizing that he needed the leaves dry enough to survive shipment to Montreal. Another member of the Wigle family, Robert, claimed that Gregory, and not the government or other farmers, was the main source of advice in the area.[92]

Of course, this advice was never entirely free. By distributing seed, as well as selling fertilizers, the Gregory brothers established and enforced a standard of production on Burley farmers.[93] Like the Tobacco Division, they were instructors with a particular vision of modern tobacco, based on categories grounded in a naturalized manufacturer idiom. However, their articulation of the idiom was even simpler than the categories employed by the Division. As told by William Gregory: "We are preaching to the farmers to grow only what tobacco they can grow properly…Quality is what we want first, and what we are ready to pay for."[94] Buyers like Gregory distilled the manufacturer idiom of factors like burn, colour, maturity, purity, and origin into a simple binary, quality/inferior, and provided a single rubric for measuring where the farmer stood in that binary, price. Price also assumed self-evident meaning for manufacturers in the sense that they claimed farmers would receive their due price based simply on the quality of tobacco they raised.

Price and quality were deceptively simple terms since tobacco, like most agricultural products, was subject to grading. Grading agricultural products was fundamental to the enforcement of the market idiom, for it abstracted messy nature—individual tobacco plants—into comprehensible prices.[95] For instance, by the 1920s, buyers broadly divided Burley (and cigar leaf) into three parts: the bottom leaves (often called lugs or sand leaves), the middle leaves, and the tips.[96] The Tobacco Division encouraged and industry buyers compelled growers to sort their leaves into these

[91] Ibid, 173.
[92] Evidence of Robert Wigle, *RCTTC*, 150-151.
[93] On the Gregory brothers and fertilizer sales, see chapter 3.
[94] 'What Farmers Think of Tobacco Growing,' *Leamington Post and News*, 25 April 1912.
[95] For a stimulating discussion on a similar process in wheat grading, see John Varty, 'On Protein, Prairie Wheat, and Good Bread: Rationalizing Technologies and the Canadian State, 1912-1935,' *Canadian Historical Review*, Vol. 85 No. 4 (December 2004): 721-753. Abstraction was also important to the formation of the wheat futures market, see Cronon, *Nature's Metropolis*, 125-126.
[96] Freeman, 'White Burley Tobacco in Canada,' 32; 'Canadian Tobaccos and Their Future: Constant Progress Made in Industry," *Leamington Post and News*, 13 June 1918. This division contrasted with Burley grading in the United States during the early 20th century, where buyers used eight grades. See Jeffrey A. Duvall, "'Burley Paid the Bills': Twentieth Century Tobacco Culture in the Central Ohio River Valley," (Ph.D. Dissertation, Purdue University, 2007), 201.

categories, particularly after the possibility of exporting leaf to the British market expanded following World War One.[97] Grading became even more complicated as flue-cured tobacco began to dominate in the 1920s, when buying agents had six grades and offered widely differing prices based on those grades. In 1911, a reasonably good year for prices, Burley ranged from 8 to 15 cents per pound.[98] Establishing and refining grades meant that the Gregory brothers' use of the term quality functioned as convenient and rather obfuscating shorthand. In other words, quality was used as a term that seemed to possess inherent and self-evident meaning, but actually linked to a constellation of buyer judgments based on supply, colour, texture, size, moisture, cleanliness, and changing consumption habits, all of which were used to generate prices.

The Gregory brothers, and buyers like Lewis Wigle, sought to create a self-evident meaning for price by asserting that the laws of supply and demand generated price, and that their adjudication of tobacco quality was a natural feature of these laws. This rhetoric was in an effort to present themselves as experts whose foremost concern was the enrichment of local tobacco farmers. According to Gregory, "We are trying our best to further the industry in this part of the province, we have at least 85 percent of the farmers with us. We take all their crop, not part of it, and we pay them cash for it."[99] According to this narrative, Imperial, as represented by William and Francis, were but conduits to the wealth of the tobacco market. Francis insisted that Imperial was interested in ensuring that they kept farmers well informed about the market demand: "From experience in past years, the growers have learned to place great confidence in the ward of the Imperial Tobacco Co., whose policy has been to reliably inform the growers ahead of time."[100] This direct relationship between the ATCC/Imperial, price, and cash, points to the fact that unlike the wheat market, tobacco did not have a futures market.[101] This meant that, for all the abstracting logic behind quality/inferior and price, the modern tobacco market depended on an expert industry buyer looking at and judging the tobacco they needed to buy. This direct interaction always meant

[97] 'Selling Graded Tobacco,' *Essex Free Press*, 5 November 1920; 'Urges Tobacco Growers to Strip and Grade Leaf,' *Leamington Post and News*, 27 May 1920; 'Tobacco Buying in Ridgetown District,' *Leamington Post and News*, 15 December 1922.
[98] Reports in the *Essex Free Press* and the *Kingsville Reporter*.
[99] Ibid. Note that the '85' may be a '95'—the copy is obscure. However, given that it is largely Gregory's rhetoric, and not an actual measure of anything, I am not particularly concerned about the exact number.
[100] 'Tobacco Worth Well Over a Million,' *Leamington Post and News*, 22 September 1910. Francis made a very similar claim in 1930: 'Danger of Over-Production of Flue-Cured Tobacco,' *Tillsonburg News*, 27 February 1930.
[101] Barbara Hahn makes this point for the U.S. market, but it is equally applicable to Canada. See *Making Tobacco Bright*, 170.

that, for all the references to abstract laws of supply and demand, the material element remained paramount.

The Gregory brothers were representative of a wider trend of bringing (mostly) male Americans and American technology to Canada to reshape the tobacco industry, further entrenching the association between tobacco expertise and the U.S. South. 'Mr. Wall' of Tennessee came to Essex in 1909 to experiment with Big Mammoth (a tobacco suited for plug) and to provide advice to local growers.[102] The next year, William advised farmers that they had a variety of excellent seeds for sale, all developed by their "seed man in Kentucky."[103] A few years later, in 1915, the Tobacco Division hired Kentuckian G.C. Routt to replace Wilfred Barnet as the superintendent of the Harrow station, despite the objections of one local paper, which asked, "Is the government quite certain that there is not a man in Canada who could fill the position satisfactorily"?[104] The *Leamington Post and News* disagreed, arguing that Barnet was no expert in tobacco, whereas Routt was. Routt's expertise was grounded in two ways—his training at the Lexington, KY experimental station, and his origin, but the latter was more important than the former. Kentucky functioned as a potent idiom for expertise and experience in tobacco. When the *Leamington Post and News* rebuffed the *Windsor Evening Record*'s concerns about replacing Barnet, it simply described the new hire as "tobacco expert, G.C. Routt, from Kentucky."[105] The article writer did not bother to note Routt's experience at the Lexington station.

Linking to American tobacco knowledge and enforcing tobacco quality though price were two important ways to establish expertise. However, the Gregory brothers also sought to establish themselves as community leaders with ties to the area. During World War One, William won local acclaim by devoting himself to the war bond and recruitment efforts, and publically and sharply decried the American failure to participate.[106] A lengthy editorial in the *Leamington Post and News* bestowed William and the "experts" he brought from the U.S. South with what it undoubtedly saw

[102] 'A New Tobacco,' *Leamington Post and News*, 1 April 1909; 'Town and Country,' *Essex Free Press*, 9 April 1909.
[103] W.T. Gregory, 'Seed From 1909 Crop Now on Sale,' *Leamington Post and News*, 17 March 1910.
[104] 'Slight on Canadians,' *Windsor Evening Record*, 11 March 1914.
[105] 'Harrow Tobacco Farm,' *Leamington Post and News*, 11 March 1914.Indeed, Routt had been recruited from the Federal experimental station in Lexington, KY.
[106] 'Allies Fighting for Peace Ideals held by H. Ford,' *Windsor Evening Record*, 2 October 1915; 'Presentation Made to Leamington Man,' *Windsor Evening Record*, 11 April 1917; 'Lloyd George and his Characteristics,' *Leamington Post and News*, 29 March 1917.

as its highest praise: "They are all good Britishers now, and each one wears a button with a Union Jack and the words, 'I'll do my bit.'"[107] The editorial also noted Gregory's donation of 60,000 cigarettes to the front, as well as his extensive efforts to obtain war bonds. William felt invested enough in the affair to take out a large ad during the 1917 election calling for the patriotic re-election of Borden's Union government.[108] His efforts yielded him an honorary colonelship, and entrenched the position of his family as community leaders. Making tobacco patriotic could also turn a North Carolinian tobacco expert into "a good Britisher."[109]

Francis Gregory was less active during the war, though he became more important in Imperial Tobacco's operations while his brother led recruitment efforts. In 1918, William retired from the company, and Francis took over as manager of the Empire Tobacco branch in Leamington.[110] He remained with the company until 1933, encouraging the transition to flue-cured tobacco and the movement of tobacco cultivation from Essex and Kent to Norfolk and Elgin. In the same year, Francis declared that the Old Belt counties had "sick" land, and began to purchase land in Norfolk County.[111] His decision to devote himself more fully to flue-cured tobacco cultivation in the New Belt was a lucrative one. When he died in 1960, his estate was valued at over two million dollars, and included 10 tobacco farms in Norfolk as well as "several" tobacco plantations back in North Carolina.[112] His transition from industry back into plantation management also furthered the perceived link between industry expertise and practical experience.

Francis' career embodied the entangled relationship between corporation, government, and large farmer. When Gregory left Imperial in 1933, South Carolinian Dudley D. Digges took his position, leaving the Federal Tobacco Division to do so.[113] In some way, Digges was following the earlier precedent of Henry Freeman, who left the Division in 1926 to set up flue-cured tobacco plantations in Norfolk County with William Pelton. According to one local account, Freeman and Pelton

[107] 'Tobacco Interests in the Leamington District," *Leamington Post and News*, 18 January 1917.
[108] 'Tobacco Growers Attention!' *Leamington Post and News*, 13 December 1917.
[109] For a useful and brief summary of cigarette consumption during World War One, see Brandt, *The Cigarette Century*, 50-53.
[110] 'Gregory Will not Accept Govt Job*' Windsor Evening Record*, 29 January 1918. Recall that Empire was a subsidiary of Imperial Tobacco of Canada.
[111] 'F.R. Gregory Testifies at Equalization Quiz,' *Leamington Post and News*, 21 December 1933.
[112] 'F.R. Gregory Estate Valued at $2 Million,' *Leamington Post and News*, 21 July 1960.
[113] Digges had been with the Tobacco Division since 1915. See Department of Agriculture, Dominion Experimental Farms, 'Report from the Tobacco Division, For the Year Ending March 31, 1916," (Ottawa, 1917), 1384.

represented an idealized marriage between the expert and the experienced man: "They were ideally suited for partnership, one an experienced tobacco grower and the other a very well-informed agricultural specialist, with wide knowledge of soils, fertilizers, seeds, etc."[114] Meanwhile, Francis assumed a prominent role as a representative of large tobacco-grower interests, particularly in his role as a member of the Ontario Flue Cured Tobacco Marketing Board, which he served on (in its various iterations) until 1957. As we will see in chapter six, Francis' position on the Marketing Board spoke to the continued potency of buyer power and manufacturing idioms even after the establishment of agricultural boards. His claim to expertise rested simultaneously on his long career as a buyer and interested interpreter of market vagrancies and on his success as a plantation owner. In the case of Francis Gregory, the "practical man" was the expert, because the adjudication of price and quality—the very abstracting of tobacco—still relied on rigorous material knowledge of the tobacco plant.

Curers: Itinerant Experts

The trend of bringing men from the U.S. South accelerated as flue-cured tobacco production expanded alongside the growth of the cigarette market. Flue-cured tobacco reconfigured the tobacco growing landscape in Canada in multiple ways: it altered understandings of soil, promoted chemical fertilizer and pesticide use, created opportunities (and harsh disappointments) for Belgian, Hungarian, and other immigrant farmers, and transformed Norfolk, Elgin, and parts of Lanaudière by facilitating the growth of some highly lucrative farms. Whereas Burley and cigar tobacco could be raised as a cash crop, flue-curing tobacco required significant capital outlays for kilns, fuel, fertilizer, priming (removing leaves one by one from the stalk), planters, and steamers, which contributed to specialized farms, including plantation networks with thousands of acres of tobacco under crop, like the ones owned by Francis Gregory or by William Pelton. The effort to bring curers from the U.S. South brought together state and industry, as well as Ontario and Quebec tobacco cultivation.

Flue-curing required skilled workers. Prior to the 1920s, the vast majority of tobacco, particularly Burley tobacco, was air dried in curing barns. Over this period, farmers occasionally used heaters

[114] "The Story of Norfolk's Flue-Cured Tobacco Industry," Delhi Tobacco Museum and Heritage Centre; see also 'William L. Pelton was First to Grow Tobacco in Norfolk,' *St. Thomas Times Journal*, 26 September 1931.

to accelerate the curing.[115] However, the curing process generally relied more on proper ventilation and timing, air curing typically being completed sometime in the winter. The major difference between air curing and flue curing derives from the intensity of the heat applied to the tobacco leaf for curing. The heat from the flues in the kiln reaches temperatures from around 30˚C to 88˚C depending on the operation.[116] There are three components to flue curing tobacco: yellowing the leaves, fixing the colour, and drying the stems. The temperature applied increases as the curer moves through these processes.

The curing of tobacco required an exacting, ready-at-hand relationship with the crop. Each of these operations is exacting, and requires the use of thermometers, awareness of relative humidity, and judgments about the rate at which the tobacco is curing. The aim is to create uniformly brown leaves, while maintaining a temperature that dries the plants evenly. The moisture from the leaves must be removed gradually and evenly. If moisture is left in the leaves, particularly the stems, then the leaves may mould or rot while bulked (stored). The curer had to constantly monitor the kilns and the external temperature. Advice literature on curing gave wide ranges for appropriate temperatures during the different stages of curing. For example, fixing the colour might require temperatures from 43˚C to 60˚C, depending on the pace at which the leaves were drying out. At the curer's discretion, it might be deemed necessary to "flash" the crop with a blast of higher heat for a brief period if the leaves were not drying quickly enough.[117] The last stage, drying the stems, required curers to endure temperatures up to 80˚C. Generally, this entire process took place over approximately three days per kiln.

Curing tobacco was (and is) an important instance of skilled labour: it required an apprenticeship, demanded acute awareness of the characteristics of the tobacco leaf, and was not divisible into smaller tasks or subject to any extensive mechanization. While curers could not determine the pace of their work, since they were tied to monitoring the changes in the leaf, they were very well compensated. Their work remained highly task-orientated, bound not to industrial time measured in shifts, but to the shifts to the leaves over time, measured by colour and temperature. The high

[115] An example of this process may be found in Freeman, 'White Burley in Canada,' 28-31.
[116] Temperatures from Department of Agriculture, 'Flue Cured Tobacco in Canada,' 27-29; N.A. McRae, 'Tobacco Growing in Canada,' Dominion of Canada, Department of Agriculture, Bulletin No. 176—New Series, (Ottawa, 1935), 24-26.
[117] Tobacco Division, 'Tobacco Growing in Canada,' 26; for a later example, see Tobacco Division, Central Experimental Farm, 'Flue-Curing Tobacco in Ontario,' (Ottawa, 1958), 2-3.

wages commanded by curers lasted through the Great Depression. In 1933 the Norfolk Agricultural Representative reported that curers received wages from $25 to $35 per week, at a time when the average agricultural wage in Ontario was $17 per *month*.[118] The curers began to arrive in the area around late July, and headed back to the United States between late September and early October.[119] Southerners were attracted by the wages, though some were also interested in the potential for settling permanently in Ontario. For instance, George Tull of North Carolina came to cure tobacco for a Leamington farm in 1928, and then returned to settle permanently in 1929, marrying an (unfortunately unnamed) woman from Teeterville and acquiring a farm near Delhi.[120] However, it was more common for Southerners to use wages from curing in Canada as a means to sustain themselves during a difficult period in the American flue-cured districts.[121] The skill required for flue-curing gave these Southerners considerable leverage in Canada, where the industry was nascent.

Curers were well aware of the importance of their role in flue-cured tobacco. J.B. Norwood, a North Carolinian who ended up settling in Norfolk, insisted, "It's a man's job, and no mistake to know just what to do in the kilning process. A curer must be on the job for 24 hours in the day."[122] The poem *Ode To a Curer's Bedtime (3 p.m.—6 p.m.)*, composed by Jean and Lea Slater and dedicated to the curer Walter H. Blackley of Virginia, captures the long days they worked and the ties to their homes:

> His dreams are of Dixie, so soft and low//That land down there where the pickaninnies grow//And also of slim-waisted Southern belles//Especially of one who is more than a pal//But his dreams of Dixie are rudely awakened//By his boss's voice, as he feels his bed being shaken.//"Get up, you Southerner, get out to the kiln,"//And he jumps out of bed with

[118] J.K. Perrett, 'Report of Field Work Accomplished During 1932 in Norfolk Tobacco District,' Agricultural Representative Reports, Norfolk County, RG 16-66, B266739, Archives Ontario; Canada, Dominion Bureau of Statistics, *Canada Year Book*, (Ottawa, 1936).
[119] For examples of the curer calendar, see "Frost Hits Tobacco Harvest Continues," *Tillsonburg News*, 1 October 1936; "Situation is Settling, J.P. Vair tells 'News," *Tillsonburg News*, 29 July 1937; and the reports of tobacco curers entering Quebec in the file "Tobacco Workers Admission to the Province of Quebec," RG 76 Vol 427 File 631475, LAC.
[120] Delhi Tobacco Belt Project, File 9960.1.
[121] For instance, Badger notes that many North Carolinians were receiving only around 10 cents per pound for flue-cured tobacco in 1932, prior to the New Deal subsidies, and bank credit in the area was scarce. See Badger, *Prosperity Road*, 23.
[122] North Carolina Man on Tobacco Growing,' *Tillsonburg News*, 22 September 1927.

> a right good-will.//He rubs his eyes, yawns and smiles//As his thoughts travel South a thousand miles;//For he knows they are waiting to welcome him home,//But now he goes back to work alone.[123]

While clearly presented as a worker with a boss, Blackley also worked "alone," testament to the fact that curers often knew more about the curing process than did the farm owner. The poem reflects how valuable the curers were to the farmers—their long hours and lonely work was, after all, worthy of an ode.

The importance of a successful cure was such that the term expert was occasionally extended to apply to the white male curers who came to Southwestern Ontario and later, Quebec to do the work. As Cecilia Danysk notes, the line between skilled and unskilled agricultural labour was often blurred, and often measured by experience.[124] In tobacco agriculture, one might make reference to an experienced primer (the person who removed leaves from the stem), and certainly people talked about experienced curers, but I have yet to come across someone calling a primer an expert. Further entrenching the status of the curer, there were very few Canadians capable of doing the work when flue-cured tobacco began to spread during the 1920s. An early report from Digges and Freeman (when they were both in the Tobacco Division) noted, "[T]he curing process by itself requires expert handling, the knowledge of which so far, at least in Canada, has been mastered by very few."[125] The lack of Canadian curers remained an issue right into World War II, providing space for both government and industry to create human links to the flue-cured tobacco centres of North Carolina and Virginia. Forging these links had the convenient effect of further entrenching a modern form of tobacco cultivation that facilitated more exact measurements for grading.

The struggle over access to knowledge about grading would constitute a core element in the formation of tobacco farmer cooperatives and the creation of government sponsored marketing boards during the 1920s and 1930s. The worst thing a farmer could hear is that one of his kilns

[123] 'Ode To a Curer's Bedtime (3 p.m.—6 p.m.), *Tillsonburg News*, 1 September 1938.
[124] Cecilia Danysk, *Hired Hands: Labor and the Development of Prairie Agriculture*, (Toronto: McClelland and Stewart, 1995), 158.
[125] D.D. Digges and H.A. Freeman, 'Flue-Cured Tobacco in Canada,' Dominion Department of Agriculture, Central Experimental Farm, Bulletin No. 38 (Second Series), (Ottawa, 1920), 7.

had "Poor" tobacco, the lowest grade one could receive.[126] In an anthropological study of flue-cured tobacco farmers, Peter Benson explored the definitions and interpretations of the extremely complex grading system developed in the United States, where "poor" tobacco could be rendered as "N1GR." The "N" stands for "non-descript;" evoking the characterization of "wild" tobacco made by the Antwerp tobacco merchant Pauwels back in 1902. As Benson notes, "such bales often had a 'foreign odor,' were 'off type,' and were 'of distinctly different characteristics' and 'cannot be classified' as tobacco."[127] The abbreviation also lent itself to a range of racist comments, impressing the racial roots of grading. While there is a substantial difference between "N1GR" and "wild" as grading terms, there is remarkable continuity in the persistence of the human/nonhuman binary as a means to impose a particular definition of good tobacco. To say that something "cannot be classified" as tobacco, when it is, in fact, tobacco, speaks to both the contradictory nature and the material, price-based power of expert categories.

Even as manufacturers could use categories to pay lower prices for tobacco, they offered solutions to farmers. By the late 1920s, Francis Gregory began advising farmers that he could secure the services of southern tobacco curers for them. A typical notice reads, "We have arranged to secure a good number of experienced curers in Virginia and North Carolina. Terms $35.00 per week, board and transportation."[128] As with previous articles advising on Imperial's efforts to bring in Southern expertise, reference to the states associated with flue-cured tobacco was seen as sufficient advertising copy. Of course, not every curer who came from the South was good at his job. As one farmer told a young John Kenneth Galbraith, "Every man from the south who was raised on a tobacco plantation and who is recommended to us, is not an expert. Many of them are woefully incompetent." However, the same farmer acknowledged the need for expert curers, "We cannot handle tobacco successfully without honest-to-goodness expert guidance." [129] Further, farmers did not discover that a curer was not an expert until after the curer came to Canada to work; their origin got their foot in the door. Just as Virginia was idiomatically associated with good tobacco products,

[126] In a small notebook kept by the Imperial buyer J.B. Wilson in the Delhi area around 1931, 13 of the 71 growers recorded had at least one kiln of tobacco judged "Poor." The notebook is part of the collections in the Royal Commission on Price Spreads, RG33-13, Vol. 38, LAC.
[127] Peter Benson, *Tobacco Capitalism: Growers, Migrant Workers, and the Changing Face of a Global Industry*, (Princeton, Princeton University Press, 2012), 223.
[128] 'Tobacco Curers,' *Tillsonburg News*, 8 August 1929.
[129] Both quotes from John Kenneth Galbraith, 'Tobacco Situation Surveyed by an Experienced Grower,' in *Does it Pay?*, ed. Jenny Phillips, (Dutton, ON: Town Crier), 457.

so too did Virginia and North Carolina function as shorthand for tobacco expertise, particularly when the firm that would likely purchase the product was advertising their services.[130]

Farmers and industry alike forcefully confirmed the importance of U.S. southern curers to the flue-cured farmer when the Bennett government sought to restrict the migration of farm labourers during the Great Depression.[131] In February 1931, responding to pressure from the tobacco industry (including both farmers and manufacturers), the Federal government agreed to continue allowing curers into Canada. Fundamental to the agreement was how the curers were defined as experts: "Only 'share men' or tenant farmers, in addition to the expert curers from the south, will be able to enter the county to gain work in the tobacco fields, while the ordinary Southern labor will be excluded."[132] Both the provincial and federal government coordinated regulation of curer admittance. In Ontario, the local Agricultural Representatives became the first point of contact for farmers applying for curer assistance. In Quebec, flue-curing tobacco began to emerge in earnest by the late 1930s. Thus, as demand for curers began to accelerate during World War II, the federal Immigration Branch of the Department of Mines and Resources oversaw admittance of curers. The formation of a government category for curers spoke to the institutionalization of their status as experts; the form that Quebec farmers filled out to secure the services of a curer referred to them as "experts-sécheurs."[133] However, as I will soon consider, expert was a category subject to similar forces of inclusion and exclusion as skill.

The number of curers who came to Canada during the 1930s and 1940s reflects the stiff demand for their expertise. Between 1930 and 1945, anywhere from 673 to 1,500 American curers were brought into Ontario, and during World War II, Quebec admitted between some 40 and 120 curers.[134] The two provinces required roughly the same number of curers in proportion to their

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[130] Canada was certainly not the only country where a Southern identity was tantamount to a claim of expertise in tobacco. Nan Enstad notes how Virginian and North Carolinian employees of BAT forged a Southern identity in China around their shared experiences and understandings of tobacco cultivation and manufacture. See "To Know Tobacco: Southern Identity in China during the Jim Crow Era," *Southern Cultures* Vol. 13 No. 4 (Winter 2007): 6-23.

[131] Ninette Kelley and Michael J. Trebilcock, *The Making of the Mosaic: A History of Canadian Immigration Policy*, (Toronto, University of Toronto Press, 1998), 216.

[132] 'Southern Workers Curtailed,' *Leamington Post and News*, 26 February 1931; see also 'Influx of Tobacco Help to be Greatly Curtailed,' *Tillsonburg News*, 20 February 1931. The continued migration of share farmers spoke to the emergence of plantation farming in the area.

[133] See the forms in 'Tobacco Workers Admission to the Province of Quebec,' RG 76 Vol. 427, File 631475, LAC.

[134] Agricultural Representative Reports, Norfolk County, RG16-66 B266736, Archives Ontario; 'Tobacco Workers Admission to the Province of Quebec," RG 76 Vol 427 File 631475, LAC.

respective acreage, with Ontario attracting a few more by proportion.[135] The number of curers admitted into Canada was a cause for some trepidation among commentators. One editorial lamented:

> Groups of Southerners from Virginia and North Carolina who have been curing bright leaf tobacco in the southern part of the county for several weeks past, are leaving for home daily, carrying fat bank rolls with them…It seems strange that Canadians do not perfect themselves in the art of curing as well as growing the flue-cured tobacco, and thus release themselves from possible hold-ups.[136]

However, no formal flue-curing program emerged until 1938, when the Norfolk County Council passed a resolution "deploring" the fact that some $250,000 went to American curers "while young Canadians went idle." To combat this, the Council, assisted by the provincial Department of Agriculture, launched a program to train curers. In the first year, 30 young men enrolled.[137] Nevertheless, as indicated by the numbers of curers admitted, reliance on Southern curers continued well into the Second World War.

The *Ode to a Curer's Bedtime* and Norwood's commentary on curing also spoke to how the skilled aspect of the work linked to a broader trend of defining skill based on excluding certain groups. Norwood's account of curing did not leave space for the equally long hours that women faced during the curing season that could span much of September. While describing North Carolinian flue-cured tobacco farming during the 1930s, Pete Daniel provided a summary of women's tasks that is readily applicable to Canada: "They weeded plant beds, chopped weeds in the fields, wormed, topped, and suckered tobacco plants, and worked at the scaffold to hand, string, and pass sticks of tobacco into the barn. They also handled their own household duties, cared for their families, and cooked for a large crew of workers."[138] Conspicuously absent from this list is curing.

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[135] For instance, in 1941, Quebec had 6637 acres of flue cured tobacco, and admitted 115 curers, for an average of 1 curer per 57 acres. Ontario had 49,667 acres of flue cured tobacco that year, and admitted about 1200 curers, for an average of 1 curer for 41 acres,

[136] No title, *Essex Free Press*, 15 October 1920, 6.

[137] 'Training Canadian Tobacco Curers,' *The Lighter*, Vol. 8 No. 4 (October 1938), 12.

[138] Pete Daniel, "Reasons to Talk about Tobacco," *The Journal of American History*, Vol. 96 No. 3 (December 2009): 670.

Skill and expertise are both categories that rely on inclusion and exclusion. The exclusion of women from the skilled work as curers has many parallels. For instance, Anna Clark's highly instructive response to E.P. Thompson's famous work traces how male weavers mobilized a rhetoric of skilled breadwinners that both sought to defend their wages and working conditions while excluding women from the wages and rituals enjoyed by the working male.[139] Closer to the industry at hand, cigar makers in the Cigar Makers' International Union made "manliness" an essential part of defining their work and skill.[140] In both cases, the failure of male workers to incorporate women's work into their visions of skill allowed industrialists to split the work force and hire women at lower wages—they recognized that women did these jobs, and they recognized that they could pay them less. However, the parallel is not exact. Male farm owners could not (or would not) attempt to hire women curers. Women were not admitted under the government program, and male farmers accepted the notion that curing was the preserve of male experts.

Race functioned as the other key means for excluding a curer from being an expert. I have not found evidence of the government admitting a single African American as a curer, despite the fact that African Americans grew flue-cured tobacco in North Carolina. Canadian tobacco interests were aware of the work of black farmers. The Imperial tobacco buyer T.L. Lea, who took over from Francis Gregory, who found himself before the Royal Commission on Price Spreads, was reported as having previously been a buyer working with black farmers in Kentucky. The *St. Thomas Times Journal* impressed this previous employment when discussing Lea, insinuating that the white Ontario farmers might resent being treated in a similar manner to black farmers.[141] An article in the *Tillsonburg News* reported that a black farmer was the best tobacco farmer in Wilmington, N.C. He managed it by having at least three of his children monitor the temperature. However, before the article dared to accept the black farmer as a curing expert, it noted, "Perhaps a thermostat device would work as well, but in the South it is cheaper to have children."[142] Bodies

[139] Anna Clark, *The Struggle for the Breeches: Gender and the Making of the British Working Class*, (Berkeley, University of California Press, 1995), chpt. 7.
[140] Patricia Cooper, *Once a Cigar Maker: Men, Women, and Work Culture in American Cigar Factories, 1900-1919*, (Urbana: University of Illinois Press), 1987; Eileen Boris, "'A Man's Dwelling House Is His Castle': Tenement House Cigarmaking and the Judicial Imperative," in Ava Baron, ed., *Work Engendered: Toward a New History of American Labor*, (Ithaca, NY: Cornell University Press, 1991), 114-141. For an example of manliness and skill in furniture making, see Joy Parr, *The Gender of Breadwinners*: *Women, Men, and Change in Two Industrial Towns*, (Toronto: University of Toronto Press, 1990), especially chpt. 7.
[141] 'Tobacco Grower Griefs,' *St. Thomas Times Journal*, 3 May 1934.
[142] 'Best Tobacco Farmer is Negro with 12 Children,' *Tillsonburg News*, 21 March 1940.

used instead of measurement were presented as a clear instance of failing to use the tools of modernity. Finally, the geographer Bert Hudgins argues against a view that African Americans brought tobacco cultivation with them when they migrated to Essex during the early 19th century, stating, "The crop requires too much skill and science for them."[143] In a pithy sentence, black farmers were doubly excluded from skill and expertise.[144]

White U.S. Southerners who came to Canada further entrenched attitudes barring black curers. These racist views are remarkably lasting; as Benson noted, white farmers continue to marginalize black farmers. Referring to 'N1GR' and its passing resemblance to a racial epithet, he notes that some farmers dealt with receiving such a grade by joking bitterly that "My tobacco is so damn sorry they wrote nigger on it."[145] J.B. Norwood would have laughed heartily at such a joke. When the interviewer asked him about black farmers (and their absence), he declared, "I'm tickled to death to get away from the negroes! We don't need them. The niggers had better keep by themselves."[146] A white farmer could afford to be racist. They had a government program in place to secure their passage, and white southerners were widely assumed experts unless proven otherwise. Their white, male bodies and their southern accents were their resumes.[147] A curer's status as an itinerant expert was, in many ways, as much contingent on race and gender as it was on their ability to gauge temperatures and adjust heat. While there were significant barriers to expert curing status, the fact that press, industry, and government described men who came and went season after season as experts, demonstrates that even by the 1940s, expertise remained a partially fluid category. Finding a historical incident of mobile agricultural expertise like this can call into question the racialized categories we use to exclude modern itinerant agricultural labourers. Today, the few tobacco farmers who continue to raise tobacco in North America rely on Mexican and Caribbean workers, including during the curing process, but these

[143] Bert Hudgins, "Tobacco Growing in Southwestern Ontario," *Economic Geography*, Vol. 14 No. 3 (July 1938): 230.
[144] For another instance of this process excluding black workers, see Sarah-Jane Mathieu, "North of the Colour Line: Sleeping Car Porters and the Battle Against Jim Crow on Canadian Rails," *Labour/Le Travail*, Vol. 47 (Spring 2001): 9.
[145] Quoted in Benson, *Tobacco Capitalism*, 210. As this chapter explains, 'sorry' is a powerful term in the tobacco fields, with complex moral, social, and racial connotations.
[146] North Carolina Man on Tobacco Growing,' *Tillsonburg News*, 22 September 1927.
[147] On accents: one newspaper article noted that Southerners were 'cagey sellers', and then replicated the Southern accent in print as a sort of proof of this. See 'Norfolk Area Aims at High Quality Tobacco as Saturation Point Nears Limit,' *St. Thomas Times Journal*, 29 September 1931.

are no "expert-sécheurs" in the eyes of government, but Seasonal Agricultural Workers with precarious claims to worker rights or good wages.[148]

Conclusion

Tobacco experts were men who were able to interpret the tobacco market idiom and apply that understanding to the farm. Throughout the period, the experience of tobacco cultivation in the United States served as a source of people and as a pool of information for establishing commercial tobacco and measuring progress. This held true in Quebec and Ontario, in cigar leaf and in flue-cured tobacco. This expertise could take a variety of forms: a man like Foucher derived his expertise from working on his plantation and participating in fairs, while William Gregory's power derived from his ability to create categories and make prices. The itinerant curers derived their expertise more from their close relationship with the leaves, and the good curers could interpret the complex categories of colour, texture, and pliability created by the market. Government experts also drew on the market idiom, even as they sought to assert that their interests were distinct from those of industry. To a point, this is true. After all, Charlan and other state experts were more subject to the petitions and complaints of farmers than were the industry experts. Further, and as we will see in chapter 5, the federal government did occasionally (if weakly) intervene in an effort to mitigate the worst excesses of tobacco-buying practice, and they drew on the advice of their experts to do so. Nevertheless, the dominance of market-based understandings of quality tobacco meant that in many instances, state and industry interests converged.

Many farmers participated in the construction of tobacco expertise. They petitioned for assistance, adopted new seed varieties, and hired curers. Particularly in the case of state experts, local modernity could and did interject the course of high modernity. They could, and did, dispute how state or industry experts presented modernization without rejecting modernization. However, such disruptions still fell within the paradigm of market-driven modernization. With the entrenchment of flue-cured tobacco during the 1930s, a tobacco farmer was entirely obligated to work with the tobacco market idiom. With the establishment of kilns, flue-curing entrenched a permanent place for expert intervention on the tobacco farm. However, the fact that their operation depended on the

[148] On the official Canadian category, see the essay in Vincenzo Pietropaolo, *Harvest Pilgrims: Mexican and Caribbean Farm Workers in Canada*, (Toronto: Between the Lines, 2009); for Mexican workers in North Carolina, see Benson, *Tobacco Capitalism*, chpt. 5.

work of itinerant curers indicates that even as tobacco farming modernized, and industry demands became entrenched, there remained space for expertise beyond the confines of the high modern experimental farm or buyer's grade book.

Chapter 3
Making Soil Modern

It was a cool, rainy November day in Montreal when William C. Macdonald took the stand. The 1902 Royal Commission regarding the Tobacco Trade of Canada, chaired by county judge Duncan Byron MacTavish, had summoned the notoriously reticent tobacco magnate to testify on the state of the industry. The main charge of the commission was to investigate the existence of a trust or combine in the tobacco markets, but the conversation branched into a broader discussion of the tobacco industry. Towards the end of the examination conducted by Senator Frédéric Ligouri Béique, the conversation turned to the prospects of commercial tobacco cultivation in Canada. The recorded exchange revealed the rationale behind Macdonald's refusal to use Canadian tobacco in his company's products:

> Q. You don't believe that in time when the farmers are educated to the growing of good tobacco that it then may become to the advantage of Canada generally?
> A. They cannot change the climate or the soil of the country—you cannot grow oranges here, nor you cannot grow figs.
> Q. You consider that the climate of Canada is not favorable to the growing of a good class of tobacco?
> A. The soil and climate of Canada does not grow as good a tobacco as that which is grown in hot climates.
> Q. And therefore in your opinion is that the growing of tobacco in Canada would rather be discouraged than encouraged?
> A. Yes, as an article of commerce in a large way. Those farmers who wish to grow it for their own use and like it; why of course—[1]

Macdonald's dismissal of the prospects for commercial tobacco cultivation undoubtedly disappointed those who supported the early efforts in both Ontario and Quebec. For Macdonald, the matter was simple: Canada could not support commercial tobacco. It was too cold and lacked

[1] Evidence of William C. Macdonald, *RCTTC*, 1198; see also Rudy, *The Freedom to Smoke,* 87–88.

the proper soil. One can imagine Macdonald gesturing to the chilly November day as all the evidence he required to prove his point.[2]

Even as Macdonald gave his testimony, tobacco farmers and modernizers alike sought not to directly change the climate and soil of Canada, but to develop new understandings of them. To achieve this, tobacco interests categorized and matched tobacco types to appropriate soils. Understanding the rhythms of the crop, from germination in hot beds to harvest in the early fall, could overcome the natural obstacles that Macdonald saw as insurmountable. A host of new perceptions about the value of particular soils and the potential of the Canadian climate for a "southern" crop accompanied the development of commercial tobacco production in Canada. The expansion of tobacco cultivation in the Lanaudière and Montérégie regions in Quebec, Essex and Kent Counties in Ontario, the Okanagan and Sumas valleys in British Columbia, and the Norfolk Sand Plain all drew on and benefited from the extensive research and efforts of both tobacco farmers and government-employed tobacco experts. Between the 1860s and the 1940s, Canadian commercial tobacco cultivation ballooned from approximately 1.5 million pounds to over 57 million pounds. This growth stands as an accomplishment of modern, scientifically grounded agriculture in the nation.

Macdonald's testimony indirectly reveals how this modern agricultural project also overturned previously established forms of tobacco cultivation. As he noted, farmers had been growing the crop "for their own use." This smaller scale cultivation had taken place in Canada for centuries, and modern tobacco interests sought to confine it to the past. The creation of commercial tobacco cultivation overturned older understandings of tobacco cultivation, simultaneously expanding and narrowing the terrain on which tobacco could be grown. This dual process of expansion and restriction comprises one of the core dynamics of this chapter. Categories constituted the major tool of this expansion and restriction; tobacco interests deployed them to inform growers where certain types of tobacco could and could not be grown. In particular, experts used these categories in order to undermine pre-existing understandings of tobacco land. More often than not, these understandings derived from Indigenous or French Canadian practice.

[2] According to historical weather data taken at McGill, 12 November 1902 had a high of 1.1 C, with a low of –1.7 and a rainfall of 27.2 mm. Data from http://climate.weather.gc.ca/index_e.html

Overcoming the natural limitations of soil through classification and experimentation was a long-standing affair. Agronomist efforts to "bend the soil to their will" had intensified since the mid-18th century, particularly after agronomist Albrecht Thaer rigorously classified soils and measured relations of meadow and arable land, as measured by rye productivity during the early 19th century.[3] Classification and experimentation were fundamental to efforts for managing Justus von Leibig's Law of the Minimum, "growth that occurs depends on the [nutrient] requirement that is available to the plant in the smallest amount."[4] This chapter contributes to histories of rural modernity by tracing how people developed increasingly elaborate soil typologies to make tobacco cultivation in particular types of soil seem natural and necessary. The creation, elaboration, and contestation of these categories form the analytic heart of this chapter. The soil classification project succeeded in the sense that tobacco cultivation came to be concentrated in areas that conformed to modern understandings of where tobacco should grow. However, there were many moments where farmer practice (even commercially orientated practice) or limitations of knowledge disrupted these categories.[5] Classification was well and good, but it was people, not categories, who sought to grow tobacco in the soil.

During the period primarily considered by the chapter (c.1860-1940), strong-tasting tobaccos fell out of favour in preference for lighter-tasting tobaccos that were suited for milder pipe blends, and increasingly after World War One, cigarettes. Shifts in consumption coincided with shifts in where Canadian tobacco was grown. The heavier pipe tobaccos grew in the regions of Lanaudière and Montérégie in Quebec,[6] the milder tasting Burley tobacco prospered along Lake Erie in the Essex and Kent counties of Ontario, and the light flue-cured tobacco needed for cigarettes grew best in the Norfolk Sand Plain. Each shift led to a particular area emerging as the predominant site of

[3] Christian L. Feller, Laurent J.-M. Thurlès, Raphaël J. Manley, Paul Robin, and Emmanuel Frossard, "'The principles of rational agriculture' by Albrecht Daniel Thaer (1752-1828). An approach to the sustainability of cropping systems at the beginning of the 19th century," *Journal of Plant Nutrition and Soil Science*, 166 (2003): 687-698; Paul Warde, "The Environmental History of Pre-Industrial Agriculture in Europe," in Sörlin Sverker and Paul Warde, eds., *Nature's End: History and the Environment*, (Balingstoke: Palgrave Macmillan, 2009), 79

[4] As defined in Robert S. Shiel, "An Introduction to Soil Nutrient Flows," in John Robert McNeill and Verena Winiwarter, eds., *Soils and Societies: Perspectives from Environmental History*, (Isle of Harris: White Horse Press, 2006), 7.

[5] Shannon Stunden Bower develops a useful concept of "colloquial liberalism" where farmer practice, orientated around individual land ownership, could still diverge from state aims. See her *Wet Prairie: People, Land, and Water in Agricultural Manitoba*, (Vancouver: UBC Press, 2011), 77.

[6] I use the modern regional names as shorthand—Montérégie and Lanaudière were established as administrative regions in 1987.

Canadian tobacco cultivation, as new understandings of soil, from farmers themselves and from the experts who sought to inform them of market demand, led to new evaluations of ideal locations.[7]

Macdonald drew on an international language to refute the idea that Canada could grow good commercial tobacco. Other tobacco interests, writing in agricultural periodicals, newspapers, and departments of agriculture, likewise drew on international studies of tobacco climate and soil to insist that Canada could profitably grow a commercial crop—so long as farmers used the right land. As with other Canadian farm sectors, like wheat and cheese, the success of this project was often measured through export market standards.[8] Farmers who failed to match their soil with the correct tobacco strain found themselves denigrated as failing to contribute to a project that sought to lift Canadian tobacco to the status held by that of the Southern United States. The Dominion Department of Agriculture and its Experimental Farm system constitutes a major source of information for this chapter, but discussion of good tobacco soil emerged from provincial agricultural representatives, the Ontario Agricultural College (OAC) and McGill's Macdonald Campus, and from corporate buyers looking for particular crops. Newspapers were often instrumental for spreading and encouraging this advice. They also provide glimpses into farmer understandings of the land they worked.

Profiling the Land

The different tobacco-growing regions have diverse soil profiles, which can lead to significant variations in small areas. To consider these variations, we begin with the very categories that experts deployed. Soil surveying did not begin in earnest until 1914 in Ontario, and 1934 in Quebec, so many of these categories discussed in this section were codified during and after the

[7] These shifts can be roughly dated: in 1924, total Ontario production of tobacco, centred mostly in the 'Old Belt' of Essex and Kent permanently outstripped that of Quebec. Ontario production had outstripped Quebec's in years prior to 1924, notably in 1920, but a subsequent collapse in prices meant that Quebec briefly retook the lead. By 1929, the 'New Belt' had become the centre of flue-cured production, the most rapidly expanding form of tobacco; in that year, the New Belt grew 10,800 acres of the total flue-cured acreage of 15,085. See Department of Trade and Commerce, Dominion Bureau of Statistics, 'Report on the Tobacco Manufacturing Industry in Canada, 1925 and 1926," (Ottawa, 1927) for a table that summarizes production, 1919-1926. For the shift to the New Belt, see Tobacco Division, "Report of the Officer in Charge, N.T. Nelson, Ph.D., for the Years 1927, 1928, and 1929," (Ottawa, 1930), 7-8.

[8] John F. Varty, "Growing Bread: Technoscience, Environment, and Modern Wheat at the Dominion Grain Research Laboratory, Canada, 1912--1960" (PhD Dissertation Queen's University, 2006), chpt. 4; R Marvin McInnis, *Perspectives on Ontario Agriculture, 1815-1930* (Gananoque, Ont., 1992), 96.

period under consideration here.[9] The section makes the categories seem rather neat, and yet the historical process of both expanding and limiting the soil categories where tobacco should be grown reveals that the creation of these categories was complex. When considering the geographic and soil profiles of these areas, it is useful to remember that tobaccos suited for cigar and pipe smoking *generally* profit from clay loams or sandy loams, while the Virginia and other tobaccos suited for cigarette smoking require especially sandy and well-drained loams.

In Quebec, two areas came to be particularly associated with tobacco production around the late 19th and early 20th century; the "northern" district of Lanaudière and the "southern" district centred on the Yamaska River valley in Montérégie.[10] In Lanaudière, tobacco cultivation particularly concentrated around the counties of Montcalm, L'Assomption, Joliette, and Berthier. Along the Yamaska, farmers near St. Hyacinthe, Sainte-Césaire, and Farnham raised tobacco. Farnham eventually became the site of a federal tobacco research station. These areas were not the only places where people grew tobacco in Québec. Small pockets of tobacco cultivation could be found throughout the province from 1860 right through to 1940. However, these are the areas where tobacco cultivation in Quebec ultimately concentrated.

Normand Brouillette has described the geographic features of Lanaudière in detail. The tobacco-growing region is situated on the Laurentian Plain, which has a mixture of clayey lime soils and more gravelly and sandy ones; the latter are particularly found around the town of Joliette. This mixture is a result of the deposits of rivers that flowed into the Sea of Champlain, an extension of the Atlantic Ocean that covered the St. Lawrence Valley as the glaciers retreated some 12,500 years ago. Over the centuries, l'Assomption River left other deposits of gravelly soil. The area has a frost-free growing period of approximately 152-160 days, which is usually sufficient for tobacco cultivation. Generally, the topography along the plain is low lying and flat.[11] The soil survey maps drawn by the Department of Agriculture following the Second World War also provide a sense of the land (see Figure 3). Much of the soil along l'Assomption River is categorized as moderately well drained limey loam or sandy loam, and having well drained soil is instrumental for

[9] J. A. McKeague, *History of Soil Survey in Canada, 1914-1975* (Ottawa: Canada Dept. of Agriculture, 1978), 13–14.

[10] The 'northern' and 'southern' district classification was adopted by the federal Tobacco Division; I follow its terminology here.

[11] Brouillette et al., *Histoire De Lanaudière*, 26–34.

commercial tobacco cultivation.[12] However, the diverse complexion of soils in the northern counties—fine loam, sandy clay, loamy clay, and so forth—is indicative of the challenges facing the expert who sought to categorize land for tobacco use.

Flowing into the St. Lawrence River from the south, the Yamaska River also ran alongside a number of farms that devoted a few acres to tobacco. Like the Lanaudière, the retreat of the Champlain Sea shaped Montérégie, noted by geologists for its rocky outcroppings and deeply buried bedrock. Farmers prized lands along the lower Yamaska for their fine sandy-clay soils, and so the region attracted increasing settlement from the end of the 18th century.[13] There are also sections possessing heavier clay loam, particularly around Sainte-Césaire. Experts later identified this soil as suited only for stronger tobaccos typically destined for pipes.[14] The postwar soil maps reflect the variation in soils. To the south of Sainte-Hyacinthe, following the Yamaska along a southerly course for fifteen kilometres, we find variations of loamy, clay loam, and sandy fine loam soils. To the north, and just above a steep ravine running alongside the river, there are pockets of well-drained, sandy and fine soil, which would later be found suitable for flue-cured tobacco.[15]

[12] Ernest Pageau, "Étude Pédalogique du comté de Joliette," Division des sols, Faculté d'Agriculture, Bulletin technique no. 8, (1961), http://sis.agr.gc.ca/siscan/publications/surveys/pq/pq28/index.html; Paul G. Lajoie, "Étude Pédalogique des comtés de l'Assomption et de Montcalm, Direction de le recherché, Ministère de l'Agriculture du Canada (1965), http://sis.agr.gc.ca/siscan/publications/surveys/pq/pq32/index.html.

[13] Peter Gossage, *Families in Transition: Industry and Population in Nineteenth-century Saint-Hyacinthe* (Montreal: McGill-Queen's University Press, 1999), 12–14.

[14] Felix Charlan, 'Tobacco Growing in Canada,' *Department of Agriculture, Dominion Experimental Farms*, Bulletin No. 25, Second Series, (1915), 12.

[15] 'Étude pédologique du comté de Rouville, Québec,'*Agriculture et Agroalimentaire Canada*, (1999), http://sis.agr.gc.ca/siscan/publications/surveys/pq/pq49b/index.html;

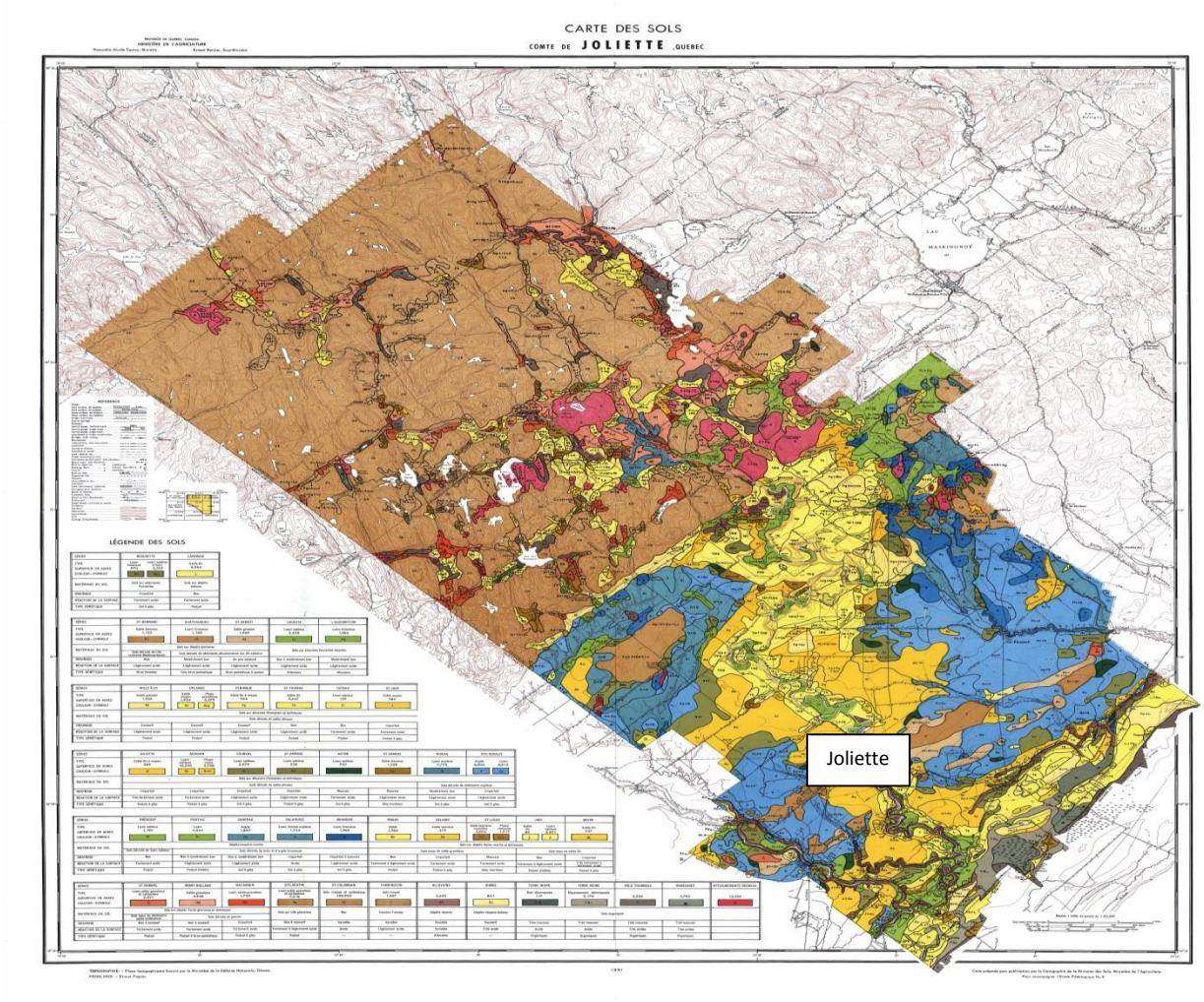

Figure 6: Soil Survey of Joliette County 1961. The predominately-brown labelled land midway up the map clearly illustrates the division between the Laurentian plateau, a generally rocky terrain, and the Laurentian plain. Also, note the gold brown soil around Joliette; this 'Achigan' soil is a sandy loam amenable to a variety of tobacco cultivation. See footnote 12 for source.

In Ontario, tobacco production was never as widespread as in Quebec, but the regions where it grew commercially had significant physical variation. Essex County and, to a somewhat lesser extent, Kent County were the first parts of the province associated with tobacco cultivation. An important geographic feature of these counties is the raised sandy and gravely moraines formed by glacial lakes. In Essex County, the Glacial Lake Warren formed these ridges, which submerged modern Essex and Kent as the Wisconsin Glacier retreated around 12,500 BCE. For example, west of Leamington is a moraine that stands about 100 feet above the lake plain, stretching through to Ruthven. A soil survey from 1949 labels the soil as a Burford Loam, a "brown gravelly loam over

reddish brown clay loam then grey stratified sand and gravel; many cobblestones."[16] Glacial Lakes Whittlesey and Warren also created a gravel strand known as the North Ridge, which runs through the towns of Essex and Cottam and reaches a height of 650 feet above sea level. During the early twentieth century, the North Ridge emerged as an important tobacco-growing strip.[17] Near Blenheim, Kent County, we find another important moraine. These ridges of gravelly or sandy loam that punctuated Essex and Kent Counties proved amenable to tobacco cultivation of various types. The ridges were also particularly valuable, since much of the interior land in Essex County was classified as heavy textured and poor draining, making it difficult to adapt to cropping without substantial human intervention.[18] Almost no amount of human intervention would make poor draining soil amenable to commercial tobacco cultivation.

The other major area of tobacco production was the "New Belt," which centres on the Norfolk Sand Plain found predominately in Norfolk County. The plain also stretches into Elgin and Oxford counties. The Sand Plain has attracted the attention of several scholars, since it emerged as the centre of Canadian tobacco production during the 1930s. In 1938, Bert Hudgins published an article on the influence of climate and soil for facilitating the expansion of tobacco production to the New Belt. He noted how Norfolk County had a remarkable concentration of sandy soil suited for flue-cured tobacco production, particularly in contrast to Kent County. "The contrast in clay and sand soils is well represented by Kent County with three-fourths of its soils clay loams…while Norfolk County has three-fourths of its area sandy soils."[19] In a more recent and engaging article considering human responses to the sweeping changes in the landscape from "wasteland" to "tobacco heartland," Lawrence Niewójt provides a rich description of the physiography of the plain:

> A product of Pleisocene glacial retreat [the aforementioned Wisconsin Glacier], it is a deposit of deltaic sediments that covers an area of about 3150 km² and ranges from an

[16] L. J. Chapman and D.F. Putnam, *The Physiography of Southern Ontario*, 3rd ed., (Toronto, Government of Ontario, 1984), 4; N.R. Richards, A.G. Caldwell, and F.F. Morwich, "Soil Survey of Essex County," *Experimental Farms Services, Department of Agriculture*, Report No. 11 of the Ontario Soil Survey, (1949), http://sis.agr.gc.ca/cansis/publications/surveys/on/on11/index.html
[17] Chapman and Putnam, *The Physiography of Southern Ontario*, 67.
[18] John Clarke, *Land, Power, and Economics on the Frontier of the Upper Canada* (Montréal, Que.: McGill-Queen's University Press, 2001), 1–6. Clarke notes how early colonial surveyors identified this poor draining land by the types of trees that grew in the area; elm, black ash, and willow were seen as denoting overly wet land. (14)
[19] Hudgins, "Tobacco Growing in Southwestern Ontario," 225.

> average depth of 10 metres to a maximum depth of 25 metres over the glacial till…West of Norfolk, this plain terminates at Lake Erie in 30-metre cliffs.[20]

Like Niewójt's article, this chapter is partially interested in the role of understandings of soil in Norfolk's transition from "wasteland to heartland." He usefully situates the change in a long period specific to Norfolk County whereas I intend to situate the change in shifts that account for previous experiences and experiments throughout Canada. This project also draws on some different archives and more robustly explores the state role in fostering these shifts.

Before closing this brief tour of tobacco lands and their soil, two other peripheral areas are noteworthy. First, and just to the Northeast of the Norfolk Sand Plain, we find the Caradoc Sand Plain, which is found in Caradoc Township, Middlesex County. Like the Norfolk Sand Plain, the Caradoc sands came from the delta of the Glacial Lake Whittlesey, and thus the sands are similarly medium to coarse.[21] I call the Caradoc "peripheral" following Carol Stewart, who studied tobacco cultivation in the area, focusing particularly on the period of restructuring from tobacco to other forms of agriculture, from corn to ginseng to strawberries, during the latter 20th century.[22] The second noteworthy area are British Columbia's Okanagan and Sumas regions, where efforts to raise tobacco persisted from the turn of the twentieth century into the 1930s. Around parts of Summerland, where the Dominion Experimental Farm employees worked on tobacco cultivation, one could find gravelly sandy loam, plots that were candidates for successful tobacco cultivation.[23] Farms around Kelowna also experimented with different types of tobacco. Moreover, tobacco figured into the modernizing project that created Sumas Valley. The draining of Sumas Lake in 1924 left some plots of land that had clay sand soils with fine drainage, which the Tobacco Division hoped to be suitable for the most modern form of tobacco production, flue-cured. However, like many aspects of the Sumas Valley project, this proved to be a disappointment.[24]

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[20] Lawrence Niewójt, "From Waste Land to Canada's Tobacco Production Heartland: Landscape Change in Norfolk County, Ontario," *Landscape Research*, Vol. 32 No. 3, (June 2007), 356-357.
[21] Chapman and Putnam, *The Physiography of Southern Ontario*, 63.
[22] Carol Stewart, "Agricultural Restructuring and Ontario Tobacco Production" (M.Sc., The University of Western Ontario), 1997. On diversification, see a useful table on page 105.
[23] C.C. Kelley and R.H. Spilsbury, "Soil Survey of the Okanagan and Simikameen Valleys," *British Columbia Department of Agriculture with Experimental Farms Service, Dominion Department of Agriculture*, Report No.3, 1949. http://sis.agr.gc.ca/cansis/publications/surveys/bc/bc3/index.html
[24] On the Sumas Valley project, see Murton, *Creating a Modern Countryside*, chap. 4; A.J. Mann, 'Facts Concerning the Tobacco Soils of the Sumas Area in British Columbia,' *The Lighter*, Vol.4, No.3 (1934), 9-10.

Drawing on and Overturning Older Knowledge

Before considering the ways new tobacco interests altered their relationship with tobacco lands, it is worth considering the people who grew tobacco here for centuries. The modern project of soil classification was not necessary to raise tobacco. First Nations peoples grew and continue to grow tobacco in what became Canada for centuries before contact. Historians and anthropologists have long observed the importance of tobacco to First Nations spiritual practices and trade. Bruce Trigger's classic study of the Huron-Wendat nation highlighted the importance of tobacco in healing ceremonies or as payment to spirits.[25] In a highly instructive compilation, anthropologist Joseph C. Winter describes a variety of Indigenous tobacco-farming practices and rituals. For example, the Crow raised a strain of tobacco unused by later commercial practice, Nicotiana quadrivalvis. Members of a "tobacco society" raised it, and each step of the process—mixing the seeds, planting, cultivating, and collecting the seeds from the plants—was accompanied by elaborate rituals. The tobacco grown by the society was not smoked; the act of raising the tobacco was sacred for them.[26] Other Indigenous growers were reported as being a bit less concerned about cultivating tobacco near other crops. Anthropologist Alexander von Gernet gathered several references from the *Jesuit Relations* and other early French sources referring to Indigenous tobacco horticulture, and summarized them by saying, "It is obvious from the descriptions furnished by the eyewitnesses that in many cases tobacco was 'cultivated' in 'fields' or 'gardens' together with subsistence cultigens such as corn, beans, and squash." However, he notes that much of this cultivation was small scale and occurred in gardens or in "clearings in the woods," a method more in line in the horticultural practice of the Hidasta.[27]

Long before the European settlement of the Old Belt of Essex and Kent, the Tionontati (Petun) and the Attawandaron (Neutral) raised and traded tobacco there. They found the climate and soil there ideal for raising *Nicotiana rustica*, a nicotine-high and strong smoking tobacco.[28] The

[25] Bruce G. Trigger, *The Children of Aataentsic : a History of the Huron People to 1660* (Montreal: McGill-Queen's University Press, 1987), 80–82.
[26] Joseph C. Winter, "From Earth Mother to Snake Woman: The Role of Tobacco in the Evolution of Native American Religious Organization," in *Tobacco Use by Native North Americans : Sacred Smoke and Silent Killer,* ed. Joseph C. Winter (Norman: University of Oklahoma Press, 2000), 286-292.
[27] Gernet, 'North American Indigenous *Nicotiana* Use," 67-69.
[28] On the identification of the tobacco strain grown prior to contact, see Alexander von Gernet, 'North American Indigenous *Nicotiana* Use and Tobacco Shamanism,' in Winter ed., *Tobacco Use by Native North Americans*, 65, in the same collection, see Gail Winter, 'Tobacco Use in Prehistoric Eastern North America,' 199-200 on the

Wendat, to the north of the Tionontati, also raised some tobacco, but Trigger notes that the climate of Wendat territory was not as amenable to tobacco cultivation.[29] The Haudenosaunee also undertook tobacco cultivation. Recovery of an extensive pipe collection at an archeological site at Mandeville, near Lanoraie, in the region of Lanaudière, led to speculation that the area might also have figured prominently in a "pipe-tobacco-smoking complex," given that the region later developed into an important tobacco district.[30] To the east, the oral testimony of an Algonquin-speaking elder, given in 1969, offers a tantalizing hint of understandings of soil in Indigenous horticulture:

> [Tobacco] grows wild under the branches of big trees, particularly in maple forests. We find a lot of tobacco growing in among willow bogs and along the brooks...They like the sandy soil and it won't grow decently at all in good deep loam. Wild tobacco, as any good tobacco man can tell you, is mighty strong. It is cured by nature.[31]

The reference to sandy terrain, along with the concentration of Indigenous tobacco horticulture in regions later associated with commercial tobacco cultivation, suggests important continuities in what was designated tobacco land.

The connections between Indigenous tobacco horticulture and those of the French habitant were quite strong. *Habitant* production was long associated with garden-raised crops intended for small-scale use, with surplus sold in local markets. It was not subject to rigorous classification of soil type. Thus, early 20th century reformers who sought to discredit the habitant smoke in favour of a new, modern, and bourgeois form of tobacco consumption used the connection between French *tabac canadien* and Indigenous horticulture to emphasize French backwardness. At the turn of the twentieth century, two articles ran in the organ of the tobacco industry, the *Canadian Cigar and Tobacco Journal*, disparaging *tabac canadien*. According to Jarrett Rudy, "French Canadian

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'abundance' of tobacco in the area. Following a severe epidemic during the 1630s, reducing their population by an estimated 60%, the Tionontati were dispersed along with the Huron and Neutrals during the Iroquoian wars, ending their role as tobacco suppliers. Olive Patricia Dickason, *Canada's First Nations: A History of Founding Peoples from Earliest Times,* (Toronto: Oxford University Press), 125; Gary A. Warrick, "European Infection Disease and Depopulation of the Wendat-Tionontate (Huron-Petun)," in Jordan E. Kerber, ed., *Archaeology of the Iroquois: Selected Readings and Research Sources*, (Syracuse: Syracuse University Press, 2007), 280.

[29] Bruce Trigger, *The Huron: Farmers of the North*, (New York: Holt, Rinehart, and Winston), 27.

[30] Claude Chapdelaine, 'The Mandeville Site: A Small Iroquoian Village and a Large Smoking-Pipe Collection—An Interpretation," in *Archaeology of the Iroquois*, ed. Jordan E. Kerber, 383.

[31] Quoted in von Gernet, "North American Indigenous *Nicotiana* Use," 69.

terroir, in particular—'intelligent' labour, climate, and soil—was singled out as inappropriate for tobacco." When reformers evaluated the *terroir* of French Canadian tobacco, a complex term that combines assessments of geography and worker, soil and race, resemblance to Indigenous practices meant it fell short. The pungent scent of *tabac canadien*—similar to the *nicotiana rustica* grown by First Nations people—smelt of cultural and economic backwardness to reformers.[32] While the bourgeois connoisseur drew out unsavoury racist and classist conclusions from the connection between French-Canadian and Indigenous tobacco, they were quite right in making the connection.

The earliest settlers of New France had to rely on trade to receive their tobacco supplies. According to anthropologist Alexander von Gernet, there is evidence of merchants importing from France through their supplies in Guadeloupe during the 17th century.[33] There is also some evidence of the famous intendant, Jean Talon, initiating some experiments with tobacco cultivation in 1671. He found that the crop fared well, but the Minister of the Marine, Jean-Baptiste Colbert, did not encourage further experimentation. Colbert held a preference for tobaccos from France's southern colonies and a conviction that New France was better for fur, not tobacco.[34] This official discouragement of commercial cultivation confined production to small-scale growth for personal use, which occasionally attracted the interest of commentators. For example, the engineer Gédéon de Catalogne reported tobacco farming in New France in 1712.[35] Another account of tobacco farming came from the Jesuit Pierre-François-Xavier de Charlevoix, who visited the colony between 1720 and 1722 and reported that the inhabitants of l'Ile d'Orléans "start to grow tobacco and it is not bad."[36] By this period, tobacco cultivation became increasingly notable. Colin Coates' report from the census accounts of Sainte-Anne and Batiscan indicates returns from tobacco every

[32] Rudy, *The Freedom to Smoke*, 70, 85–86.
[33] Alexander D. Von Gernet, "The Transculturation of the Amerindian Pipe/tobacco/smoking Complex and Its Impact on the Intellectual Boundaries Between 'Savagery' and 'Civilization', 1535-1935" (Ph.D Dissertation, McGill University, 1988), 149–151.
[34] Von Gernet, 'The Transculturation of the Amerindian Pipe Complex,' 159; Jim Poling, Sr., *Smoke Signals: The Native Takeback of North America's Tobacco Industry*, (Toronto, 2012), 47.
[35] Von Gernet., 158–9. He draws on the account of R.M. Saunders, "The First Introduction of European Plants and Animals into Canada," *Canadian Historical Review*, Vol. 16 No. 4 (1935): 405.
[36] P. de Charlevoix, *Journal d'un voyage fair par ordre du roi dans l'Amérique Septentrionale: Adressé à Madame la Duchesse de Lesdiguières*, Vol. 5 (Paris: Chex Rollin Fils, Librarie, 1744), 102; "On commence aussi à cultiver le Tabac, & il n'est pas mauvais." also quoted in Von Gernet, 160.

year from this point onward.[37] In 1744, Louis XV's Secretary of State, Jean-Frédéric Phélypeaux, comte de Maurepas, initiated a brief effort to encourage commercial production in the "southern" part of New France. However, little seems to have come of Maurepas' effort, and production remained predominantly bound to domestic consumption throughout the eighteenth and into the nineteenth century.[38]

Later tobacco experts recognized continuities with both small-scale habitant production and Indigenous cultivation. For instance, the practice of raising *Nicotiana quadrivalvis* attracted the interest of the Tobacco Division.[39] Lyal Tait draws explicitly on the continuity between Indigenous and modern tobacco cultivation in his 1968 overview of Canadian tobacco farming. Tait, a tobacco farmer himself, had a keen awareness that his farm had once been Attawandron territory, and the soil profile provided him with his evidence: "On the same sandy knoll where our present farmhouse is situated…once dwelt the first owner and tenant of our farm. We live in the former tobacco land of the Neutrals, overlooking old Lake Erie, so our tenant was unquestionably a 'tobacco Indian."[40] "Tenant" is a telling word, since the flue-cured tobacco cultivation practiced by Tait drew on the efforts of sharecroppers or tenants. The discovery of Indigenous artifacts intrigued him enough to write a short book on the "Tobacco Indians" of Ontario, a product of amateur archeological sleuthing and investigation of French sources on the Wendat, Tionontati, and Attawandron. While the work has stereotypical views of Indigenous people, portraying Tionontati and Attawandron men as lazy gamblers, it also draws several parallels between white and Indigenous rationales for tobacco cultivation. For example, Tait notes, "The Hurons and the tobacco nations exchanged wampum, fishing nets, tobacco, and corn for fish and furs. We are told that much of this tobacco found its way to Quebec, even as it does today."[41] For Tait, the soil,

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[37] Colin M. Coates, *The Metamorphoses of Landscape and Community in Early Quebec* (Montreal: McGill-Queen's University Press, 2000), 39–40.

[38] Von Gernet, "The Transculturation of the Amerindian Pipe/tobacco/smoking Complex ," 162; Jacob M. Price, *France and the Chesapeake: a History of the French Tobacco Monopoly, 1674-1791, and of Its Relationship to the British and American Tobacco Trades* (Ann Arbor: University of Michigan Press, 1973). On Maurepas, see Vol.1, 110; the reference cited by Von Gernet appears in Vol. II, f. 75, 949-50.

[39] 'Tobacco Growing Amongst the North American Indians,' *The Lighter*, Vol. II No.4 (July 1932), 7; drawing on Ralph Linton, "Use of Tobacco Among North American Indians," Field Museum of Natural History, Department of Anthropology, Leaflet No. 15 (1924), 4-5.

[40] Lyal Tait, *Tobacco in Canada.* (Tillsonburg Ontario Flue-Cured Tobacco Growers' Marketing Board, 1968), 52.

[41] Lyal Tait, *The Petuns: Tobacco Indians of Canada*, (Port Burwell, Ontario, 1971), 96. For an overview of the 'Lazy Indian' stereotype, see John Lutz, *Makúk: A New History of Indigenous-White Relations*,' (Vancouver, 2008), chpt. 3. The portrayal of Indigenouss as lazy, and thus outside economic production, would undoubtedly have helped Tait and his readers elide questions of land ownership that the recovery of artifacts may have sparked.

which yielded both tobacco and artifacts, grounded his farming in a long history of cultivation, lending historical authenticity to the act of raising tobacco in the Norfolk Sand Plain.

Early efforts to legitimize commercial tobacco cultivation in British Columbia also relied on selective use of Indigenous precedents. Local histories of B.C. tobacco cultivation note that the Wisconsin immigrant Louis Holman launched his tobacco experiments in 1893 after observing the growing practices of the Salish-speaking Okanagan people.[42] The short-lived British North America Tobacco Company of Kelowna provides a poignant example of this narrative:

> To [Holman's] surprise he found a number of Tobacco Plants of Indian planting, and upon inquiry learned that the Indians had grown tobacco for their own use as far back as their traditions and folk-lore reached in the dim past. With an eye trained by constant sight of the fertile fields of his native State, he immediately recognised the District now called Kelowna as containing the great essentials necessary to produce the soothing weed in its finest form, namely, soil perfectly adapted to the plant and right texture, fertile beyond imagination, and climate ideal in every particular.[43]

Commercial farmers used a convenient history to confine Indigenous use of the soil in order to establish an area as having potential for tobacco cultivation. Indigenous names do not feature among the early commercial growers. The connection to an American expert, who would grow the "finest" tobacco as opposed to tobacco shrouded by the "dim past," was a point of pride for the firm.

This project of simultaneously drawing on and overturning Indigenous understandings in order to establish new forms of commercial tobacco cultivation occurred elsewhere in the British Empire. In Zimbabwe, settlers who were disappointed to find that promised gold deposits did not materialize turned to tobacco after discovering that parts of Southern Zimbabwe were well suited for tobacco production. From the mid-1890s, the British South African Company (BSAC) funded the research and publication of materials on American and Turkish cultivation techniques, and by

[42] A.J. Mann of the Summerland Experimental Farm provided a different source for Holman's inspiration; tobacco cultivation by Father Pendozi of the Oblate Okanagan Mission. However, given that the mission was established to interact with and convert Indigenous peoples, this cultivation was undoubtedly shaped by Indigenous practice. A.J. Mann, 'The State of the Tobacco Industry in British Columbia,' *The Lighter*, Vol. 7 No, 2 (April 1937), 16.
[43] British North American Tobacco Company, 'Tobacco Growing in British Columbia: From Seed to Smoke,' (1913), File 'Tobacco,' Kelowna Archives.

1907, the BSAC and the Rhodesian Department of Agriculture funded experiments on local growing conditions that often occurred on settler farms.[44] As was the case in Canada, colonizers identified areas having potential for tobacco through observation of indigenous tobacco cultivation. An 1897 BSAC report noted how tobacco "occurs in a wild state, is grown universally by the natives, and has been produced of excellent quality by white farmers in several districts."[45] In Zimbabwe and in Canada, colonizers cast Indigenous uses of the land as the foundation of the development of modern commercial tobacco cultivation.

The continued preference for pipe tobacco, the small scale and domestic orientation of the crop, and the *habitant's* taste for a strong-tasting smoke all lent themselves to continuities between First Nations and *habitant* tobacco land in the form of small garden plots on the periphery of the main agricultural production. Later tobacco interests treated these two categories a bit differently. They confined First Nations' cultivation to a convenient and novel past, using it as part of their staging tracing the development of modern tobacco understanding. *Habitant* production was more troubling for experts, since the *habitants* continued to raise tobacco and sell it in informal markets. Criticism of French Canadian soil use also links to extensive work—both by contemporaries and by historians—criticising French Canadian farmers for cultural practices that depleted soil.[46] Worse yet for reformers, the strong smell and taste of *tabac canadien* led to positions like the one expressed by Macdonald on a cool and rainy November day. Reformers thus drew on this history of people using the land for tobacco cultivation to historicize the feasibility of widespread cultivation of a 'tropical' plant like tobacco.

Expanding Production during the 19th Century

In 1827, Charles Melvin penned for Upper-Canadian readers the tract "Directions to Those Who Raise Tobacco in this Province." Melvin established his credentials for the topic by indicating that he grew tobacco in Maryland before migrating to Upper Canada. The tract quickly turns to the selection of tobacco soil, "The ground that is intended for Tobacco ought to be a rich, light, sandy

[44] Steven C. Rubert, *A Most Promising Weed : a History of Tobacco Farming and Labor in Colonial Zimbabwe, 1890-1945* (Athens, OH, 1998), 28–29; Jordan. Goodman, *Tobacco in History : the Cultures of Dependence* (New York,1993), 214.
[45] Quoted in Rubert, *A Most Promising Weed*, 3.
[46] For a recent summary of the long debate over French Canadian agricultural practices, see Peter A. Russell, *How Agriculture Made Canada*: *Farming in the Nineteenth Century*, (Montreal and Kingston, 2012), chapters 2 and 3.

loam; if it has a clayey bottom so much the better.—An argillaceous or clayey soil does not do so well for it, as in the latter soil it grows much slower, and is not of as good quality as in the former."[47] This advice, drawing on centuries of experience from the United States, provided a foundation for later reformers to build on. Light soil, need for rapid growth, moisture retaining clay bottoms—these keywords persisted.

Melvin wrote this tract in Sandwich, reflecting Essex's early engagement with tobacco cultivation. William Berczy Jr., the son of Joseph Brant's portrait painter, grew some tobacco on his 2400-acre tract in Sandwich Township.[48] As part of the *pays d'en haut*, French Canadians from the St. Lawrence had previously settled in the area and brought their practice of growing *tabac canadien* with them.[49] Canada Twist, a form of unstemmed, unpressed leaf long popular among French Canadian smokers, was created in the county throughout the 19th century, indicating that French Canadian practice had staying power. Canada Twist was popular enough for farmers to inquire anxiously in their local paper about the effects of changes to the regulations governing the sale of twist tobacco in 1897.[50] American settlers were another source for tobacco farming. There is some evidence that black Americans who either migrated or fled to settle in the area brought tobacco cultivation with them, though according to historical geographer John Clarke, the 1851 census data is inconclusive regarding the extent to which they grew tobacco. The census is clearer about the fact that white Americans, on average, grew the largest acreages of tobacco in the county, followed by English, English Canadians, and Scots. Clarke finds French Canadians actually grew the smallest acreage, averaging only 0.09 acres, though this may arise from a French Canadian tendency to consume or sell their tobacco in ways that went undetected by census enumerators.[51]

Using the 1851 census records, Clarke provides a useful consideration of the distribution of tobacco cultivation in Essex County. He finds that 337 farms reported growing tobacco, with an

[47] Charles Melvin, *Directions to Those Who Raise Tobacco in this Province*, (York, 1828), 1-2.
[48] John Andre and J. Russell Harper, 'Berczy, William Jr.,' *DCB*, Vol. 10, (1972); Clarke, *Land, Power, and Economics*, 464.
[49] 'Essex County: Its Resources and Advantages as Seen by a Globe Representative,' *The Kingsville Reporter*, 27 July 1899, 1; Robert Leslie Jones, *History of Agriculture in Ontario, 1613-1880* (Toronto: University of Toronto Press, 1946), 40–41. Notably, this presence of French farmers has been used by Fernand Ouellet to undermine the thesis that French farmers were less productive than their English counterparts due to technique. Rather, the timing of settlement and land acquired seems to be the key factor. See Russell, *How Agriculture Made Canada*, 91-95.
[50] 'Canada Twist,' *Essex Free Press*, 26 November 1897, 4. For more on these regulations, see chapter 5.
[51] Clarke, *The Ordinary People of Essex*, 262.

average of 0.6 acres. Most interestingly, he reports that 118 of these farms were on land he classified as "heavily textured and poorly drained," hardly ideal for tobacco cultivation. However, farms on land classified as "medium textured, imperfectly drained," and "light to medium textured, well drained," raised the highest averages of tobacco, at 0.92 and 0.97 acres respectively. From this, he speculates that some farmers arrived at the conclusion that soil not suitable for winter wheat was suited to tobacco, following the advice of early commercial growers like the aforementioned Berczy and William McCormick. [52] However, the fact that so many farmers grew tobacco on soil ostensibly unsuited for its cultivation underscores how the later categories created for commercial tobacco cultivation were guided by tastes, not ecology.

Throughout the 19th century, the degree of specialization in tobacco cultivation in specific regions of Quebec and Ontario was mutable. Drawing on the 1851 census, Robert Jones notes that in that year, Essex grew 457,111 pounds, Kent grew 313,189 pounds, and the rest of Upper Canada grew only 6116 pounds. In 1854, the Reciprocity Treaty led to American tobacco entering duty free, reducing local production significantly. As will be expanded on in chapter five, tobacco production briefly spiked during the U.S. Civil War, only to again shrink thereafter until 1880.[53] However, census records from 1871 to 1891 indicate that Essex and Kent's status as the centres of tobacco production in Ontario diminished, then rebounded, during the period.

Table 1: Tobacco Production in Ontario, 1871-1891 (in pounds)

District	1871	1881	1891
Essex	190,692	33,625	144,063

[52] Clarke, *The Ordinary People of Essex*, 190
[53] Jones, *History of Agriculture in Ontario*, 41-2; 316; Tait, *Tobacco in Canada.*, 59; Ian M. Drummond, *Progress Without Planning : the Economic History of Ontario from Confederation to the Second World War* (Toronto: University of Toronto Press, 1987), 35

Kent	115,016	9,813	10,628
Ontario Total	399,870	160,251	314,086
'Old Belt' as percent of total	76.5	27.1	49.3

Source: *Census of Canada*, 1871-1891

These simple percentage calculations demonstrate that the emergence of the Old Belt as the centre of Ontario tobacco cultivation began in fits and starts during the 19th century. Following the increased importing of American tobacco after the U.S. Civil War and restoration of American tobacco production, and the limited number of domestic buyers for tobacco, there was little reason to specialize in tobacco. Lewis Wigle, the prominent merchant of Leamington and early tobacco buyer, gave some rationale for this limited production when he noted that until the mid-1890s, he purchased a tobacco known as "Thick-set"—"a big black, heavy tobacco"—for a mere 2-4 cents per pound.[54] As some farmers in Ontario shifted away from wheat production, with its fluctuating prices and increased competition from the Prairies, they turned to corn, oats, and livestock, all of which found a more ready market in the late 19th century.[55]

As Essex and Kent farmers raised corn and oats, Quebec saw a gradual shift towards regional specialization in tobacco cultivation. Table 2 traces this change through the censuses.

Table 2: Production of Tobacco in Selected Districts of Quebec (in pounds)

District	1871	1881	1891	1901

[54] Evidence of Lewis Wigle, *RCTTC* 165-166.

[55] On the expansion of livestock and related agricultural production, see Drummond, *Progress Without Planning*, 33-34; on demand for feed, see McInnis, *Perspectives on Ontario Agriculture*, 90. To give a sense of the extent to which corn and oats dominated production, consider this data from the census records (1871-1891):

County/Produce (bushels)	1871	1881	1891
Essex/Corn	671,607	1,103,179	2,874,295
Kent/Corn	315,595	801,227	1,245,022
Essex/Oats	488,466	656,422	1,097,481
Kent/Oats	310,080	599,768	633,514

Joliette	78,064	33,600	321,151	1,177,556
L'Assomption	21,486	45,056	260,771	1,517,805
Montcalm	39,311	224,893	963,565	2,737,081
Rouville	42,288	49,847	146,418	209,628
Total Production in Quebec	1,195,345	2,356,581	3,958,737	7,655,975
Quebec Mean	14,443.81	38,103.68	62,487.91	119,624.61

Source: Census of Canada, 1871-1901. Census numbers likely underestimate how much tobacco was actually grown, given the widespread practice of growing a small amount in a garden.

The widely dispersed production of tobacco indicated by the 1871 and 1881 columns reflects the practice of farmers growing tobacco in small plots or gardens. In 1881, production in the districts of L'Assomption and Joliette was very close to Quebec's mean, and by 1891, the production was significantly above the mean. Montcalm, also in Lanaudière region, was generally above Quebec's mean production, and this trend only accelerated between 1880 and 1890. Likewise, though to a lesser extent, Rouville in Montérégie also began to shift above the mean. The steady rise of some counties indicates that the production of tobacco increasingly shifted from a widely dispersed area with no particular area dominating production to concentrated regions that were well above the mean. The categorization of soil was a major factor in this development.

Establishing New Categories

Since most Canadian tobacco cultivation occurred in Quebec during the 19th century, much of the writing on tobacco targeted Quebec farmers. The early authors sought to link particular types of tobacco to particular soils and were less interested in defining soil types. For example, an 1876

pamphlet by Octave Cuisset evaluated soil types by both potential harvests and by quality. He advised that black and silty soils, containing abundant vegetable matter, produce large harvests, but a tobacco that is quite strong, usable mostly for snuff (never in great demand amongst Canadians). Lighter soil mixed with sand produces a large leaf tobacco with thinner leaves, a tobacco that is lighter smoking and thus more suited for pipes. Finally, sandy, low-clay soil produces smaller harvests, but yields leaves that suited cigar production.[56] G. Laroque, another tobacco tract writer, further emphasized the need to select soils with concern for quality, rather than quantity. He argued that one could tell from the leaves whether the farmer selected the right soil. Laroque noted that a clayey, rich and dense soil might produce large leaves, but they would invariably be of inferior quality.[57] This admonishment reminds us that farmers were indeed using "unsuitable" soils to produce tobacco. Médéric Foucher, a well-known 36 *arpent* tobacco plantation owner in Saint-Jacques-de-l'Achigan, drew on his expertise to identify matches between soils and particular types of tobacco. In his reckoning, sandy clay soil was best for Kentucky and White Burley (both usually pipe tobaccos), and Connecticut Seed Leaf (a cigar leaf). These three varieties were best because in his experience, they had been successfully acclimatized to Canada, and were well suited to the needs of manufacturers. With the right soil and seed, the varieties produced leaves with a fine shade of brown or clear yellow. According to him, this attentiveness to soil variety was both brought by modern growers (like himself), and needed. He argued that farmers grew too much tobacco on humid soil, causing the plant to decompose.[58]

This is worth pausing on—it is not that various types of tobacco *couldn't* grow on humid or heavy soils, but rather these writers emphasized that it *shouldn't* be. An article from the editor of the reforming *Gazette des Campagnes* makes this distinction clear. Concerning soil, it states, "Tobacco grows in all grounds, provided that they are deep, properly loosened and substantial, plain or homogenous, cool without humidity and protected from north winds."[59] This definition allows space for growing on clayey or compact soils, though the article discourages this since such soil yielded stunted [rabougries] leaves. Likewise, humidity was undesirable, but still productive,

[56] Cuisset, *Le Père Coulange,* 10.
[57] Dr. G. Laroque, *Culture et Preparation du Tabac*, 2nd ed., (Québec, 1897), 24.
[58] Médéric Foucher, 'Choix du terrain,' *L'Étoile du Nord*, (4 juliett 1889)
[59] 'Culture du tabac,' *Gazette des Campagnes*, Vol 15 No. 14 (22 Mai 1877), 108. "Le tabac croît dans tous les terrains, pourvu qu'ils soient profonds, proprement ameublies et substantiels, unis ou homogènes, frais sans humidité et arbitrés des vents du nord."

since the article noted that plants grown on humid land produce a leaf that is 'bold, acidic, and herbaceous [herbacé].' [60] Using humid or heavy soil created the strong-smelling *tabac canadien* that bourgeois taste so reviled. This article is an example of the early effort to link a particular market idea of good tobacco to particular soils and limit the terrain on which farmers could rightly grow tobacco, even as they sought to expand production of tobacco.

When writers like Laroque and Foucher sought to narrow the scope of where farmers could effectively grow tobacco, they also contributed to new interpretations of what constituted usable soil. Recall that around Joliette, to the north of the fertile lands around L'Assomption and Montcalm, there are large sections with gravelly and sandy soil. This characteristic contributed to the late settlement of the area around Joliette. Barthélemy Joliette established the town that bears his name in 1822. During the second half of the 19th century, farmers began to settle and clear land around the town, finding that rye grew well in the soil.[61] By the 1880s, some commentators recognized the region around Joliette as having some of the best land for tobacco cultivation. This perception was in no small part due to the success of Médéric Foucher's tobacco plantation located some seventeen kilometres away from Joliette. Foucher positioned himself as an experimenter who used his plantation to try all manner of seed, fertilizer, and soils.[62] He, along with other farmers, found the sandy soil of the area to be well suited to tobacco cultivation. B. Goldstein, who commented on tobacco cultivation for the provincial Department of Agriculture's *Illustrated Journal of Agriculture*, found that tobacco grown around Joliette and St. Jacques was of the highest quality; he also found production around l'Assomption to be meritorious.[63] This application helped undermine the perception that the area had poor soil due to the high concentration of sand and gravel. Arthur Jennings Fust of the aforementioned journal evoked this tension when he recalled that, "the best flavoured, softest, and richest tobacco I ever smoked, I grew in 1870 on the vile soil of Joliette."[64] The establishment of a tobacco maker that used domestic leaf in 1883 furthered the

[60] 'Culture du Tabac,' *Gazette des Campagnes*, 108.
[61] Brouillette et al., *Histoire de Lanaudière*, 363-369.
[62] Médéric Foucher, 'Notes sur la culture du tabac," *JAI*, Vol. 13, No. 3, (mars 1890), 35.
[63] B. Goldstein, 'Tobacco growing under the present laws—Its preparation for sale, &c.', *IJA*, Vol. 3 No. 2 (June 1881), 18-19.
[64] A.J.Fust, "Sheep Manure," *IJA*, Vol. 9 No. 12 (December 1887), 186.

association with tobacco cultivation and the land around Joliette, opening the region to wider agricultural opportunities.[65]

However, finding good soil was not sufficient for ensuring suitable land. High winds threatened the growing tobacco plant, constituting a challenge that received considerable attention from the advice literature. Laroque wrote that high fences, hedges, and palisades only provide imperfect protection against the high winds, which damaged and tore leaves, reducing their value for buyers who sought whole leaves.[66] Other articles echoed concerns in a *Gazette des Campagnes* article about northerly winds that advised planting on lands that faced the south.[67] For instance, one referred to the Dutch tobacco grower and author M.V. Demoor who reminded readers that exposure to northern winds stunted tobacco and referred to a practice among their growers to plant trees to shelter their plants from the winds.[68] It is unclear how widespread this practice was in Quebec during the 19th century, though a suggestive line in the *Gazette des Campagnes* finds, "one obtains beautiful tobacco in places that are surrounded by artificial shelters. In the soil where tobacco is grown with success, the system is generally adopted."[69] The use of trees or shrubs for wind shelters was not unprecedented. There were early efforts among the U.S. Department of Agriculture to encourage tree planting in the Great Prairies, including the 1873 Timber Culture Act that gave settlers title to 160 acres of land for planting 40 acres of trees.[70] In Canada, horticulturalists were interested in planting trees to protect their fruit crops. In an 1893 report of the Fruit Growers' Association of Ontario, timber screens received "special attention" as farmers considered the appropriate space between the wind-breaking trees.[71]

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[65] 'Manufacture du tabac,' *La Gazette de Joliette*, (9 November 1883); 'A propos le tabac: Succès et mérite," *L'Étoile du Nord*, (20 septembre 1884).
[66] Laroque, *Culture et Preparation du tabac*, 2nd ed, 87. This advice was unchanged from his first edition, written in 1881.
[67] 'Culture du tabac,' *Gazette des campagnes,* 108.
[68] 'Terrains propres à la culture du tabac,' *Gazette des campagnes*, Vol 27 No. 6 (30 janvier 1890), 46.
[69] *Gazette des campagnes,* 'Culture du tabac,' 108. The entire section reads as "Les cas où l'on recontre l'exposition la plus avantageuse sont assez rares; on cultive le tabac autant que possible dans les terrains ayant une légère pente vers le sud; cependant à défaut de cette situation, *on obtient de beaux tabacs dans les endroits que l'on entoure d'arbris artificiels. Dans les pays où l'on cultive le tabac avec success, on adopte généralement ce système.*" The word d'arbris' appears to be a typo; I have assumed that d'abris (shelter) might have been intended, from context, though d'arbres (trees) is also possible. Either way, the line does speak to some people planting with an eye for sheltering their plants from the wind.
[70] Robert Gardner, 'Trees as Technology: planting shelterbelts on the Great Plains,' *History and Technology* Vol. 25 No. 4 (December 2009), 327-330.
[71] 'Horticultural Department: Fruit in Canada,' *IJA*, Vol. 15, No.8 (1 August 1893), 158.

Around the end of the century, the federal government launched tobacco experiments in a number of regions in an effort to expand its cultivation. There are a few reasons for this, but to recapitulate, federal interest emerged from the dominion government's 1897 policy to raise excise taxes on imported leaf tobacco, appeals from growers for assistance with education on tobacco cultivation, and from the impulse to match tobacco with buyer demands. Intriguingly, one of the earliest federal projects, undertaken by Commissioner of Dominion Lands H.H. Smith with the assistance of the Dominion Experimental Farm system, experimented with tobacco in Brandon, Manitoba, Indian Head, Assiniboia District, and New Westminster and Agassiz, British Columbia. The experiments reveal that when the federal government increased their interest in tobacco, the boundaries for its commercial cultivation remained unfixed.

Two years of correspondence, from 1895 to 1897, between the Dominion Lands Commissioner, Experimental Farm managers, and tobacco merchants began when Johnston Gordon, a native of Portland, Connecticut and a shipper of tobacco with "thorough knowledge" of growing it, wrote to the Commissioner inquiring about tobacco cultivation in the west. Pamphlets advertising B.C. convinced him that there was "no reason why portions of British Columbia cannot be made to produce the leaf equal in color & fineness to any grown in the World."[72] The letter prompted the Dominion Lands Commission to enquire into tobacco cultivation in the west and to distribute seed (primarily cigar leaf acclimatized for Connecticut) acquired through Gordon to its experimental farms. W.M. Tietjen, a cigar manufacturer in New Westminster, responded to a request for information concerning tobacco cultivation in the province. Tietjen indicated he had received some 20 samples of local tobacco at his firm, and while they were poorly cured, "I am of the opinion…that especially the soil is well adapted for raising tobacco here for cigar purposes and the climate is well adapted if it is not too near the Coast."[73] The Commission also received a report about tobacco in the Prairies from an unnamed local paper tracing the practice to Indigenous cultivation at Stony Plain (Alberta) and to Mennonite and French Canadian cultivation in

[72] John Gordon to H.H. Smith, 22 January 1895, 'Culture of Tobacco in Canada', RG15-D-II-1, Vol. 742, File 448348, Microfilm Reel T-12490, LAC.
[73] W.M. Tietjen to J. Mckenzie, 8 February 1895, 'Culture of Tobacco in Canada', RG15-D-II-1, Vol. 742, File 448348, Microfilm Reel T-12490, LAC. The letter is forwarded from Smith to Gordon, which prompts the latter to advise the former that seven other farmers in the area were interested in immigrating to Canada.

Manitoba.[74] Again, First Nations' precedent led to new enthusiasms over the possibility of tobacco cultivation.

The results of the experiments quashed some of the enthusiasm. A letter from John Stemshorn of the Regina Land Office stated that he was unable to send samples of the tobacco crop because they all froze during a September frost. However, he also offered some hope: "Several settlers who have been in the habit of growing tobacco in the old country claim that the soil in the immediate vicinity of Regina is too heavy, and have promised if I supply them with some plants next season to grow them for me on their lands in the bluffs where the soil is a great deal higher."[75] In this short letter, topography, imported knowledge, climate, and soil type all interact with Connecticut tobacco seed in a rather unexpected place. The experiment in Indian Head was also largely unsuccessful, but the samples sent back from Agassiz were promising, Gordon claiming that the sample largely confirmed his perception of B.C. soil.[76] The file leaves it unclear whether or not Gordon decided to come to Canada, though the last letter addressed to him was to a New York address, so he may have ultimately relocated within the United States. Further, despite the experiences of the settlers, the experiments in the Prairies were suspended.[77] There may have been amenable soil, but the climate seemed unwilling to countenance commercial tobacco cultivation in the Prairies. Nevertheless, the experiments indicate that the tobacco regions were unfixed as discussion of tobacco soils had yet to establish firm categories.

Also around the turn of the century, more sustained federal efforts to encourage tobacco cultivation took place in Quebec. In 1902, Camille Bourgeois and J. Blais Dugas reported on Belgian opinions of samples of tobacco from Montcalm, l'Assomption, and Joliette. According to one unnamed buyer, Quebec farmers were to "cultivate one type, generally, provided the soil is suitable, that will give uniformity, so much desired by dealers."[78] Encouraged by these reports, in 1904, the

[74] 'Manitobacco: The Fragrant Weed Thrives Amazingly in the West,' 'Culture of Tobacco in Canada', RG15-D-II-1, Vol. 742, File 448348, Microfilm Reel T-12490, LAC.
[75] John Stemshorn to H.H. Smith, 13 December 1895, 'Culture of Tobacco in Canada', RG15-D-II-1, Vol. 742, File 448348, Microfilm Reel T-12490, LAC.
[76] Johnston Gordon to H.H. Smith, 28 November 1895, 'Culture of Tobacco in Canada', RG15-D-II-1, Vol. 742, File 448348, Microfilm Reel T-12490, LAC. However, the next year, the Agassiz crop failed due to frost.
[77] There is a reference to experiments with tobacco at the Morden, Manitoba Experimental Farm in 1925, though I have no information on the results. E.S. Archibald to Dr. Grisdale, 17 April 1925, 'Experimental Farms-General Tobacco Division,' RG17, Vol.2834, File Part 1, Microfilm Reel T-6992, LAC.
[78] Report attached to a letter from Jason Robertson to J. Blais Dugas, 30 August 1902, 'Canadian Tobacco Industry,' RG17, Vol 999, Docket 165198, LAC.

Department of Agriculture sponsored two Quebec merchants, J. Blaise Dugas and Pierre Denis, to conduct an investigation of tobacco culture in Wisconsin and to report on what they found to both the department and to growers in Quebec. The perceived overlap between Wisconsin and Quebec climate and soil constitutes a prime example of efforts to forge new soil categories by referral to U.S. precedent. In terms of the potential growing season, there are some reasonable similarities between the two. For example, parts of Wisconsin's Vernon County have growing seasons of around 152 days, which compares to the 137-152 frost-free days in around Joliette.[79] Dugas and Denis' report also emphasized the similarities between Quebec and Wisconsin climate by linking a particular cigar variety cultivated in Wisconsin to the province:

> The Comstock type is a rapid grower, and we are told that it should be adaptable to the Quebec climate…We believe that as good tobacco can be produced in Canada as in Wisconsin. Our land is as good, our climate is about the same. We plant tobacco about the 1st of June. They require, as we do, about ninety days for maturity. They have frost sometimes in the beginning of September.[80]

By drawing such a direct comparison to an American state and attracting attention from Quebec farmers, the report helped to establish for the government that viable commercial cultivation in Quebec was not a question of climate or soil, but of aptitude and proper knowledge.

Dugas and Denis' report on Wisconsin tobacco cultivation constituted a potent, if indirect, rebuttal to Macdonald's testimony. They relied on the reports of tobacco purchasers to further their case that tobacco could be grown commercially. They were also encouraged by the cigar manufacturer J.M. Fortier, who liked to boast of his efforts to defend Canadian leaf and farmers.[81] However, their most powerful evidence emerged from the soil and climate itself. By pointing to the reality of tobacco cultivation in Quebec and drawing parallels to another tobacco-growing climate in

[79] Karl B. Raitz and Cotton Mather, 'Norwegians and Tobacco in Western Wisconsin,' *Annals of the Association of American Geographers*, Vol. 61 No. 4 (Dec 1971), 685; Brouillette et al, *Histoire de Lanaudière*, 34. It is worth noting that these are modern figures; in 1935, N.A. MacRae indicated that the 'colder belts,' which typically include Quebec, could expect from 100-125 frost-free days. 'Tobacco Growing in Canada,' 6-7.
[80] J. Blaise Dugas and Pierre Denis, 'Report on the Methods of Tobacco Culture Employed in the State of Wisconsin,' 'Canadian Tobacco Industry,' RG17, Vol 984, Docket 157247, LAC.
[81] Evidence of J.M.Fortier, *RCTTC*, 1338.

Wisconsin, Dugas and Denis undercut Macdonald's assumption that climate and soil ended at the border.

Refining Categories

In order to further overcome Macdonald's criticism, one repeated by some other domestic and foreign buyers, the Dominion Department of Agriculture extended the experimental work on Canadian tobacco, formally establishing a Tobacco Division in 1906. The criticism of Canadian tobacco extended beyond Macdonald. In response to a circular letter sent with samples of Canadian cigar leaf, three cigar manufacturers stated unequivocally that farmers could never grow good cigar leaf in Canada. However, this view was in the distinct minority, as over thirty manufacturers replied, and most felt that Canadian tobacco had some potential.[82] Efforts to unlock that potential emerged in a broader context of government interest, at both the federal and provincial level, in fostering a more scientific and modern agriculture. In Quebec, a new agricultural school was established in Oka in 1893, and the province hired agronomists to examine and report on agricultural conditions in 1912.[83] Across the border, the OAC began soil surveys in 1914, as part of what Patricia Bowley describes as the transition from mixed to specialized farming during the 1910s.[84] Tobacco fit into this broad transition, as people refined the definition of good tobacco soils. They sought to establish categories that complimented the demands of international tobacco purchasers. While the early twentieth century continued the trend towards regional specialization in tobacco production on the basis of suitable soil and climate, efforts to expand into peripheral areas—notably in British Columbia—meant that there remained space for experimentation and flux during the early years of the Tobacco Division.

Concern with matching soil and tobacco type to conform to modern standards of tobacco quality was certainly not limited to Canadian experimenters. Barbara Hahn notes that during the 1880s American agronomists were classifying tobacco lands in order to develop a more rigorous tobacco

[82] Felix Charlan, 9th August 1906 'Canadian Tobacco Industry,' 9th August 1906. RG17, Vol 999, Docket 165198, LAC.
[83] Dupont, *Une Brève Histoire de L'agriculture Au Québec*, 78–79; Normand Séguin, *Agriculture et Colonisation Au Québec : Aspects Historiques* (Montreal, 1980), 12.
[84] Patricia Bowley, "Ontario Agriculture in the 1910s: The Move Towards Regional Specialization in Crop Production,' *Scientia Canadensis: Canadian Journal of the History of Science, Technology, and Medicine,* Vol. 20, No 49, (1996), 103; Darwin W. Anderson and C.A. Scott Smith, "A history of soil classification and soil survey in Canada: Personal Perspectives,' *Canadian Journal of Soil Sciences*, No. 91 (2011), 676-678.

taxonomy that linked soil with particular strains of tobacco.[85] During the early twentieth century, agricultural experts in Puerto Rico, notably those brought from the U.S. Department of Agriculture, also sought to improve selection of variety by Puerto Rican farmers. As was the case in Canada, this initiative occurred with some local encouragement, as cooperative experiments were conducted jointly by research stations and some Puerto Rican farmers.[86] In 1905, the government brought Felix Charlan, previously employed by the French government tobacco monopoly, to evaluate and offer suggestions for improving domestic production. Charlan's appointment accelerated the trend of government involvement and foreign expertise combining to alter Canadian tobacco cultivation. His earliest reports impressed that farmers needed to select varieties of tobacco suited for Canadian soil and climate. For example, he noted that Connecticut Seed Leaf was widely grown for its weight, but that farmers did not sufficiently appreciate that this cigar variety was a late maturing one threatened by autumn frosts.[87] By comparison, he found that Ontario growers were more fastidious in selecting only some tobacco varieties, particularly favouring Burley. Charlan noted approvingly that Ontario farmers often acquired their seed (particularly Burley seed) directly from the United States, and held that Essex's soil and climate was suited to the Zimmer Spanish cigar leaf.[88] Encouraging the cultivation of commercially grown seed from the United States and matching it to their appropriate climate and soil became a central goal of Charlan, who was soon hired on a permanent basis to head the Federal Tobacco Division.

In 1907, Charlan's Tobacco Division issued its first bulletins on tobacco cultivation in Canada. The pamphlet "The Growing of Tobacco" has some similarities to Laroque's manual or Foucher's writings from the late 19th century. However, the work demonstrates an evolved specificity regarding the link between soil type and tobacco. For example, Laroque wrote that White Burley grew particularly well on "a light soil," but generally focused on the leaf shape, colour, and potential yields of other tobacco varieties. Charlan's work also found light soils suited for Burley, but found that "sandy loams or even loamy soils" were suited for Havana Seed Leaf and Zimmer Spanish (cigar leafs) and Connecticut Seed Leaf (pipe leaf), while "clay loams," which had previously been identified as "gravelly soils" were suited to the Canadian tobacco varieties Canelle

[85] Hahn, *Making Tobacco Bright*, 124.
[86] Levy, "The History of Tobacco Cultivation in Puerto Rico, 1899-1940," 189-190. .
[87] Felix Charlan to Deputy Minister O'Halloran, 18 Décembre 1906, RG17, Vol 999, Docket 165198 LAC. The letter refers to an attached report, dated 11 December.
[88] Felix Charlan to Sydney Fisher, 26 June 1906, p9, RG17, Vol 999, Docket 165198, LAC.

and Petit Rouge.[89] However, these early classifications were still insufficiently specific for the Tobacco Division's comfort, and experiments with tobacco varieties and soils occupied a significant amount of the Division's attention.

Through its network of experimental stations in Ottawa, Farnham, and Harrow, the Tobacco Division sought to further refine its understanding of where to grow what tobacco. Given Macdonald's perception, along with the legitimate challenges that the weather offered the prospective tobacco farmer, climate came up frequently in tobacco literature. The first line in the first bulletin issued by the Tobacco Division states: "If there be a country in which tobacco is cultivated where the seedlings should be the object of very special care, Canada is most certainly that country. The summer is sufficiently long and warm to permit a large number of varieties of tobacco to come to maturity, but the severity of the spring and the early frosts of autumn necessitate the use of numerous precautions."[90] He, along with other authors, impressed the need to germinate tobacco plants in warm seedbeds to ensure that they had enough time to grow in the abbreviated Canadian growing season. In a later pamphlet, he focused particularly on the Quebec farmer's need to use seedbeds, given they faced colder conditions than their Ontario counterparts did. Charlan deemed the latter a "temperate" climate and Quebec "cold."[91] Omer Chevalier, head of the experimental farm at Farnham, Quebec, assured readers that the problems brought by the cold spring could be overcome by thorough ploughing to loosen the soil, the warm summer taking care of the rest. He impressed that the farmer could overcome climatic obstacles (for the most part): "up to a certain point the activity and zeal of the planters as well as the beautiful summers compensate for the unfavourable climatic conditions, and therefore we are not really faced with any very serious difficulty."[92] In contrast to the uniform labelling of Canada as "cold" by Macdonald, the federal Tobacco Division and other advocates of tobacco farming wanted to create a more nuanced picture; cold, but only part of the time, and not uniformly so. Further, the Division sought to encourage the idea that through experiment, farmers could manage cold.

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[89] Laroque, *Culture et Preparation du Tabac,* 2nd ed., 10-14; Felix Charlan, 'Tobacco: The Growing of Tobacco,' Dominion Department of Agriculture, Tobacco Division, Bulletin on Tobacco A-3, (Ottawa, 1907), 4.
[90] Felix Charlan, "Tobacco: Preparation of the Seedlings and the Care to be Given to Them," Dominion Department of Agriculture, Bulletin Relating to Tobacco A1, (Ottawa, 1906), 3.
[91] F. Charlan, "Tobacco Seed Beds," Bulletin No. 21, (Ottawa, 1915), 11-12; 'Town and County,' *Essex Free Press*, (3 January 1908), 7.
[92] O[mer] Chevalier, "The Importance of Rotations in Tobacco Culture," Bulletin on Tobacco A-5, (Ottawa, 1909), 9.

A 1914 effort to provide a refined classification of Quebec soils was disrupted when the French army called up the inspector hired to conduct the survey, Paul Humbert. Sadly, Humbert died on the front. Along with mourning the personal tragedy, Charlan regretted the death as a setback for the soil project, noting, "Owing to the great variety of the soils in the part of Quebec where tobacco is grown, and the comparatively large number of varieties used in a small area, this work is perhaps more useful in Quebec than in Ontario, where, although the variation of soils is about the same, the number of strains grown is not so large."[93] Comments like this suggest that the Tobacco Division saw Quebec farmers as a bit further back in their modernizing project, since their cultivation continued to defy patterns. To overcome this perceived deficit, the experimental stations in Farnham and St. Jacques de l'Achigan continued with their experiments over the war, testing soil and climatic conditions in their areas.

The results of these experiments were publicized in a pamphlet the Division issued in 1919, which provided an even more rigorous connection between tobacco and soil type in Quebec than what was seen in the earlier 1907 pamphlet. It divided commercial tobaccos into three categories: pipe, cigar binders, and Canadian, and identified suitable soils for each. It also ended with a warning that indicated that not all farmers accepted the Division's interpretation of suitable climate for tobacco:

> From the character of the applications for seed received at Ottawa, it would appear that some growers, are deceiving themselves as to the quality of their harvests. The general tendency seems to be to grow varieties giving a heavy yield, although, because of unfavourable climatic conditions, it may be impossible for these to attain their full development…it would be much better to cultivate smaller, earlier maturing varieties of tobacco, which will have a chance to ripen and furnish leaves having a better taste. [94]

Two important points can be taken from this. First, the distribution of seed remained one of the most important points of contact between the Division and farmers. Secondly, and well into the twentieth century, the Division continued to work against the perception that more production was

[93] Department of Agriculture, Dominion Experimental Farms, 'Report from the Tobacco Division for the Year Ending March 31, 1915,' (Ottawa, 1915), 1159.
[94] F. Charlan, 'Some Varieties of Tobacco Recommended for the Province,' Dominion of Canada, Central Experimental Farm, Pamphlet No. 20 (1919).

necessarily better. This tension will be considered more thoroughly in the chapters on marketing tobacco, but for now, it is worth emphasizing that appeals to manage tobacco yields were not just limited to discussions of supply and demand, but to efforts to manage climate.

While war's heavy costs prevented Humbert from completing an analysis of tobacco soil for Quebec, G.C. Routt presented one for Ontario. The Tobacco Division recruited Routt from an experimental farm based in Lexington, Kentucky. His status as a former state employee from the heart of American Burley country gave his opinions significant credibility in Canada.[95] Routt provided one of the most thorough surveys of tobacco cultivation in Ontario to that point. He assessed soils in Essex, Kent, Prince Edward, and Norfolk—despite the fact that the latter county had yet to be established as a tobacco-producing area in 1915, when he conducted the survey. He noted that Essex farmers generally did grow different types of tobacco based on their soil—stronger smoking varieties of dark tobacco on "heavier soils" in the north and west of the country, and lighter tobacco, including some early experiments with flue cured varieties, in the sandy soils around Leamington and Ruthven. Routt also contended that the soil in southern Kent, particularly around Blenheim, Chatham, and Ridgetown, was particularly suited for Burley, and noted that farmers there predominately grew that variety. He observed some cultivation in Prince Edward County, but found that there were few buyers in the region and that there was too much limestone in much of the soil. Finally, he also discovered some cultivation on a farm near Simcoe (in Norfolk County), and observed that sandy and largely forested land would be most suited for flue cured and Burley cultivation.[96] After about a decade, some plantation owners brought Routt's prediction to fruition.

Local papers published Routt's findings on tobacco land, along with other observations about cultural practices.[97] Newspapers provide a glimpse of how farmers viewed the land where they

[95] His appointment created a minor political issue, when the *Windsor Star* objected to the fact that the Harrow farm manager, Wilfred Barnet, would be 'superseded' by Routt. The *Leamington Post and Times* dismissed this objection, noting that Barnet was not a specialist in tobacco, while Routt was, and that the question was simply a 'matter of expertise.' Barnet may have been miffed, as he resigned from his position later that year. 'Harrow Tobacco Farm,' *Leamington Post and Times*, 11 March 1915; Department of Agriculture, Dominion Experimental Farms, 'Report from Tobacco Division for the Year Ending March 31, 1916,' (Ottawa, 1917), 1383.
[96] 'Report from the Tobacco Division for the Year Ending March 31, 1915, 1203-1206. He noted a couple other counties in passing, notably Welland and Lincoln, but only in passing.
[97] 'Selecting Tobacco Land,' *Essex Free Press*, 10 May 1918, 5; 'Growing White Burley Tobacco,' *Kingsville Reporter*, 4 April 1918, 5.

grew their tobacco; the aforementioned ridges of Essex and Kent Counties were most frequently associated with tobacco cultivation. As early as 1902, the *Essex Free Press* noted that much of the tobacco planting in the area was along the North Ridge. Farmers in the ridge land were also among the first to attempt growing Warne tobacco, which is a flue-cured variety, during the early 1910s. As the New Belt superseded the Old during the late 1920s, farmers complained to newspapers that buyers were buying the best crops "from along the ridge lands" and then neglecting the other tobacco crops.[98] Certainly, not all tobacco was grown along ridges, but since many farms along them possessed sandy soil, they were suited to a number of different varieties of tobacco. The categorization of some soils as ridge lands predates Tobacco Division activity, and understanding that those lands were particularly suited for tobacco derived as much from, if not more than, local practice than from central experimentation. Charlan seems to have understood this reality to a point, when he noted that their soil surveys were based on the "practical results" from tobacco yields.[99] Yet, Charlan still wanted to modify local practice to incorporate a more rigorous classification of soil.

In 1916, after Routt's report, the Tobacco Division hired H.A. Freeman from Virginia as a soil expert to develop "standard" soil types that would facilitate more precision when advising which tobacco to grow and which fertilizer to use. Unsatisfied with the information used by the Division concerning the specific chemical and physical composition of the soil, Freeman drew on findings of the U.S. Department of Agriculture's Bureau of Soils to introduce a model for more precise chemical analysis. His analysis suggested that successful flue-cured tobacco required a soil of 40-70 percent medium sand, with a clay content between 3-8 percent and not higher than 10 percent. He identified three different types of sandy soil in the Leamington area alone, based on how coarse or fine the sand was, along with the percentage of silt and clay present in the soil. However, Freeman seems to have been aware that these percentages might be difficult for people with laboratories to interpret, and so he also he appealed to materiality by providing a colour guide, noting that clay heavy soils tended towards dark red or brown, while sandy soils tended towards lighter colours. [100] The interplay of colour and chemical in service of commercial tobacco neatly

[98] 'Leamington,' *Essex Free Press,* 6 June 1902, 7; 'Tobacco a Profitable Crop,' *Leamington Post and News*, 25 September 1914, 1; 'Better be Frank,' 20 December 1928, *Leamington Post and News*, 6.
[99] 'Report from the Tobacco Division for the Year Ending March 31, 1916,' 1383.
[100] Dominion Department of Agriculture, Central Experimental Farm, 'Tobacco Division: Flue-Cured Tobacco in Canada,' Bulletin No. 38, Second Series, (Ottawa, 1920), 32-36.

illustrates how History 1 and History 2 could interact in the environment, as the ready-at-hand and the abstraction of categories for soil composition intersected.

To convince farmers of the value of chemical analysis, Freeman worked with them on experiments in their fields. This allowed him, and by extension, the Tobacco Division, to apply his knowledge about soils that went beyond county or township to particular farms. For example, when discussing Thorfin Wigle's farm, Freeman noted that the soil there was a "fertile loam…typical of the dark loams now devoted to tobacco in Essex and Kent Counties." He then noted how Wigle's farm differed from the ridge lands around Highgate, Blenheim, Wheatley, and Ridgetown.[101] By 1923, at the Tobacco Division station at Farnham, Quebec, J.E. Montreuil launched a similar series of cooperative experiments.[102] As the Division sought greater categorical precision, it also drew on the cooperation and expertise of local farmers to create this knowledge. Drawing on local farmers to participate in the tests indicated that the Tobacco Division remained committed to bringing their tests into the fields. However, by the 1930s, and with the rise of chemical fertilizers, the Division relied more on laboratory testing and less on these cooperative experiments.[103] The distance between expert and farmer grew as capitalist influence, demarked in this case by chemical fertilizers developed to accelerate agricultural yields, expanded.

By the time Freeman worked with local farmers, Macdonald's criticisms seemed a distant concern. While there remained discussions about need to improve the quality of Canadian tobacco, there was no question that parts of Canada could successfully raise tobacco. By refining and deploying categories to assess where tobacco could and could not be grown, tobacco interests demonstrated that farmers could cultivate "modern" tobacco. However, while tobacco became regionally specialized, many farmers continued to use it as a supplemental cash crop. However, there were farmers, particularly in Ontario, who were shifting to growing tobacco almost exclusively. This trend prevailed among the farmers who raised flue-cured tobacco. The report indicated that flue-

[101] 'Report from the Tobacco Division for the Year Ending March 31, 1916,' 1383-1384; Department of Agriculture, Dominion Experimental Farms, 'Tobacco Division: Report of the Officer in Charge, F. Charlan, for the Year 1922,' (Ottawa, 1923), 44-45.
[102] Department of Agriculture, Dominion Experimental Farms, 'Tobacco Division: Report of the Officer in Charge, F. Charlan, for the Year 1923,' (Ottawa, 1924), 19.
[103] According to Uekötter, the transition from field based to lab based experimentation began as a result of the rise of agrochemistry in Germany before World War One—the transition in Canada seems to be a bit later. See Uekötter, "Why Panaceas Work: Recasting Science, Knowledge, and Fertilizer Interests in German Agriculture," *Agricultural History* Vol. 88 No. 1 (January 2014): 70.

cured tobacco required "high specialization, expensive equipment, and skill" that encouraged concentrating on the crop more exclusively.[104] Flue-cured tobacco, requiring a level of capital commitment and expertise beyond any other type of tobacco cultivation, demanded robust understandings of soil and climate. Tobacco interests established new categories and understandings of soil to recast agricultural "wastelands" into areas of intensive tobacco production. This expansion, while successful in establishing new flue-cured regions in sandy lands, also engineered significant resistance, both from nature, and from people who found their land deemed unsuited to flue-cured cultivation.

The Final Expansion: Flue-Cured Tobacco

While new understandings of soil were pivotal for the expansion of tobacco cultivation into the Norfolk Sand Plain, other factors also played key roles. The decline in Old Belt production came from several sources: the high cost of land in the Old Belt, the difficulty in adapting some farms from Burley to flue-cured tobacco because of different soil requirements,[105] and growing problems with soil exhaustion and diseases, notably the fungi *Thielavia basicola*, which afflicted young seedlings and turned leaves black (and therefore, valueless).[106] The collapse of the Kingsville based Canadian Tobacco Growers Cooperative Company in 1928 further discouraged many Old Belt tobacco farmers. The impact of soil diseases will be considered in the next chapter, since it constituted one of the gravest challenges to the perception that soil could be managed successfully through fertilizer regimes. Norfolk became more attractive for tobacco farmers because there were still available plots of land in the Norfolk Sand plain, and from the large harvests and high prices that early flue cured growers in the area received for their crop.

The legacy of Norfolk as an agricultural "wasteland" contrasted sharply with Essex. Considering land value, the 1925 OAC survey found that Essex farms with substantial tobacco acreage (between 11 and 20 acres) might cost from $162 up to $785 per acre. The report explained the high end of the price range by referring to "the intensive nature of flue cured tobacco growing in the

[104] Department of Agriculture, Dominion Experimental Farms, 'Report of the Chief of the Division, C.M. Slagg, for the Year 1924,' (Ottawa, 1925), 4.
[105] R.J. Haslam, 'Soils Great Factor in Tobacco Growing,' *Leamington Post and Times*, 13 February 1930, 12.
[106]T.J. Major, 'Report of Seedbed Survey—Project No. T-42, 1925,' RG 17, Vol. 2833. File 1-14-1, National Archive; C.M. Slagg, 'Black Root Rot of Tobacco,' *Essex Free Press*, 12 June 1925.

area where the small farms are located [generally around Leamington and Ruthven]."[107] This was a long settled and intensively cropped region. These high prices contrasted considerably with the costs of acreage, which "did not even represent the value of the buildings" paid in 1923 by a pioneer of flue curing tobacco in Norfolk, William Pelton.[108] For Pelton, a native of Wisconsin, not only were the Essex prices relevant, but so too were the prices in American tobacco regions, and in the mid-1920s, American tobacco farmers in the Carolinas were beset by low prices for their crop, which led to some Americans looking for new opportunities.[109] By 1927, real estate companies began to advertise opportunities in Norfolk. Leggett's Real Estate ran ads with typically boosterish copy ("Virgin Soil—That Spells Success"). However, the copy had some merit, since the $30 to $50 per acre prices offered might indeed have seemed "ridiculously low" to a farmer who could easily pay many times that for land in Essex.[110] The low price is explained by the Norfolk Sand Plain's long history of being cast as unsuited for agricultural production. In 1910, the Ontario Ministry of Agriculture had slated the area for reforestation efforts because "[t]he soil is of a light, sandy nature, unsuitable for agricultural purposes." These efforts followed a period of deforestation during the mid-19th century by initial settlers who then became discouraged by the area's inability to grow wheat after they had cleared the forest.[111] Reforestation efforts would prove vital for flue-cured farmers who struggled with sandstorms damaging their crops, but at the time, the project denoted a limited agricultural potential.

The utilization of soil deemed unusable by previous generations was a pivotal project for modern agronomists looking to recast production in the most profitable ways.[112] An interesting comparison to the opening of the Norfolk Sand Plain for a new and marketable form of tobacco

[107] G.W. Michael, 'Tobacco Farming in Southwestern Ontario,' (Guelph, 1926), 6-7, tables II and III. The high prices are also attributable to observations that as early as 1911, it was claimed that all the land that could grow tobacco had been purchased. 'Tobacco Culture: Preparation of the Land,' *Leamington Post and Times*, 23 March 1911.
[108] 'William L. Pelton was First to Grow Tobacco in Norfolk,' *The St. Thomas Times and Journal*, 26 September 1931, 18. As we have seen, the claim in the title is inaccurate.
[109] In South Carolina, Eldrid Prince and Robert Simpson label the period from 1926-1933 simply as the 'Abyss' for tobacco farmers. *Long Green: The Rise and Fall of Tobacco in South Carolina*, (Athens, 2000), chapter 5.
[110] Ad for Leggett's Real Estate, *Leamington Post and News*, 29 September 1927, 2.
[111] Ontario, Legislative Assembly, Sessional Papers, 'Report of the Minister of Agriculture, for the Year Ending October 31st 1910,' Vol. XLII, Part VII, No. 26 (1911), 15; Niewójt, 'From Waste Land to Canada's Production Heartland,' 359-361.
[112] Another example of this transformation of 'wastelands' is Fresno, California, an area once considered 'barren' that was transformed into the centre of raisin cultivation by the 1890s. See David Vaught, *Cultivating California: Growers, Speciality Crops, and Labor: 1875-1920* (Baltimore: John Hopkins, 1999), 15-25.

may be found in John Varty's work on Prairie settlement and the growing of wheat in the semi-arid region known as Palliser's Triangle, which had been famously deemed unsuited for the production of wheat. Historians Gerald Friesen and Gerald Jones have seen the triangle's settlement as ill-calculated rushes inspired by boosterism and overconfidence in agricultural practice that contributed to the devastation of the Dust Bowl years.[113] By examining how the Canadian state sought to develop a standard of measurement—protein—that was advantageous to the low-yield, high-protein wheat grown in the south, Varty provided a powerful example of how ideas of modernity, the state, markets, and farmers intersected to recast drought as useful, semi-arid soil as suited to wheat, and bumper crops as disastrous.[114] Pivotal to this project was the deployment of soil surveyors and new categories to place veterans into sparsely settled northern districts with black chernozemic and grey luvisolic soils.[115] As the Dust Bowl (or, as Varty would encourage us to remember, the consequences of bumper crops) demonstrates, the abstract and confident use of categories could lead to dire circumstances for people.

Like Palliser's Triangle, the government deemed the Norfolk Sand Plain unsuited to agriculture until market demands, land prices, and new categories altered this perception. The form of tobacco consumption most associated with modernity, cigarettes, and its emphasis on light smoking tobacco transformed how people evaluated the agricultural potential of the Norfolk Sand Plain in particular and of sandy soils more generally. Cigarette manufacturers demanded a light-tasting, acidic, and easy-to-inhale tobacco for their product. This demand facilitated an opportunity for tobacco farmers to make "waste" land usable, an opportunity that local papers celebrated. For example, the *St. Thomas Times Journal* reported on the progress of a grower who had emigrated from North Carolina. They wrote, "He owns 33 acres of land which we refer to when speaking of sandy waste. Tobacco has blossomed like the rose in the desert on this land and Mr. Faucette this year is harvesting what he calls 'a mighty nice crop.'"[116] The sand plains "blossomed" with

[113] Gerald Friesen, *The Canadian Prairies: A History*, (Toronto, 1987), 302, 384; David Jones, *Empire of Dust: Settling and Abandoning the Prairie Dry Belt*, (Calgary, 1987). This is the position that Varty challenges in his article.
[114] John Varty, 'On Protein, Prairie Wheat, and Good Bread: Rationalizing Technologies and the Canadian State, 1912-1935,' *Canadian Historical Review*, Vol. 85 No, 4 (2004).
[115] Varty, 'On Protein, Prairie Wheat, and Good Bread,' 728-729; McKeague and Stobbe, *History of Soil Survey in Canada*, 8-10.
[116] 'Sixty New Tobacco Farms in Norfolk-Elgin-Oxford Area; 1932 Yield of Purest Quality,' *St.Thomas Times Journal*, 1 October 1932, 13.

tobacco, while farmers in the Old Belt were removing soil suited for other forms of agriculture from tobacco production.

To develop new ways of seeing soil, the Tobacco Division increased its experimental distance from farmers. Following its reorganization in 1929, the Division ceased its cooperative experiments, depending instead on more standardized testing procedures and increased chemical analysis of soils.[117] More rigorous categorization of soils were developed. For instance, in 1937, tests on the potassium retention in tobacco soil dealt with four types of soil: Fox coarse, Fox gravelly, Plainfield sand, and Fox fine sandy loam.[118] There also remained the challenge of matching the various sandy soils to a particular type of flue-cured leaf. Gold Tip, Bonanza, Yellow Mammoth, and Virginia Bright were all presented as suitable for most sandy soils, but White Stem Orinoco, which generally performed poorly, was said to grow well on Plainfield Sand.[119] The sheer variety of strains and soils indicates that to a point, categories can obscure and confuse as much as they can clarify. In an attempt to cut through the confusion, the OAC offered soil testing for farmers. Farmers were to collect soil samples and send it to the lab, a shift from the days when tobacco experts would work in cooperative experiments in the field. This service proved reasonably popular, with several hundred farmers sending samples to the OAC tobacco expert R.J. Stallwood for examination.[120] While these categories were useful for matching the increasingly specific measurements of fertilizers with more precise numbers for measuring soil composition, they were also deployed to justify limiting who could enter into tobacco farming.

The stakes for defining good tobacco soil increased after 1934, when a quota system created by the Ontario Flue Cured Tobacco Marketing Association began to place limits on who could raise tobacco. The Association, headed by Archibald Leitch, a former professor at the Ontario Agricultural College and a plantation manager, could and did reject farmers for having unsuitable soil. In 1938, this is exactly what happened to approximately 250 people who applied to join the Association.[121] While people turned down by the Association could still raise tobacco, they were

[117] On the reorganization, see Tobacco Division, 'Report of the Officer in Charge, N.T. Nelson, For the Years 1927, 1928, and 1929,' (Ottawa, 1930), 6, 16.
[118] 'Potash Fixation of Norfolk Soils,' *The Lighter*, Vol. 8 No. 1 (January 1938), 15-17.
[119] H.F. Murwin, 'Varieties of Flue-Cured Tobacco,' *The Lighter* Vol. 3 No. 2 (March 1933), 9-10.
[120] R.J. Stallwood, 'Tobacco Topics: Fall Soil Samples,' *Tillsonburg News*, 20 October 1938; 'Testing Soils', *Tillsonburg News*, 17 November 1938.
[121] '4,000 Acres to New Growers,' *St. Thomas Times Journal*, 4 February 1938.

barred from selling it to any buyer member of the Association—and the buyers including the large firms such as Imperial Tobacco or Macdonald Tobacco (who had entered into domestic leaf buying after the death of their founder). The definitions of what constituted good tobacco soil came out of the lab and began to sharply limit who and who could not grow flue-cured tobacco.

Quebec also saw an expansion of soil testing, which led to a small but significant increase in flue-cured production in that province. The provincial government launched experiments in flue-cured tobacco in Quebec by the early 1930s, with the sandy soil around Joliette particularly targeted. Early reports indicated that the challenge arose less from soil and more from climate, since the Quebec tobacco regions had a shorter growing period than those of Ontario. Nevertheless, successful tests found that flue cured tobaccos could be raised and harvested by August, before the threat of frost.[122] More elaborate soil experiments accompanied these experiments. In 1933, R. Bordeleau of the Tobacco Division worked with Dr. R.R. McKibbin of Macdonald College to classify the soils in the Yamaska Valley, identifying five different types of soil.[123] Not long thereafter, McKibbin assisted with surveys specifically searching for flue-cured tobacco soil.[124] By 1937, around 450 acres of flue-cured tobacco were being raised near Joliette compared to 52,500 acres of flue-cured tobacco in Ontario, mostly in the New Belt.[125] By 1939, these early efforts were successful enough for the Division representatives to fret that tobacco farmers were expanding too rapidly into flue-cured production, as the acreage climbed steadily to reach 5710 acres by the start of World War Two, almost exclusively in the Northern district. J.E. Montreuil of the experimental station at L'Assomption warned that Quebec was at the "northern limit" of tobacco production, which "increases the difficulties in production."[126] Climatic obstacles could be mitigated, but never overcome, and problems with both weather and prices reduced flue-cured acreages in Quebec during the early 1940s.[127] Such limitations contributed to Quebec's flue-cured

[122] 'Cigarette Tobacco in Quebec—Provincial Experiments,' *The Lighter*, Vol. 4, No.2, (March 1934), 13-14.
[123] R. Bordeleau, 'Tobacco Soil Types of the Yamaska Valley,' *The Lighter*, Vol. 3 No. 4 (July 1933), 9-10.
[124] McKeague and Stobbe, *History of Soil Survey in Canada*, 14.
[125] 'Progress of the Tobacco Crop—July 15 1937,' *The Lighter*, Vol. 7 No. 3 (July 1937), 8; 'Increase in Tobacco Acreage for 56,000,000 Pound Crop,' *St. Thomas Times-Journal*, 13 January 1938, 6.
[126] J.E.Montreuil, 'Facts Regarding Flue-Cured Tobacco in Quebec,' *The Lighter*, Vol. 9, No.2 (April 1939), 13-14; 'Progress of the Canadian Tobacco Crop,' *The Lighter*, Vol. 9 No. 3 (July 1939), 8.
[127] Brouillette et al., *Historie du Lanaudière*, 413; 'Canadian Tobacco Industry in 1942,' *The Lighter*, Vol. 13 No. 1 (January 1943), 5.

interests never establishing the same quota system as their Ontario counterparts. Nevertheless, the area around Joliette was established as a flue-cured district well into the 20th century.

As farmers in Ontario and, to a lesser degree, Quebec cleared the sandy soil, they were troubled by high winds and sandstorms that could irreparably damage the crop, particularly if they were strong during the transplanting period. Winds offered challenges not solved by soil surveys or samples. Rather, a ready-at-hand knowledge was needed. An immigrant and farm owner from North Carolina, J.B. Norwood, linked dealing with winds with having a thorough knowledge of one's land: "A good wind break on the north and the west of the fields prevents the wind from blowing the sand over the young plants... I tell you, a tobacco grower must know every rod of his field."[128] In 1938, the geographer Bert Hudgins corroborated this position, emphasizing that farmers must carefully select the site and slope of their fields, and plant wind-breaking trees to shelter the plants. He indicated that cedar, poplar, spruce, and catalpa were among the most commonly planted varieties.[129] In 1935, around 500 landowners planted approximately 200,000 trees for the express purpose of breaking winds in the area.[130] Likewise, the Ontario government continued with its tree-planting programs that it had launched when it saw the area as agriculturally deficient, though this time it was with an eye for assisting tobacco farmers with both sandstorms and with problems arising from soil erosion.[131]

Despite these efforts, problems from wind damage captured increased attention by the end of the 1930s. At a meeting with tobacco farmers, W.H.Potter of the *Farmer's Advocate* made an impassioned plea for more trees, arguing, "We owe it to our land to make such restitution, to give them back some of the forest growth it once had. Go back into your communities and do your bit in saving the trees." H. Murwin of the Tobacco Division agreed, alleging, "Had we all taken as much interest in windbreakers in the last ten years as we will have to take in the next ten years, we would not have had so much tobacco blowing out of the ground this summer."[132] Intriguingly, when Leitch addressed the meeting, he noted that the flue-cured tobacco farmers around Joliette were more conscientious about planting windbreakers than their Ontario counterparts. Perhaps the

[128] 'North Carolina Man on Tobacco Growing,' *Tillsonburg News*, 22 September 1927, 11.
[129] Hudgins, 'Tobacco Growing in Southwestern Ontario,' 227-228.
[130] 'Tree Planting for the Sandy Soils of the Norfolk Plain,' *The Lighter*, Vol. 7 No. 3 (1937), 1
[131] Niewójt, 'From Waste Land to Canada's Production Heartland,' 368-370.
[132] 'Crop Rotation and Soil Rejuvenation Tobacco Area Needed,' *St. Thomas Times Journal*, 16 July 1938.

lessons the farmers learned back in the late 19th century persisted among the Quebec tobacco farmers. In either case, the references to making restitution to the land suggest that, despite the efforts to make the relationship with soil one based on measurements and numbers, soil remained a tangible, material thing that produced unanticipated consequences.

Categories Overcome: British Columbia

While tobacco cultivation was established on a reasonably sound (if somewhat windswept) basis in the New Belt and pockets of Quebec, farmers in British Columbia were largely turning away from the crop. This was following about forty years of experiments and efforts to get tobacco cultivation established on a sound basis in the Okanagan Valley and Sumas Valley. The efforts and problems farmers and experts encountered in their efforts to establish tobacco farming in the province speak to the distinct limits of modern agriculture, limits particularly imposed by the same markets that fostered modernity. The wide variability in soil in the two valleys also proved daunting for those who might render the land into abstract categories.

As tobacco cultivation, particularly cigar leaf tobacco, expanded in the Okanagan Valley, the Tobacco Division sought to rationalize use of the soil through experiments. Local farmers were well ahead of Division reports—by the time that Charlan visited Kelowna in 1908, local papers were abuzz about the possibilities of tobacco cultivation and marvelling at the fine yields.[133] As settlers who were attracted by promises of fertile fields and welcoming climate flocked to the Okanagan Valley, tobacco must have seemed an attractive option to help pay for the substantial capital costs of the land in the area.[134] They were confident in their crop. Reporting on the prospect of federal government investigation of the growing tobacco cultivation, the *Kelowna Courier* wrote "The growers of Kelowna are not afraid of Government investigation of the quality of their product, they court it; and they only ask that adequate assistance be afforded them such as the

[133] 'Tobacco and Its Progress in the Okanagan Mission,' *Kelowna Clarion and Okanagan Advocate*, 13 October 1904; H. Rothenburg, 'Progress of the International Tobacco Company,' *Kelowna Courier and Okanagan Orchardist*, 20 June 1907,1.
[134] For example, land sold by the Aberdeen owned Coldstream Estate Company cost an average of $149/acre. See Paul Michael Koroscil, *The British Garden of Eden : Settlement History of the Okanagan Valley, British Columbia* (Burnaby, B.C, 2003), 70.

Government has already given so liberally to the fruit-growing, dairying and stock-raising industries."[135]

Perhaps the *Courier* was right not to fear outside assessment, as Charlan's review of tobacco cultivation in the area was largely positive. He felt the climate and soil had considerable potential. Before a parliamentary committee, Charlan reported that the Cuban cigar seeds planted in the area produced crops that were quite good, and manufacturers might use them as filler (the most costly part of a cigar). He also confirmed that the soil in the valley was suited for cigar leaf, though he found the porous soil near the lake would generally not be dry enough to support commercial cultivation.[136] Most of his criticisms arose regarding cultural techniques. The potential of the soil and climate encouraged Charlan to inquire about hiring a tobacco expert to send to Summerland, who went so far as to send a couple recruiting letters to an Irish agricultural officer, G. Keller, though they came to nothing.[137] Likewise, the early enthusiasm for Kelowna tobacco briefly abated after the collapse of the aforementioned British North America Tobacco Company in 1914, only two years after its formation, owing to a limited commercial market for the high quality cigars they produced.[138] The mismanagement of Louis Holman, who began the firm by buying and expanding operations aggressively, has also been identified as a factor.[139] It was the market more than soil or climate that limited production.

Despite the problems with market access, the Experimental Farm branch launched tobacco experiments in Agassiz, Summerland, and Sidney, B.C., along with Morden, Manitoba in 1925. The revived experiments were particularly motivated by renewed interest among farmers to reattempt tobacco cultivation, the amenability of the soil being doubtlessly a factor in this.[140] A.J. Mann, at the Summerland station, was to oversee the project, though Experimental Farm head E.S.

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[135] 'The Tobacco Industry: Statement by the Board of Trade,' *Kelowna Courier and Okanagan Orchardist*, 11 October 1906.
[136] 'Kelowna Tobacco Before Parliament,' *Kelowna Courier and Okanagan Orchardist*, 3 September 1908; Department of Agriculture, Tobacco Division, "Tobacco Growing in British Columbia: Preliminary Notes," Bulletin Relating to Tobacco A-10 (Ottawa, 1910), 6.
[137] Felix Charlan to G. Keller, 11 January 1911, RG17, Vol. 1121, Docket 208025, LAC. Intriguingly, Charlan initially offered Keller a position for a station in Kentville, Nova Scotia; the Frenchman believed that the Annapolis Valley had potential as a tobacco producing region.
[138] Payne, 'The Tobacco Industry in Kelowna.'
[139] Joel A. Rickard, "Okanagan tobacco," *Western People*, 21 November 1985.
[140] E.S. Archibald to Deputy Minister Grisdale, 17 April 1925, RG17, Vol. 2833, Microfilm Reel T-6992, LAC.

Archibald admitted Mann was not a tobacco expert.[141] Again, tests found that the soil around Summerland, deemed to be sandy and silty with a slight alkaline content, were suited to White Burley, or potentially even flue-cured varieties.[142] These findings differed slightly from Charlan's earlier emphasis on cigar tobaccos, indicative of interest to move into the more lucrative flue-cured production. C.M. Slagg, Charlan's successor as Tobacco Division chief, reported that the experiments in Agassiz and Sidney were unsuccessful because they were unable to find suitable soil in either location.[143]

Around this period, the B.C. Minister of Lands, Duff Pattullo, requested that a tobacco expert inspect the bench lands around Oliver in the South Okanagan Irrigation Project to see if tobacco could be raised there.[144] This project was an effort to irrigate the lands around Oliver and help settle returned soldiers. As James Murton has illustrated, it was also an effort to forge a new, modern countryside, one that combined nature with science by attempting to work with the sloping terrain rather than blasting a new topography.[145] C.M. Slagg also had an opportunity to visit Oliver in 1925, and found that the soil was, in fact, suited to flue-cured tobacco, but that an unnatural obstacle prevented its widespread cultivation. He reported, "the initial expense of building curing sheds and buying the necessary equipment is in our opinion too great for the Oliver settlers to undertake."[146] The growing capital expense of establishing a tobacco farm was increasingly confronting farmers, bringing decided changes to who could raise tobacco and where it could be raised. The distance from the major purchasers in eastern Canada added to the risk of undertaking the high capital costs needed for flue-cured tobacco.

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[141] E.S. Archibald to Deputy Minister Grisdale, 17 April 1925, RG17, Vol. 2833, Microfilm Reel T-6992, LAC.
[142] Department of Agriculture, Dominion Experimental Farms, 'Tobacco Division Report of the Officer in Charge, C.M. Slagg for the Year 1925,' (Ottawa, 1926), 14-18.
[143] C.M. Slagg, 'Memorandum re Trip to British Columbia and California and certain points between,' RG17, Vol. 2833, Microfilm Reel T-6992, LAC.
[144] Duff Pattullo to W.R. Motherwell, 27 November 1924, RG17, Vol. 2833, Microfilm Reel T-6992, LAC.
[145] Murton, *Creating a Modern Countryside*, 145-155. Another compelling example of the efforts of humans to modify nature in a way that blended engineering and science with nature and beauty can be found in Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West*, (Washington, 1999), especially chapter 6.
[146] Quoted in a letter from E.S. Archibald to Deputy Minister Grisdale, 28 September 1925, RG17, Vol. 2833, Microfilm Reel T-6992, LAC. Slagg's observations about problems with capital seems in line with Murton's analysis of the financial problems that plagued the irrigation project and its settlers, Murton, *Creating a Modern Countryside*, 158.

Despite the expenses associated with flue-cured tobacco, A.J. Mann, the Summerland Station employee charged with encouraging tobacco cultivation in the province, reported enthusiastically on an expansion of flue-cured tobacco production in the Sumas Valley. The Division published a summary of these experiments in 1935, drawing on soil literature from the United States for identifying ideal types. More chemically rigorous and mechanically exact experiments were conducted, echoing trends in Ontario; by this time, Mann seemed more comfortable with his knowledge about tobacco. The tests at Summerland produced an interesting result, where soil that seemed to have a suitable proportion of sand and a low clay percentage still failed to produce good flue-cured crops; instead, the plants were found to wilt. This led to Mann introducing a more elaborate variable, the "wilting coefficient." This measured moisture retention of the soil based on the crop planted. According to this measure, Mann discovered that the soil had a wilting coefficient of 5 percent, which was barely at the acceptable minimum level of moisture retention for flue-cured tobacco (12 percent was the maximum). He ultimately concluded that most farms in the area would be unable to achieve sufficient moisture retention to encourage flue-cured cultivation, and that the "extremely variable amounts of fine and coarse sand and gravel" defied the categories needed to determine whether flue cured tobacco could be raised with confidence.[147] Given that Quebec and Ontario had more extensive cigar and Burley production, and that prices for these varieties were low in the 1930s, this physiographical limitation largely halted tobacco production in the Okanagan.

The other experiments were conducted in the Sumas Valley, which had been created in 1924 after the provincial government drained Sumas Lake. [148] Farmers had introduced tobacco to the area in 1927. The modernizing ideology that drove the initiative to claim the valley for agriculture also informed the elaborate soil survey Mann oversaw. In this case, the chemical analyses and new measures confirmed what some local farmers had experienced—the soil was, in fact, amenable to flue-cured production. Mann reported "With judicious soil management, some of these lighter soil areas may yet prove suitable for the successful production of flue-cured tobacco." This analysis came with two caveats: first, the crop would suffer during rainy years, which would cause the soil to retain too much moisture and cause the plant to mature late, and secondly, "market demands"

[147] A.J. Mann and S. Barnes, 'Soil Texture in Relation to Tobacco Growing in British Columbia,' Dominion Department of Agriculture Bulletin No. 175, (Ottawa, 1935), 13.
[148] 'Bright Flue-Cured Tobacco in British Columbia,' *The Lighter*, Vol. 4 No. 1 (January 1934), 15.

might limit the extent to which farmers could raise the crop profitably.[149] The latter concern proved too much to overcome, as the Sumas growers always remained frustrated by the lack of packers or purchasers, and that the future of the industry seemed uncertain.[150] The Sumas story illustrates how sandy, well-draining soil with a low percentage of clay was a necessary but not sufficient prerequisite for profitable flue cured cultivation. The wilting coefficient could not overcome the problem of distance for tobacco growers in B.C., who found themselves far removed from the commodity chains that linked to buyers based in far off Montreal or Britain. The fact that in the east, marketing schemes were being developed to contend with the challenges of overproduction in Ontario, provided further disincentive for any substantial investment in flue-cured operations. Further, British Columbia remained quite distant from the network of Southern U.S. curers that were so heavily relied upon in Ontario and Quebec. A curer would not be especially inclined to take a Greyhound bus between North Carolina and the Sumas Valley.

Conclusion

Mann recognized that his wilting coefficient and his measures were insufficient. His 1935 pamphlet had a short preface, typed in bold: "ACTUAL EXPERIENCE is the only safe test of the suitability of climate and of soil for the production of tobacco possessing a certain type adapted to certain specific purposes as may be required by the trade."[151] This is a sentiment that Macdonald would have agreed with, had it been proposed to him on that cold November day in Montreal. From British Columbia to Ontario to Quebec, categories and tests interacted with farmer practices, sometimes smoothly, sometimes not.

In some ways, the categories all seem so neat—all tobacco needs well-drained, friable soil, with a bit of clay and humus to retain moisture. Lighter tobaccos, like Virginia Bright for flue curing, need lighter, sandy soils, while darker tobaccos, like White Burley, need a bit more clay or loam to profit. Dark tobaccos, often destined for cigars or pipes, do best in soils that have high organic matter and high nitrogen contents. However, these neat categories belie a number of critical points.

[149] Mann and Barnes, 'Soil Texture in Relation to Tobacco Growing in British Columbia,' 22.
[150] A.J. Mann, 'The Status of the Tobacco Industry in British Columbia,' *The Lighter* Vol. 7 No. 2 (April 1937), 16-18.
[151] Mann and Barnes, 'Soil Texture in Relation to Tobacco Growing in British Columbia,' 4.

Firstly, the categories drew on often-unacknowledged precedent to a long tradition of tobacco cultivation in what became Canada. While some tobacco experts noted the fact that First Nations people like the Okanagan and the Tionontati raised tobacco, they generally confined that fact to an interesting historical tidbit, in a way all too typical of colonial regimes. Even Tait, who was especially interested in the Tionontati precedents to his own tobacco farming, made it clear that he thought that the new tobacco farmers held rightful claim. Likewise, although less comprehensively, the habitant's *tabac canadien* was gradually replaced by less pungent tobaccos, as tobacco cultivation concentrated more in specific areas. The selection of sandier, looser soils contributed to this olfactory shift.

Secondly, it was never particularly easy to judge, with full confidence, whether soil was indeed sufficiently well drained, or moisture retaining, or sandy, or any number of other things on particular farms. Experimental stations could produce numbers that illustrated the percentage of sand a good flue-cured soil could have, but it could never fully account for the wide variability of soil. Even when soil largely met the ideal requirements set forth by experts, it could still disrupt plans by swirling around in a windstorm. Some of the failures in the Okanagan Valley were also due to the sheer difficulty of rendering soil into categories.

Thirdly, the neat classifications ultimately excluded some farmers from growing the sorts of tobacco they hoped to grow. This was particularly painful for Burley tobacco growers who hoped to switch to flue-cured varieties like Warne or Virginia Bright following the collapse of Burley prices during the 1920s. The evaluation of soil also came to constitute a core part of the Ontario Flue Cured Tobacco Marketing Association's ability to adjudicate who and who was not a good tobacco farmer. Classifications limit as they enable.

Of course, the Tobacco Division, the Association, and others were merely responding to what they saw as perfectly natural market forces, and in engaging with farmers and publicizing their findings on what soil to use, they believed that narrowing the range of farms was doing farmers a great service. For some farmers in the New Belt, this was the case; careful control over tobacco soil brought the region considerable material benefits. More broadly, the efforts of experts to more rigorously classify tobacco soils had positive ramifications for farmers, as they were able to draw

on those categories to select varieties that could yield the best crop for the highest price. Classifications enable as they limit.

As the location of tobacco cultivation in Canada became more and more settled, and categories of good soil increasingly established, tobacco interests also had to contend with challenges that posed great risks to even the most modern farmers. Hail and frost could destroy even the best cared crop. A year that was too wet, or too dry, or wet and dry at the wrong times, could also pose great challenges. However, perhaps the greatest obstacle, one that disrupted the notion of agricultural progress as linear, was soil depletion. As we shall see, the farmers of the Old Belt were largely and vocally tired of tobacco and its impact on their land by the end of the 1920s. This chapter has been silent on the grave challenge of soil depletion, but many of the people here spent as much time and effort developing and encouraging with use of rotations, manures, and fertilizers as they did discussing which soil to use. An issue that occupied so much attention of those interested in tobacco requires a chapter of its own.

Chapter 4
Land and Limits

This chapter is about confronting ecological limits. It takes a fundamental characteristic of commercial tobacco cultivation—its tendency to deplete soil of its nutrients—and traces the efforts of Canadian tobacco interests to contend with this problem. (The symmetry between commercial tobacco's impact on physical soil and manufactured tobacco's impact on human lungs is quite fitting). Tobacco farming is well suited for considering the links between development of modern soil management regimes and capitalist market demands because the plant's sensitivity to adjustments in the levels of soil nutrients made it a particularly challenging crop for farming reformers. Converting tobacco, in its myriad varieties and flavours, to a leaf that suited the tastes and requirements of manufacturers and consumers stretched modern knowledge of soil and fertilizer to its outermost limits. It necessitated the development and redevelopment of relationships between farmers and the soil they worked. As we saw in the previous chapter, market demand led to farmers raising flue-cured tobacco on sandy, generally infertile soil, making fertilizer selection essential to commercial tobacco cultivation. The choice was seldom easy, the relationship often rocky.

Focusing on the ecological limitations of farm management regimes draws inspiration from the ever-growing recognition of the connections between environmental and agricultural history.[1] The idea that environment shapes farmer experiences is not novel; historians' interest in crop rotation, the value of "virgin" land, or the immense clearing efforts required to access that land stretch back decades, even centuries. The shift lies more in considering the environment as something more than a stage or as an obstacle to human agency, and instead shifting to a more robust awareness of the dialectical relationship between farmers and their environment. This awareness complicates simple distinctions between human and natural landscapes. By using the term dialectical, I mean to emphasize how material realities shaped tobacco farmer decisions to an extent that makes it very difficult to see farmers as beyond or outside nature. While I hesitate to take a position following Frederich Engels' hypothesis regarding the human/nature dialectic (originally

[1]For instance, "Agricultural history and environmental history are inextricably linked." Paul Warde, 'The Environmental History of Pre-industrial Agriculture in Europe,' in Sverker Sörlin and Paul Warde, eds., *Nature's End: History and the Environment*, (London: Palgrave Macmillan, 2009), 70. See also Steven Stoll, *Larding the Lean Earth: Soil and Society in Nineteenth Century America*, (New York: Hill and Wang, 2003), chpt 1.

formulated in *Dialectics of Nature*) that emphasized material reality as *a priori* to human consciousness, the emphasis on the entangled relationship between humans and their environment is compelling and has been widely adopted by environmental historians.[2]

Tobacco farmers were acutely aware of their relationship with the land. They were generally aware that over cropping had led to depletion. Early advice from 1863 on tobacco cultivation warned that "The culture of tobacco is said to be exhausting even to new land," and in 1926 one report cautioned prospective growers that in the U.S. South raising tobacco in successive crops "resulted in serious soil depletion."[3] In Ontario, OAC expert R.J. Stallwood demonstrated awareness that farmers could never absolutely overcome the challenges of soil maintenance when he stated, "It has be said that the man who makes a partner of the soil, who strives to understand its mysteries and its peculiarities, is much more likely to be a successful producer of profitable crops than is the farmer who considers the soil but mere dirt, a slave to be driven without mercy."[4] Stallwood draws our attention to the idea of the dialectic relationship between farmer and land, and the fact that many farmers were aware of the dialectic (though they would never call it by such academic jargon). Not everyone held a confident belief that the soil could be "dominated," despite the modern capitalist ideology that foregrounded mastery over nature. Such a sense could emerge from observation while using the soil, or it could come from lingering religious perceptions of the human relationship with land. The term dialectic is used to reflect this tension between the cultivation of a crop bound to modern capitalist markets and awareness of the ecological limitations imposed by the crop. Farmers wanted a paying crop, but they also wanted to ensure that their land could raise crops in future years. As we shall see, the environment punished farmers who failed to heed it as a "partner," and frustrated efforts to extract more tobacco from the land with pest infestations.

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[2] For grappling with the concept of dialectics of nature, this article has been most valuable: William L. Remley, "Sartre and Engels: The *Critique of Dialectical Reasoning* and the Confrontation on the Dialectics of Nature,' *Sartre Studies International*, Vol. 18 No. 2 (2012), 19-48. For a recent and highly useful account of one such entangled relationship, see Andrew Duffin, *Plowed Under: Agriculture and Environment in the Palouse*, (Seattle: University of Washington Press, 2007). Jennifer L. Bonnell discusses the dialectic between culture and the material in her study of Toronto's Don River, see *Reclaiming the Don: An Environmental History of Toronto's Don River Valley*, (Toronto: University of Toronto Press, 2014).

[3] W.S.B., Michigan Farmer, 'Culture of Tobacco,' *The Canadian Agriculturalist and Journal of the Board of Agriculture of Upper Canada*, Vol. 15 No. 4 (April, 1863), 136; John Kenneth Galbraith, 'Tobacco Yield Much Higher Here Than in Virginia,' in *'Does it Pay?'*, ed. Jenny Phillips, (Dutton, ON: Village Crier, 2010), 220.

[4] R.J. Stallwood, 'Tobacco Topics,' *The Tillsonburg News*, 7 Oct 1937, 2.

Other historians inspire the dialectic framework. In his oft-cited work on the Snake River valley in Idaho, Mark Fiege reflected on how his travels through the area of study caused him to reflect on the fact that "what is human in the irrigated landscape, and what is natural, cannot be easily teased apart, if at all." He proposed considering the area, altered by irrigation yet still shaped by the nature that predated irrigation, a "hybrid landscape that should be understood on its own terms."[5] Along with collapsing easy material distinctions between nature and human, environmental historians have also proposed an identity between culture and nature. Notably, the historians of Alberta's Bow River convincingly argue, "nature and culture have become so intertwined in history as to make a sharp separation between them arbitrary."[6] The intertwining of nature and culture is also evident in Clinton Evans' observation that the very definition of a weed is a cultural act.[7] Hybridity, intertwining -- these are terms that attempt to bridge the gap between the cultural turn with its attention to discourse shaping material reality and the role of nature in shaping the discourses.[8]

The dialectic governing tobacco farmer and soil shifted over time, as tobacco manufacturers demanded different forms of tobacco. These shifts form the main narrative arc of the chapter. During the 1860s, where this chapter begins, Quebec farmers began experimenting with new forms of pipe and cigar tobacco, and some people began to grow the crop more intensively. By the turn of the twentieth century, high prices commanded by varieties of Burley tobacco, suited for pipe, plug, and some cigarette mixtures, convinced farmers in Essex and Kent counties to introduce tobacco into their farms. During the 1920s, growing cultural preference for light-tasting cigarettes engineered new relations between farmers and soil. Intensive use of chemical fertilizers and increased capital requirements characterized this relationship. The tobacco fields of the 1920s

[5] Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West*, (Seattle: University of Washington Press, 1999), 9. A fascinating reflection on hybrid landscapes and their role in grounding the cultural turn in material reality has been written by Richard White, "From Wilderness to Hybrid Landscapes: The Cultural Turn in Environmental History,' *The Historian*, Vol. 66 No. 3 (September 2004), 557-564.
[6] Christopher Armstrong, Matthew Evenden, and H.V. Nelles, *The River Returns: An Environmental History of the Bow*, (Montreal and Kingston: McGill-Queen's University Press, 2009), 21. This view is partially shaped by Richard White's famous idea of the 'organic machine,' which also militated against strict binaries.
[7] Clinton Evans, *The War on Weeds in the Prairie West: An Environmental History*, (Calgary: University of Calgary Press, 2002), xiv.
[8] This arrangement is suggested in White, "From Wilderness to Hybrid Landscapes," 564. Through Remley's reading of Engels and Sartre, this is a position that would fully satisfy neither strain of thought; Engles would be dissatisfied by the lack of universality that emerges from emphasizing hybridity and contingency, and Sartre would object to the emphasis on human consciousness as being *within* nature.

through to the 1940s constitute a prime example of a hybrid landscape in Fiege's sense. They remained sandy and of dubious agricultural value for most crops, as they had prior to their use for tobacco, but farmers also rendered them fertile through intensive uses of fertilizers, greenhouses, and other agricultural technologies.

Each shift in tobacco growing created new limits and altered old ones. From 1860 to 1940, from Lanaudière to Norfolk, the application of crop rotations constituted a key element of the discussions regarding proper management of soil. Even after some seventy years of commercial cultivation, people had yet to perfect the relationship. Likewise, questions about the best way to deal with ravenous insects shaped discussions of commercial tobacco as much in the 1860s as they did in the 1940s. Notable consistencies between the discussion of the problem in Quebec and Ontario, often harmonized through the efforts of the Federal Tobacco Division, leads me to argue that the emergence of the New Belt in the Norfolk Sand Plain and their understandings of tobacco land management has some roots in the experiences of Quebec farmers. In other words, there are considerable continuities in the ecological dialectic from a commercial tobacco farmer in 19th century Quebec and to the farmer of 1940s.

As is often the case in history, important shifts were at play among the continuities. A variety of pests and the emergence of tobacco diseases set strong limitations on the extent to which modernization could manage nature. The epidemic of "Burley sick" land, or land that was infested with a fungus (*Thielavia basicola*) that caused root rot and wilted leaves in Essex County during the 1920s constituted a fundamental challenge to the confidence of tobacco interests and their ability to manage ecological obstacles. The disease heralded the rapid decline of the Old Belt, and facilitated the shift to the relatively "virgin" land found in the New Belt. This shift to the Norfolk Sand Plain intensified the ecological challenges of growing new strains of flue-cured tobacco, such as Warne, Bonanza, and Virginia Bright, in a way that fostered large and healthy leaves that tasted light when smoked as a cigarette. Growing flue-cured tobacco in the light, sandy soil required refining a fertilizing and rotation regime that could make a farmer a "partner of the soil." Such a regime contributed to a shift from organic manures to chemical fertilizers, but chemicals did not always prove adequate for farmers, particularly as the dreaded mosaic virus began to spread in greenhouses, hotbeds, and fields. These challenges point to a fundamental dissonance in the ideology behind making farms into specialized "factories"—namely, nature is rarely predictable,

consistent, or readily abstracted.[9] Rather, they highlight Timothy Mitchell's point that "Technical change does not remove uncertainties, as the conventional view of science proposes—it causes them to proliferate."[10]

Examining the challenges faced in maintaining the tobacco farmer/soil dialectic draws our attention to a continental conversation about modern farming. As a soil-depleting and labour-intensive crop, successful commercial growers had to be attentive to the new findings about how to maintain their tobacco fields in order to attract higher prices. Therefore, tobacco farmers were eager adopters of pesticides such as Paris green, early targets for fertilizer sales, willing builders of greenhouses, and erectors of increasingly elaborate curing barns. Farm experts and fertilizer advertisements steadily reassured tobacco farmers that use of fertilizers would lead to rewards. For instance, a report of several years of experimental work on fertilizers at the Harrow, Ontario Dominion Experimental Farm declared, "no crop grown in those sections gives larger returns for the judicious use of commercial fertilizers than does tobacco."[11] Their willingness to employ new methods of soil management drew in large part on experiments and experiences from the tobacco-growing regions of the United States, from the cigar-leaf growers in Wisconsin and Connecticut, to Burley growers in Kentucky and the flue-cured tobacco heartland in North Carolina.[12] Tobacco interests applied and modified many of the techniques found there, and occasionally boasted that they improved on U.S. methods.

Tracing the transitions from manures to chemical fertilizers, the emergence of greenhouse growing to contend with shorter growing seasons, and waves of various pests, the chapter highlights the constant revision and rethinking required by tobacco interests to manage this challenging cash crop. While development is never linear, and the focus here is particularly on limitations, it is

[9] This tension is usefully explored in Deborah Fitzgerald, *Every Farm a Factory: The Industrial Ideal in American Agriculture*, (New Haven: Yale University Press, 2003), especially chpt.1.
[10] Mitchell, *Carbon Democracy*, 238.
[11] 'Artificial Fertilizers Pay,' *Essex Free Press*, 27 March 1925, 3.
[12] The use of fertilizers, both manures and chemical, by American tobacco farmers have been highlighted in a number of works, including Alan L. Olmstead and Paul W. Rhode, *Creating Abundance: Biological Innovation and American Agricultural Development*, (Cambridge: Cambridge University Press, 2008), 214-217; Barbara Hahn, *Making Tobacco Bright*, chpt. 4; Frederick F. Seigel, *The Roots of Southern Distinctiveness: Tobacco and Society in Danville, Virginia,* (Chapel Hill: University of North Carolina Press, 1987), 71; John Van Willigen and Susan C. Eastwood, *Tobacco Culture: Farming Kentucky's Burley Belt,* (Lexington: University Press of Kentucky, 1998), chpt. 2; Julia A. King, "Tobacco, Innovation, and Economic Persistence in Nineteenth Century Southern Maryland," *Agricultural History*, Vol.71, No.2, (Spring, 1997), 213.

important to note that there were successes, as farmers did yield rewards from their crops and managed to adapt to ecological challenges. The emergence of specialized flue-cured, cigar, and Burley-leaf farms in Quebec and Ontario can be seen as a success both for capitalist agricultural production and for farmers fortunate enough to have the capital sufficient to succeed in this trying agricultural field. This exchange between limitations and successes in the new tobacco regions draws inspiration from Carolyn Merchant's observation that dialectical approaches manage to avoid the progressive or declensionist narratives that can shape environmental history.[13]

From Manures to Early Chemical Fertilizers

Starting around the 1860s, agricultural reformers and tobacco manufacturers sought to transform tobacco cultivation from small-scale cultivation to commercial cultivation of pipe and cigar tobacco. To do this, they focused on reforming the relationship between the farmer and the soil they used. In Quebec, advice about manures, rotations, avoiding frosts, and combatting pests proliferated in newspapers, agricultural journals, and pamphlets that circulated through local *sociétés d'agriculture* and *cercles agricoles*. Through the efforts of the federal government, this advice spread to Ontario as Essex and Kent counties began planting tobacco more extensively at the turn of the 20th century. As new understandings of tobacco cultivation were proposed and undertaken, anxieties emerged over the ramifications of the consequences of planting tobacco on agricultural land. Commentators who looked at experiences in Virginia cast their understanding of nutrients in terms of limits, and fretted that an expansion of tobacco production would mean a decline in the overall productivity of farms. They drew on an alternative spiritual and moral landscape that questioned the value of planting a harmful crop like tobacco in land best suited for growing foodstuffs. Much of the commentary on tobacco cultivation in the latter part of the 19th century and early 20th century therefore sought to respond, directly or indirectly, to those anxieties.

Selection of appropriate manures was one way to respond to the concerns. "Père Coulange", the pen name of Octave Cuisset, advised his readers about commercial tobacco back in 1876. Following his consideration of soil types, he also had some advice to give to his listeners about enriching the soil. "Tobacco requires a well fertilized nourishing land," he observed, "and the most

[13] Carolyn Merchant, *Ecological Revolutions: Nature, Gender, and Science in New England*, 2nd ed., (Chapel Hill: University of North Carolina Press, 2010), xiii-xxi.

active fertilizer is best for the culture."[14] By Cuisset's reckoning, sheep manure created a fine-tasting tobacco, while cow manure worked well for light soil and horse manure for heavier soils. Of course, a farmer could not just dump these manures haphazardly onto the soil. The timing (about a month for planting the tobacco in the field) and the state of the land (well ploughed, with no large clods) both warranted consideration.

The link between the manures used and the flavour of the tobacco in many works indicated the importance of taste to early experimentation. One (unnamed) writer in the *Gazette des Campagnes* put the matter baldly—"Of all the commercial crops…there is not, without excepting flax, [a crop] which the type of fertilizer has a larger influence on the quality of the product than tobacco."[15] The author regretted that Quebec farmers had failed to match the quality of American tobacco, and attributed this problem largely to inattention to fertilizer. It then provides one of the more thorough lists of ideal fertilizers for tobacco in order of merit: compost (like tobacco stems), muck (particularly recommended for sandy soils), poultry droppings, and dead fish. When discussing the various sources of manure, the author warns against using fresh horse manure, cautioning that it can have an adverse effect on the quality of the crop.[16] An 1892 article provides some evidence of the complications that could lead to ill-tasting tobacco: "Animal manure acts on tobacco, to different degrees, more or less harmful to the quality of tobacco. The animals which received a feed rich in potash, like beets and apples, supply manure perfectly adapted to tobacco culture; horse manure is worthless for tobacco; and that of sheep and chickens is no longer used."[17] This observation about horse manures was not fully accepted; in 1898 Médéric Foucher noted that green horse manure (which had been well decomposed), could be valuable for seedbeds.[18] Considering

[14] Cuisset, *Le père Coulange*, 11 "Le tabac demande une terre substantielle bien chargée engrais, et les engrais les plus actifs sont les meilleurs pour sa culture."
[15] 'Culture du tabac,' *Gazette des campagnes*, Vol. 15, No. 15 (29 mars 1877), 116. "De toutes les plantes commerciales…il n'en est pas, sans même excepter le lin, sur lesquelles la nature des engrais exerce une plus grande influence sur la qualité du produit que sur le tabac."
[16] This concern is latter echoed in other sources, including F.A. Médéric Foucher, 'Manière de préparer les cauches chaudes destinées au Tabac Canadien,' *L'Étoile du Nord*, 31 mars 1898, 2; Laroque, *Culture et préparation du tabac*, 2nd ed,, (1897),33.
[17] 'Culture du tabac,' *Gazette des campagnes*, Vol. 28 No. 45, (Décembre 1892), 357. 'Le fumier des animaux agit sur le tabac, à différents dégrés, plus ou moins nuisibles à la qualité du tabac. Les animaux qui ont reçu une nourriture riche en potasse, telles que les betteraves et les pommes de terre, fournissent un fumier parfaitement adapté à la culture du tabac; le fumier de cheval ne vaut rien pour cette culture; celui des moutons et des cochons ne doit pas non plus être employé."
[18] Foucher, 'Manière de préparer les cauches chaudes destinées au Tabac Canadien,' *L'Étoile du Nord*, 31 mars 1898, 2

which view is correct is less important here. What matters is that it emphasizes complications for farmers trying to select manures to use. Manures, like soil, defied easy categorization, and these categories remained bound to sensory experience.

While selecting and acquiring the correct manure could be a challenge, writers widely insisted that it was a necessity. The question became further complicated as more consideration of chemical fertilizers emerged. In 1881, Arthur Jenner Fust saw barn manure as foundational to good tobacco cultivation, writing that, "Artificials I should use as a help, not as standby."[19] By "artificials," Fust referred to potash from wood ash, bone dust (for phosphorus), and sulphate of ammonia or sodium nitrate (for nitrogen). During the twentieth century, writers reversed this position, as what Fust would term "artificials" became preferred, due to increased availability and improved measurability. However, the inclusion of artificial fertilizers was indicative of a shift from the earlier references of the 1860s and 1870s that tended to refer more generally to manures as the source of nutrients to a sharper focus on the particular components required for good tobacco cultivation.[20] An example of this shift can be found in comparing the two editions of G. Laroque's pamphlet on tobacco cultivation. The first edition (1881) primarily refers to manures, and only briefly refers to marl and 'plaster' (gypsum) as important, while the second edition (1897) contains more specific discussion of chemical fertilizers, such as potassium sulphate and ammonium sulphate. Also in the second edition, Laroque notes the emergence of commercial fertilizers specific for tobacco in the United States, and comments on their chemical composition and uses.[21] This increased discussion of artificial fertilizer indicated that at least some tobacco farmers were moving towards a model of cultivation that drew on fertilizers external to the farm, constituting an important step towards entrenching their farms into a more elaborate capitalist system. However, taking this step was a long process.

Increasingly specific instructions accompanied the growing reference to chemical fertilizers. For an acre, Fust's 1881 article recommended "20 bushels of fresh wood-ashes [potassium], 6 bushels

[19] Arthur R. Jenner Fust, 'Tobacco,' *The Illustrated Journal of Agriculture*, Vol. 2 No. 11 (May 1881), 161. He reiterates this in 'Manure for Tobacco,' *The Illustrated Journal of Agriculture*, Vol. 6 No. 6 (June 1884), 83.
[20] For example, 'Cultivation of Tobacco,' *The Canadian Agriculturalist and Journal of the Board of Agriculture in Upper Canada*, Vol. 15 No. 5 (May 1863), 165; 'Correspondances,' *Gazette des campagnes,* Vol. 3 No. 6 (15 janvier 1864), 44-45; 'Des plantes industrielles: du tabac,' *Gazette des campagnes*, Vol. 7 No. 33 (26 novembre 1868), 261-2; Cuisset, *Le père Coulange*, 10-12
[21] Compare Laroque, *Culture et préparation du tabac*, 1st ed., (Lèvis, 1881), 10-14 to his *Culture et préparation du tabac*, 2nd ed, 26-43.

of bone-dust [phosphorous], and 150 lbs of Sulphate of Ammonia, or 100 lbs of Nitrate of Soda [nitrogen]."[22] He particularly emphasized the importance of the potash from the wood-ashes as vital to a good smoking tobacco. J.C. Chapais provided similar advice to a reader of *le Journal d'agriculture illustré*, recommending that, per *arpent*, a farmer use 20 bushels of wood ash, 6 bushels of bone dust, and 100 lbs of ammonium sulphate in addition to manure.[23] These sorts of recommendations, which varied both by amounts of material recommended and by the complications of measurement by *arpent* or by acre, are indicative of the expansion of a long trend of farm interests attempting to pin down reasonably precise measurements for fertilizers.[24] These recommendations did not generally take tobacco or soil types into account, an oversight that later advice sought to redress. Moreover, the search for specificity that began around the 1880s necessitated increasing attentiveness to the multiple variables of tobacco cultivation (such as soil and variety grown), requiring constant revision of fertilizer recommendations.

With the emergence of discussions about chemical fertilizers, three questions became particularly salient. First, could farmers actually afford to purchase the fertilizers to supplement any manure or compost that came from their own farms? If so, how much fertilizer was required? Thirdly, could new fertilizers facilitate cropping tobacco perennially on the same land? These questions occupied considerable attention from their introduction in the 1870s and 1880s, right into the 1940s. In some cases, farmer aspirations for the effectiveness of fertilizers outpaced that of tobacco experts, as the experts frequently warned farmers that crop rotations remained a necessity, even as companies created specialized fertilizers.

The shift to artificial fertilizers required increased capital outlay to grow commercial tobacco. However, it did not occur evenly or smoothly, as the associated costs and effort required to use the fertilizers remained unappealing for many farmers who saw tobacco as a supplemental cash crop. In his 1881 article, Fust gave an exact estimate of $13.60/acre for the necessary bone meal, wood ash, dung, and sodium nitrate. However, he insisted that the costs would be returned by the higher

[22] Fust, 'Tobacco,' 161.
[23] J.C. Chapais, 'Engrais pour le tabac,' *Le Journal d'agriculture illustré*, Vol. 12 No. 7 (Juillet 1889), 109. A similar recommendation can be found in F.A. Med Foucher, 'Culture du tabac,' *Le Journal d'agriculture illustré*, Vol. 12 No. 4 (Avril, 1889), 59.
[24] Steven Stoll notes vigorous efforts to understand appropriate fertilizer proportions beginning in earnest in 1820s United States, following the 1819 Panic. See *Larding the Lean Earth*, 27

prices that better quality tobacco attracts.[25] Other articles indicated the underappreciated value of tobaccos stems as sources of nitrogen, a potential cost-saving green manure.[26] In their broad survey of Quebec rural life, Serge Couville and Normand Séguin suggest that commercial fertilizers were not widely used in Quebec until 1920, costs being a major factor in the limited adaptation of chemical fertilizers.[27]

As for Ontario, farmers briefly participated in the international "guano craze" during the turn of the century. Demand for guano linked the tobacco farmer to its sources in Peru and Chile, further binding Canadian tobacco to global commodity chains, in this case, British and American trading houses that had captured much of the international market.[28] In 1907, William Gregory, a prolific tobacco grower who eventually managed Imperial Tobacco's leaf-purchasing operations, placed himself at the forefront of selling new guano to farmers. He advertised for his "Special High Yield Guano," drawing on a testimonial that a field fertilized with guano yielded 2547 pounds per acre of Burley tobacco (typically, even 1000 pounds of quality tobacco would be considered a reasonable return for an acre). According to advertisement copy, guano could coax tobacco from land when all else failed, and it could even restore Burley sick land.[29] The veracity of his claim is unimportant, though it seems unlikely that many farmers would have received such high returns. What does matter is that in connecting to these growing chains supplying fertilizer, Canadian farmers were using what Steven Stoll describes as the first "external factor" in the chemical exchange fundamental to agricultural production. Rather than relying on manures, or rotations, guano promised an injection of nutrients, particularly nitrogen, which could be supplied in controlled quantities from a bag rather than from a farm.[30] People hoped that external compliments

[25] Fust, 'Tobacco,' 163. See also J.C. Chapais, 'Engrais pour le tabac,' 109.
[26] Fust, 'Manure for Tobacco,' *The Illustrated Journal of Agriculture*, Vol. 6, No. 6 (June 1884), 83; Fust, 'Tobacco-Stems,' *The Illustrated Journal of Agriculture*, Vol. 11 No. 5 (May 1889), 68
[27] Serge Courville and Normand Séguin, *Rural Life in Nineteenth-Century Quebec*, (Ottawa: Canadian Historical Association, 1989), 11. See also Normand Perron, *L'État et le changement agricole dans Charlevoix, 1850-1950*, (Sainte-Foy: Presses de l'Université Laval, 2003), 186-193.
[28] On the 'guano craze' and efforts to find supplies of it in Peru and Chile, see Vaclav Smil, *Enriching the Earth: Fritz Haber, Carl Bosch, and the Transformation of World Food Production*, (Cambridge, MA: MIT Press, 2001), chpt 3; Rory Miller and Robert Greenhill, "The Fertilizer Commodity Chains: Guano and Nitrate," in Topik et al., ed *From Silver to Cocaine*, 228-251. For guano use in Canadian tobacco, see H. Nagant, 'Engrais pour le culture du tabac,' *Le Journal d'agriculture illustré,* Vol. 15 No 8 (août 1892), 126; Laroque, *Culture et préparation du tabac,'* 36; 'Use of Peruvian Guano,' *Kingsville Reporter*, 1 April 1910.
[29] 'Largest Yield of Tobacco Ever Recorded,' *Leamington Post and Times*, 17 January 1907; 'The Growing of Tobacco,' *Leamington Post and Times*, 21 April 1910; 'Growing Tobacco: Best Soils, Preparation,' *Essex Free Press*, 28 April 1911; 'Gregory's Special High Grade Guano,' *Leamington Post and Times* 15 February 1912.
[30] Stoll, *Larding the Lean Earth*, 189-190.

to the soil could facilitate continuous cropping. This introduced a new dynamic to the relationship between farmer and soil, one that shifted the dialectics between the farmer and the land, as tobacco interests sought to redefine long established "natural" limitations concerning the productivity of the land. Neither the land nor all people cooperated in this endeavor.

A useful evaluation of manure and fertilizer use comes from one of the early evaluations of Canadian tobacco-growing habits by Felix Charlan. In a 1906 letter, Charlan commented on the use of fertilizers among both Quebec and Essex County growers. He noted that growers around Montcalm applied green (plant) manure to their field prior to planting their crop, and confirmed that Quebec growers struggled from a lack of animal manure. Regarding Ontario, he commended farmers for having and applying a considerable amount of manure. However, both Ontario and Quebec farmers applied limited chemical fertilizer: "The use of chemical fertilizers is hardly widespread, a major operation in Berthier county uses it, but in Essex the attempts have not been favourable and the farmers have generally renounced it there."[31] In his bulletin on tobacco manures issued to farmers through agricultural societies, Charlan broadly noted that tobacco farmers tended to use too little manure.[32] Like Fust and Chapais before him, Charlan mostly worried about access to fertilizers, the presumption being that farmers should willingly assume the costs.

Encountering Early Limits of Fertilizers

Why might farmers "renounce" the use of chemical fertilizers, as Charlan suggested? This anxiety gestures towards concerns over the impact of their use on the soil and on the quality of the tobacco. These concerns were not without precedent. Kentucky Burley growers worried that chemical fertilizer, particularly when applied in abundance, would negatively affect how their product burned.[33] This concern manifested in Canada as well. In his article on fertilizers in Quebec, Fust dismissively engaged with these concerns, writing, "Talking of superphosphate, there is a good deal of nonsense going about the sulphuric acid contained in it being injurious to the land. Stuff! The acid is in a state of combination with lime, and is none other than our useful land plaster."[34]

[31] F. Charlan to Sydney Fisher, 26 June 1906, RG17, Vol. 999, File 165198, LAC. "L'emploi des engrais chemiques est peu répandu, une exploitation importante les utilise dans le comté de Berthier, mais dans Essex les essais ont été defavorables et les planteurs y ont généralement renoncé."
[32] F. Charlan, "Manures in Tobacco Culture," Bulletin Relating to Tobacco A-2 (Ottawa, 1906), 3.
[33] Van Willigen and Eastwood, *Tobacco Culture*, 24.
[34] Fust, 'Manure for Tobacco,' 83.

If one is more generous with farmer apprehensions, Fust's cavalier dismissal of such concerns indicates that many farmers were cautious about adding new elements to their relationship with their land out of concern that it would harm both soil and crop. This concern also stemmed from the fact that the primary way for farmers to evaluate their tobacco was through taste, and they knew that tobacco was very sensitive to shifts in what people put in their soil.

Most other writings on tobacco were more sensitive to concerns about the connection between chemical fertilizers and product taste. Where and how to apply the chemical was one consideration. Tobacco pamphlet writer B. Lippens recommended that chemical fertilizer was best harrowed or raked into the earth, as opposed to ploughed deep into the soil.[35] Another challenge was to use the correct sources to acquire the nutrients. Charlan warned against the use of sodium nitrate or ammonia sulphate, finding that they produced leaves that are "rather heavy, without fineness, often with a loose tissue, and sometimes unsatisfactorily dry."[36] This was in contrast to advice given not ten years before in the *Gazette des Campagnes* that called for farmers to use a chemical fertilizer that included 3.5 percent sodium nitrate.[37] Taken together, the early advice on chemical fertilizers is limited—while there was agreement in the literature that fertilizers were of value, they had yet to divine the exact relationship between them and the land. Understanding tobacco soil remained an elusive goal, one that required decades more of experimentation.

Despite the lack of certainty over the appropriate sources or application of chemical fertilizers, the stakes of getting fertilizing right were clear. The threat of soil exhaustion emerged constantly as what might happen if tobacco farmers failed to properly fertilize and replenish their soil. This anxiety emanated from both proponents and critics of tobacco cultivation. Back in the 1860s, the editor of the journal of the Upper Canadian Board of Agriculture noted with trepidation the increasing interest in tobacco cultivation. Even as the journal published letters from American farmers concerning tobacco cultivation, the editor typically included a note expressing disapproval of the entire venture. For instance, prefacing a letter from Kentucky grower L.J. Bradford is the comment:

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[35] B. Lippens, "La Culture du Tabac,' *Le journal d'agriculture illustré* , Vol. 5 No. 12 (janvier 1883), 184; *Conférences Agricoles: La culture du tabac*, (Montreal, 1882), 6-7.
[36] F. Charlan,'Manures in Tobacco Culture,' 5; see also his article 'Tobacco Culture,' *Essex Free Press*, 21 February 1908.
[37] 'Culture du tabac,' *Gazette des campagnes*, Vol. 31, No. extra, 22 avril 1895, 3.

> Whether it is desirable to admit this plant into Canadian husbandry will no doubt be regarded by some as doubtful, even supposing that our climate and soil are, in all essential respects, suitable. Tobacco culture has been attended by an exhaustion of the soil in some of the richest portions of Virginia, and neighbouring states: but it is said that this evil is now obviated by a judicious rotation of crops…We doubt whether the better qualities of this plant can be raised so far north as Canada, so as to compete with the productions of more southerly latitudes.[38]

Even while allowing for some improvements in rotation, the editor of the *Agriculturalist* questioned the feasibility of tobacco cultivation based on the limitations of climate and soil, and acknowledged that a number of readers held moral objections to tobacco cultivation. The stakes were still higher when Richard Denison wrote to the *Canada Farmer*, the heir to the *Agriculturalist*, proposing tobacco as a reasonable substitute for wheat following a collapse in wheat prices in 1864. The editor, W.E. Clarke, quashed the idea. Like his predecessor, he objected that tobacco depleted the soil without "liberal manuring," adding that tobacco was prone to the ravaging of tobacco worms. While claiming to lack strong moral objections to smoking, Clarke added "other things being equal, we had rather that the farmers of Canada should produce the staff of life, than that their labour should end in smoke."[39] Over time, Clarke must have hardened his opinion on tobacco, for he later invoked climate, God, and racial tropes to discourage tobacco cultivation.[40]

As the anti-tobacco movement in Canada grew in strength, so too did religiously grounded objections to using land for raising it. The organ of the respectable farmer, *The Farmers' Advocate*, generally published very little on tobacco cultivation, excepting a couple articles during the 1870s. However, in 1903, the *Advocate* broke a long silence on tobacco to run an article strenuously opposing the use of cigarettes.[41] In Essex County, all did not eagerly welcome the revival of

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[38] 'Cultivation of Tobacco,' 164. On problems with exhaustion in Virginia, see Siegel, *The Roots of Distinctiveness*, 68.

[39] "Tobacco as a Substitute for Wheat," *The Canada Farmer*, Vol. 1, No. 15 (August 15, 1864), 226-227. On the discursive power of wheat as the 'staff of life' and marker of civilization, see Varty, "Growing Bread," chapter 1 for a useful summary.

[40] 'Tobacco,' *The Canada Farmer*, Vol. 5 No. 5 (2 March 1868).

[41] "Down with the Cigarette," *The Farmer's Advocate*, Vol. 38, No. 569, (5 March 1903). It is noteworthy that the article objected particularly to *cigarette* use, rather than tobacco use in general. Cigarettes were generally held to be a particularly reprehensible form of tobacco use amongst anti-tobacco advocates; it was particularly associated with

extensive tobacco cultivation at the turn of the century. *The Kingsville Reporter* was generally supportive of tobacco farming, but occasionally printed articles that objected to the use of fertile land for growing the "weed." Weeds were disruptive, unruly—hardly in line with the impulse, drawing back on the parable of Adam and Eve, to restore the land to an Eden.[42] In 1901, a farmer who signed "Fruitgrower" objected to the negligence of apples for tobacco cultivation. Why, he asked, did farmers allow fruit to rot in the field in order to plant a dirty, risky, and draining crop? He fretted that those who rushed to raise tobacco did so at the risk of the long-term viability of their land, attributing their decision in part to the climatic and topographical features of South Essex, and charging that the good land and climate rendered farmers indolent.[43] Such a concern opens to a gendered reading. The active male was charged with civilizing the passive female landscape; indolence was not amenable to such civilizing.

Protestant religious principles were at the foundation of many objections to using land for tobacco. In Ontario, along with the anti-cigarette activities of the Woman's Christian Temperance Union, local ministers worried about the moral implications of tobacco growing. The Rev. Millyard of the Kingsville Methodist Church responded thoughtfully to a question concerning whether or not farmers should grow tobacco:

> I answer this question by submitting three propositions and another question. First proposition: When a man opens up the bosom of the earth and places in it a tobacco plant, he makes God a partner in the tobacco growing business, willingly or unwillingly. Second proposition: It is not right to make God a partner in any business against his will. Third proposition: If a man honestly and intelligently asks God to become his partner in growing tobacco, and sincerely and intelligently believes that he has received that consent, then, so

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the moral corrupting of youth and women, with dandyism and subversive forms of masculinity, and with alien cultures. The literature on this is voluminous, but as an sample, see Eric Burns, *The Smoke of the Gods : a Social History of Tobacco* (Philadelphia: Temple University Press, 2007), 142–148; Tate, *Cigarette Wars*, chapter 2; Rudy, *The Freedom to Smoke*, 28–30; Brandt, *The Cigarette Century*, 46–50.

[42] This draws on Carolyn Merchant, "Reinventing Eden: Western Culture as a Recovery Narrative," in *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronin, (New York: W.W. Norton and Co., 1996), 132-170.

[43] 'An Important Subject," *Kingsville Reporter*, (21 February1901).

far as he is concerned, it is right to grow tobacco. Question: How many are in the tobacco growing business on this basis?[44]

The quotation from an evangelical minister reveals an alternative understanding of the farmer/soil dialectic that placed God at the foundation. It also indicates that tobacco is something outside of God's original intention for the land farmed—the farmer introduces the crop—this is no hybridization, but a perversion. Finally, the minister ends with an open question, but one that seems to preclude, or at least strongly question, the possibility of many growing tobacco with God's consent. The Rev. Millyard provides a spiritually charged reading of the Old Belt landscape; God intended farmers use the land for life-giving wheat and fruit, not nutrient sucking and demoralizing tobacco. Less philosophically, but with equal concern over land use, the W.C.T.U. published a prize-winning essay by a Kingsville girl entitled "Not a Pipe Dream," opposing tobacco use. Combining well-developed arguments concerning the moral and physical risks of tobacco use with anxieties over an imagined Bolshevist threat, she wrote: "The people of Russia, are many of them starving. Have we any food to send them? Essex County certainly hasn't. The people have used the best of their land to grow tobacco instead of wholesome food."[45] In this girl's eyes, raising tobacco meant Ontario farmers were failing in the Canadian duty to be the breadbasket of the world.

These objections emerge from a combination of physical and moral concerns over the raising of tobacco. Their importance emerges from the ways they suggest alternative understandings of the relationship between soil and farmer. Care for the soil was infused with a moral imperative that predated capitalist agriculture. In the sources above, farmers were responsible for ensuring that their farms remained productive and that they contributed to the feeding of the nation. In this reading, soil was not just a material, but also a responsibility. The objections raised on spiritual grounds also point to a lingering understanding of soil based not solely on analytic fact, but on notions of Nature, particularly a female Nature, that (male) farmers needed to preserve and protect. The fact that the objectors called for the planting of wheat or fruit illustrates Carolyn Merchant's point that by the mid-nineteenth century, "male" utilitarian and "female" romantic visions of land

[44] 'Questions Answered,' *Kingsville Reporter*, (27 February 1919), 1. Apparently, one farmer was distressed enough about this question to go home and disc up some 5 acres of tobacco he had been growing; 'Local and General,' *Kingsville Reporter*, (24 July 1919), 5.
[45] 'Not a Pipe Dream,' *Kingsville Reporter*, 9 March 1922.

coexisted in capitalist culture.[46] Such coexistence recalls Chakrabarty's distinction between History 1 and History 2. As the 20th century wore on, appeals to religious or romantic rationales for preserving soil were increasingly abandoned in favour of practical reasons for doing so, though one can find echoes of the romantic in R.J. Stallwood's description of the farmer and soil relationship. Moral imperatives for preserving soil never disappeared.

For most tobacco writers, the need to preserve soil stemmed from more terrestrial, more practical reasons that elided moral concerns about exhaustion. The advisability of rotating tobacco received considerable attention. In the 1877 *Gazette des Campagnes* article on its cultivation, the author confidently asserted that "experience" demonstrated that the crop could indeed follow itself, so long as the soil was not pushed to exhaustion—a rather vague standard.[47] Most other writers were less confident about the prospects of allowing tobacco to follow itself in the field. One of the first articles in the *Gazette des Campagnes*, written by Dr. François-Louis Genand of St. Jacques de l'Achigan, recommended an annual rotation with potatoes.[48] Later articles in the periodical recommended a rotation with clover.[49] Generally, authors recommended some form of rotation, often with corn, clover, or cereals such as rye. There is evidence that Quebec farmers considered rotations when raising tobacco. According to Jocelyn Morneau, farmers in the Lanaudière region, particularly in Joliette and Berthier counties, incorporated a rotation of rye and tobacco as part of their shift away from the wheat economy following the mid-nineteenth century. Those two counties were at the head of rye production in Quebec up until the end of the twentieth century.[50] However, census data indicate that rye production remained well outpaced by potatoes, suggesting that farmers might have agreed with Genand and used potatoes as a rotating crop.[51]

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[46] Merchant, *Ecological Revolutions*, 254-258.
[47] 'Culture du tabac,' *Gazette des campagnes*, Vol. 15 No. 14 (22 mars 1877), 107-8.
[48] 'Correspondances,' *Gazette des campagnes*, Vol. 3 No. 6 (15 janvier 1864), 44-45; Brouillette et al., *Historie du Lanaudière*, 414.
[49] 'Culture du tabac, *Gazette des campagnes* Vol. 28 No. 45 (29 décembre 1892), 357; 'Culture du tabac,' *Gazette des campagnes*, Vol. 31, No. extra, 22 avril 1895, 3
[50] Brouillette et al., *Histoire de Lanaudière*, 369. The choice of rye might also have reflected the fact that the sandy soil used in tobacco plantations was often ill suited for other cash crops. Rye grew well in regions with longer winters and on "problem soils." It also restored nitrogen and helped to prevent weed growth. Bowley, "Ontario Agriculture in the 1910s," 108-9.
[51] Taking Joliette district as an example, rye production was 24,344 lbs in 1871; 13,985 lbs in 1881; and only 5693 lbs in 1891. Meanwhile, potato production was 287,144 lbs in 1871; 173,923 lbs in 1881; and 345,667 lbs in 1891. *Census of Canada* 1871, Table XXIII, 158-9; 1881, Table XXIV, 184-5; 1891, Table II, 90-1.

Expert discussion of rotations spoke to how the nature of soil and the crop interacted to impose limitations. Commentators like Tobacco Division employee Omer Chevalier worried that farmers were failing to heed warnings about the risk of soil depletion. In 1909, he wrote, "notwithstanding the improvements lately effected in tobacco culture, we find that the yields are diminishing every year. This is easily explained by the fact that the majority of planters grow tobacco every year on the same land."[52] Exacerbating the problem of insufficient rotation were limitations in the use and understandings of fertilizers. As William Johnson recently observed in the context of U.S. cotton cultivation, measuring yields "served as a ready shorthand measure of soil quality in an era when knowledge of organic chemistry was still limited."[53] Chevalier acknowledged this limited knowledge when he noted that experts "no longer believe in the possibility of supplying the want of mineral substances by strong applications of chemical manures; in fact these are very soluble and consequently are apt to disappear, especially in tobacco culture which requires a deep light soil that lends itself easily to losses by drainage."[54] For Chevalier and Charlan, soil needed to be preserved, its nutrients restored, not for any moral reason, but because no understanding of chemical or manure fertilization sufficed to maintain the fecundity of the land. To manage this limited knowledge, they relied on a vocabulary of chemical exchange between farmer and soil, and couched their understanding of depletion in the language of scientific inquiry based on observation of yields rather than moral directive. For example, Chevalier provided numeric measurements of how much potash, nitrogen, and phosphoric acid tobacco plants removed from the soil.[55] Whether or not the number was accurate need not detain us here. What is important is how the Tobacco Division attempted to employ scientific rhetoric and measurements to persuade farmers of the stresses tobacco placed on the soil. This emphasis by the Division on chemical formulation marked the beginning of an important shift in the farmer/soil relationship.

However, during the early 1900s, not all farmers adopted the message of tobacco cultivation as chemical exchange. A 1910 report in the *Leamington Post and Times* indicated that farmers failed to rotate crops sufficiently, and that "It is to be regretted that our farmers, as a general rule, have

[52] O[mer] Chevalier, "The Importance of Rotations in Tobacco Culture," Bulletin on Tobacco A-5, (Ottawa, 1909), 5; see also F. Charlan and O. Chevalier, 'Experimental Work Carried on in 1909,' Tobacco Bulletin A-6, (Ottawa 1909), 25.
[53] William Johnson, *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom*, (Cambridge, MA, 2013), 153.
[54] Chevalier, 'The Importance of Rotations,' 7.
[55] Chevalier, 'Importance of Rotations,' 5.

not experimented enough on their farms to determine…the needs of the soil."[56] G.C. Routt, who joined the Tobacco Division from Lexington, KY in 1914, was critical of growing practices in Ontario, and particularly in Essex. In his assessment of tobacco cultivation undertaken that year, he noted that the Essex soils seemed particularly exhausted, "in large measure due to a lack of rotation."[57] Another issue was the limited availability of manure. On this subject, the *Kingsville Reporter* recorded the observations of an unnamed visitor from Kentucky who found that farmers were relying too heavily on chemical fertilizers. The paper's editor agreed, noting, "if the policy of taking everything off and putting nothing back prevails very long, land will depreciate in value to a great extent."[58] Land value, of course, was another means of rapidly evaluating the success of the exchange when precise chemical measurements remained lacking.

In the *Leamington Post and Times,* humourist Adam Bede put the problem more colourfully, calling for the creation of a "Society for the Prevention of Cruelty of Soil." Making this mock call in 1910, he wrote, "We're too lazy to take care of the things we have. We're not making the ground produce as it should. We're neglecting it. We have not learned to rotate the crops. We plant tobacco, and tobacco and more tobacco, until we have 'tobaccoed' the ground to death."[59] While clearly meant to give the reader a few chuckles, Bede's "suggestion" gestured to the very real problem of insufficient rotations. His pointing to the "death" of soil also demonstrates a latent understanding of the soil as a living thing.

As the Division struggled to encourage use of chemical fertilizers, nature brought a new challenge into the mix. The emergence of tobacco root rot (*Thielavis Basicola*) in the seedbeds and fields of tobacco farmers confirmed the worst fears of those who sought to convince farmers of the importance of exchange. For farmers, tobacco root rot served as a strong reminder that tobacco was indeed a difficult plant to manage, as a properly topped and suckered tobacco plant placed pressures on the nutrients of their soil, particularly nitrogen and potassium.[60] For the Division and other experts, tobacco root rot was both evidence of the uneven growing practices of farmers and

[56] 'Maintenance of Soil Fertility,' *Leamington Post and Times*, 27 January 1910.
[57] Tobacco Division, 'Report from the Tobacco Division For the Year Ending March 31st, 1915,' (Ottawa, 1916), 1203.
[58] 'Warns Tobacco Growers,' *The Kingsville Reporter*, 29 September 1927, 4.
[59] 'Tobacco Notes: Adam Bede's Idea,' *Leamington Post and Times*, 10 March 1910.
[60] A.R. McCrea, I.C. Trueman, and M.A. Fullen, 'A comparison of the effects of four arable crops on the fertility depletion of a sandy silt loam destined for grassland habitat creation,' *Biological Conservation*, Vol. 97 (2001), 182.

a vexing challenge to their ability to manage tobacco cultivation through their knowledge of fertilizers, rotations, and chemical exchange.

Burley Sickness

In 1909, W.A. Barnet, the manager of the Harrow station, penned a report containing one of the earliest references to "Burley sick" land in Ontario. He argued that this problem emerged from two sources: the lack of exact knowledge about fertilizers, and the failure of farmers to rotate their crops.[61] While Barnet seemed optimistic about the prospects of educating farmers to mitigate the impact of Burley sickness, the problem plagued Essex and Kent growers (and to a lesser extent, Quebec growers—many of whom grew cigar leaf which was thought to be less susceptible to the fungus) well into the 1920s, thereby posing one of the greatest challenges to modern tobacco farming. The emergence and spread of *Th. Basicola* forced farmers to confront the exacting cost of tobacco cultivation and contemplate their relationship with their land.

Despite the difficulties caused by the fungus, there was reasonable scientific understanding of *Th. Basicola*. According to a botanist's report from the 1920s, scientists isolated the fungus in 1897, and they had experimented to develop resistant tobacco strains or develop preventative measures since then.[62] Contemporary studies, including many conducted by the United States Department of Agriculture (USDA), discovered that the fungus emerged in warm seedbeds, stunting the growth of seedlings and hardening the stems of the plant (see Figure 1). While the fungus could affect other varieties of tobacco, Burley plants were particularly susceptible. Since Canadian tobacco cultivation relied heavily on seedbeds to germinate the plant because of the climate, the fungus constituted a grave threat to Burley tobacco farmers. According to Charlan, the root rot caused by the fungus could be especially hazardous if it did not manifest severely in the seedbeds, as the unwitting farmer would transplant the infected seedling into the field, thus infecting the wider farm and causing the fungus to spread.[63] Once the fungus was present in the field, crop yields decreased

[61] W.A. Barnet, 'Report on the Tobacco Industry in Ontario,' Tobacco Bulletin A-4, (Ottawa, 1909), 8-9.
[62] George H. Conant, "Histological Studies of Resistance in Tobacco to *Thievalia Basicola*," *American Journal of Botany*, Vol. 14 No. 8 (Oct 1927), 457.
[63] F. Charlan, 'Tobacco Seed Beds,' Bulletin No. 21 (Ottawa, 1915), 38-39.

for several years. Farmers described this problem by referring to their land as "Burleyed out."[64] This term further cemented the farmer's connection between tobacco cultivation and soil depletion.

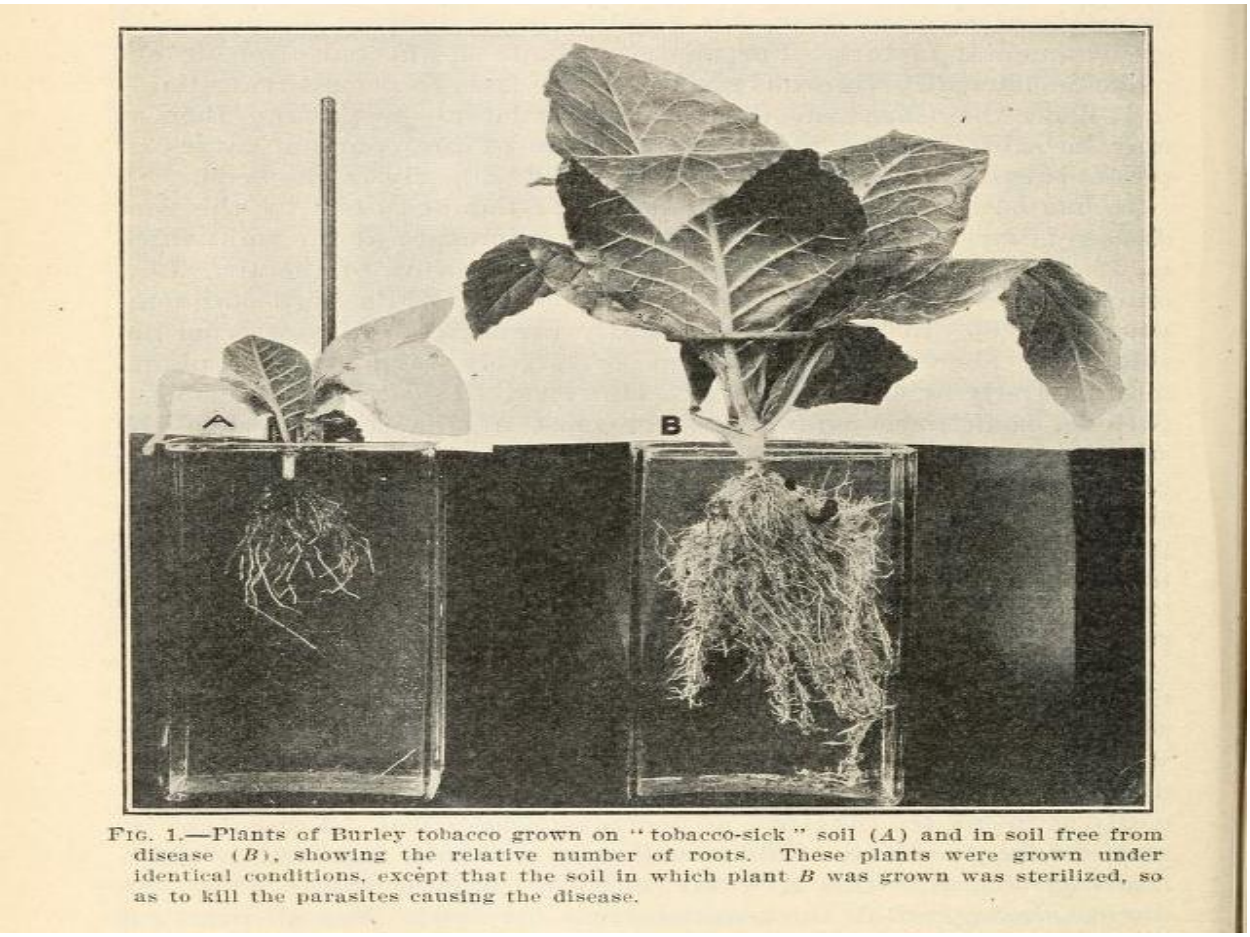

FIG. 1.—Plants of Burley tobacco grown on "tobacco-sick" soil (*A*) and in soil free from disease (*B*), showing the relative number of roots. These plants were grown under identical conditions, except that the soil in which plant *B* was grown was sterilized, so as to kill the parasites causing the disease.

Figure 7: Comparison of Burley afflicted with *Th. Basicola* and healthy plant. Source: James Johnson, 'Strains of White Burley Tobacco Resistant to Root-Rot,' United States Department of Agriculture Bulletin No. 765, (Washington, 1919), 4.

Experts did not agree with the more passive characterization of the land being sick. Rather, they placed the blame squarely on farming practices. Following his 1915 inspection, G.C. Routt reported that in Essex County, "Most of the soils in the tobacco sections are rather run down for tobacco, in a large measure from lack of rotation, while some, especially clay soils, are pretty well

[64] See, for example, 'The Tobacco Crop in Essex and Kent: Acreage About Same as Last Year with Equal Returns,' *Leamington Post and Times*, 23 August 1917; Department of Agriculture, Dominion Experimental Farms, 'Report from the Tobacco Division for the Year Ending March 31, 1914, 1022.

infested with the fungus producing 'root rot.'"[65] Nor was the problem confined to smaller growers, who were often cast as having poor cultivation practices. One of the earliest tobacco plantations, the 215-acre Walker Plantation, had an outbreak of the fungus in 1914. However, unlike the typical farmer, the plantation could afford to bring the American tobacco expert James Johnson to their farm to examine and diagnose their problem.[66] During the 1910s, newspaper reports and warning about root rot and the need to cease using the soil for tobacco for several years became reasonably commonplace.[67]

As root rot spread, the Tobacco Division sought to encourage the development of root-rot resistant strains of Burley. These initiatives drew and expanded on similar initiatives in the United States, where the fungus infected fields in Kentucky, Connecticut, Ohio, and Wisconsin.[68] The USDA attempted to hybridize White Burley with varieties of cigar tobacco, and when they noted that some Burley plants managed to grow in fungus-infested soil, they cultivated those strains.[69] When James Johnson came north to visit the Walker plantation, he conferred with William Barnet at the Harrow Station and helped with experiments there to develop strains of resistant Burley.[70] The effort to develop resistant Burley then passed on to G.C. Routt, who became the Division's first plant pathologist in 1916. He began a series of experiments on the diseased land of the Walker plantation and on two farms near Blenheim, planting a variety of Burley strains and Burley-cigar leaf hybrids, such as White Burley x Comstock. This was no rapid process. Of the twenty-three varieties he planted in 1920, only eight showed "appreciable resistance," though he commented that one strain of White Burley demonstrated some promise for both resisting the fungus and giving good yields.[71] Despite the uneven success of his experiments, Routt and the Division offered

[65] Department of Agriculture, Dominion Experimental Farms, 'Report from the Tobacco Division for the Year Ending March 31, 1915, 1203.
[66] F. Charlan, 'A Serious Tobacco Disease,' *Leamington Post and Times*, 28 October 1914.
[67] 'Growing White Burley Tobacco,' *Leamington Post and Times,* 4 April 1918; 'Tobacco Root-Rot and How to Control It,' *Leamington Post and Times*, 22 May 1918; 'Tobacco Growing,' *Essex Free Press*, 28 March 1924.
[68] Lyman J. Briggs, 'The Field Treatment of Tobacco Root-Rot,' U.S. Department of Agriculture, Bureau of Plant Industry, Circular No. 7, (Washington, 1908), 5.
[69] Johnson, 'Strains of White Burley Tobacco Resistant to Root Rot,' 8-11; on the long history of tobacco hybridization, see Olmstead and Rhode, *Creating Abundance*, 207-214.
[70] 'Report from the Tobacco Division for the Year Ending March 31, 1914,' 1022-23; for a retrospective of these experiments, see 'The Importance of Variety in Tobacco Production,' *The Lighter*, Vol. 9 No. 2 (April 1939), 12-13.
[71] Department of Agriculture, Dominion Experimental Farms, 'Tobacco Division: Interim Report for the Officer in Charge, F. Charlan, For the Year Ending March 31, 1921,' 11-12.

resistant seeds to farmers who struggled with the virus.[72] While Routt left the Division not long after his 1921 report, his Harrow-developed strain was successful enough that the Division dubbed it the 'G.C. Routt Burley,' although this honorific did not seem to go public.[73]

Farmers could look to other sources to acquire resistant Burley. Entrepreneurial seed sellers also provided anxious growers with fungus-resistant seed. For instance, in 1920 the Biggar-Pelton Co. of Leamington offered an ounce of Johnson's Resistant White Burley for a dollar—a steep price for seed. Likewise, Francis Gregory of Imperial Tobacco offered resistant seed to farmers, though he noted that it tended to produce crops of a poorer quality (though, that he could then assess a lower grade and price based on this claim was likely not lost on him).[74] Whatever Gregory's motive for questioning resistant strains, it gestures to how difficult it could be for farmers and experts to balance the competing needs of yield, quality, and soil maintenance. In 1926, a Tobacco Division report confirmed that resistant strains did indeed tend to produce smaller yields, though it was more optimistic about the quality of the leaf produced.[75] Despite these challenges, by 1930 resistant Burley strains were firmly established as an option, and by this time, most farmers were more concerned with soft market demand than soil diseases.[76] Developing more reasons to have farmers buy seeds, rather than use their own from their crops, further entrenched business interests in the cultivation of the crop. Such interests furthered the transition from a moral to a material reading of the need to preserve soil.

The effort to develop resistant strains of Burley constituted one of two major strategies devised to contend with the disease, the second being the encouragement of the use of high-pressure water steaming in seedbeds to sanitize the nutrient-rich muck used to accelerate the growth of the seedlings. The very need for seedbeds derived from the challenges of growing tobacco in Canada's cool springs not felt in states like North Carolina or Virginia. The importance of seedbed

[72] G.C. Routt, ''Growing White Burley Tobacco,' *Leamington Post and Times*, 4 April 1918; G.C. Routt, 'Selecting Tobacco Land,' *Essex Free Press*, 10 May 1918; 'Big Gathering of Local Tobacco Growers,' *Leamington Post and Times*, 29 January 1920.
[73] Department of Agriculture, Dominion Experimental Farms, 'Tobacco Division: Report of the Chief of the Division, F. Charlan, For the Year Ending March 31, 1923,' 4.
[74] 'Town and Vicinity,' *Essex Free Press*, 31 March 1922, 'Tobacco Seed,' *Essex Free Press*, 22 February 1924.
[75] H.A. Freeman, 'White Burley Tobacco in Canada,' Dominion of Canada, Department of Canada, Bulletin No. 66, (Ottawa, 1926), 3.
[76] H.F. Murwin, 'Resistant Burley,' *Leamington Post and Times*, 3 April 1930.

construction encouraged Charlan to pen three early Tobacco Division pamphlets on the topic.[77] Generally, seedbeds and transplanting seemed to have been part of the general pattern of cultivation in Canada. Building a wood frame and covering it with glass, cotton, or wood slats was a reasonably inexpensive proposition. However, frequent advertisement for seedlings in newspapers indicates that some farmers preferred or could not spend the time or money to construct a bed. One tobacco factory, the John Ross & Co. facility in Kingsville, became involved in the seedling business, creating some eighty tobacco beds producing around two million young Burley and dark tobacco plants for transplantation.[78]

By the 1910s, most farmers used seedbeds or purchased seedlings from those who had beds. However, combating the fungi that profited from the warm, moist, nutrient rich environment proved challenging. The spread of root rot, along with other diseases such as "damping off" (a term used to describe the rotting effect of the pathogens *Rhizoctonia solani* and *Pythium ultimum*) continued apace. Not only tobacco growers confronted problems with diseases in seedbeds, but tomato farmers also found their greenhouses afflicted with fungi.[79] The main solution provided for dealing with plants that were already infected was to destroy them, as efforts to cure infected plants were largely futile.[80] Therefore, it was essential to employ high-pressure water steaming as a preventative measure. However, for many farmers, the expense of a steamer was prohibitive. In order to mitigate these costs, farmers could hire someone to steam their beds. Michael Wigle found employment during the spring doing just that, travelling over several seasons offering his services and his steamer.[81] As sharecropping expanded over the late 1920s and into the 1930s, provision of steamers might be part of the deal between sharecroppers and farm owners.[82]

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[77] F. Charlan, 'Tobacco: Preparation of the Seedlings and the Care Given to Them,' Bulletin Relating to Tobacco A1, (Ottawa, 1906); F. Charlan, 'Tobacco Seed Beds;' F. Charlan, 'The Construction and Care of Tobacco Seed Beds in the Province of Quebec,' Dominion of Canada, Central Experimental Farm Pamphlet No. 21, (Ottawa, 1919).

[78] 'Tobacco Plants by the Million,' *Kingsville Reporter*, 29 April 1926. Another ad offered 'pull your own' plants at $1.50 per 1000 plants; 'Tobacco Plants,' *Essex Free Press*, 12 June 1925.

[79] The tomato fungus was identified as *Pythosa infestans* by the Essex County Agricultural Representative. See 'Annual Report Essex County Branch Ontario Department of Agriculture,' Agricultural Representative Reports, Essex County, RG16-66, B266720, Archives Ontario.

[80] See Charlan, 'Tobacco Seed Beds,' 38. For a more recent discussion of damping off, see S.K. Gayed, D.J.S. Barr, and L.K. Weresub, 'Damping off in tobacco seed beds caused by Rhizoctonia solani and Pythium ultimum,' *Canadian Plant Disease Survey*, Vol. 58 No. 1 (1978).

[81] 'Olinda,' *Leamington Post and Times*, 5 April 1917; 'Ruthven,' *Essex Free Press*, 3 March 1922.

[82] Michael, *Tobacco Farming in South Western Ontario*, 25.

Results of steaming were mixed. Some seedbed surveys undertaken during the 1920s indicate that diseases remained a vexing problem. A 1925 survey of 125 seedbeds in the Old Belt by the Division provides one of the most thorough examinations of steaming and disease. T.J. Major, the reporting specialist, discovered some 20 percent of the beds were infected with *Th. Basicola*, particularly in Kent County, "where soil sterilization is not generally applied." Approximately 5 percent of the beds displayed evidence of damping off. Major's report coincided with a few reports in Ontario papers chiding growers for inadequate steaming.[83] He also visited an unspecified number of seedbeds in Missisquoi, Rouville, Montcalm, and L'Assomption, reporting that some 80 percent of beds demonstrated some degree of root rot, and that one-third of them were affected by damping off. Regarding Quebec, Major reported that while many of the beds were well constructed, "Comparatively few of the growers sterilized their soil this year, although a large percentage used fresh soil."[84] The problem persisted in Quebec into the next decade, when a disease survey estimated that 25 percent of Quebec tobacco fields were afflicted with the fungus.[85]

Costs and time prevented many farmers from steaming adequately. Farmers who engaged in mixed farming had to deal with other crops around April, the ideal time for steaming. The Division officer at Farnham, Quebec, recognized this problem when he wrote, "The planter who does not make very large seed beds often does not give his beds sufficient attention… Moreover, frequently his other farm work and the amount of labour at his disposal do not permit him to give the beds greater attention."[86] In 1930, the Division approvingly reported the emergence of a "cooperative sanitation program" in the Yamaska Valley as a potential solution for mitigating the costs, in both time and money, of steaming.[87] According to the Ontario Agricultural Representative's tobacco specialist, J.K. Perrett, farmers from the U.S. South who were less accustomed to seedbeds proved slow to adopt steaming. Perrett also saw problems with how people steamed, noting that those hired often

[83] D.D. Digges, 'Tobacco Seed Beds and their Care,' *Leamington Post and Times*, 24 April 1924; 'The Care of the Tobacco Seed Bed,' *Essex Free Press*, 2 May 1924; 'Tobacco Beds,' *Leamington Post and Times*, 29 March 1929.
[84] T.J. Major, 'Report of Seedbed Survey—Project No. T42,' RG17, Vol 2833, Microfilm T-6992, LAC.
[85] Dominion of Canada, Department of Agriculture, 'Tobacco Division: Report of the Officer in Charge, N.T. Nelson, For the Year 1930,' 20.
[86] Department of Agriculture, 'Tobacco Division: Interim Report of the Officer in Charge, F. Charlan, for the Year Ending March 31, 1921,' 8.
[87] Dominion of Canada, Department of Agriculture, 'Tobacco Division: Report of the Officer in Charge, N.T. Nelson, For the Year 1930,' 21.

did not steam the beds for a sufficient amount of time, or with enough pressure.[88] Undoubtedly, the problems and unsatisfactory results from steaming discouraged some farmers from bothering with the practice.

The limits of seedbed maintenance reveal the challenges in expanding the agricultural frontiers of tobacco cultivation. Here, we see a fine example of the exchanges and limits the environment places on the farmer. In order to grow tobacco in Canada, a farmer required a relatively lengthy gestation period for the seedlings. However, these seedbeds were prone to disease and fungi, compelling experts and farmers alike to contend with a challenge that required decades of research. The dialectic between tobacco farmer and environment produced new problems and new limits, as solutions were found for outstanding problems.

Farmers in Essex and Kent counties had confronted ecological hardship before. The increased production of tobacco during the 1920s that encouraged much of the increased discussion of Burley sickness was influenced by the expansion of the European Corn Borer into Ontario from 1920 onwards. In Essex, corn production dropped from 81,256 acres in 1920 to 20,214 acres in 1927, while tobacco acreage during the same period went from 8541 acres in 1920 to 13,666 acres in 1927.[89] The problems from the borer were dire enough that in 1922, the United States barred shipment of Essex corn.[90] Justus Miller, the Ontario Department of Agriculture Essex County representative, encouraged tobacco as a replacement crop, noting that "We must develop along those peculiar lines which our soil and climate give us a special advantage. Of all the crops of this nature, none offers greater possibilities than tobacco."[91] Only a few short years later, market and ecology replaced this optimism with frustration, and calls were made to begin shifting tobacco land back to corn.[92]

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[88] J.K. Perrett, 'Report of Field Work Accomplished During 1932 in Norfolk Tobacco District,' Agricultural Representative Reports, Norfolk County, RG 16-66, B266739, Archives Ontario. Problems with adequate steaming persisted through the 1930s; see P.G. Newell, 'Tobacco Diseases in the New Flue-Cured Belt of Southwestern Ontario,' *The Lighter*, Vol. 9 No. 3 (July 1939), 18.

[89] Caesar, 'The European Corn Borer,' 6; H.A. Freeman, 'Tobacco Crop Report for 1920,' *Leamington Post and Times*, 25 November 1920; 'Annual Report of the Statistics Branch, 1927' *Ontario Sessional Papers*, Vol. LIX, Part IV, No. 21 (1928), 6.

[90] 'Essex County Quarantined,' *Leamington Post and Times,* 9 November 1922.

[91] "Corn Borer May be Blessing,' *Essex Free Press*, 27 November 1925.

[92] 'To Grow More Corn and Less Tobacco,' *Leamington Post and Times*, 4 April 1929. The market conditions that engineered this frustration are considered in another chapter.

By the late 1920s, the keywords of the farmer/soil dialectic in the Old Belt were fatigue and sickness. The Kent County Agricultural Representative dramatically represented this fatigue and frustration when he exclaimed that the county would have been better off "if they had never seen a stalk of tobacco."[93] William Pelton, a large scale tobacco grower at the forefront of the shift to Norfolk county, warned fellow growers in the New Belt that over-cropping tobacco leads to the same "disastrous effect in wearing out the soil as it did in Essex County," while Francis Gregory declared the Essex county land "sick of tobacco."[94] By 1933, tobacco acreage in Essex had dropped to 5700 acres, about two-thirds of what it had been in 1920, indicating that a number of farmers agreed with Gregory's assessment.[95] The idea of sick land points to the tension that nature places on capitalist agricultural production—land may be abstracted as "tobacco land" that can turn a profit, but soil proved more resistant to such abstraction.[96] The dialectic between farmer and soil was subject to the vagaries of both humans and nature. Tastes changed, altering what tobacco should be grown, and new diseases came to prosper in the seedbeds and fields. This is a lesson hard learned by those who sought to invest in tobacco cultivation in the Old Belt, and one confronted again by new farmers in the New Belt. Limits were reached even as opportunities arose.

Fertilizing for Flue Cured Tobacco

Growing flue-cured tobacco entailed an intensification of the challenges shaping the relationship between farmer and soil. It required extraordinary, and measurable, attentiveness to the composition of the soil and the nutrients added to it. Too much nitrogen caused the plant to mature too rapidly, making the leaf a heavy smoking one, unsuited to the cigarettes that flue-cured tobacco was destined for.[97] A 1920 pamphlet on flue curing revealed the tension flue cured growers had to negotiate between yields and quality: "The objective of the grower of flue tobacco should be to obtain the best colour and the maximum possible yield at the same time. This will require the maintenance of the fertility of the tobacco land to a nice degree of equilibrium so as to prevent the

[93] 'Local News,' *Leamington Post and Times*, 3 April 1930.
[94] 'William L. Pelton was First to Grow Tobacco in Norfolk,' *St. Thomas Times and Journal*, 26 September 1931; 'F.R. Gregory Testifies at Equalization Quiz,' *Leamington Post and Times*, 9 February 1933.
[95] 'Annual Report of the Statistics Branch, 1933,' *Ontario Sessional Papers*, Vol. LXVI, Part V., No. 22 (1934), 4.
[96] Thanks to Ben Bradley for this astute observation following a reading of an earlier draft of this chapter.
[97] According to a textbook on fertilizers, nitrogen is most associated with 'high photosynthetic activity, vigorous vegetative growth, and a dark green colour.' Samuel L. Tisdale et al., *Soil Fertility and Fertilizers*, 5th ed., (New York, 1993), 48.

leaf becoming too coarse for a successful curing."[98] Flue-cured tobacco cultivation required the unusual step of having to "starve" the tobacco plant of nitrogen, while giving it just enough of the nitrogen and plenty of other nutrients to ensure that it survived and produced leaves of adequate size.[99] As we saw in the last chapter, the expansion of tobacco cultivation into land heretofore deemed infertile also necessitated the management of sandy soil prone to nutrient leakage and erosion; this management in turn required the rigorous application of chemical fertilizers to supply the other necessary nutrients, including potassium, phosphorus, magnesium, and calcium.[100] This delicate balancing act of applying the right ratio of nutrients into soil that required intensive maintenance constitutes an ideal setting to consider an outermost technological limit of Canadian agricultural production. As Barbara Hahn notes, "The story of Bright [flue cured] Tobacco is but one example of the incredibly dense human histories that lie behind the world that seems natural but is instead technological."[101] I take a slight exception to the idea that Bright tobacco is *instead* technological, preferring the interpretation that this constitutes an example of natural/artificial hybridity, subject to all the limits and possibilities of the human/soil dialectic.[102] Flue cured tobacco points to the hybrid characteristic of tobacco fields, as farmers raised "natural" plants through intensive technological intervention in the land.

Buyers and experts saw only particular farmers as capable of navigating the complicated relationship betwixt the flue cured crop and the soil. Thus, the increase in Warne tobacco also contributed to increased specialization. Burley and cigar tobacco growers generally raised it as a complimentary cash crop, but the capital requirements and requisite specialized knowledge encouraged intensive production of flue-cured tobacco. Some writers welcomed this higher barrier to entry, the *Essex Free Press* noting, "only those who have sufficient finances can grow [Warne]. This keeps out the small growers, and they were the ones who helped to kill the growing of 'Burley' because they did not cure properly."[103] The sentiment against small, unspecialized growers emerged regularly as tobacco cultivation increasingly shifted towards flue-cured growth.

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[98] D.D. Digges and H.A. Freeman, 'Flue-Cured Tobacco in Canada,' Bulletin No. 38, Second Series, (Ottawa, 1920), 5.
[99] Olmstead and Rhodes, *Creating Abundance,* 216.
[100] There are sixteen essential nutrients in plant production, but these five come up in most discussions of tobacco fertilization, especially nitrogen, potassium, and phosphorus. Tisdale et al, *Soil Fertility and Fertilizers*, 46.
[101] Hahn *Making Tobacco Bright*, 4.
[102] 'Slight,' because a large part of Hahn's narrative revolves around the process of flue curing tobacco in kilns, which is more unambiguously a technological intervention.
[103] 'Tobacco Acreage to be Less,' *Essex Free Press*, 16 April 1915.

Such sentiment was entirely in line with the expansion of business interests shaping the production of the crop, from seeds to fertilizer. Another editorial warned, "If no restrictions were imposed [on new farmers], it is pointed out that there is a certain type of grower who would crop the same soil year after year until its fertility was exhausted."[104] Often, the "certain type" of grower was a recent immigrant to Canada. Much of this discussion of proper chemical fertilizers and use of soil blended with social assumptions about the merits of particular ethnicities and their farming abilities.

High prices motivated studies for understanding the nutritional needs of the soil and overcoming concerns about exhaustion. For example, in 1915, flue-cured tobacco sold for prices averaging around 30 cents per pound, as opposed to the 8 to 13.5 cent per pound range buyers offered for Burley.[105] This gap between Burley and flue cured tobacco seldom closed. Particular sources and nutritional ratios for fertilizers had been given in the past, but increased experimentation and advertising meant that chemical fertilizers moved from being cast as supplemental to organic manures to being seen as foundational to a good soil maintenance regime. This shift occurred in part because chemical fertilizers had the benefit of being more amenable to quantification and measurement. As environmental historian Frank Uekötter notes, "Unlike mineral fertilizers, animal feces defied quantification."[106] This was a lengthy shift, for in 1916, the Division warned that while chemical fertilizers were "indispensable" for "securing a paying crop…it is dangerous to apply them in too large quantities."[107] To understand the influence of chemical fertilizers, the Division launched numerous experiments during the 1910s, both on their own farms and later, in cooperation with local tobacco farmers. Typically, they conducted the experiments by testing different ratios of ammonium sulphate, superphosphate, and potash. They also applied different amounts of fertilizer to determine the equilibrium between marginal gains and marginal costs. For example, in 1922, the Division launched cooperative experiments with farmers, growing Warne tobacco in plots fertilized with a 3-8-10 (nitrogen-phosphorus-potassium) mixture, applying 400, 600, 800, and 1000 pounds per acre.[108] Ratios and amounts constituted only part of the tobacco question. The relative merits of "drilling" the fertilizer (applying it below the transplanted plant)

[104] 'Many Tobacco Growers Seek Permits in Elgin,' *St. Thomas Times and Journal*, 4 April 1938.
[105] For Burley: 'Local and General,' *Kingsville Reporter*, 26 September 1915. For Flue-Cured: 'Town and County,' *Essex Free Press*, 26 November 1915.
[106] Uekötter, "Why Panaceas Work," 77.
[107] Tobacco Division, 'Report from the Tobacco Division For the Year Ending March 31st, 1916,' (Ottawa, 1917), 1385.
[108] Tobacco Division, 'Report of the Officer in Charge, Felix Charlan, For the Year 1922,' (Ottawa, 1923), 39.

or broadcasting it (applying fertilizer in bands alongside the crop) were debated. In 1910, a column recommended broadcasting, but by 1921, drilling was favoured.[109] In 1939, an article in *The Lighter* switched the recommendation back to broadcasting, indicating that despite these studies, determining the precise way to apply fertilizer remained a challenge for many years.[110]

An important shift in fertilizer experiments occurred in 1929, when N.T. Nelson, who held a Ph.D., took over the Tobacco Division. He was assisted by T.J. Major, who earned a MSc. The pair coordinated a complete reorganization of the fertilizer experiments, enforcing rigorous standards for plot sizes, increasing use of check plots for comparison of results, and developing precise chemical testing to refine understanding of the nutrients required for commercial tobacco.[111] They also increased the attention on the chemical balance of the fertilizer elements, providing specific discussion of the ramifications of applying too little or too much of any particular element. Table 3 provides one such summary:

Table 3: Fertilizer Elements and their Impact on Flue Cured Tobacco

Element	Too Much	Too Little
Nitrogen	Dank green growth, delayed maturity, darkens colour.	Undersized, prematurely yellow plants with mixed colours.
Phosphorus	Premature ripening, variegated colours.	Poor growth, delayed maturity, dark colour.

[109] 'Planting of Tobacco,' *Leamington Post and Times*, 17 March 1910; 'The Farm: Artificial Fertilizers in Tobacco,' *Leamington Post and Times*, 28 April 1921.
[110] 'Tobacco Fertilizer Recommendations for 1939,' *The Lighter*, Vol.9 No.1 (January 1939), 10. See also F.A. Stinson, 'Band Applications of Fertilizer for Flue-Cured Tobacco,' *The Lighter* Vol. 11 No. 1 (January 1941), 13-14.
[111] Tobacco Division, 'Report of the Officer in Charge, N.T. Nelson, For the Years 1927, 1928, and 1929,' (Ottawa, 1930), 6, 16.

Potassium	Slight delay of maturity, but no major effect on quality.	Poor quality and variegated colours.
Calcium	Amplifies danger from black root rot, affects absorption of other elements.	Rare, but can lead to aluminum toxicity.
Magnesium	Can be toxic if not sufficiently balanced with lime (calcium)	Causes lower leaves to become brittle.

Source: N.T. Nelson, 'Balanced Fertilizer for Flue-Cured Tobacco,' *The Lighter*, Vol. 2 No. 2 (March 1932), 4-5.

Nelson presented the findings summarized above to the Ontario Tobacco Fertilizer Committee in 1932. The committee, established in 1930, formed with two aims in mind; first, to coordinate experiments between federal, provincial, and corporate interests, and secondly, to devise and disseminate fertilizer recommendations with farmers. To this end, representatives of the committee conducted field tours and published recommendations in newspapers. In Quebec, no formal committee was launched, though more conferences were held to encourage the expanded use of chemical fertilizers.[112] However, as flue-cured tobacco cultivation expanded around Joliette, Berthier, and l'Assomption, particularly during the latter part of the 1930s, Quebec farmers increasingly required chemical fertilizers.[113] Whether by the full Fertilizer Committee in Ontario or the Tobacco Division agents in Quebec, recommendations were issued during the winter, in order to give fertilizer companies time to create the correct mixtures. The recommendations were also the most tangible result of Nelson and Major's commitment to chemical fertilization.

[112] For a summary of the formation of the committee, see Tobacco Division, 'Report of the Officer in Charge, N.T. Nelson, for the Year 1930,' (Ottawa, 1931), 22-23.
[113] For a discussion of the initial expansion of flue cured tobacco into Quebec, see Georges E. Turcotte, 'Progress of the Tobacco Crop in Quebec,' *The Lighter*, Vol. 7 No. 3 (July 1937), 8; Earl Spafford, 'Tobacco Industry Contributes Much in Tax Revenues to War Coffers,' *The Lighter*, Vol. 11 No. 2 (April 1941), 15-16.

The recommendations are an intriguing blend of numeric certainty and concession to the difficulties in abstracting soil. For example, the 1935 recommendation for flue-cured fertilizer stated: "Use 800 to 1000 pounds per acre of a 2-10-8 on the more productive soils, and a 3-10-8 mixture on the less productive soils. Undoubtedly other mixtures such as a 2-12-6 or a 3-10-6 may be used to advantage under certain local conditions."[114] In order to facilitate the application of correct fertilizers, the OAC and the Dominion Experimental Stations offered soil testing to prepare individualized fertilizer recommendations with farmers being required to follow exacting instructions to gather their samples.[115] Even with recommendations and soil sampling, farmers could find it difficult to select fertilizers. A Norfolk farmer 'F.E.G' wrote into the "Farmer's Corner," an advice column run by the Ontario Agriculture College, asking why his 3-8-4 fertilizer was producing slow-ripening plants. The problem, according to Prof. Henry G. Bell, was that the farmer was using a fertilizer with insufficient potash (potassium); a 2-10-8 fertilizer was required.[116] Prompted by the more exacting fertilizer requirements of the light flue-cured leaf, the ratios reflect the culmination of the effort to establish a rational and comprehensible relationship between tobacco farmer and soil, mediated by chemicals. The question from F.E.G. indicates the difficulty in establishing that relationship on those grounds.

Statements like the recommendation above, or the invitation for farmers to have their soil chemically tested, indicate an increased space and growing role for experts, be they government or, increasingly, commercial. This drive for expert mediation was not novel—experts had been giving advice on best fertilizer practices for decades—but the expansion of flue cured tobacco cultivation, a form of tobacco cultivation wholly reliant on human manipulation of soil and leaf, meant that the limits of tobacco cultivation were discussed in the language of chemical composition. This language also provided a large space for fertilizer companies to create and expand their market. By the 1920s, chemical fertilizer advertisements became increasingly common, providing a reasonably large collection to examine how the companies sought to overcome the limitations of the soil. Francis Gregory, William's younger brother, established himself as the selling agent for Ober's Fertilizer, a firm based in Baltimore, Maryland. One evocative copy that blended artifice with nature claimed, "Ober's Fertilizer Covers the Flue-Cured

[114] 'The Tobacco Fertilizer Conference at Simcoe, Ontario,' *The Lighter*, Vol. 6 No. 1 (1936), 13.
[115] R.J. Stallwood, 'Tobacco Topics: A Soil Advisory Service,' *Tillsonburg News*, 16 October 1941.
[116] 'The Farmer's Corner,' *The Kingsville Reporter*, 28 January 1937, 6

Tobacco Districts of the Continent like the Dew," tying the Canadian tobacco region and Ober's fertilizer into a naturalized continental project. The copy also declared that the mixture had the ideal composition of nitrogen and potash.[117] A later Ober's advertisement, along with other firm' advertisements, offered a range of elemental ratios in their advertising.[118] The overlap between the advertised chemical compositions of the tobacco fertilizers and the recommendations of the Fertilizer Committee and Division is striking, and deliberate by design. They emerge from a shared commitment to making fertilization more precisely measurable, and thus amenable to fertilizer sales pitches.

Some of these pitches drew on a combination of experience and expertise by asking farmers to consider the origin of their fertilizer. This demonstrates how social and cultural categories worked their way into company resolve to establish themselves as the most "proven" and "scientific" fertilizer company. In one heated dispute, nationalist appeals functioned as the trump card. In 1927, the Mueller Process Company of St. John, Michigan ran an advertisement directed towards tobacco growers claiming its fertilizer to be a "frost beater," and that other firms contained alkali and sodium harmful for plants. Scottish Special Fertilizers, a Canadian-based and British-backed company, responded the next week, disparaging the claims as insulting, misleading, and worst of all, from a foreign source. Scottish Fertilizers claimed that farmers "know that in dealing with a reliable Canadian concern they eliminate those regrettable instances which so often follow a transaction with some foreign exploiter." Outflanked on the nationalist angle, Mueller responded the next week by trying to bring the debate back to "scientific" principles by alleging that Scottish failed to spend the necessary money on experimentation, relying instead on "mixtures." Mueller understood the process at a chemical level; Scottish just mashed some ingredients together. However, Mueller's advertisements seem to have disappeared from the papers not long after the dispute, while Scottish Fertilizers persisted, so the nationalist appeal may have worked.[119]

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[117] 'Ober's Fertilizer,' *Leamington Post and Times*, 7 February 1924.
[118] An advertisement for Ober's Fertilizer gave four different combinations for fertilizer appropriate for flue-cured tobacco and another one gave eight. See *The Kingsville Reporter*, 3 February 1927, 4; *Leamington Post and News*, 3 March 1927, 5. See also 'National Fertilizers,' *Tillsonburg News*, 12 April 1934.
[119] This dispute took place over 6 January, 13 January, and 20 January 1927, *Leamington Post and Times*. The nationalist angle was used by other firms, particularly the Canadian Fertilizer Company of Chatham, Ontario. See 'Fertilizer Experiments,' *Kingsville Reporter*, 28 January 1926, 1.

Other firms entered the increasingly lucrative tobacco fertilizer market. Canadian Industries Limited, one of Canada's largest chemical concerns, entered into the market advertising fertilizers for tobacco. Their advertisement impressed that their fertilizer, developed by "one of Canada's leading Agronomists," B. Leslie Emslie, was a result of experiments he had conducted since 1906 around Leamington. CIL combined experience with appeals to scientific expertise, impressing that their laboratories were modern and that they would ensure "no excess of Chlorine" in their blends.[120] By drawing on the practical experience of their scientists, companies like CIL sought to naturalize the use of chemical fertilizers—this was no innovation imposed by impersonal scientists, but the hard-won result of experiment. Such methods of naturalizing chemical fertilizer use echoed earlier initiatives in the flue-cured regions of the United States, where "the methods that regularly produced Bright Tobacco made the application of purchased chemicals seem natural. Because Bright Leaf grew on sandy soils, it required fertilizer purchases. Fertilizer companies therefore pushed the flue-curing method relentlessly."[121]

Indeed, for several firms and sales agents, fertilizer sales proved increasingly lucrative. Norfolk County, the heart of the New Belt, became known for being a major consumer of chemical fertilizers. One estimate from 1935 indicated that the county accounted for 20 percent of the total fertilizer sales in Ontario, and that tobacco cultivation drove a large amount of those sales. Indeed, in 1933, fertilizer companies sold $400,000 worth of fertilizer to Norfolk tobacco farmers on cash and credit.[122] In 1937, twelve different companies were offering different blends of chemical fertilizer.[123] Far from being a supplement to manures, chemical fertilizers were now at the forefront of tobacco cultivation in Canada. West Lorne (Elgin County) tobacco farmer W.H. Bole combined concern with nutrient ratios and movement away from manure when he told a reporter that he used no manure on his crop of flue-cured tobacco, but relied on 600 pounds of 3-8-4 fertilizer per acre for his crop.[124] Such reliance on purchased chemical fertilizers was quite remarkable, given that, in his survey of Ontario agriculture between 1870 to 1927, Marvin McInnis observes: "At no time

[120] Canadian Industries Limited ad, *The Tillsonburg News*, 29 March 1934.
[121] Hahn, *Making Tobacco Bright*, 118.
[122] 'Annual Report for the Year Ending 1935,' and J.K. Perrett, 'Report of Field Work Accomplished During 1933 in Norfolk Tobacco District,' Agricultural Representative Reports, Norfolk County, RG 16-66, B266739, Archives Ontario.
[123] "Recommendations for Chemical Fertilizers," *The Tillsonburg News*, 2 December 1937.
[124] J.K. Galbraith, 'Tobacco Yield Much Higher Here Than in Virginia,' in *Does it Pay?*, 220.

under review was purchased fertilizer an important input in Canadian agriculture."[125] As the reports from local agricultural representatives and fertilizer salespeople suggests, flue-cured tobacco was at the vanguard of chemical fertilizer use in Canadian agriculture. Measurable and readily purchased, chemical fertilizers seemed to offer a means of ensuring perennial returns on the high fixed costs of flue-cured tobacco, such as the kilns, the curers, and the seedbeds.

However, fertilizer having the right nutrient ratio, the right elemental sources, and the right national origin remained subject to the strict limitations imposed by the nature of the soil. Recall Stallwood's admonition beginning this chapter: the soil needed to be a partner, and that its capacities demanded respect. As fertilizer regimes evolved, most experts remained committed to the idea that the land needed rest from tobacco. However, the high sunk costs for the equipment and fertilizer required to raise flue-cured tobacco meant that farmers (and farm owners) were under higher pressure to produce a consistent crop. By the latter half of the 1930s, Stallwood and other tobacco writers began sounding warnings about soil depletion in the New Belt. Archie Leitch, the head of the Ontario Flue Cured Marketing Board, used the cudgel of refusing or reducing acreage quotas for growers who failed to follow an adequate rotation scheme.[126] Renewing advice given to Quebec farmers in the late 19th century, the Division called for farmers to employ a rotation with tobacco and rye. Farmers were not to harvest the rye but disk it into the soil to help to restore nitrogen and mitigate the effects of soil erosion. According to F.A. Stinson of the Division, some farmers did follow a two-year rotation of tobacco and rye.[127] However, the general impression from reports indicates that there were problems in convincing farmers to rest their soil.

The emergence of tobacco mosaic, a virus causing mottling of infected leaves, seemed to vindicate expert anxieties (see image 3-2). Reports of mosaic, also referred to as "Calico," emerged as tobacco cultivation expanded into the sandy soil suited for flue-cured tobacco, particularly during rainy years.[128] During the initial outbreaks of the 1920s, Canadian experts were able only to identify the virus through its effects on the plant leaves, and even in 1935, N.A. MacRae noted

[125] Marvin R. McInnis, *Perspectives on Ontario Agriculture, 1815-1930*, (Gananoque, ON: Langdale Press, 1992), 97.
[126] '4,000 Acres to New Growers,' *St. Thomas Times Journal*, 4 February 1938. The acreage quotas were given out annually to Ontario flue cured tobacco growers—in order to retain membership in the Marketing Board, farmers were obliged to adhere to their quotas.
[127] F.A. Stinson, "Flue-Cured Tobacco Cropping Practices," *The Lighter*, Vol. 8 No. 3 (July 1938), 12.
[128] For example, see 'Tobacco Disease,' *Leamington Post and Times*, 13 October 1921; Tobacco Division, 'Interim Report for the Officer in Charge, F. Charlan, For the Year Ending March 31, 1921.' (Ottawa, 1922), 13.

that "So little is known relative to the cause of this disease that control measures are nearly those of prevention."[129] In the same year, the American biochemist Wendell Stanley isolated the virus, which then served as a model for exploring viruses generally.[130] While this discovery galvanized scientific progress, it did little to mitigate grower anxieties over the loss of crops from the virus. Chemical fertilizers met their match in a virus. The most frequent solution presented to farmers with soil afflicted with the disease: rotate the crop, particularly with rye.[131] No measurements of fertilizer, no regime of steaming, seemed adequate for the task of preventing the virus.

Figure 8: Tobacco Leaf Infected with Mosaic Virus. Source: N.A. MacRae, 'Tobacco Growing in Canada,' Dominion of Canada, Department of Agriculture, Bulletin 176—New Series, (Ottawa, 1935), 35

[129] N.A. MacRae, 'Tobacco Growing in Canada,' Dominion of Canada, Department of Agriculture, Bulletin 176—New Series, (Ottawa, 1935), 35. For a similar sentiment, see H. Murwin, 'Control of Tobacco Mosaic in the Field,' *Leamington Post and Times*, 11 June 1931.
[130] Angela N. Creager, *Life of a Virus: Tobacco Mosaic as an Experimental Model*, *1930-1965*, (Chicago, 2002), chpt.1.
[131] D.D. Digges, 'Tobacco-Growing in Southwestern Ontario,' Dominion of Canada, Department of Agriculture, Bulletin No. 76—New Series, (Ottawa, 1927), 16; R.J. Stallwood, 'Tobacco Topics: Tobacco Mosaic,' *Tillsonburg News*, 4 July 1940; R.J. Stallwood, 'Tobacco Topics: Why Rotate Tobacco?,' *Tillsonburg News*, 5 March 1942.

However, it appears that not all farmers gladly received this advice to renew rotating. The colourful R.J. Stallwood had more to say about the lack of rotations in 1940, and the overconfidence people had in the ability of chemical fertilizers to manage the soil:

> We are drawing cheques on our bank account—the soil—and spending our soil fertility faster than we have been replacing it. We have been short-changing our soils, particularly with respect to the organic matter content.

A slave, a partner, a bank—soil was more than dirt for Stallwood; it was a relationship. In the same article, he went on to outline the consequences for abusing this relationship, and the limited extent to which fertilizers could function as a curative:

> Repeated cropping with tobacco, excessive cultivation and the absence of cover crops to protect the land from wind and water erosion soon deplete the light, sandy, flue-cured tobacco soils of organic matter…The general reaction of tobacco growers to the reduced yields on fields that have been depleted of organic matter is to increase the rate of application of commercial fertilizers, but experiments have shown that a crop cannot make the most efficient use of fertilizers under such conditions.[132]

He was not alone in his concerns over farmers not heeding the risks of erosion. In the dry prairies of both the United States and Canada, soil experts fretted about the overextension of monocropping and the insufficient utilization of rotations by the modern farmer. Rod Bantjes notes that for agricultural experts, wheat farmers in the Canadian prairies were "too modern," too ready to adopt new practices of wide scale wheat production.[133] Likewise, in the Palouse district in Washington and Idaho, farmers ignored steady warnings about the erosion of their topsoil due to what Andrew Duffin describes as an "agrarian liberalism," a sentiment shaped by a faith in technology, a willingness to accept some government assistance, but a rejection of any perceived government intervention in their decision making.[134] While it would be difficult to describe Canadian flue-cured tobacco growers in quite the same sense—after all, they eventually accepted a marketing

[132] R.J. Stallwood, 'Tobacco Topics: Short-Changing Our Soils,' *Tillsonburg News*, 8 February 1940. For a later report complaining about the lack of rotation, see H.F. Murwin, 'Will Diversification Save Tobacco Farms?' *The Lighter*, Vol. 14 No. 4 (November 1944), 1.
[133] Bantjes, *Modern Earth: Prairie Space as Modern Artifact*, 48.
[134] Duffin, *Plowed Under*, 8-9.

board system that regulated production and acreage—the idea that farmers often outpaced experts in terms of their confidence in the ability of new technologies and ideas to overcome natural obstacles is a suggestive one. Stallwood's anxieties indicate the considerable extent which capital and technology now shaped the relationship between farmer and soil. Before, experts criticised farmers for not having enough confidence in modern agricultural developments. Now, it seemed farmers had *too much* confidence, and it was experts who were impressing the fact that humans and land were in a relationship.

Nevertheless, this confidence should not be seen solely as arising from an abstract approval of technology because intense capital pressures also tightly bound tobacco farmers. To extend Stallwood's bank metaphor, farmers needed to draw on the soil in order to pay the bills demanded by fertilizer sales, equipment retailers, seed sellers, labourers, farm owners, and so on. Environmental limits were stretched and relationships strained by the intensification of market demands arising from specialization in flue-cured tobacco.

Insects: The Constant Limit

Like fungi or viruses, insects were one of the great variables of commercial tobacco cultivation. The farmer's struggle to contain or eliminate them is broadly illustrative of how the relationship between the farmer and their environment could simultaneously shift and remain distinctly continuous. Insects are a powerful example of hybridity in tobacco fields. Their emergence is "natural" in a sense—they are, after all, organic creatures—but their activities increase as artificial agricultural production specializes and intensifies. The challenge offered by pests to the modern farmer is hardly unique to tobacco. Jason Patrick's consideration of orchards in British Columbia and Washington highlights how orchardists were compelled to deal with moths and other pests as they implemented their vision of a scientific and modern agriculture. As he notes, "The conundrum faced by farmers was that the large crops they desired were also a bountiful food source for pests that could not otherwise survive in the semi-arid valleys."[135] Examining the (largely unsuccessful) efforts in the United States to control agricultural pests, James McWilliams argues that as people settled and sought to control their environment, "they strove to achieve economic goals that

[135] Bennett, *Blossoms and Borders*, 261

undermined that control."[136] Likewise, as tobacco production expanded and specialized in new areas, it encouraged the spread of vexing pests like cutworms and wireworms that were, after all, part of the relationship.

Throughout the period, many farmers relied on (or, resorted to) time-tested—and time-consuming—methods of seeking out and killing the bugs by hand. In the case of the "tobacco worm" (possibly the tobacco hornworm, *Manduca sexta*), Laroque noted that in order to contain their population before the larvae grew into voracious moths, the farmer must "hunt" under the leaves of their crop.[137] This hunt continued straight through into the New Belt. Hugh C. McKillop, a well-known Elgin farmer and Conservative M.P., demonstrated his method of killing pests to a young John Kenneth Galbraith, who spotted a damaged leaf while reporting for the *St. Thomas Times Journal*. Without delay, McKillop declared the tobacco worm a "bad actor" and promptly squished it "by exemplifying the finger and thumb practice." Turning to Galbraith, McKillop declared, "We mustn't be squeamish in these matters."[138] Some of those who might have been a bit more squeamish, or who lacked the time to look over their leaves, might turn to fowl for their pest problems. The large Walkerville plantation, for instance, experimented with ducks as a means to keep their pests under control.[139]

Tobacco farmers had been trying to mitigate the impact of voracious pests well before the advent of flue-cured tobacco cultivation. Indeed, one of the interesting things about pest maintenance in tobacco cultivation is the continuities. Even the expanded use of mechanized sprayers tended only to facilitate more rapid application of pesticides like lead arsenate and Paris green (an arsenate derived from copper dye). During the 1880s, some debate emerged over the use of Paris green, an insecticide derived from copper acetate and arsenic trioxide. B. Lippens deemed it an effective pesticide for aphids, while J. Chapais, who noted the efficaciousness of the pesticide, worried that it would spoil the leaf.[140] For his part, Médéric Foucher recommended a sprinkling of soot and

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[136] James E. McWilliams, *American Pests: The Losing War on Insects from Colonial Times to DDT*, (New York, 2008), 4.
[137] Laroque, *Culture et préparation du tabac,* 86.
[138] J.K. Galbraith, "West Elgin Land That Is Just Suited for Tobacco Growing,' in *Does it Pay?*, 56.
[139] W.A. Barnet, 'Report on the Tobacco Industry in Ontario,' Tobacco Division, Dominion Department of Agriculture, Bulletin A-4, (Ottawa, 1909), 11.
[140] J.C. Chapais, "Insects Nuisibles," *Le Journal d'agriculture illustré*, Vol. 4 No. 11 (décembre 1881), 171-2; B. Lippens, "La Culture du Tabac," *JAI*, Vol. 5 No. 12 (janvier 1883), 183.

chalk around the stems of tobacco plants following a watering.[141] By 1907, Felix Charlan unreservedly recommended a mixture of Paris green, cornmeal or bran, molasses, and water to deal with cutworms, almost exactly the same mixture recommended some thirty years later to deal with the insect.[142]

As is often the case in tobacco cultivation, findings from the USDA also shaped the discussions on pesticides, such as when A.C. Morgan, an entomologist with the department, began recommending lead arsenate as an alternative for Paris green, particularly for controlling cutworms and tobacco worms. He discovered that a mixture of one pound of lead arsenate mixed with twelve gallons of water killed the cutworms "before they had done any appreciable damage to the plants." He also noted that fears that the arsenate use would injure the eventual smoker of the tobacco were "groundless," although he acknowledged that spraying the poison rather than applying it as a dust could have negative ramifications for the plant and soil, if the mixture was not sufficiently blended.[143] Contrary to the later discovery of the harmful effects of lead arsenate on both the sprayer and the soil, the mixture was presented to growers as less likely to harm the plant than Paris green.[144] While it is difficult to determine exactly how much of these chemicals farmers used, a report from the early expansion of tobacco cultivation in Norfolk County found one dealer who had sold 8000 pounds of Paris Green in 1928 for cutworm control. Given about a half pound of Paris green was required for the bran-molasses-water mixture used per acre for cutworms, this indicates that farmers used the chemical widely.[145]

Prior to the start of World War II, concerns about the use of lead arsenate began to emerge. In 1938, the Federal Department of Agriculture briefly became concerned with a report published in the *Canadian Public Health Journal* reporting that Canadian tobacco had unacceptably high levels of lead, and it called for more state oversight over the use of lead arsenate in tobacco, moving

[141] 'Correspondance,' *L'Étoile du Nord*, 9 Mai 1889.
[142] Felix Charlan, 'Tobacco: The Growing of Tobacco,' Bulletin on Tobacco A-3, (Ottawa, 1907), 14.
[143] A.C. Morgan, 'Methods of Controlling Tobacco Insects,' U.S. Department of Agriculture, Bureau of Entomology, Circular No. 123, (Washington, 1910), 2-3, 14-16.
[144] 'Use of Arsenate of Lead Against Tobacco Worms,' *Leamington Post and Times*, 22 August 1913; 'Tobacco Without Hornworms,' *Essex Free Press*, 6 July 1917. A recent environmental study of Washington orchard areas found that lead arsenate lingered in the soil for fifty years after its application, see Sarah Wolz et al., "Residential arsenic and lead levels in an agricultural community with a history of arsenic use," *Environmental Research*, Vol. 93 (2003), 293-300.
[145] 'Delhi is Favoured for Tobacco Plant,' *Tillsonburg News*, 5 July 1928. For the formula, see MacRae, 'Tobacco Growing in Canada,' 39.

towards the development of "less toxic sprays."[146] This call emerged around the same time as British Columbian apple producers were being obliged to move away from lead arsenate, as American exporters deemed the lead content of their crops too high.[147] The story took on a conspiratorial turn when the Toronto tabloid *Hush* ran a story claiming that Imperial Tobacco was stifling the findings of Dr. Zeidler, the lead author of the report, and that Zeidler had been offered a bribe to keep the information quiet.[148] Government officials were relieved when Zeidler ran a letter in the *Globe*, advising that no such contract from Imperial had been made. The letter did, however, restate his position that a replacement for lead arsenate should be found.[149] The entire affair pointed to the unexpected consequences of the fight against pests, and it presaged the later controversy around lead arsenate's eventual replacement, DDT.

Despite fingers and thumbs, ducks, and chemical pesticides, insects shaped and limited the amount tobacco coaxed from the soil. A few excerpts illustrate the trend. Ruthven, 1924: "The last of the tobacco plants were set out here last week. The worms showed up in great numbers, with the result that a great deal of transplanting had to be done." In 1930: "Considerable damage was caused in all the tobacco districts. On some farms in the northern district of Quebec over 50 percent of the plants had to be replaced…The injury in the New Belt of Ontario and in Kent was also quite severe." Quebec's northern district, 1939: "Cutworms were more prevalent than usual, and they are responsible for the unevenness of a great many crops."[150] And so on.

Perhaps not everyone would have agreed with R.J. Stallwood's assessment when he stated, "From the earliest days of agriculture, the farmer has waged constant war against insects, and in many cases has only held his own, if not fought a losing battle. In the case of the wireworm, most tobacco men accept their losses with resignation and reset until the disappearance of the insect."[151] However, Lyal Tait's account of the efforts to control pests through poisoned brans and sprays

[146] Frederick A.J. Zeidler and William J. Wagner, "The Lead and Arsenic Content of Canadian Domestic Tobacco.," RG 17, Vol. 3228, File 164-5, LAC.
[147] David Dendy, "The Worm in the Apple: Contesting the Coddling Moth in British Columbia," in R.W. Sandwell, ed., *Beyond the City Limits: Rural History in British Columbia*, (Vancouver: UBC Press, 1998), 147-148.
[148] "Arsenic in Canadian Cigarettes," *Hush*, 28 October 1939, clipping in RG 17, Vol 3228, File 164-5, LAC.
[149] Frederick A.J. Zeidler, "Chemist Misrepresented," *The Globe*, 28 October 1939.
[150] 'Ruthven,' *Essex Free Press*, 4 July 1924; Dominion of Canada, Department of Agriculture, 'Tobacco Division: Report of the Officer in Charge, N.T. Nelson, For the Year 1930,' 21; 'Progress of the Canadian Tobacco Crop,' *The Lighter*, Vol. 9 No. 3 (July 1939), 8.
[151] R.J. Stallwood, 'Tobacco Topics: 'War News,' *Tillsonburg News*, 21 October 1937.

indicates that for most farmers, this was indeed the reality. Recalling efforts to control tobacco pests prior to the introduction of the new chemicals following World War II, like the (notorious) DDT, Tait wrote, "The farmer naively hoped that the cutworms might prefer the molasses bran to the young tobacco plants. Sometimes they did, but often they did not, to the dismay of the unhappy farmer."[152] Warm seedbeds could give the young plants a head start, and chemical fertilizers could draw out more tobacco from the soil, but insects were always emerging as unwelcome consumers of the plant. Perhaps they, as much as people or the soil, were the guiding agents of the human/soil dialectic, and they spoke (in Mitchell's sense) through the damaged leaves that impressed on tobacco farmers the considerable and persisting risks of their operation.

Conclusion

From Burley to flue-cured, from Quebec to Ontario, tobacco interests confronted the ecological limits that shaped and controlled the production of their tobacco. Engaging with the environment, or, as proposed here, participating in the farmer/soil dialectic, led to the development of a number of technologies, including fertilizers, greenhouses, and steamers, aimed at making the relationship as manageable as possible. Tobacco serves as a particularly powerful case for this broader story of agricultural management because of the exacting demands of the purchaser, who insisted on not just an abundant crop, but also a leaf that conformed to particular metrics of colour, size, elasticity, and thickness. As the century wore on, these metrics became ever-more exacting, culminating in the demand for the nitrogen-deficient yet healthy flue-cured leaf. The increased expectations and demands were met with intensifying commitment to developing a land-maintenance regime that could maintain the balance between production and soil vitality. This regime, based as it was on intensive use of fertilizers and limited rotations, placed pressures on the soil, pressures that were recognized, but not readily overcome.

Taking seriously the idea that the environment ought to be seen as an agent in histories about agricultural development foregrounds the fact that the human efforts to develop new methods of tobacco cultivation led to new and unanticipated challenges. From the outbreaks of *Th. Basicola* and the mosaic virus, to the challenges posed by insects, the story of commercial tobacco cultivation serves yet another reminder that nature is not readily abstracted as a material that can

[152] Tait, *Tobacco in Canada*, 97.

be manipulated for capitalist production; there are simply too many variables involved. The religiously grounded concerns of the Rev. Millyard or quotes from tobacco experts like Charlan and Stallwood indicate that many contemporaries recognized this limitation. The description of the land as "Burley sick" by Old Belt farmers also serves as an evocative metaphor, one that seems to recognize that land is not simply material, but a living thing. After all, mere material does not get sick.

Yet, despite this awareness, people did push their land to their productive limits—and beyond. The calculations of economics often shaped and drove the dialectic, as farmers considered the prices attracted by quality tobacco leaf, the sunk costs of the curing barn, greenhouse, steamer, and fertilizers, or the need to raise a paying crop to make a viable share with the landowner. When manure proved insufficient for tobacco farmers, many were early and rapid adopters of chemical fertilizers, overcoming earlier concerns about the influence of the chemicals on the taste of the tobacco. Fertilizer companies—often closely aligned with tobacco firms—assured farmers that their product would produce returns and mitigate ecological costs. This mixture of economic pressure and engineered optimism contributed to the growth in specialized tobacco farms, with their concomitant challenges for managing the problems arising from growing a nutrient-depleting crop. They contributed to the formation of the hybrid landscapes of the Norfolk Sand Plain, where farmers used the sandy, nutrient-deficient soil to produce a nitrogen-hungry crop, and where the farmer/soil dialectic confronted its outermost limit.

Chapter 5
Tariffs and Trusts: Making and Regulating the Tobacco Market, 1902-1934

In the late nineteenth century, following the work of neoclassical economists like William Jevons and Alfred Marshall, economics emerged as a field of inquiry that investigated the allocation of scarce resources by abstract economic agents, rather than emphasizing the social relations between production and distribution.[1] Neoclassical economists focused on commodification, abstraction and measurement, and served to entrench the idea of a self-adjusting market and the emergence of economics as a specialized knowledge beyond the realm of democratic practice, a transition that accelerated as a result of the rapidly growing petro-based economy that demanded new, macro forms of calculation. According to Timothy Mitchell, after the 1930s, "economics superseded law as the technical language of administrative power."[2] However, the same period of transition saw the persistence of ideas from political economy, ideas that resisted abstraction because they foregrounded the interest of different classes and how best to manage those interests. Monopolies and trusts remained terms laden with moral meaning. Tariff discussions produced debates not based on abstract allocation, but on the relative benefit for people as producers or consumers, as debates over regulation offered a range of views on the best means for government to ensure orderly market operations and to prevent divisive class conflicts, from government control of certain sectors to the production of limited regulatory bodies.[3]

Tobacco presented considerable challenges for the federal government to determine the relationship between good economic theory and actual production and distribution. Four challenges particularly confronted government officials: lingering qualms over the morality and healthiness of tobacco smoking, steady lobbying from some manufacturers and most tobacco farmers calling for tariff protection, the persistence of informal tobacco markets and related questions of Canadian tobacco quality, and the influence of the monopolistic ATCC/Imperial Tobacco. All of these challenges clearly demonstrate the assertion of Philip Scranton and Patrick

[1] Wallerstein, *Centrist Liberalism Triumphant, 1789-1914*, 247-251; Polanyi, *The Great Transformation*, especially chpts 14-16; Paul Craven, *"An Impartial Umpire": Industrial Relations and the Canadian State, 1900-1911*, (Toronto: University of Toronto Press: 1980), 22-30.
[2] Mitchell, *Carbon Democracy*, 136.
[3] On regulation as a spectrum, see Christopher Armstrong and H.V. Nelles, *Monopoly's Moment: The Organization and Regulation of Canadian Utilities, 1830-1930*, (Toronto: University of Toronto Press, 1988), 188. See also McGerr, *A Fierce Discontent*, chpt. 5; Martin J. Sklar, *The Corporate Reconstruction of American Capitalism, 1890-1916: The Market, the Law, and Politics*, (Cambridge: Cambridge University Press, 1988), 33-40.

Fridenson that the state does not simply set the stage for business, but "state practices and provisions are fundamental to the possibility of *doing business at all*."[4] This chapter, then, seeks to explore the role of government in managing various social, moral, and cultural understandings of the tobacco market.

This chapter draws on several large government reports that studied the Canadian tobacco industry to explore the different ways that people used terms like monopoly, trust, natural channels of distribution, supply and demand, and how those terms had both economic and social origins. Major moments include the debates that culminated in the 1908 Tobacco Restraint Act, the creation of a protective tariff for domestic tobacco in 1897 and subsequent discussions of proper tariff rates, extending into the 1930s and incorporating the British Empire, the 1902 Royal Commission Regarding the Tobacco Trade of Canada, and the 1934 Royal Commission on Prices Spreads. It investigates how most government officials acceded to the benefits of market discipline wrought by supply and demand, but how they also felt obliged to respond to public concerns over the monopolistic features of the tobacco market. In navigating this tension, the government role in managing the market grew, which both expanded market discipline as a form of governmental power but also allowed for social concerns to filter into the market through political pressure.

Conceptually, I draw on recent sociological and historical work that complicates the formation of the "natural" market by foregrounding the social and cultural roots of the market, a project that has drawn inspiration from Karl Polanyi's position in *The Great Transformation* that a self-adjusting market is a "utopia."[5] One way he attempted to demonstrate this was by arguing that, far from being the rational, individualistic, bartering Economic Man of Adam Smith's imagination, "man's economy, as a rule, is submerged in his social relationships."[6] As a recent collection on Polanyi's lasting influence notes, a key aspect of Polanyi's argument is that "the 'self-regulating market' is to some extent a misnomer, an illusion even, since this regime could only emerge and reproduce itself thanks to specific interventions by the state."[7] Subsequent commentators used the term "disembedded market" to describe the characterization of market relations as rational and

[4] Philip Scranton and Patrick Fridenson, *Reimagining Business History*, (Baltimore: Johns Hopkins University Press, 2013), 17. Emphasis in original.
[5] Polanyi, *The Great Transformation*, 3.
[6] Polanyi, *The Great Transformation*, 47.
[7] Keith Hart and Chris Hann, "Introduction: Learning from Polanyi 1," in *Market and Society: The Great Transformation Today*, eds. Keith Hart and Chris Hann, (Cambridge: Cambridge University Press, 2009), 9.

individualistic, and distinct from the particular societies in which they operate, whereas an understanding of a market that is bound to social and cultural conventions can be called an "embedded market."[8] The flaws of market fundamentalism demand understanding; there is need to historicize the different forms that a "natural" market could take and to interrogate the role of government in defining and shaping those natural markets. Tobacco, as a product with long ties to both government regulation and to social mores, seems a useful commodity to study for this project.

Collectively, and in some contrast to the abstracting impulse of neoclassical economics, this and the next chapter provide concrete illustration of the actual operations of the tobacco commodity chain that linked farms to leaf buyers who in turn supplied the tobacco manufacturers scattered through Ontario, Quebec, and the British Empire. Often, the leaf buyers and the manufacturers were part of the same company, though a branch separate from the manufacturers could conduct leaf purchasing. For instance, the British Leaf Tobacco Company of Canada, established in 1924, did Imperial Tobacco of Great Britain and Ireland's leaf purchases for the British market. There were some independent leaf buyers as well, like the Ross Leaf Tobacco Company of Kingsville, established in 1922 and reorganized as the Consolidated Leaf Tobacco Company in 1931.[9] In the New Belt, the Canadian Leaf Tobacco Company of Tillsonburg, established in 1925, featured as the main independent buyer.[10] These leaf buyers would purchase the tobacco that the farmers had bulked, and then distribute it to processing plants where workers, often women, removed the stems. The processed (destemmed) leaves were placed in storage, where they could ferment and await manufacturer need. The manufacturer power over this leaf purchasing and processing stage emerged as a key point of farmer anxiety and as a focal point for tobacco farmer cooperative efforts. After manufacturers created the plug, cigar, pipe, or cigarettes, they then distributed it to retailers, either directly or through wholesalers. As we will see, the role of wholesalers as a useful

[8] See, for instance, Fred Block's Introduction to *The Great Transformation*.. Also helpful is Ritu Birla, *Stages of Capital*, 4-5, note 9. Jens Beckert notes that Polanyi himself did not use the term frequently, arguing that "the centrality of the concept of embeddedness is an artifact of the *reception* of *The Great Transformation*." "The great transformation of embeddedness: Karl Polanyi and the new economic sociology," in *Market and Society*, 41.
[9] Tait, *Tobacco in Canada*, 540-542; "Tobacco Plant Reopens," *Leamington Post and News*, 17 December 1931.
[10] Tait, *Tobacco in Canada*, 526-529. The domestic branch for leaf purchasing, Imperial Leaf Tobacco Company of Canada, was established in 1932. Choko and Burgess, *Imperial Tobacco Canada*, 116.

channel in this process received considerable attention, as the ATCC/Imperial Tobacco began to see them as a link to be controlled through contracts or removed altogether.

These chapters consider how both farmers and corporations appealed to government to intervene in the tobacco economy. Farmers called for government assistance to ensure that they received all of the benefits of their position in an expanding chain that linked their farms to Great Britain. Many farmers impressed that they grew tobacco to the standards required by Imperial and other buyers, by buying seeds, applying the fertilizers, hiring the curers, and building the tobacco barns and kilns. They contended that the government was responsible for ensuring that they received just returns for all of these investments that were demanded by the Imperial Tobacco dominated chain, and from the benefits that accrued from the protective tariff that both manufacturers and farmers supported. Meanwhile, manufacturers sought support against what they saw as unfair competition from the informal tobacco trade that proliferated in Quebec. The intersection of Imperial's considerable influence over the grading and prices of the tobacco market, the creation of tobacco tariffs, and the emergence of anti-cigarette legislation for youth all meant that the tobacco market was as much a social and political question as it was an economic one.

The Crusade against the "Coffin Nails"

Members of Parliament debated disentangling the tobacco market from moral questions during the early 20th century. No less a figure than Wilfrid Laurier expressed some discomfort with the revenues the government received from the sale of tobacco: "If I were to follow my own inclination, I would have no hesitation in prohibiting cigarettes, cigars, smoking tobacco and chewing tobacco as well." He made this comment during a 1908 debate over the excise on tobacco products. However, he concluded that, despite his personal feelings about tobacco, he was not willing to enact measures to prohibit tobacco use, and contended that such a conversation had no place in a debate over tobacco taxation.[11] Other M.P.s disagreed, pushing for prohibition of tobacco products, particularly cigarettes. Debates over the morality of tobacco use clearly indicate the intersection between the social and the economic in the tobacco market, and they ensured considerable government regulation of the industry. They also opened a small space for women to

[11] Canada. *House of Commons Debates*, 9 April 1908, 4th session, 9th Parliament, Vol. 4.

participate in the regulation of the economy, particularly though the activities of the Woman's Christian Temperance Union (WCTU).

Gendered and age-based anxieties over the health risks of tobacco use, particularly cigarette use, dramatically depressed demand for cigarettes until the First World War. Early studies of nicotine and the harmful effects of tobacco use shaped some of the discussion. However, as several historians who have considered the anti-cigarette crusade have noted, concern over moral and racial degeneracy were inseparable from the more legitimate health concerns that later anti-smoking campaigns foregrounded.[12] The wide-reaching nature of the anti-cigarette campaign drew on the broader progressive impulse to reform society through an amalgam of middle-class, professional, and state intervention. The campaign also coincided with the anti-monopoly campaign that inspired the first major Canadian investigation of the tobacco trade. Alleged monopoly and market manipulation made a suspect industry all the worse.

During the years leading up to World War One, there was increased, albeit limited, knowledge of the harmful effects of tobacco, particularly cigarettes, leading to government intervention. Much of the early medical concern orientated around the fact that nicotine was widely known to be a poisonous substance.[13] Early advertisements offering remedies for tobacco "sickness" seized on the risks of nicotine. For instance, a notice in *The Windsor Evening Record* advised, "Nicotine is a most powerful poison…Tobacco 'sickness'…was caused by Nicotine."[14] The *Newmarket Era* attributed the collapse of a young man to his use of cigarettes, reporting that he was saved only when "some nicotine was taken from his stomach."[15] The House of Commons held discussions on anti-cigarette legislation on four occasions (1903, 1904, 1907, and 1908), and the dangers of nicotine were raised as evidence of the need for legislative action.[16] Conservative MP T.P. Sproule

[12] Tate, *Cigarette Wars*; Lee J. Alston, Ruth Dupré, and Tomas Nonnenmarcher, "Social reformers and regulation: the prohibition of cigarettes in the United States and Canada," *Explorations in Economic History,* Vol. 39 (2002): 425-445; Allan M. Brandt, *The Cigarette Century*, chpt. 2; Jarrett Rudy, "'Unmaking Manly Smokes': Church, State, and the First Anti-Smoking Campaigns in Montreal, 1892-1914," in Edgar-André Montigny, ed., *The Real Dope: Social, Legal, and Historical Perspectives on the Regulation of Drugs in Canada*, (Toronto: University of Toronto Press, 2011), 61; Sharon Anne Cook, *Sex, Lies, and Cigarettes: Canadian Women, Smoking, and Visual Culture, 1880-2000*, (Montreal and Kingston: McGill-Queen's University Press, 2012), chpt. 2.
[13] Brandt, *The Cigarette Century*, 106-107.
[14] "Tobacco Poison 'Killed,'" *The Windsor Evening Record*, 9 February 1895; see also "Don't Tobacco Spit or Smoke Your Life Away," *The Kingsville Reporter*, 1 February 1895.
[15] "Those Cigarettes," *The Newmarket Era*, 9 April 1897.
[16] For a brief overview of these debates, see Rob Cunningham, *Smoke and Mirrors: The Canadian Tobacco War*, (Ottawa, International Development Research Centre, 1996), 34-38.

emphasized that cigarettes were particularly dangerous because of nicotine: "the fact is that tobacco which is manufactured into cigarettes is treated with other narcotic poisons as well as nicotine, while tobacco made into a cigar is not so treated."[17] Sproule's contention that companies treated cigarettes with nicotine was false. Nevertheless, concern over the impact of nicotine on youth development contributed to the Liberal government's decision to pass the Tobacco Restraint Act, barring cigarette sales to people under eighteen in 1908—the same year that Britain barred sales of cigarettes to children under sixteen.[18]

The 1914 House of Commons Select Committee on Cigarette Evils was the last parliamentary investigation of the impact of cigarettes for decades.[19] Dr. A. McGill, a Dominion analyst, noted that "uncharged nicotine" entered the system when a cigarette was smoked, and that nicotine was "an extremely poisonous substance." McGill distinguished between cigarette and other forms of tobacco use by noting, "The great harm I believe is done by cigarette smoking is the fact that whereas in pipe and cigar smoking it is not unusual to take the products down to the bronchial tubes, and possibly into the lungs, in cigarette smoking this is habitually done."[20] Dr. L.J Lemieux of Université Laval also presented the committee with a statement on the physiological impact of tobacco use, focusing particularly on the harmful effects of nicotine. He graphically noted that a drop of nicotine applied to the eye could kill an animal.[21] Another line of the medical testimony focused on the alleged traces of opium found in cigarettes. Concerns about opium in cigarettes circulated widely; for instance, in the House of Commons, the anti-cigarette M.P. T.S. Sproule drew on WCTU arguments and accused cigarette makers of steeping their product in an opium

[17] Canada, *House of Commons Debates*, 9 April 1908, 10th Parliament, 4th Session, 6482. A similar point was raised earlier by John Barr in the House, see Canada, *House of Commons Debates*, 16 March 1908, 10th Parliament, 4th Session, 5102. Both reports cited in footnote twenty-one note that lab results indicated that cigarettes had in fact not been specially treated.
[18] The debate over this bill was brief, and it passed readily. See Canada, *House of Commons Debates*, 16 June 1908, 10th Parliament, 4th Session, 10693. On Britain's bar, see Hilton, *Smoking in British Popular Culture,* 167-170.
[19] Alston, Dupré, and Nonnenmarcher, "Social reformers and regulation," 431, n. 9.
[20] Canada, "Select Committee on Cigarette Evils," *Journals of the House of Commons*, Vol. 49, Appendix 3, (1914), 31-32. Two reports that also noted this were Prof. Foucher, "Travaux originaux: Quelques remarques sur l'usage du tabac en repport avec la muqueuse de la bouche et des voies respiratories," *L'union médicale du Canada*, Vol. 26 No. 4 (avril 1897), 194-198 and "The Cigarette Question," *The Canada Medical Record*, Vol. 26, No. 11 (Nov. 1898), 543-546..
[21] Canada, "Select Committee on Cigarette Evils," 79.

solution.[22] However, McGill noted that his testing had revealed no opium in any cigarettes.[23] Generally, the testimonies before the Committee were not adequate for constructing a firm position warranting further legislative action on cigarettes. The committee tamely ended its proceedings by calling for more data and further investigation of the matter during the next session.[24] As it happened, World War One occupied the attention of legislators during that session.

Given that the health risks of cigarette smoking remained rather shrouded at the time, reformers like those in the WCTU deployed a language of morality, linked to productivity, to discourage the use of tobacco. By asserting that the smoker was unmanly, and would lead to other "dissolute pastimes," the WCTU challenged the rationality of the smoker.[25] This angle was repeated by some prominent businessmen, like Henry Ford, who contended that cigarette smokers were unreliable and that he would not hire them "not as a matter of sentiment" but as a "plain business proposition."[26] This approach connected to the prohibitionist campaign against alcohol, insisting that drink disrupted the ability of a man to be morally sound and productive, which, as Craig Heron notes, combined religious conviction with middle-class, liberal economic rationality.[27] Such an approach provided space for women involved in the WCTU movement to develop a critique of cigarette use that infringed on the male economic sphere. However, the limits of this approach were revealed, as few legislators were convinced that a grown man would succumb to any harm presented by a cigarette. In the House, the Essex M.P., A.H. Clark, used this perception to criticize calls to bar cigarette sales altogether in order to protect children, arguing, "If it is not injurious to older people to use cigarettes, the House is being asked to go a long way for the sake of preventing children from using cigarettes."[28] Clark's logic won the day, and calls to bar cigarette sales altogether never gathered sufficient traction. Most male M.P.s simply rejected the idea that a fully capable man would ever fall victim to the slender cigarette. Yet, being able to smoke cigarettes

[22] Canada, *House of Commons Debates*, 9 April 1908, 10th Parliament, 4th Session, 6482. On the WCTU position, see "A Great Foe," *The Newmarket Era,* 19 July 1901. A similar sentiment was raised in American anti-cigarette cases, see Tate, *Cigarette Wars*, 27.
[23] Canada, "Select Committee on Cigarette Evils," 28,33.
[24] Canada, "Select Committee on Cigarette Evils," 6.
[25] Cooke, *Sex, Lies, and Cigarettes*, 58
[26] Quoted in Tate, *Cigarette Wars*, 55.
[27] Craig Heron, *Booze: A Distilled History*, (Toronto: Between the Lines, 2003), 184-185.
[28] Canada, *House of Commons Debates*, 10th Parliament, 4th Session, 16 March 1908, 5121.

would soon emerge as a masculine rite of passage, one that was fully compatible with the rational economic man.[29]

Criticism of cigarette sales also sought to draw on growing concern over the power of the industrial giants that arose from the merger mania of the late 19th century. Few were as successful—and as feared—as James Buchanan Duke, architect of the American Tobacco Company. It was no great stretch for reformers to link the ATC monopoly to harmful products. In the United States, "Cigarettes provoked some antagonism simply because they were the products of a trust. The symbolism was powerful enough that anti-cigarette activists continued to attack the 'Tobacco Trust' for years after it had actually ceased to exist."[30] While this line of criticism did not feature prominently in the WCTU campaign or other petitions against cigarette smoking, it appeared. For instance, an article in the long-running temperance magazine *Northern Messenger* contrasted the harm caused by cigarettes with the profits of the "American Tobacco Trust."[31]

Reformers targeted the sales methods used by the tobacco trust, particularly the use of suggestive cards. Historians have long noted how Duke's American Tobacco Company emerged as an aggressive advertiser, using sexually charged images of women to drive sales to men.[32] Such sales tactics drew the critical eye of the reformers, who made links between them and the threat of an American trust. Before the Committee on Cigarette Evils, Owen Dawson, a clerk in Montreal's juvenile court, contended that the images were "great inducements" for boys to purchase cigarettes.[33] In a circular, the Women's Missionary Society of the Methodist Church cited J.J. Kelso's testimony:

> The cigarette and tobacco business is completely demoralizing many lads between the ages of seven or eight and twelve years. I lay great stress upon the cigarette evil, because in order to force the sale, certain manufacturers place an immoral or highly suggestive picture

[29] Rudy.
[30] Tate, *Cigarette Wars*, 45.
[31] "The Cigarette Evil," *Northern Messanger*, Vol. 32 No. 27 (2 July 1897); also "The Cigarette and the Boy," *The Globe*, 24 March 1909; On the WCTU petitions, see Cook, *Sex, Lies, and Cigarettes*, chpt. 2
[32] Cook, *Sex, Lies, and Cigarettes*, 87-90; Brandt, *The Cigarette Century*, 31-33; Jordon Goodman, *Tobacco in History: The Cultures of Dependence*, (London: Routledge, 1993), 101.
[33] Canada, "Select Committee on Cigarette Evils," 50.

> in each package—always an actress or a female performer scantily dressed…An American firm sold $60,000 worth of these pictures in one year.[34]

By noting the money an "American" company made in the sale of the pictures, Kelso labelled the cigarette trade as a foreign and disruptive force in Canada. Such a discursive reacposition opened space to cast the American-dominated cigarette trade as a sort of illegitimate market, and linked to a wider rhetoric that drew on anxieties over American control of Canadian markets. While reformers never achieved their aim of barring cigarette use in Canada, their concerns over health ensured that the tobacco trade would always be subject to considerable government oversight. They linked to broader concerns over the role of monopolies and American ownership for a properly functioning market, and they firmly placed the government in a central role for defining what shape that market would take. Of course, what form that government role would take remained open to considerable dispute.

Protecting Farmers, Defining a Market

In 1897, as part of a broader response to increased U.S. tariffs, the Laurier government introduced a protective tariff on raw leaf tobacco entering Canada. The protection amounted to ten cents per pound for unstemmed (unstripped) leaf and fourteen cents per pound for stemmed.[35] There had been some measure of discrimination against products made from foreign leaf before. For instance, in 1880, tobacco products (excluding cigars) that were manufactured from domestic tobacco were subject to a fourteen cent per pound excise tax, whereas tobacco products from foreign leaf was subject to a twenty cent excise. A similar discretion existed for cigars.[36] Introducing the tobacco tariff, Laurier's Minister of Finance, William Stevens Fielding, argued, "if the Canadian producer can as a result of this duty get some advantage, we see no reason why he should not have the same opportunity afforded him as has been afforded to other industries."[37] The opposition Conservatives made a few pointed remarks about the richness of the "free trade" Liberals introducing protective

[34] "Monthly Letter," The Women's Missionary Society of the Methodist Church, June 1896, 6.
[35] Rudy, "Manufacturing French Canadian Tradition," 213-214. C.P. Stacey, *Canada and the Age of Conflict*, (Toronto: University of Toronto Press, 1984), 52-53.
[36] Canada, *House of Commons Debates*, 10 March 1880, 4th Parliament, 2nd Session, 568.
[37] Canada, *House of Commons Debates*, 22 April 1897, 8th Parliament, 2nd Session, 1128.

measures, but their barbs did not alter the fact that they too supported the imposition of tariffs on raw leaf.

The 1897 tariff emerged in part from a prolonged lobbying effort by some farmers and manufacturers. For instance, in 1892, a delegation of farmers from Montcalm visited Ottawa to request a 35 cent per pound tariff on foreign leaf, and just months before Fielding introduced the revisions to the tariff structure, a petition circulated around Cottam, Essex Co, asking for protection.[38] The prominent cigar manufacturer, J.M. Fortier, also took a lead role in calling for a tariff on raw leaf. Fortier is best known to historians for the poor working conditions of his Montreal factory, which included isolating workers who had run afoul of the foreman in a "black-hole." During his testimony before the 1885 Royal Commission on the Relations of Labor and Capital, the cavalier way that Fortier described striking Georgina Loiselle, one of his employees, took the commissioners aback.[39] However, in the matter of the tariff, Fortier presented himself as a champion of the farmers. In one of his petitions to the government, Fortier contended that "There are more growers in a single county, say Montcalm, than there [*sic*] employees and manufacturers of cigars, cigarettes and tobacco in the whole Dominion of Canada."[40] In order for farmers to develop tobacco in Canada, Fortier contended, more protection was required. In the same petition, however, Fortier also called for an equalization of excises on tobacco manufactured in Canada, regardless of whether it was made from foreign or domestic leaf.

Fortier was no altruist. In the same petition, he argued, "All tobacco growers should sell their tobacco to licensed manufacturers or to a licensed tobacco packer or handler, so that Canadian tobacco should receive the proper attention before it is put on the market. To-day it reaches the market too green and has a bad reputation on that account."[41] In essence, Fortier sought a double advantage: he wanted to lower the price of his raw material through a protective tariff, while limiting the competition he faced from the informal *tabac canadien* trade. He did so using similar methods to the experts explored earlier in the dissertation, appealing to the categories of good and

[38] "Les droits sur le tabac," *L'Étoile du Nord*, 23 mars 1893; 'Une injustice du tariff: la question du tabac," *L'Étoile du Nord*, 30 mars 1893 "Cottam," *Essex Free Press*, 19 March 1897.
[39] *Report of the Royal Commission on the Relations of Labor and Capital in Canada, Evidence, Quebec* (Ottawa, A. Senecal, 1889), 91-128. See also Bettina Bradbury, *Working Families: Age, Gender, and Daily Survival in Industrializing Montreal*, (Toronto: McClelland and Stewart, 1993), 130, 135-136.
[40] J.M Fortier, Memorandum to His Excellency the Governor in Council, RG 20-A-1, Vol. 1152, File 5021, National Archive.
[41] J.M. Fortier Memorandum.

bad tobacco that people like Dugas or Charlan relied on when they sought to develop tobacco cultivation.[42] Fortier's position would be echoed by Imperial Tobacco, which claimed that informal trade "was competing directly and unfairly with manufactured tobacco."[43] He was also bolstered by the testimony of Dr. Bruce Smith before the parliamentary committee investigating tobacco, who claimed that foreign peddlers in Montreal sold tobacco to children, "The Greek who goes around pushing his cart and selling his bananas and his peanuts, at a sly corner may have a cigarette for the little boy that comes around."[44] Such a claim speaks volumes to the flexible definitions of a properly operating market. Such claims of illegitimacy and foreignness impressed that the informal markets were dubious places, outside the good mores of the legitimate channels of trade.[45]

However, Fortier's concept of the tobacco market had a fundamental tension. On the one hand, it relied on the bourgeois definitions of what constituted good tobacco, and it clearly identified his products as falling within that definition and *tabac canadien* as outside.[46] On the other, he identified *tabac canadien* as competing unfairly with his products, since the trade was largely unlicensed. In essence, Fortier asserted that the tobacco sold by farmers was innately inferior to his product, while simultaneously decrying the fact that it was in competition with his product. Only by calling on government to acknowledge and regulate the proper channels of tobacco manufacturing, from farmer to manufacturer, thereby limiting how the tobacco market was defined, could Fortier reconcile this tension.

This effort to define the tobacco market in a more narrow sense had precedent. In 1876, a group of manufacturers calling themselves the Tobacco Association of Canada, which had both Ontario and Quebec members, also called for licensing farmers who sought to sell their tobacco directly to the market. Like Fortier, they too sought to couch their appeal in a way that cast them as friendly

[42] Brazilian manufacturers in the state of Bahia used a remarkably similar criticism to deride the small scale production of farmers in that area, as an effort to impose more control in the area. See Michiel Baud and Kees Koonings, "*A lavoura dos pobres*: Tobacco Farming and the Development of Commercial Agriculture in Bahia, 1870-1930," *Journal of Latin American Studies*, Vol. 31 (1999): 310-311.
[43] Rudy, *The Freedom to Smoke*, 118.
[44] Canada, "Select Committee on Cigarette Evils," 71. Despite his opposition to cigarette sales to minors, Smith also asserted that a man could smoke a cigarette with no great harm.
[45] The persistence of these informal markets was not confined to tobacco. See Rosemary E. Ommer and Nancy J. Turner, "Informal Rural Economies in History," *Labour/Le Travail*, Vol. 53 (Spring 2004): 127-157.
[46] On this, I follow Rudy's formulation of how these categories were defined, *The Freedom to Smoke*, chpt 3.

towards farmer interests. They did so by casting the informal market where *tabac canadien* circulated as a contraband market, where farmers were obliged to "accept a price which does not remunerate him[.]" However, "were the growth of the article placed on a proper basis, the grower could put his product in the market and get a fair value in cash for it…instead of, as at present, having to dodge from store to store and accept any offer he can get for it."[47] Further, the pamphlet argued, selling tobacco on a "proper" basis would ensure that the government would receive the duties and revenues that should accrue from the sale of tobacco. One of the authors of this appeal, the manufacturer A.D. Porcheron, would later circulate a pamphlet to Quebec farmers in an effort to encourage improved curing practices. He ended the pamphlet by restating the argument that government regulation was required to ensure that the quality of tobacco would improve.[48]

To reformers like Porcheron and Louis Labelle, the early tobacco reformer, the taxation regime established by the government was not merely a revenue-generating tool, but a means to ensure that the modern tobacco sought by experts came to fruition. For instance, he rallied against the vibrant leaf tobacco trade that proliferated in Montreal, calling for the imposition of a one hundred dollar licence on each hawker in the city.[49] Labelle's concern emerged from his convictions that since farmers were able to find ready buyers for tobacco of bad quality, their incentive to improve their practices diminished. Nevertheless, the government, aware of strong local opposition to any imposition of taxes on the raw leaf trade in Quebec, demurred from acting for decades—political calculus interfered with expert-defined economic rationality. For instance, efforts to raise a tax on raw leaf in 1920 led to a series of petitions from municipal councils in Montcalm, l'Assomption, Laval, and Missisquoi objecting to the measure, and the government did not pursue the matter.[50] During the Depression, the raw leaf trade continued to factor as an important part of Quebec's tobacco market. According to T.J. Major of the Tobacco Division, in 1932 some ten to twelve million pounds of raw leaf tobacco were being sold in Quebec for somewhere between ten to fifteen cents per pound. In his report, he impressed that "the government had no contact with it [the raw leaf] at all."[51] An informal and free market for tobacco would persist right through until

[47] Tobacco Association of Canada, "Serious Loss of Revenue to the Country," 1876, 7, (CIHM 24673).
[48] A.D. Porcheron, *Traitement et culture du tabac canadien*, (Montreal, 1882), 21.
[49] L.V.L[abelle], 'Le tabac Canadien en Feuilles et ses défants," *L'Étoile du Nord*, 13 mars 1890; see also his "A propos de tabac," *L'Étoile du Nord,* 3 avril 1890.
[50] For the petitions, see RG17, Vol. 1361, File 271152, LAC.
[51] Report on Canada in the "Tobacco Federation of the British Empire: Tobacco Notes No. 12," RG17, Vol. 3277, File 164 1.1, LAC.

1940, when the federal government imposed a tax on the trade.[52] The longevity of this trade speaks to the gradual and uneven process of tobacco modernization that vexed creating any clear tobacco market solely defined by market channels shaped though government regulation.

The persistence of an informal trade complicated questions of tobacco quality, a question intimately bound to both the economics of the tariff and the cultural construction of taste. In the House of Commons, questions arose about whether Canada could ever produce a tobacco that would be worth protecting. For instance, in 1900, the Nova Scotia Liberal MP Joseph Gilles moved to reduce the "high duties" on tobacco products. Echoing the arguments of William C. Macdonald, that famous critic of Canadian tobacco, he contended that the Canadian climate made it impossible for Canadian farmers to raise a crop that would be "equal in quality to the foreign leaf." Sir Henri Joly de Lotbinière, a tobacco smoker himself, hotly disputed the charge, declaring, "If there is any industry in this country which deserves encouragement, it is the cultivation of Canadian tobacco. I know of none which has a better future."[53] The Liberal government also countered allegations that their duty raised the price of tobacco for consumers by noting that the tariff actually lowered costs for products made from Canadian leaf. The South Essex M.P., Mahlon Cowan, argued that, thanks to the increased production of Empire Tobacco, an ATCC-owned firm that specialized in Canadian leaf products, consumers could enjoy pipe or plug tobacco for 30 cents per pound less than the equivalent product made by Macdonald Tobacco. Returning to the question of quality, Cowan stated: "I am not going to say that we can produce tobacco of the fancy types for cigars, or the finest Virginia leaf, but…nine-tenths of the tobacco brought into the Dominion from the United States, can be produced to an equal, if not greater state of perfection than it can be in the United States." On this question, Cowan cited the opinion of several manufacturers and industry people, including William T. Gregory. He also noted that the industry organ, the *Canadian Cigar and Tobacco Journal*, which had denounced the tariff in 1897, now ran editorials celebrating the advancement of Canadian tobacco farming and acknowledging the value of the tariff.[54] Canadian tobacco meeting cultural expectations of good tobacco validated the tariff, and reports of both

[52] Rudy, *Freedom to Smoke*, 118-119.
[53] Canada. *House of Commons Debates*, 7 March 1900, 8th Parliament, 5th Session, 1499, 1509.
[54] The lengthy speech was published for circulation in a pamphlet, *Speech of M.K. Cowan, Esq., M.P. South Essex, on Canada's Tobacco Industry*, 1900 (CIHM 91421)

farmers and manufacturers demonstrating support for the tariff appealed to Laurier and the liberal interest in class harmony.

Farmers and manufacturers who grew and used Canadian leaf saw the 1897 tariff as merely a start. Appeals continued for further protection, particularly because the American tariff on tobacco, in all forms, remained consistently higher than Canadian tariffs. The amount of protection required remained an active issue right through World War One, and farmers made frequent calls for more protection.[55] The strong tobacco farmer support for tariff protection of their industry cut against the typical role farmers had in discussions of protectionism during the early 20th century. Generally, historians broadly see farmers as opposed to tariffs because of the high prices they generated for farming equipment and manufactured goods.[56] The fact that tobacco farmers, along with sugar beet farmers, benefited from tariffs enforced the Liberal position during its 1905 Tariff Commission hearings. As Louis Audrey Wood noted in his classic study of farmers' movements, "the case of tobacco growers of southern Ontario was singled out by them [the Tariff Commissioners] as offering an exceptionally good example of protectionism operating with successful results in the agricultural industry."[57] Indeed, the Commission, headed by Minister of Finance Fielding, had to insist to a tobacco farmer delegation that the farmer calls for greater protection were extraordinary and unwarranted.[58]

In 1908, the government sought to justify their protective tariff and signal that Canadian leaf was on par with foreign leaf by harmonizing excise stamps. They decided to create a uniform excise stamp for manufactured products, rather than having different stamps for products made from Canadian, mixed, and foreign tobacco. Farmers had called for a uniform stamp, contending that the green stamp used for tobacco products made from Canadian leaf had encouraged continued prejudices against their tobacco.[59] There was national agreement amongst farmers for the need to

[55] See reports of these movements in 'Le tabac canadien,' *L'Étoile du Nord*, 3 mars 1904; 'Town and Country,' *Essex Free Press*, 1 December 1905; 'Tobacco Men's Large Order,' *The Globe*, 23 November 1905; 'No Tobacco Reform,' *Leamington Post*, 18 April 1907.
[56] For farmer protests against the tariff in Ontario, see Kerry Badgley, *Ringing in the Common Love of Good: The United Farmers of Ontario, 1914-1926*, (Montreal and Kingston: McGill-Queen's University Press, 2000), 54-67.
[57] Louis Audrey Wood, *A History of Farmers' Movements in Canada: The Origins and Development of Agrarian Protest, 1872-1924*, (Toronto: University of Toronto Press, 1975 [1924]), 243.
[58] 'Tobacco Men's Large Order,' *The Globe*, 23 November 1905.
[59] On negative associations with the Canadian green stamp, see Rudy, *Freedom to Smoke*, 87. The stamp came into effect in 1897.

create a uniform stamp, though their rationales varied. In B.C., where there had been some foray into cigar tobacco around Kelowna, farmers complained about the impact of the stamps. In 1905, farmer C.S. South wrote a long letter on the topic, which was forwarded to the Minister of Agriculture, Sydney Fisher. Smith noted, "Prejudice has stamped all cigars made in factories working under the Combination + all Canadian licenses as inferior + instead of assisting to advertise domestic leaf, they in reality condemn it. This prejudice is due to the fact that the leaf grown in certain parts of Eastern Canada is rather rank + unsuited for use as Cigar tobacco, consequently all domestic tobacco is unfairly classified as inferior."[60] He argued the stamp structure discouraged manufacturers from using Canadian leaf, contributing to the fact that only one manufacturer (presumably Empire) used it to any great extent, leading to monopoly. By creating a uniform stamp, the government effectively denoted that Canadian tobacco was of the same value and quality as foreign (particularly U.S.) tobacco. However, as South's reference to "rank" eastern Canadian tobacco suggests, the stamp issue reveals the persisting difficulty of regulating tobacco in an abstract sense because people had different tastes and different expectations of the Canadian farmer's ability to cultivate tobacco, and tobacco still circulated in informal markets.

Despite his reference to "certain parts" of Eastern Canada, South's position was shared by Quebec growers who specialized in cigar and pipe leaf. In 1907, a group of about two hundred Quebec tobacco farmers took the trip to Ottawa to call for a uniform stamp. Likewise, in January 1908, a group of Essex tobacco farmers also called for a uniform stamp.[61] The matter rankled farmers, as stern comment from the *Leamington Post* suggests: "Is there any country or nation under the broad canopy of heaven that places the stamp of interference on the product of the Brain and Brawn of its citizens?…In this respect also Canada stands alone, ridiculously among the nations of the earth."[62] This was but the strongest in a series of editorials in papers calling for the removal of the differentiated stamps. One, from the *Windsor Evening Record*, noted that even a delegation of Montreal-based manufacturers called for the removal of the differentiated stamps, indicating that

[60] C.S. South to Hewitt Bostock, 11 March 1905, RG 17, Vol. 999, File 180368, LAC. See also A.G. Smith to C. South, 18 March 1905, in the same collection.
[61] "Délégation de Planteurs de Tabac à Ottawa," *L'Étoile du Nord*, 31 janvier 1907; "Tobacco Growers Meeting," *Essex Free Press,* 31 January 1908.
[62] 'Shorter Catchism," *Leamington Post*, 18 April 1907.

the movement had broad support.[63] By linking the question of stamps to their work, farmers sought to adjust how the government defined the tobacco market and called for them to value their work and expertise on an equal playing field with foreign tobaccos.

Lingering prejudices against Canadian tobacco presented some opposition to this call. Some cigar manufacturers worried that a uniform stamp would disrupt the association between their product and fine Cuban tobacco, and western cigar makers protested that they did not have access to Canadian leaf in the way that their eastern counterparts did.[64] Further, the Cigar Maker's International Union sent a letter to George Foster, the Conservative M.P. for North Toronto, contending that the uniform stamp would encourage manufacturers to mix foreign and domestic leaf, which they claimed would be "inimical to our interests as cigarmakers."[65] Like farmers who appealed to their understanding of tobacco through their physical contact with the crop, cigar makers also appealed to a ready-at-hand relationship they held with the leaf. Clearly, they were not as convinced as farmers that Canadian tobacco was up to snuff. During a time when the skill of cigar makers in Canada was being challenged by scab labour and mechanization, the ability to define good tobacco was not simply a question established by market demand, but shaped by the conflicting interests of those who derived their livelihood from the leaf.[66]

Nevertheless, support for the abolition of multiple stamps was potent enough to spark legislative action. The Minister of Interior Revenue, William Templeman, introduced an amendment to the Inland Revenue Act in the spring of 1908. In advancing the amendment, Templeman largely drew on the arguments made by farmers and manufacturers, noting that because of the stamps, "Canadian tobacco has suffered serious disadvantage."[67] F.O. Dugas, the Montcalm M.P., linked the removal of the different stamps to a broader narrative of Canadian development, arguing grandiosely, "If we can contribute our little mite to the upbuilding of Canada by assisting in the

[63] "Tobacco Men's Complaints," *Windsor Evening Record*, 19 January 1907. See also "Voice of the People," *Windsor Evening Record*, 6 February 1907; "Tobacco Acreage Must be Greatly Reduced," *Leamington Post*, 28 March 1907; "Urges Uniform Stamp and High Duty," *Kingsville Reporter*, 27 February 1908.
[64] Rudy, *Freedom to Smoke*, 62-62; see also "Tobacco Stamp Legislation," *Leamington Post*, 16 January 1908; "The Forest City, Cigar Manufacturers Objections to Uniform Stamp," *The Globe,* 22 February 1908; "Tell 'Em by the Smell," *The Globe*, 19 March 1908.
[65] Canada, *House of Commons Debates*, 10th Parliament, 4th Session, 9 April 1908. Foster was also one of the M.P.s who pushed for anti-cigarette legislation.
[66] Cooper, *Once a Cigar Maker;* Rudy, *Freedom to Smoke*, 55-59.
[67] Canada, *House of Commons Debates*, 10th Parliament, 4th Session, 9 April 1908, 6487.

creation and development of a leaf tobacco industry within our Dominion, that will supply the greater proportion of the tobacco requirements of our people and give that much more wealth to our farmer, is not our duty clear?"[68] Dugas drew on reports from the *Canadian Cigar and Tobacco Journal* that noted the steady improvements in Canadian tobacco, drawing together the project of modern tobacco cultivation and the development of Canada. Endorsement from both manufacturers and farmers made it simpler for the Liberals to create uniform stamps, which also had the benefit of not raising prices for consumers. The appeals were sufficient, and the amendment passed.[69] In establishing a uniform excise stamp for tobacco sold by manufacturers, the Canadian government indicated that any tobacco sold through the channel of farmer to manufacturer was of broadly equal quality, and M.P. A.H. Clarke used the measure to claim that the Liberal government helped to add value for the Canadian tobacco farmer.

During the second reading, questions of cigarettes and health emerged simultaneously alongside discussion of tobacco quality, even as Prime Minister Laurier sought to distinguish the two topics. He stated, "This Bill is for the purpose of readjusting the excise duties upon tobacco, and has absolutely no connection with the question that has now been brought before the House [Blain's anti-cigarette legislation]."[70] In so doing, Laurier sought to reposition the discussion of tobacco to the terrain of the empirical, morally neutral market—this is why health questions, which, as we saw, were intimately bound to questions of morality, had "absolutely no connection" to discussion of excise taxation on a market product.[71] This is, however, a very selective neutrality because government decisions to adjust the stamping of tobacco products were bound to both social redefinitions of good tobacco and moral appeals to the imperatives of national development. The realities of the tobacco trade undermined the idea of the neutral market, even as the government deployed the concept.

With the tariff in place, the stamp made uniform, and the sale to children barred, the government had established the broad contours of the Canadian tobacco trade. Canadian tobacco steadily

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[68] Ibid, 6499.
[69] On the specific changes, see Bill No. 143, "An Act to amend the Inland Revenue Act," in *Supplement to the Canada Gazette,* 9 May 1908.
[70] Canada, *House of Commons Debates*, 10th Parliament, 4th Session, 9 April 1908, 6497.
[71] On the 'moral market,' which liberal political economists struggled to reconcile with social concepts around religion and patriotism, see G.R. Searle, *Morality and the Market in Victorian Britain*, (Oxford: Oxford University Press, 1998). See also Wallerstein, *Centrist Liberalism Triumphant, 1789-1914*, 243-251.

increased its place in domestic manufacturing, with its usage accelerating sharply during the 1920s. In 1921, 35.5 percent of domestic tobacco production used Canadian leaf. By 1931, that proportion had increased to 55.9 percent. Throughout, manufacturers of pipe tobacco, then cigars, and lastly, cigarettes used the highest proportion of raw Canadian leaf. In 1933, Canadian tobacco reached another milestone when manufacturers used Canadian leaf for over 50 percent of all pipe, cigar, and cigarette production. Notably, between 1921 and 1936, the federal government received anywhere between 25 to 42 million dollars in tax revenues from tobacco.[72] However, this growth, while generally positive for Canadian tobacco farmers, still presented serious challenges, as tobacco production and prices fluctuated considerably during this period. To give just one example, flue-cured tobacco prices in Ontario could be as high as 45 cents per pound and as low as 16 cents at points between 1921 and 1932.[73]

Farmers and government alike hoped that Imperial preference would mitigate the worst effects of the fluctuating tobacco market. Imperial preference itself was a multifaceted phenomenon predicated on several factors, including British interest in securing economic self-sufficiency through its Empire, debates within Britain over the merits of free trade, and the desire to preserve the last vestiges of British hegemony. From the Canadian side, Imperial preference, which had entered the trading vocabulary since the Colonial Conference of 1897, had always been a mixture of response to American tariffs and efforts to ensure continued access to the British market. The actual performance of Imperial preference was generally mixed, since the United States continued to grow as Canada's major trading partner, and historians have generally found a gulf between the effusive praise for Empire and Commonwealth that dignitaries offered following preference arrangements and the actual impact of preference.[74] In 1919, the British government decided to provide tobacco from the Empire with a preferential tariff rate, providing imperial exporters with a 1/6th tariff rebate in 1919, and increasing that rebate to 1/4th in 1925.[75] The preferential rates were

[72] All statistics from Tobacco Division, Department of Agriculture, "Statistics Relative to the Tobacco Industry," (Ottawa, 1936), Canadian Agricultural Library.
[73] Tait, *Tobacco in Canada*, 72; Tobacco Division, *Interim Reports*.
[74] See John Herd Thompson, "Canada and the 'Third British Empire,'" in Phillip Buckner, ed., *Canada and the British Empire*, (Oxford: Oxford University Press, 2010); C.P. Stacey, *Canada and the Age of Conflict*, (Toronto, University of Toronto Press, 1984), 52-57; Steven E. Lobell, "Second Image Reversed Politics: Britain's Choice of Freer Trade or Imperial Preferences, 1903-1906, 1917-1923, 1930-1932," *International Studies Quarterly*, Vol. 43 (1999): 671-694.
[75] "Empire Tobacco," *Tobacco Trade and Review*, Vol. 58 No. 690 (1 June 1925), 21.

reconfirmed for a ten-year term following the 1932 Ottawa Conference.[76] These rates ensured that the British market functioned as the primary export market for Canadian farmers.

Penetrating the British market was more than an economic goal—there remained considerable cultural pressure to prove to the discerning British smoker that Canadian tobacco was worthy of their lungs. This desire manifested following Médéric Foucher's success at the London Indian and Colonial Exhibition of 1886.[77] It also appeared in several government reports that continuously impressed that Canadian tobacco and Canadian packing standards were not up to British standards. Implicit in all of those reports was the idea that British standards were the best yardstick for measuring Canadian progress.[78] The British market held several appealing qualities. Farmers saw the British market as a potential alternative if ATCC/Imperial offered poor prices—the first spike in interest came in 1899, following a couple years of disappointing prices.[79] However, efforts to connect to the market did not begin in earnest until the 1920s, following the establishment of Imperial preference. As with North America, cigarette consumption rose steadily in Britain, overtaking the pipe market in 1919. Britons rapidly became prolific cigarette consumers—a report from Tobacco Division member T.J. Major reported that they smoked 1,460 cigarettes per capita annually, compared to 374 cigarettes in Canada.[80] Thus, supplying that market with modern, Canadian flue-cured tobacco proved an irresistible opportunity.

Selling to the notoriously fussy British smoker both validated and challenged the broader Canadian tobacco improvement project. This was a challenge—one tobacconist in the London Borough of Southwark dismissively described Empire leaf as "absolutely rubbish."[81] Tobacconists interviewed by T.J. Major during his time in Britain were more diplomatic, noting that Canadian flue-cured tobacco had a distinctive "tang" that smokers did not always welcome.[82] A brief

[76] "British Tobacco Preference Stabilized at Present Figure," *The Simcoe Reformer*, 25 August 1932.
[77] See chapter one.
[78] See F. Charlan, "Canadian Tobaccos in England," Memo for Experimental Farms, July 1920, RG17, Vol. 2833, File 273572, Microfilm T-6992, LAC; T.J. Major, "Market for Canadian Tobacco in Great Britain," Dominion Experimental Farms Branch, Tobacco Division, 1929, Canadian Agricultural Library.
[79] "Kingsville," *Essex Free Press*, 15 September 1899; "Tobacco Growers Meeting," *Leamington Post*, 5 January 1899.
[80] Hilton, *Smoking in British popular culture, 1800-2000*, 85; T.J. Major, "Market for Canadian Tobacco in Great Britain," Dominion Experimental Farms Branch, Tobacco Division, 1929, Canadian Agricultural Library.
[81] "Tobacco Leaves," *Tobacco Trade and Review*, Vol. 59, No. 707 (1 November 1926), 27.
[82] Major, "Market for Canadian Tobacco in Great Britain." This position was also impressed by the Agricultural Product Representative for Canada in Great Britain in a letter, see W.A. Wilson to Deputy Minister of Agriculture Grisdale, 5 May 1928, RG17, Vol. 3277, File 164-1.1, LAC.

Godfrey Phillips campaign for Canadian Club cigarettes—a cigarette made entirely of Canadian leaf—advertised to prospective buyers that their smoke lacked that "tang." Evidently, smokers were not convinced, as the product quickly disappeared after its introduction in 1931.[83] Because of the difficulty that Empire producers had in reproducing the mild smoking leaf made in the United States, tobaccos from the Empire, including those of Canada, India, Zimbabwe, and Malawi continued to be associated with cheap brands through the 1930s.[84]

The Tobacco Federation of the British Empire emerged in an effort to combat this perception. Formed in 1928, the Tobacco Federation sought to bring together producers from throughout the Empire, including Canada, India, Malawi, Zimbabwe, and North Borneo in an effort to market their product to the British market. In a memo outlining its formation, its first chairman, Harold Pooley, noted the need for "the education of the public" concerning the taste of Empire leaf.[85] In a speech to the organization, W.A. Wilson, trade representative for Canadian agricultural products in Britain, argued that Canadians, with help from American experts, had overcome the challenges of soil and climate:

> "Soil and climatic conditions in Canada closely approximate those in the best tobacco growing areas in the United States and for growing successfully, both pipe and cigarette tobaccos, but more especially the former. In British Columbia there has been opened an area where leaf of quality, equal if not superior, to the best Virginia, has been grown… [Canada has seen] a veritable invasion of experienced tobacco farmers from the tobacco growing states in America because of the greater advantage they foresee for their efforts in view of the new marketing situation which is developing in the United Kingdom."[86]

[83] "British Tobacco Without the Tang," *Tobacco Trade and Review*, Vol. 64 No. 763, (1 July 1931), 47; see also "Purely Canadian Tobacco Received," *The Simcoe Reformer*, 17 December 1931; "Company News: Godfrey Philips Ltd.," *Tobacco Trade and Review*, Vol. 65 No. 772, (1 April 1932), 33.
[84] "Tobacco Consumption: Increase of 'Empire' Smoking, Pipe and Cigarettes," *Tobacco Trade and Review*, Vol. 61, No. 729, (1 September 1928), 22; "Empire Tobacco and Gift Schemes," *Tobacco Trade and Review*, Vol. 69, No. 817 (1 January 1936), 16.
[85] Harold T. Pooley, untitled memo, 28 April 1928, RG17, Vol. 3277, File 164-1.1, LAC.
[86] W.A. Wilson, "The Empire Tobacco Industry," Conference Paper given on 11 September 1928, RG17, Vol. 3277, File 164-1.1, LAC.

The Tobacco Federation of the British Empire celebrated the Ottawa Agreements as a triumph, arguing that they both acted as an impetus for Canadian exports to Britain and as a validation of the improved quality of Empire leaf more broadly.[87]

These arguments had some effect. Canadian tobacco exports to Britain increased considerably during the period of protection, moving from 236,039 pounds to 6,228,243 pounds between 1920 and 1928, constituting practically all of Canadian leaf export.[88] Nevertheless, as is often the case with Imperial preference, results were mixed for Canadian farmers. In 1934, for instance, Canada exported over 7.5 million pounds of tobacco to Britain. However, amongst British Empire producers this put them behind India, Zimbabwe, and Malawi. In the same year, the United States, the tobacco that Canadians so sought to emulate, exported over 128 million pounds of tobacco to Britain.[89] "Virginian" tobacco, a term used to broadly define American bright leaf tobacco, remained so entrenched in the British market that a tobacconist was taken to court in 1941 over his use of the term to describe an Empire-based product.[90] In the British market, Virginian tobacco functioned as a potent idiom that denoted quality to the exclusion of other producer nations. Despite the arguments of bodies like the Tobacco Federation, American tobacco retained its idiomatic position as the superior leaf, while Empire came to be associated with cheap smokes, and it was difficult for Canadian tobacco interests to break this association.

Imperial preference illuminates both the capacity and limits of tariffs to shape markets, and the strong relationship between trade policy and cultural perception. Without Imperial preference, Canadian leaf sales to Britain would likely have taken even longer to come to fruition, given that there had been several abortive efforts to sell to the British market since the late 19th century. Efforts to expand Canadian exports to Britain were in many ways a simple matter of suppliers trying to locate demand. However, as the discussion on tariffs from 1897 onwards suggests, these decisions were never simply matters of economic rationality. Rather, they were bound to an array of socially and culturally influenced decisions and perceptions, such as the creation of a uniform stamp to demark Canadian tobacco's improvement. Likewise, British Imperial preference was not just an economic policy, but also an effort to confirm the continued relevance of the Empire

[87] "Tobacco Federation of the British Empire: Tobacco Notes No. 24," RG17, Vol. 3277, File 164-1.1, LAC.
[88] Major, "Market for Canadian Tobacco in Great Britain."
[89] "The Board of Trade Returns," *Tobacco Trade and Review*, Vol. 67 No. 804 (1 December 1934).
[90] "In the Law Courts," *Tobacco Trade and Review*, Vol. 74 No. 886 (1 October 1941), 22.

following a war that marked the beginning of the end of British global influence. This desire can be seen in the "Buy British" campaign, particularly encouraged by Imperial Tobacco of Great Britain and Ireland, which incorporated all of Empire production into a broadly conceived "British" identity.[91] The formation of the Tobacco Federation of the British Empire also spoke to the dual interest in encouraging economic growth and appealing to a broader imperial identity. However, this identity—and this market—was increasingly precarious. The Buy British campaign did not last long, and the Tobacco Federation often lacked for funds.[92] Tariffs could spark and shape development, and governments could denote the best channels for market operations, but they could never fully define the tobacco market.

Commissions and Monopolies

The presence of the American Tobacco Company of Canada/Imperial Tobacco contributed to debates over foreign influence in Canadian market operations. The scope of these companies was such that newspaper and government reports, along with parliamentarians, routinely referred to them as a combine, trust, or monopoly. The company's power was indeed significant: by 1929, Imperial Tobacco was Canada's seventeenth largest non-financial corporation, based on assets, just ahead of Massey-Harris and the Hudson's Bay Company.[93] At different points, critics of the companies sought to demonstrate that, far from being a mostly independent subsidiary, the ATCC and Imperial were simply taking marching orders from American or British overseers. While almost all commentary acknowledged that ATCC/Imperial had considerable market power, the consequences of their market share were in dispute.[94] To what extent did the presence of an American, and then British-American company, with perceived monopolistic tendencies, disrupt

[91] On the campaign, see "'Buy British' Campaign in England," *The Lighter*, Vol. II, No. 1 (January 1932), 2; "The Imperial Tobacco Co. of Great Britain and Ireland," *Tobacco Trade and Review*, Vol. 65, No. 771, (1 March 1932), 18.
[92] On Canada's limited financial contributions, see Lord Strathcarron to Deputy Minister Grisdale, 15 September 1936, RG 17, File 164-1.2, LAC.
[93] Graham D. Taylor and Peter A. Baskerville, *A Concise History of Business in Canada*, (Oxford: Oxford University Press, 1994), 312.
[94] According to estimates during the 1902 Royal Commission, the American Tobacco Company of Canada controlled around 78 to 80 percent of the burgeoning cigarette trade. In 1930, as Imperial Tobacco of Canada, they continued to control about 90 percent of the cigarette market. See Testimony of Mortimer B. Davis, *Royal Commission re the Tobacco Trade of Canada*, (hereafter RCTTC), pg. 1043, RG 13-A-2, Vol. 2317, File 1903-349, LAC; Marc Choko and Joanne Burgess, *Imperial Tobacco 1908-2008: Passion and Innovation*, Trans. Kathe Roth, (Montreal: Imperial Tobacco Canada, 2008), 105.

the 'natural' workings of the marketplace?[95] The government had considerable stake in this question, for it was their regulation of cigarette sales and their tariff barriers that had largely defined the chain that connected farmer to manufacturer. Nevertheless, the difficulty in answering this question limited the scope of government action against the firms, though government took some measures to disrupt their operations following inquiries.

The question of monopolies emerged in 1895, when the American Tobacco Company entered Canada through purchase of the Montreal cigarette manufacturer D. Ritchie and Company. D. Ritchie attracted interest because of their use of the cigarette making Bonsack machine, the same machine that contributed to the rise of the American Tobacco Company.[96] The firm further expanded through the purchase of Empire Tobacco, a Granby company that had specialized in making plug tobacco from Canadian leaf, in 1898. Empire continued to operate as a separate firm for a period; it also existed as a means for American owners to take advantage of the 1897 tariff.[97] The American Tobacco Company formed in 1890, following a period of rapid expansion by James Buchanan Duke's American Tobacco, itself buoyed by use of the Bonsack machine and aggressive advertising. The new American Tobacco Company, a product of a merger between five tobacco firms, quickly validated its label as the Tobacco Trust through rapid consolidation of the tobacco market, particularly the cigarette industry. The firm also became noteworthy for its vertical integration, developing highly sophisticated leaf purchasing and sales departments that sought to control both raw material and the sale of their products.[98] The extent to which the American Tobacco Company was able to centrally coordinate its strategies in its New York office has recently been challenged, but the broad point that Duke's company became a central player in the

[95] To be clear, neither the ATCC nor Imperial was ever a monopoly (or a monopsony) in the strict sense of the term, since other buyers always existed in the marketplace. This section more interrogates the rhetoric of monopoly than the question of whether or not the company was a monopoly in a technical sense.

[96] Rudy, "Manufacturing French Canadian Tradition," 215; Joanne Burgess, "Davis, Sir Mortimer Barnett," in *Dictionary of Canadian Biography*, Vol. 15, University of Toronto/Université Laval, 2003. American Tobacco also purchased the smaller American Cigarette Company.

[97] Howard Cox, *The Global Cigarette: Origins and Evolution of British American Tobacco*, *1880-1945*, (New York: Oxford University Press, 2000), 31; Choko and Burgess, *Imperial Tobacco Canada*, 52.

[98] The story of the rise of James Buchanan Duke's American tobacco empire is widely documented. Relevant literature includes Maurice Corina, *Trust in Tobacco: The Anglo-American Struggle for* Power, (London: Michael Joseph, 1975); Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business,* (Cambridge, MA: Harvard University Press, 1977), 381-391; Robert Sobel, *They Satisfy: the Cigarette in American Life*, (Garden City, NY: Anchor Press, 1978); Howard Cox, *The Global Cigarette: Origins and Evolution of British American Tobacco*, (New York: Oxford University Press, 2000), chpt 2; Brandt, *The Cigarette Century*, chpt 1.

Anglo-American tobacco market by the early 20th century remains intact.[99] Duke was a ruthless competitor, regardless of the game. He had no qualms in casting aside four different partners during his involvement in the Saguenay River hydro development.[100]

From 1895 onwards, most Canadian tobacco production was inextricably linked to an American, and then Anglo-American tobacco empire. In 1902, following a period of intense competition between the American Tobacco Company's British subsidiary, Ogden's of Liverpool, and an alliance of British manufacturers who organized under the Imperial Tobacco of Great Britain and Ireland label, the British and American interests formed British-American Tobacco (BAT).[101] BAT's primary objective was to carve a global tobacco empire between the American and British firms—the ATC had interests in Japan, China, Australia, Germany, and Canada, while the firms that formed Imperial Tobacco held interests in South Africa and India. When BAT formed, the ATC and Duke were the prime movers: "its £6 million authorized share capital was divided in the ratio of 2:1 in favour of the American parent."[102] When the U.S. federal government broke up the ATC using the Sherman Act in 1911, the relative power shifted towards the British companies. By 1914, 70 percent of BAT shares were in British hands.[103]

BAT's influence was evident when the American Tobacco Company of Canada reorganized into the Imperial Tobacco Company of Canada in 1908. Mortimer Davis remained the chairman of the newly reorganized firm, remaining in this position until 1926. Sir Hugh Cunliffe-Owen, who served on the first board of BAT and who assumed control of the corporation in 1923, served as Vice-Chairman. Eight of the fifteen board members of the new Canadian firm were BAT officials.[104] Through BAT, the Imperial Tobacco Company of Canada made lasting links to British investors and capital. These links were made abundantly clear by the share subscription list Imperial provided to the Royal Commission of Price Spreads in 1933 (a list the company wished

[99] Leslie Hannah, "The Whig Fable of American Tobacco, 1895-1913," *The Journal of Economic History,* Vol. 66 No. 1 (2006): 42-73.
[100] David Massell, *Amassing Power: J.B. Duke and the Saguenay River, 1897-1927*, (Montreal and Kingston: McGill-Queen's University Press, 2000), 188.
[101] The five founding firms of Imperial Tobacco of Great Britain and Ireland were W.D.& H.O Wills, Hignett Bros., Lambert & Butler, John Player & Sons, and Stephen Mitchell & Son.
[102] Cox, *The Global Cigarette*, 77.
[103] Cox, *The Global Cigarette,* 123.
[104] Cox, *The Global Cigarette*, chpt. 9; Subscription List for Imperial Tobacco Company of Canada, Ltd., October 1908, Legacy Tobacco Documents Library, http://legacy.library.ucsf.edu/

to remain private). In that year, the company had 16,325 shareholders. Of these, 12,319 were residents of Great Britain, constituting 84.4 percent of the shareholders, and 3,571 were Canadian residents, constituting 13.31 percent of the shareholders. Further, British residents controlled 97 percent of the preferred shares. Meanwhile, Americans held only 1.47 percent of the shares in the firm, though they did provide a large number of the expert employees for the firms.[105] Such a shareholder list undoubtedly contributed to the general perception that Great Britain was the natural market for Canadian tobacco exports; capital flowed west across the Atlantic, and product flowed east. Despite this tie, both historian Howard Cox and the Imperial Tobacco Company history assert that Davis (and his successor, Gray Miller) largely possessed day-to-day operational independence.[106] This is entirely possible. Because Imperial Canada was a profitable and dividend generating operation, its British shareholders were likely satisfied with limited intervention.

Government and producers alike were more concerned about the effect of ATCC/Imperial in the Canadian market than they were over exactly who controlled the stocks and operations. When the federal government launched investigations of the ATCC/Imperial as part of inquiries into the tobacco industry in 1902 and 1928, and through the broader Royal Commission on Price Spreads, much of the investigation orientated around the question of monopoly and how monopolies subverted both the operations of supply and demand and the intent of the government tariffs, engineering unfair conditions for producer and consumer alike. This line of inquiry forms an important continuity between the three investigations, with the Price Spreads commission producing the most pointed critiques of Imperial's operations.

The first such inquiry, the 1902 Royal Commission regarding the Tobacco Trade in Canada, headed by the Carleton County court judge D.B. McTavish, emerged in large part due to diverging opinions over what constituted a properly functioning marketplace. The testimony during the commission bears close investigation because it spends well over one thousand pages discussing the specific operation of the tobacco market. Under the terms of the investigation, McTavish was to

[105] Brief from Imperial, Royal Commission on Price Spreads, RG33-18, Vol. 37, LAC.
[106] Cox, *The Global Cigarette*, 249; Choko and Burgess, *Imperial Tobacco Canada*, 76.

> inquire into and report…concerning an alleged exclusive contract system adopted by the [ATCC] and [Empire]; the object and effect of which is alleged to be to prevent those who deal in…goods…supplied by these companies from selling the goods of other manufacturers, thus creating a monopoly, which seriously affects the interests, not only of the other manufacturers, but also of the growers of tobacco…[107]

The commission travelled to several places, including Toronto, Montreal, Joliette, and Saint John, collecting evidence from wholesalers, retailers, company heads, and farmers about the nature of the contract system used by ATCC and Empire.

The core complaint arose from the fact that these contracts offered by the firms provided the product sellers a six percent commission if the consignee agreed to handle cigarettes from ATCC exclusively. A similar arrangement existed for the Empire products made from either Canadian leaf or a combination of Canadian and foreign leaf. According to the plaintiffs, a number of tobacco manufacturers including Fortier, and the Hamilton-based Tuckett Tobacco, the terms of the ATCC/Empire contract effectively choked off competition because retailers and wholesalers came to rely on the six percent commission brought from selling ATCC/Empire products exclusively in order to make a profit on their tobacco sales. The ATCC agreement for cigarettes was Canada-wide, while the Empire agreement for leaf tobacco products was confined to Ontario and Quebec. According to the Order that appointed the commission, these sorts of contracts were problematic because "the proprietors of these [competing tobacco] factories find themselves unable to distribute their products through the *natural channels* and largely shut out from the markets as a result of the system referred to, which thus tends to create monopoly."[108] The question of "natural channels" is what detains us here, for it appeals to the notion of an ideal market in which goods "naturally" flow from producer to consumer. According to multiple testimonies, wholesalers usually functioned as the natural or legitimate conduit that linked producer and consumer. In this sense, a monopoly is disruptive, for it unduly concentrates goods. However, metaphors obscure as much as they reveal—the testimonies before the commission reveal more varied understandings of the market than a term like natural channels suggests.

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[107] *Report of Commissioner (Judge McTavish) in re the Tobacco Trade of Canada*, (Ottawa, S.E. Dawson, 1904), 3.
[108] *Royal Commission re the Tobacco Trade of Canada*, (hereafter RCTTC), pg. 2, RG 13-A-2, Vol. 2317, File 1903-349, LAC. My emphasis.

The multiple understandings of a properly functioning marketplace emerge in the divergent testimonies of James F. Smyth, a Windsor wholesaler, and his former partner, Robert Pinchin. During his testimony, Pinchin, who joined the small Leamington-based Consumers Tobacco Co. following his split with Smyth, made several appeals to the idea of natural channels. Smyth had agreed to enter into exclusive contracts with ATCC and Empire after Pinchin left. Pinchin recounted his reasons for rejecting Empire's contract when he worked in wholesale, noting, "I did not think that that by barring these companies [i.e. companies other than Empire] from the legitimate channels of distribution it was in the interest of the tobacco business to sign such a contract."[109] When O.E. Fleming, who represented "other tobacco interests," sought more detail about whether the contract "shut off the natural channels of trade," Pinchin contended that the contracts effectively barred production from the Consumer Tobacco Co. from reaching the market.[110] When the lawyer representing ATCC and Empire in the hearing, C.S. Campbell, pressed Pinchin on the idea of legitimate channels, Pinchin replied that since being "forced out of the proper channels," his firm had to rely on smaller jobbers. For him, the problem in this was that "Nearly all our jobbers are retailers…We cannot draw the line between the jobber and the retailer, because they are nearly all retailers that handle our goods."[111] Here was the rub—the clear defining line that linked manufacturer to retailer, the wholesaler, had become muddled. The "natural channel" became obstructed.

Pinchin's erstwhile partner, James Smyth, saw no particular issue with his decision to contract with ATCC and Empire. He was relatively pleased with the commission that the exclusive contract offered. Further, and anticipating ATCC arguments, Smyth denied that a wholesaler is entirely necessary, and that some retailers prefer to get their products directly from manufacturers. He argued, "[retailers] like their neighbours to think they have an advantage in being able to buy from the factories."[112] Smyth found himself in the awkward position of simultaneously supporting the idea that his wholesale concern constituted a natural channel of commerce while insisting on the fact that other tobacco concerns could sell their products directly through retailers without disadvantage. Despite the tension, Campbell sought to demonstrate that the networks of retailers

[109] Testimony of Robert Pinchin, RCTTC, 111.
[110] Testimony of Robert Pinchin, RCTTC, 114.
[111] Testimony of Robert Pinchin, RCTTC, 127.
[112] Testimony of James Smyth, RCTTC, 84.

and jobbers functioned as an adequate substitute for firms that found themselves contracted out of access to the larger wholesalers. He exploited this line when he examined the Ontario representative for the Montreal-based B. Houde company, Frank Dimock. Campbell asked whether, given that the natural channels of the wholesaler were closed, the firm was able to "open new channels." Dimock, was obliged to say that they had.[113] Pointing to these alternative channels indicated by Smyth and admitted by Dimock allowed the ATCC to contend that, despite controlling many of the natural channels of trade, they were no monopoly.

Despite the access to jobbers, several other firms contended that ATCC/Empire constituted a monopoly. Joseph Picard of Rock City Tobacco, a firm established in Quebec City in 1899, contended that Empire's exclusive contract on Canadian leaf products entirely blocked their product from Ontario. For Picard, the situation was an injustice because the firm had been launched in part due to the government tariff: "We though [sic] that after the tariff on the raw leaf was changed that there would be a great future for Canadian tobacco."[114] Essentially, Picard contended that since the government shaped the tobacco market through tariff policy, they had an obligation to ensure that Canadian firms had an opportunity to access it.

J.M. Fortier was one of the earliest and fiercest critics of the combine. In 1897, he initiated a proceeding under the Criminal Code to investigate whether Empire Tobacco had formed an illegal combine. Judge Dugas ruled in favour of Empire, finding that their contract offering a bonus for selling their product exclusively, while "very shrewd," still constituted a form of "ordinary competition."[115] Fortier was undaunted. During the commission hearing, after discussing how his access to the wholesale channels was restricted, Fortier expanded his testimony to incorporate a broader discussion of the principles of market operation. In response to a question over whether the American-owned company controlled the trade, Fortier offered an expansive answer that encompassed his understanding of the operation of the American Tobacco Company. He alleged that due to their operations in the United States, middlemen, farmers, and competing manufacturers were being driven out of business. The problem was so bad, he argued, "you might as well have

[113] For instance, during his cross examination of Frank W. Dimock, RCTTC, 259.
[114] Testimony of Joseph Picard, RCTTC, 609-610.
[115] An excerpt of the ruling can be found in Canada, *House of Commons Debates*, 5 August 1904, 9th Parliament, 4th Session, 8545.

La Regie,"[116] (the French government monopoly in tobacco sales). Fortier positioned himself as a champion of competition and free trade. "I think the market should be open so as to let any one that wants to buy cigarettes or tobacco or whatever the article may be buy them wherever he likes. He should be free to make a bargain with a man to sell him his goods… It seems to me that the trade should be open."[117] *The Globe*, which regularly reported on the commission, made particular note of Fortier's testimony, finding that it "corroborated preceding witnesses as to the effects of the contract system."[118] I suspect that the paper found Fortier's hearty appeal to the benefits of free and open competition most palatable.

Another witness who received close attention was, unsurprisingly, William C. Macdonald. Beyond disparaging the possibility of Canadians raising commercial tobacco in the first place, Macdonald offered his thoughts on the nature of the tobacco trade. At the time of the commission, Macdonald did not feel unduly threatened by the American-led interest because he had ruled out using Canadian leaf in his product, thus eliminating all of Empire product lines from directly competing with his imported pipe and plug tobacco, at least in his mind. Further, the ATCC contract referred to cigarettes specifically, a line his firm had not entered.[119] Nevertheless, as Macdonald's biographer observes, the tobacco magnate certainly noted the potential for growing competition from the American-owned firms. When Duke's tobacco concern entered Canada, Macdonald entered into a price agreement with the Montreal Wholesale Grocers' Association, whereas prior to the entry of the ATCC, he had rejected the wholesaler advances.[120]

During his testimony, Fleming sought to establish two points to support the plaintiff position: that Macdonald was the pre-eminent tobacco producer in the country, and that he had achieved this position through competition and use of wholesalers, without means of exclusive contract. Macdonald was something of a dry wit, according to his biographer, which came across in some of his responses and had the effect of rather diminishing Fleming's arguments:

> Q [Fleming]. What would the result be in your opinion if say, for instance, the tobacco trade were in the hands of a monopoly?

[116] Testimony of Joseph Fortier, RCTTC, 1347.
[117] Testimony of Joseph Fortier, RCTTC, 1345.
[118] "Mr. J.M. Fortier's Experience with the Tobacco Monopoly," *The Globe*, 15 November 1902.
[119] Rudy, *Freedom to Smoke*, 113.
[120] Fong, *Sir William C. Macdonald*, 98-102.

A [Macdonald]. It would be very profitable for the monopolists.

Q. We will take it from the standpoint of the insterests of the country?

A. That would depend entirely on the course or procedure of the monopolist. If he wished to work for the benefit of the country he could do so; if he worked entirely for his own interests, he would take another course.[121]

Later in the testimony, Fleming sought to orientate the question around the matter of price and fair competition. However, this line of inquiry yielded few results for him:

Q. The matter of competing as to the price you sell your goods at and whether you can sell lower than your competitor; that is fair competition in trade?

A. What is fair competition?

Q. When you can sell at a lower figure than your competitor; the man who can see lower is competing with his competitors in business—that is considered a fair feature of competition?

A. It is vry [*sic*] hard to define what is exactly fair as far as competition is concerned—it is very difficult indeed.[122]

Fleming attempted to orientate the question directly around the wholesale contracts drawn up by ATCC, but even here, Macdonald gave little succour:

Q. Would you think that if, we will say the American Tobacco Co. had entered into an agreement with the wholesale trade of Canada whereby the wholesale trade agreed to handle their goods exclusively, to the exclusion of yours, we will say, would that be a fair competition?

A. If the merchant who buys and the merchant who sells make an agreement between themselves and under the law of the country, I do not see that I could take any exception to it.[123]

[121] Testimony of Sir William C. Macdonald, RCTTC, 1178. On his humour, see Fong, *Sir William C. Macdonald*, 249.
[122] Testimony of Sir William C. Macdonald, RCTTC, 1201
[123] Testimony of Sir William C. Macdonald, RCTTC, 1202.

Finally, in the last questions during Macdonald's examination, the tobacco magnate gave Fleming a more helpful response. When Fleming asked why Macdonald had never used exclusive contracts, he replied:

> I want to be free myself and I want the man who buys from me to be free too. I don't want to rope him in and tie him to me. I want to be independent myself and I like him to be independent. That is one of the reasons why I did not want to fix any price for the selling of my goods. I want the merchant who buys it who pays for it to do as he pleases—throw it into the river if he likes, give it away if he likes."[124]

Even this reply, which at least allowed Fleming to end on a positive note, had its limits because it was difficult to correlate Macdonald's appeal to the broad and abstract ideals of market freedom to the specific operations of the tobacco marketplace. Macdonald's position that he could not take exception to the contracts, so long as they were legal, punted the issue back to government regulation without offering much in the way of legislative redress because he did not provide any specific ways to regulate contracts. His replies were problematic for Fleming because they introduced ambiguity in an issue where the lawyer representing the petitioners required certainty. For the petitioner case, monopolies were destructive because they disrupted the natural channels of commerce. Intentionally or not, Macdonald opened space for a different reading.

The cross-examiner representing ATCC/Empire, Senator Frédéric L. Béique, took advantage of this space to create an alternative reading of a properly functioning marketplace by impressing the consequences of excessive competition.[125] He pressed Macdonald on two points; first, that Macdonald had been compelled to sell his product at below-cost prices during periods of high competition, and secondly, that Macdonald himself had eliminated competition through consolidations and price competition. During the examination, Béique noted that Macdonald had purchased firms owned by Porcheron and by Paegaels and Ferguson, "for the purpose of closing [them]."[126] Béique also noted that Macdonald (along with Hamilton-based Tuckett tobacco) entered in a fixed-rate scheme with wholesalers, though Macdonald contended that he was not

[124] Testimony of Sir William C. Macdonald, RCTTC, 1202.
[125] Béique had been involved in another high-profile debate over the need for government regulation as a key shareholder of the Montreal-based Royal Electric, there, he also emerged as an opponent of municipal regulatory efforts. See Armstrong and Nelles, *Monopoly's Moment*, 77.
[126] Testimony of Sir William C. Macdonald, RCTTC, 1187-1188.

particularly enamoured with the wholesale scheme, and it was not one that relied on exclusive contracts.[127] By pressing this line of inquiry, Béique sought to transmogrify what the plaintiffs saw as a distortion of the "natural" workings of the market and competition into perfectly natural market operations in Canada with a long precedent.

Mortimer Davis, the head of the alleged distortion, sat through the longest testimony during the commission hearings. Predictably, Davis was a difficult witness, combative with his answers and reticent with his documents. Over the course of his two-day examination, he had plenty of time to offer perspective on what constituted a good market. He defended ATCC and Empire's operations on several grounds. First, he contended that wholesalers and jobbers had requested exclusive contracts, and he disputed the characterization of wholesale as a natural channel. Secondly, he sought to distill the matter to being not one of market manipulation, but of simple supply and demand. Thirdly, he contended that his company had worked to improve the status of Canadian leaf tobacco through its marketing and sales. Finally, he argued that the company was taking full and legitimate advantage of the government tariff by encouraging the sale of Canadian-made products. The ways in which Davis disputed alternative understandings of the natural workings of the market further demonstrate that identifying exactly what was natural about the tobacco market and to what the optimal outcomes of the government tariff policy were remained a near-impossible task.

Davis' first line of attack, that it was indeed wholesalers and jobbers who requested the contracts, was in many ways the most damaging for the petitioners' case. It cut against the government Order for the commission, which specifically pointed to the fact that the ATCC was unduly preventing other manufacturers from accessing the "natural channels" of trade. For instance, Davis argued, "[Wholesalers] did not want to be troubled with the goods of other manufacturers that were on their shelves and that were not saleable. The fact of the matter is that they wanted to give us the exclusive business."[128] He was able to draw on the testimony of other wholesalers, particularly that of Thomas B. Escott of London and that of James Smyth, in making this claim.[129] This was a particularly sharp line, since it appealed to the abstract idea of supply and demand as the best form

[127] Testimony of Sir William C. Macdonald, RCTTC, 1189.
[128] Testimony of Mortimer Davis, RCTTC, 1109. He makes a similar argument on pages 1064 and 1083.
[129] Escott does indeed claim that his contract with Empire allowed him to carry fewer lines of tobacco at greater profit. See Testimony of Thomas Baker Escott, RCTTC, 217-220.

of market discipline—the other company's tobacco was not selling. Davis pushed further on this point, noting, "as a matter of fact the distribution is really all regulated by the demand from the consumer."[130] Essentially, Davis was turning the petitioner argument on its head; it was they, and not his concern, who sought to disrupt the laws of the market and take unfair advantage of the government tariffs.

Davis also sought to re-characterize the tobacco market by denying the instrumental role of wholesalers in distributing tobacco. In so doing, he anticipated the later position wholesaler merchants found themselves in, as growing department stores and chains gradually reduced the wholesaler market share.[131] When Fleming asserted in a question that wholesale constituted the natural channel of trade, Davis contended, "The modern channel for reaching the retail trade is for the manufacturer to go direct to the retail trade and not have a distributer at all; that is the natural channel."[132] Davis' slippage between modern and natural is interesting, for it makes a claim about change over time and efficiency—the concept of a market's natural channel is historically contingent and debateable. For Fleming, a natural channel was one that facilitated access for multiple manufacturers, who could use a network of wholesalers to distribute their wares. For Davis, a natural channel was one that facilitated his definition of modernization, which meant getting goods as rapidly as possible to retailers, cutting out the wholesaler. Modernity, for Davis, was consumption orientated in the sense that he sought market chains that did not necessarily benefit multiple manufacturers, but ones that moved product to consumers efficiently.

Davis drew on the persistence of small, informal markets to clarify his view of the transition from peddling, to wholesale, to direct links between manufacturer and retailer. In reality, Davis' position was manifestly shaky because he was obliged to admit that by primarily distributing ATCC and Empire products through wholesalers and jobbers, they did business "the old-fashioned way."[133] However, such a method of distribution was preferable to the alternative, even older model of sale, which was to "go ourselves and peddle at our product like the local manufacturers of Quebec

[130] Testimony of Mortimer Davis, RCTTC, 1110-1111, a similar argument is made on 1118.
[131] On the decline of wholesaling, see David Monod, *Store Wars: Shopkeepers and the Culture of Mass Marketing, 1890-1939*, (Toronto: University of Toronto Press, 1996), 260-261. Michael Bliss also briefly notes the role of Eaton's in undercutting wholesalers in his *Northern Enterprise: Five Centuries of Canadian Business*, (Toronto: McClelland and Stewart, 1987), 360.
[132] Testimony of Mortimer Davis, RCTTC, 1138.
[133] Testimony of Mortimer Davis, RCTTC, 1136.

do."[134] Positioning his firm as the one that drove the next stage of product distribution, Davis implicitly cast his firm as the agent of change and modernization. Davis confessed that his method of distribution was not fully modern because they still required an old-fashioned intermediary, the wholesaler. However, he insisted that his concern certainly would not stoop to "peddling," a term that seems deliberately chosen because of its connotative connection to *tabac canadien*, that archaic tobacco that circulated in the untaxed informal market. This easy designation of peddled tobacco as innately inferior and bound to the past speaks volumes about how social conceptions fundamentally shape the market, for as Rudy shows, the debasing of *tabac canadien* was in many ways a social and cultural act. It seems probable that Davis did not knowingly stage his firm in such a way—the categories of "modern" and "old-fashioned" are naturalized as self-evident in his usage—he does not take time to define them. Nevertheless, the effect was to position the growth of his firm as equivalent with progress, defined through more rapid connection between manufacturer and consumer. Contracts that provided retailers with commissions for selling ATCC/Empire products, in this way, were not a disruption of a natural channel, but the forging of a new natural channel.

This notion of ATCC/Empire as progress is further developed by the argument that his firm had done more than any other to promote the development of Canadian tobacco cultivation. This argument, similar to those deployed by corporate experts, aligned the combine's interests with those both government and farmers. Davis argued that when the ATCC bought out Empire Tobacco in 1898, the previous owner, John Archibald, had developed only the "nucleus" of a trade in Canadian leaf in Ontario.[135] Davis linked both his use of exclusive contracts and coupons, which could be redeemed for prizes to the broader development of Canadian tobacco cultivation. He argued, "we give to the customer the protection which the Government has given to us. The trouble with most manufacturers has been that they tried to keep the protection the Government gave them and put it in their own pockets and not in the pockets of the consumer."[136] During the closing arguments, the ATCC representatives observed how improving Canadian tobacco was actually a company accomplishment, citing Macdonald's opinion of Canadian tobacco as evidence.[137]

[134] Testimony of Mortimer Davis, 1173.
[135] Testimony of Mortimer Davis, RCTTC, 1135.
[136] Testimony of Mortimer Davis, RCTTC, 1559-1160.
[137] Mr. Campbell's Argument, RCTTC, 1534.

Fleming received this argument with due skepticism, and in the closing arguments, the petitioners maintained that the ATCC contracts were almost identical to that of the ATC in the United States, raising the bugbear of powerful American interests dominating the Canadian market.[138] However, given that the preeminent Canadian tobacco producer, William Macdonald, had failed to use Canadian-raised leaf, the ATCC/Empire argument had merit.[139] Exclusive contracts or no, the reading that the combine aligned with government policy in forming a Canadian leaf market through tariff policy was available.

The difficulty of disentangling government from corporate policy ultimately limited Judge McTavish's space to implement changes. For the thousand plus pages of testimony, McTavish's report was a mere eight pages long, and three of those were filled with a replication of the ATCC and Empire contracts. McTavish hedged his bets with his findings. He argued that there was little evidence that farmers were receiving lower prices for their tobacco, most wholesalers seemed satisfied with the condition of their contracts, and consumers were not seeing higher prices for product. He did admit that the other manufacturers were having difficulties accessing wholesale networks, which he described as "the highway between the manufacturer and the consumer."[140] Clearly, he had not entirely bought Davis' argument about the evolution of natural channels through the omission of wholesalers. Ultimately, he found that while a contract system was in place, and that system placed competing firms at a disadvantage, the system was legal in both common and statutory law. For McTavish, any changes to "legislative control over the freedom of contract" were entirely at the discretion of Parliament, and he offered no particular recommendations in this regard.

In 1904, in response to persisting pressure from other manufacturers and farmers who continued to insist that they received unfairly low prices, the governing Liberals took action on the McTavish invitation. The Minister of the Interior, Louis-Philippe Brodeur, introduced an amendment to the Interior Revenue Act that would allow his ministry to cancel the license of any company that excluded the sale of like goods from other companies, or would make terms that would "deprive

[138] Mr. Goldstein's Argument, RCTTC, 1453.
[139] The Conservative M.P. for Cornwall-Stormont, R.A. Pringle, impressed this point when opposing legislation targeting the ATCC/Empire. See Canada, *House of Commons Debates*, 5 August 1904, 9th Parliament, 4th Session, 8547.
[140] *Report of Commissioner*, 9.

the purchaser any profit upon the sale of such goods" if other company goods were sold. In essence, it reduced the ability of ATCC/Empire to enforce the elements of the contract that reduced commissions for retailers who failed to sell their products exclusively. In introducing the amendment, Brodeur claimed that such legislation "has been asked for by almost all the tobacco growers of this country."[141] In the political forum, and in contrast with both the earlier and later Liberal association with free trade, Brodeur particularly emphasized the foreignness of the combine, characterizing their expansion as an "invasion," and thundering "Here is a monopoly which is controlling the market in the United States; we should not permit that monopoly to exist in this country."[142] Many Conservatives, including Frederick Monk and Robert Borden, did not object fundamentally to the proposal, though they raised issues concerning the timing of the amendment, which Brodeur introduced in early August just before an election. The opposition also objected to the power the amendment gave to the Minister of the Interior.[143] The amendment passed relatively easily, and the entire scheme occasioned only minimal comment from *The Globe*.[144] Despite the legislation, ATCC's successor Imperial Tobacco remained as powerful as ever, organizing with an authorized capital of eleven million dollars in 1908 and reorganizing with an authorized capital of almost forty million in 1912.[145]

The government launched a smaller commission to inquire into the Canadian tobacco industry in 1928. Led by E.S. Archibald, the director of the Dominion Experimental Farms, the federal government, through the Department of Agriculture, initiated the Tobacco Inquiry Commission as a response to complaints amongst farmers contending that they were unable to attract remunerative prices for their production because of Imperial's market power.[146] The committee was considerably more limited than the 1902 investigation, and largely concerned itself with producing a fact-finding report that clarified market demand. Indeed, the commission concerned itself more with dispelling the notion that the British market possessed an unlimited demand for quality

[141] All quotes from Canada, *House of Commons Debates*, 4 August 1904, 9th Parliament, 4th Session, 8393.
[142] Canada, *House of Commons Debates*, 4 August 1904, 9th Parliament, 4th Session, 8394, 8399.
[143] For instance, Monk raises this objection, see Canada, *House of Commons Debates*, 4th August 1904, 9th Parliament, 4th Session, 8413.
[144] "Tobacco Monopoly," *The Globe*, 14 July 1904. See also "Trust will Reform," *The Windsor Daily Record*, 8 September 1904.
[145] "Imperial Tobacco Company of Canada Limited re. Enquiries Regarding Capital Etc.," Royal Commission on Price Spreads Evidence, RG 33-18, Vol. 37, LAC
[146] *Report of the Tobacco Inquiry Commission, March 1928*, 1, RG17, Vol. 3228, File 164-3-2, LAC; see also "Tobacco Growers Aroused over Price Reduction," *Leamington Post and News*, 3 November 1927.

tobacco, a notion that they feared was spreading amongst Ontario farmers, than it did with redressing specific farmer anxieties.[147] Ultimately, the commissioners broadly dismissed the idea that a combine existed, noting that while thirty-eight of the one hundred and three people who spoke before the commission felt there was some sort of combine, they were unable to produce evidence to that affect. Farmer difficulties in precisely measuring their costs also worked against them, because the commission was entirely committed to assessing the market quantitatively, which was in line with the evolving use of metrics and data as means for adjudicating the need for government intervention. Because farmers could not produce precise costs or exact evidence of combines, the commissioners underlined, "There is no evidence to prove that companies in any way attempted to control normal competition."[148] In lieu of precise evidence to the contrary, the committee asserted that a slump in prices was a product of both overproduction and disputes that had erupted because of the rapid decline of the Canadian Tobacco Growers Cooperative Company Ltd of Kingsville.[149] The Commission's major significance lay in the fact that its understanding of evidence aligned neatly with Imperial Tobacco's interests.

The depths of the Great Depression, filled as it was with tangible, immediate suffering, challenged the government position that sought to align producer and manufacturer interests by calling for measurable improvements to agricultural methods that contributed to a smooth relationship between supply and demand. In 1934, R.B. Bennett's ambitious minister of trade and commerce, Henry Herbert Stevens, began to position himself as the champion of small retailors and producers—though he seldom bothered consulting with representative groups like the Ontario Retail Merchants Association.[150] The wide publicity of a speech Stevens gave in Toronto decrying the influence of combines and mass marketing forced R.B. Bennett's hand, and the Prime Minister reluctantly named the popular Stevens the head of a committee to investigate the spread between the costs of commodities for the consumer and the price received by producers.[151]

[147] *Report of the Tobacco Inquiry Commission*, 8.
[148] *Report of the Tobacco Inquiry Commission*, 80. Such a benign view was typical of attitudes towards combines and mergers during the 'merger mania' period of the late 1920s in Canada, when no firms were formally investigated under the 1923 Combines Act, see Traves, *The State and Enterprise*, 82.
[149] *Report of the Tobacco Inquiry Commission*, 81.
[150] Monod, *Store Wars*, 288.
[151] Monod, *Store Wars*, 305-306; Waite, *Searching for R.B. Bennett*, 183-184.

Newspaper reports seized on discussion during the Price Spreads Commission that highlighted the discrepancy between the prices farmers got for tobacco and the wages workers made for manufacturing the tobacco on the one hand, and the profits that Imperial Tobacco were making on the other. The *Globe* reported that the committee members were "shocked" by the salaries and bonuses that Imperial officials received. [152] For instance, the recently retired D.C. Patterson, who succeeded Mortimer Davis as president of Imperial in 1926, received $25,000 in salary and $61,253 in bonuses in 1930 (a total of $1,219,171 of remuneration in 2014 dollars).[153] Further, Imperial's corporate reports indicated that the firm continued to prosper in the midst of the Depression. For instance, in 1933, the company reported net profits of $5,670,176.[154] Such reports were grist for Steven's populist mill, who championed the broad sentiment that big business were squeezing small producers and retailers out of the picture with restrictive trade practices. Appeal to market rates had little currency during a period of widespread suffering.

The commission compelled Imperial Tobacco (along with numerous other companies, such as Eaton's) to produce memos outlining their operations. Gray Miller, who succeeded D.C. Patterson as Imperial's president in 1933, sought to demonstrate that their company was not a monopoly, that they paid a fair price for leaf tobacco, and that they sold their products at a reasonable cost. On the issue of monopoly, Imperial presented figures demonstrating that they did not have control over the leaf trade. Calculating their total purchase of flue-cured tobacco against the total production of flue-cured leaf between 1924 and 1933, they found that their company controlled anywhere between a low of 33.2% and a high of 84.7% of the crop in a given year, and that the firm tended to establish price precedents that were used by other leaf buying companies.[155] Their calculations did not, however, account for the percentage of tobacco cultivated that remained unsold, and so their percentages likely represent an underestimate of the market control they possessed. The memo also noted that producer interests expressed concern that they controlled a large share of the export trade through their British Leaf Tobacco Company subsidiary. Far from

[152] "Huge Bonuses for Imperial Tobacco Officials: President's Salary More than Doubled by Extra Payments," *The Globe*, 9 May 1934; 'Imperial Tobacco Makes $1,375,000 Profit from an Investment of $25,000," *St. Thomas Times Journal*, 3 May 1934; 'Price Spreads Committee Resumes Investigation," *Tillsonburg News*, 10 May 1934.
[153] "Imperial Tobacco Company of Canada Limited Salaries and Bonuses to Chief Executives," Royal Commission on Price Spreads Evidence, RG 33-18, Vol. 37, LAC. Calculation for 2014 dollars is an estimate provided by the Bank of Canada inflation calculator, http://www.bankofcanada.ca/rates/related/inflation-calculator/
[154] "Imperial Tobacco Company of Canada, Ltd.," *Moody's Industrials*, *1934*, 2095.
[155] "Brief from Imperial," 21, Royal Commission on Price Spreads Evidence, RG 33-18, Vol. 37, LAC. The mean percentage is 63.98%.

encouraging a monopoly, the brief argued, their British leaf purchasing interest worked to expand the demand for Canadian leaf to the benefit of all concerned because it worked within the spirit of Imperial preference.[156] The argument had similarities to Empire Tobacco's position decades earlier that their work fostered a new and vibrant commercial tobacco industry in Canada.

Imperial's second strategy sought to neutralize moral concerns over their profits and the prices they paid by insisting that they were working within the spirit of the tariff structure and abiding by the laws of supply and demand under the tariff. They contended that the tariff imposed by the Canadian government, coupled with the high prices of the late 1920s, encouraged "speculators" to grow flue-cured tobacco in order to turn a quick profit. Intriguingly, and perhaps aware of the political dangers of targeting small farms, they described large landowners with several tenants and corporate plantations as the worst offenders in this regard.[157] Imperial contended that this expansion in production occurred despite multiple warning from their agents, such as Francis Gregory, that demand was depressed.[158] In a subsequent memo, the company further defended their profits as being both a reasonable reflection of market demand and a product of the capital they invested, an argument that evoked the idea of a businessman's right to a living profit.[159] Finally, the company used global prices, particularly those of the United States, to demonstrate that Canadian prices were consistently higher, concluding that Imperial thus conducted business fairly.[160]

While retreating to the typically safe ground of numbers and measurement, Imperial also acknowledged there were justifications for government intervention. They called for the government to set minimum prices for tobacco products in order to ensure that retailers and wholesalers received a fair cut. Demonstrating some anxiety over the ramifications of perfect competition, the Imperial brief also warned that without price controls, the company would be compelled to enter into a rigorous price competition with its competitors, risking "thousands" of retail and wholesale positions.[161] This call indicated that the Canadian tobacco market still relied

[156] "Brief from Imperial," 37.
[157] "Brief from Imperial," 16-19.
[158] "Brief from Imperial," 23-28.
[159] Gray Miller to R.B. Hanson, 15 May 1935, Royal Commission on Price Spreads Evidence, RG 33-18, Vol. 37, LAC; Traves, *State and Enterprise*, 98.
[160] "Brief from Imperial," 12.
[161] "Brief from Imperial," 82-84.

on wholesale; Davis's "modern" market had yet to be achieved. On the production side, Imperial called for the government to rigorously license the production of flue-cured tobacco by issuing licenses for producers, giving preference to growers who had already grown tobacco, and then issuing new licenses to growers only if the price paid for tobacco "is not less than the comparable price paid to cultivators in the United States."[162] Targeting the long-disliked raw leaf trade, Imperial also called for any tobacco sold for consumption to fall under the auspices of the Excise Act, and for any farmer who breached the conditions of their license to have it rescinded. In essence, Imperial Tobacco made the case that there were no problems on the demand side—their firm generated prices based on domestic and export demand and offered prices based on basic market principles of supply and demand. However, they did not extend the same confidence that the supply side would adhere to these principles without direct government intervention. After all, farmers and farm owners ignored warnings in newspapers about the dangers of overproduction. For Imperial, there was plenty of evidence from other alleged monopolies, such as telephones, to suggest that government regulation would not necessarily be damaging to their operations.[163]

In many cases, the final report of the Royal Commission on Price Spreads mitigated Stevens' populist rhetoric celebrating the virtues of the small producer and was a relatively tame document. After all, Bennett had removed Stevens from the commission chair, replacing him with the more conciliatory William Walker Kennedy. There were a few changes, such as amendments to the Criminal Code making illegal loss-leading and territorial price differentials designed to ruin competitors.[164] However, even moderated, the tobacco industry received special opprobrium. The section on tobacco began:

> Perhaps the clearest example of exploitation of the primary producer that came before us was that provided by the relationship between the tobacco manufacturers, especially the Imperial Tobacco Company of Canada, Limited, and the tobacco grower during the period preceding 1934. This example also provides an excellent instance of the degree to which a

[162] "Brief from Imperial," 31.
[163] Armstrong and Nelles, *Monopoly's Moment*, 185-186.
[164] Monod, *Store Wars*,317.

> monopolistic buyer can disturb the ordinary workings of economic law in the fixation of prices.[165]

The report further alleged that Imperial took advantage of the "imperfect information" possessed by producers to gain an undue advantage, and that Imperial exploited the tariff for their own ends by charging high prices for their manufactured goods, since they enjoyed a measure of protection from imported tobacco products.[166] This imbalance in information was suggested by government comparison of Imperial's estimated prices and actual prices paid to farmers during the 1931 season. While some farmers received the estimated prices, dozens of those recorded received hundreds, or even over one thousand dollars less from the company than the estimated value of their crop.[167] The government regulation of the tobacco market that extended back to their 1897 tariff and excise stamp policy provided justification for intervention.

The report made it clear that Ontario farmers were the unfortunate victims of corporate manipulation. Concerning Quebec farmers, the report was considerably more willing to attribute the decline in prices for pipe and cigar tobacco to declining demand more than to monopolistic power. To blame were the lower quality of production and the persisting presence of the informal market, both trends at odds with a proper form of agricultural development.[168] The Commission had barely considered the conditions of Quebec agriculture—the main files on the matter collected by the commission were a series of petitions from farmers calling for the continued exemption of raw leaf tobacco from the Excise Act. 1731 farmers, as well as hundreds of small merchants and consumers, had signed petitions calling for the continued free trade of raw leaf.[169] The commissioners largely ignored the petitions in their findings and breezily dismissed Quebec tobacco as inferior, thus failing to fulfill demand. Such a dismissal demonstrates how cultural assessments of Quebec tobacco informed the government understanding of the tobacco market. The government position regarding the informal trade again confirmed that their regulation was, despite the Price Spread report, hardly contrary to corporate interests.

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[165] *Report of the Royal Commission on Price Spreads*, 147.
[166] *Report of the Royal Commission on Price Spreads*, 147.
[167] "Comparison of Prices Estimated with Prices Paid 1931 Buying of J.B. Wilson, Imperial Tobacco Co.," Royal Commission on Prices Spreads Evidence, RG 33-18, Vol. 37, LAC.
[168] *Report of the Royal Commission on Price Spreads*, 151
[169] "List of Petitions Protesting Against the Imposition of an Excise Tax on Leaf Tobacco," Exhibit No. 120, Royal Commission on Price Spreads Evidence, RG 33-18, Vol. 62, LAC.

Unsurprisingly, Imperial Tobacco found the report objectionable. Gray Miller penned a complaint that could be made by a Quebec farmer when he wrote, "The final report…insofar as it concerns the tobacco industry, is full of inaccuracies and many of the findings are not supported by the evidence, while others deal with matters into which little, if any, investigation was made."[170] Miller alleged that the report failed to consider Imperial's evidence of their efforts to reduce the supply, and argued that the profits Imperial made, which he estimated as a nine percent return on their capital investments, were hardly exorbitant. Lester B. Pearson, who had worked for the commission as a clerk, disagreed with Miller's position. In a letter to R.B. Hanson, the minister of trade and commerce, Pearson noted, "The figure, 9%, given by the Company itself would seem to be a fairly high one for a period of such widespread economic distress," though he acknowledged that it was also the case that the value of Imperial's assets had been artificially inflated through watered stock.[171] Pearson's objection denoted a limit to the government's commitment to abstraction and measurement as the best means to determine market return, particularly during the end of Bennett's time in office when the limitations of market correcting itself were becoming increasingly apparent.

By the time the Royal Commission on Price Spreads issued its report, Imperial Tobacco acquiesced to government intervention via the Natural Products Marketing Act. During the House of Common debates over the merits of the act, Humphrey Mitchell, who at the time sat as an Independent Labour M.P., directly cited Imperial Tobacco's practices as evidence of "rugged individualism" in the market run amok. Summarizing his support for the act, he argued, "I believe the state has some responsibility in this regard; it has some responsibility in protecting the weaker against the stronger."[172] It was in this spirit that Ottawa approved the formation of the Ontario Flue-Cured Marketing Board under the auspices of the Natural Products Marketing Act on 26 September 1934.[173] The final report of the Price Spreads commission argued that flue-cured tobacco farmers were in a particularly weak position because the nature of the soil that the farmers were on. As it

[170] Gray Miller to R.B. Hanson, 15 May 1935.
[171] "Comments on Memorandum of Imperial Tobacco Company," 15 May 1935, Royal Commission on Price Spreads Evidence, RG 33-18, Vol. 37, LAC.
[172] Canada, *House of Commons Debates*, 8 May 1934, 17th Parliament, 5th Session, 2908.
[173] "Ottawa Approves Tobacco Marketing Board," *The Simcoe Reformer*, 27 September 1934. Two other early farm groups to organize under the board included the Export Apple and Pear Growers (Fruit Board of Canada) and the Western Ontario Bean Marketing Board. Ontario, Legislative Assembly, Sessional Papers, "Report of the Minister of Agriculture for the Year Ending October 31, 1934," Vol. LXVII, Part V, No. 21, (1935): 98-99.

noted, "The land that can be utilized for production is limited; substitute commodities are virtually non-existent, and foreign competition is not important."[174] While the formation of the Board can be seen as a strike against Imperial Tobacco, we have also seen that in the midst of the Depression, the company did not necessarily oppose price stabilization measures. Indeed, in a public letter to tobacco growers, Gray Miller encouraged growers to join and support the Board, arguing "Imperial Tobacco Company are equally desirous to-day as they have been in the past, that fair prices be paid to the producers…but, in the absence of some scheme of orderly marketing, particularly where production exceeds demand, as in the past, fair prices are not always attained."[175] There remained, as we will see, considerable room for debate over what constituted a fair price. Nevertheless, the letter reveals that stability, with its positive cultural connotations, became the new watchword that governed the proper operation of supply and demand.

Conclusion

The formation of the Ontario Flue-Cured Marketing Board constitutes a capstone of government oversight over the tobacco market. The Board reformed in 1936 as the Flue-Cured Tobacco Marketing Association of Ontario after the Natural Products Marketing Act was ruled *ultra vires* by the Judicial Committee of the Privy Council. As this chapter has sought to demonstrate, the government defined the tobacco market throughout the early 20th century. As the interest in Imperial preference demonstrates, this defining relied as much on social and cultural factors as economic ones. The Natural Products Marketing Act was an extension of a long-running trend that extended back to tariffs and cigarette sales. Furthermore, the government had regularly been asked to do so, be it by those concerned about the health risks of tobacco, by farmers looking for protection, by wholesalers who felt powerless against the ATCC combine, or even by Imperial Tobacco itself after it determined that competition threatened to become too destabilizing. The only form of tobacco market that did not seek some form of government intervention, the raw leaf trade that predominated in Quebec, was also the only one that government and industry alike regularly dismissed as illegitimate. Regular government intervention into the tobacco market did little to prevent the rise of the ATCC/Imperial Tobacco, for the company generally succeeded in presenting their operations as being in line with the government desire to create a viable tobacco

[174] *Report of the Royal Commission on Price Spreads*, 152.
[175] "To: The Flue-Cured Tobacco Growers of the Province of Ontario," *The Tillsonburg News*, 11 October 1934.

market that balanced producer and consumer interests. During the Depression, the government became a bit more willing to intervene directly on behalf of producers, as the profits of Imperial could not be defended as representing a reasonable balance between the different tobacco interests. The Board constituted a particularly formal means for arriving at prices, one that seemed to promise a long-term solution to ensuring market stability, incorporating producer and consumer interests that could be bound to predictable prices and manageable supply. However, as we will see, the Board did not manage to align farmer and manufacturer interests to the degree envisioned by government sponsors.

Chapter 6
The Search for Stability: Tobacco Marketing, 1920-1958

Between government regulation and macroeconomic challenges arising from the Great Depression, farmers struggled to define their role within the tobacco market. Farmers had disputes against buyers, but also against themselves, as farmer interests were never as homogenous as the various organizations established by farmers and government officials might have liked. This final chapter focuses on the formation of and disputes within three major tobacco-marketing organizations: the Canadian Tobacco Growers Cooperative Company of Kingsville, the Ontario Flue-Cured Tobacco Growers' Marketing Board, formed in 1934 (along with the succeeding Flue-Cured Tobacco Marketing Association of Ontario of 1936, which largely continued the practices of the Board), and the revived Ontario Flue-Cured Tobacco Growers' Marketing Board of 1957. Considering these organizations facilitates study of buyer and farmer interaction within a tobacco market thoroughly defined by expert knowledge. In a sense, these three marketing schemes, all organized under various federal and provincial legislation, represent the aegis of the idea that interests could be managed by shared interest in modernization, enacted by a rigorous commitment to measurability: minimum average prices for production were set, acreage quotas were enforced, and an extensive grading system was formed to categorize tobacco. The Boards and Association all depended on a degree of cooperation between the farmers and the major buyers, particularly Imperial Tobacco. Through this broader definition of cooperation, there emerged hope that stable prices would characterize the tobacco market. However, as was the case with environmental management, the tools of stabilization and control produced their own instabilities.

The first Board and the Association both depended on rhetoric that foregrounded the need to find fair prices for producers. Frequently, fairness was defined as a paying return on a crop. As Tillsonburg's Mayor Sutch noted in 1933, following a year of low flue-cured prices, "I hope and believe that another year you men are going to have the privilege of saying what your tobacco is worth and that you will receive a fair price--not a ridiculous price, but what is fair and just for the labor you put into the growing of it."[1] This is a good a definition of fairness on the part of producers as any, since it makes an intuitive link between labour and value by making a claim that the farmer's labour is inherently valuable; after all, they produce something that people consume. This

[1] "Mayor Sutch Presides as Tobacco Growers Organize," *The Tillsonburg News*, 16 March 1933.

claim has been an important part of farmer organizations in a variety of sectors and settings, from bananas to peaches, and they are tied to assertions that the produce from the farm is of a marketable quality. Indeed, agricultural cooperative efforts have generally been tied to both concern over producer returns and a desire to market production to consumers.[2] However, tobacco farmers were not always able to make the same claims for their production as farmers in other sectors, for tobacco farming lacked the same romantic, civilizing associations of other crops. Further complicating the issue, fairness could be defined in other ways; farmers who found themselves outside the good graces of the Board or Association often impressed that fairness meant allowing *all* farmers to be able to access tobacco buyers.[3] Fairness was an intuitive word, but it lacked stable meaning.

Orderly marketing and stability were laudable aims, but such aims produce their own tensions. In this case, they were tied to a vision of farming based on high capital costs and requisite specialized knowledge for flue-cured tobacco, which made it particularly amenable to organization based around shared commitment to an expert-driven and market measured understanding of good tobacco. No Board or Association fundamentally challenged the importance of modernization for tobacco growers that government and corporations had been encouraging; they simply sought to ensure that farmers who did modernize through use of chemical fertilizers and flue-curing kilns had a greater voice in the tobacco market. Using acreage quotas to regulate both the quantity and quality of tobacco production in Ontario meant that some farmers, including recent immigrants who were struggling through the Depression, were excluded from selling with the major tobacco buyers. These patterns of inclusion and exclusion reflected the fact that tobacco growing occurred on both large-scale plantations, with loud voices on the Board and Association, and on smaller farms.

Unlike other chapters, this final chapter will focus almost exclusively on Ontario. British Columbia's experiments with flue-cured tobacco cultivation had largely evaporated by World War

[2] On banana farmers making this claim, see Soluri, *Fair Bananas*, 31-33; for apple producers, see Bennett, "Blossoms and Borders," 192; for peaches, see Vaught, *Cultivating California*, 109-110.
[3] On a conceptual framework for competing meanings of fairness, see Elisabeth Valiente-Riedl, *Is Fairtrade Fair?*(Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2013), 6-18. For a similar, if less rigorously delineated discussion of fairness in agriculture, see Henry J. Frundt, *Fair Bananas!: Farmers, Workers, and Consumers Strive to Change an Industry*, (Tuscon: University of Arizona Press, 2009), chpt. 1.

II, with production shrinking to under one hundred thousand pounds.[4] In Quebec, the provincial government encouraged the creation of cooperatives, which constituted an important means for the project of developing a commercially orientated crop, particularly in the burgeoning dairy sector.[5] At the Société coopérative de la vallée de Yamaska cooperative, grading and sorting were cast as a means to ensure that local farmers received their fair price for a quality product. In 1929, local farmers founded the La Société coopérative agricole de tabac du district de Joliette, an organization committed to helping further education on growing cigar and pipe tobacco and create a cooperatively owned processing plant.[6] Another group, the Coopérative des Tabacs Laurentiens, established in 1939, came to control about half of the flue-cured crop in the province by 1947.[7] However, owing in part to provincial government preference for grower cooperatives in tobacco, the Quebec tobacco growers did not establish marketing boards.[8] Further, Quebec flue-cured tobacco production was slight compared to Ontario's; for instance, in 1957, it was 3.7 million pounds, compared to Ontario's production of over 147 million pounds.[9] During this period, the shift towards Ontario's almost total domination of the flue-cured tobacco production was largely complete.

The chapter begins with an outline of the rise and fall of the Canadian Tobacco Growers Co-operative company, which introduces some of the tensions between different farmers and helps explain the collapse of the Old Belt. It then traces the formation and establishment of the Board, which was reformed in 1936 as the Flue-Cured Association under Ontario legislation after the federal Natural Products Marketing Act was ruled *ultra vires* by the Canadian Supreme Court. It demonstrates that disputes that erupted in the 1950s had their origins in the structure of the Association, as many farmers became convinced that the Association was increasingly dominated

[4] Norman A. MacRae, "Canadian Tobacco: Production and Consumption," Foreign Trade Service, Department of Trade and Commerce, (Ottawa, 1947), 5.
[5] David Dupont, *Une brève histoire de l'agriculture au Québec: de la conquête du sol à la mondialisation*, (Montreal: Fides, 2009), chpt. 2; Maurice Doyon, "An Overview of the Evolution of Agricultural Cooperatives in Québec," *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie*, Vol. 50 No. 4 (July 2005), 497-509.
[6] Lafortune, "La société cooperative agricole de tabac du district de Joliette."
[7] Norman A. MacRae, "Canadian Tobacco: Production and Consumption," 5. See also Brouillette et al., *Histoire de Lanaudière*, 399.
[8] This evaluation comes from the President of the Quebec Agricultural Marketing Board, Georges-H. Héon to G.F. Perkin, 18 October 1957, Flue-Cured Tobacco Growers' Marketing Plan, RG 16-250, B352787, File 1.2, Archives Ontario.
[9] Tait, *Tobacco in Canada*, 76.

by an unsavory alliance of corporate buyers and plantation farmers. The conflicts that emerged within the Association are thus suggestive of how elusive stability is; an organization that used two core means to ensure market stability, acreage quotas and minimum average prices that provided a framework for negotiating the sale of their crops, produced its own instabilities as some farmers disputed quotas and minimum prices. In contrast to the governmental preference for natural channels and class harmony, disputes both between classes (producer and manufacturer) and within classes (among farmers) that all took place within the context of modern tobacco agriculture point to the persistence of instability.

Precedent to the Board: The Canadian Tobacco Growers Co-operative Company

The Canadian Tobacco Growers Co-operative Company, based in Kingsville, Essex Co, emerged out of a widely shared sense that farmers were receiving unjustly low returns on their crops. Farmers, who had been receiving up to 30 cents per pound for Burley and 65 cents per pound for flue-cured tobacco during the latter years of World War One were confronting a price drop to a top price of 13.5 cents per pound for Burley and 35 cents for flue-cured.[10] The Kingsville Co-op (as it was colloquially known), established in 1920, confronted many of the problems that vexed tobacco farmers throughout the century: imperfect access to market information for farmers, a sense of Imperial Tobacco dominance of all points of the tobacco commodity chain, including leaf purchasing, processing (destemming), packing and storage, and difficulties with wide swings in tobacco prices. The Co-op sought to solve these problems by creating a farmer-controlled company that would purchase, grade, process, store, and market tobacco on behalf of its members. It also sought to provide its members with access to fertilizers and other tobacco farming equipment, like fertilizer drills.[11] It sold shares at $50 each, and was quite successful in its initial organizing, acquiring a factory for grading, processing, drying, and storing leaf tobacco within six months and attracting some 2100 shareholders by 1921.[12] John Coghill, the Co-op's first president, worked

[10] Since there was no central body monitoring prices, newspapers were the main source for prices, see 'Burley Tobacco Market Opened Monday,' *Leamington Post and News*, 17 October 1918; 'Local News,' *Leamington Post and News*, 7 November 1918; 'Town and Vicinity,' *Essex Free Press*, 28 January 1921; 'Tobacco Prices at Blenheim Disappointing,' *Leamington Post and News*, 17 February 1921.
[11] 'By-Laws of The Canadian Tobacco Growers' Co-operative Company, Limited,' Provincial Secretary's Department Appointments Files, RG 8-28, Box No. 3, B223974, Archives Ontario.
[12] "Memorandum with regard to a request for financial aid from the Canadian Tobacco Growers' Co-Operative Company, Limited, of Kingsville, Ontario." RG 17, Vol. 2833, Microfilm T-6992, LAC; 'Co-operative Co. Controls 10,000,000 Pounds Tobacco,' *Leamington Post and News*, 5 May 1921.

quickly to attract British buyers in order to carve a viable alternative to Imperial, and he claimed to have contracts for some 5 million pounds of flue-cured tobacco, though he had more difficulty offloading Burley.[13]

The Kingsville Co-op is important to the formation of the 1934 Board in three ways. Firstly, it functioned as a way for farmers to discuss options for improving their position in the tobacco commodity chain, setting a precedent for future organization. Secondly, its decline at the end of the 1920s contributed to the decline of tobacco cultivation in Ontario's Old Belt, ensuring that the Board would predominantly feature people living in the New Belt. It emerged during a period of widespread agricultural organization, as farmers throughout the province confronted a postwar collapse in prices. The United Farmer of Ontario Minister of Agriculture, Manning Doherty, reported with pleasure that between 1917 and 1921, some 179 cooperatives, including both retail and producer cooperatives, had been formed in the province.[14] Therefore, thirdly, these cooperatives all contributed to the expansion of provincial capacity to work with farmer organizations through the Ministry of Agriculture's Co-operation and Markets Branch, which issued pamphlets and reports designed to assist the formation of farmer cooperatives.[15] This capacity only further expanded with the organization of agricultural marketing boards under provincial auspices in 1936.

The Kingsville Co-op also anticipated lasting disputes over the ideological underpinning of farmer organization. The cooperative movement broadly had splits between more socialist organizers, like E.A. Partridge, who saw cooperation as a means of encouraging wide spread rethinking of the competitive nature of market exchange, and people like future federal minister of agriculture T.A. Crerar who believed that cooperatives were simply a means of ensuring that farmers received larger returns for their production in a competitive market.[16] As an institution founded on the

[13] 'Co-operative Tobacco Co.,' *Essex Free Press*, 26 November 1920.
[14] "Report of the Minister of Agriculture for the Year Ending October 31st, 1921," *Ontario Sessional Papers*, Vol. LIV, Part VI, 3, 41-42.
[15] See, for instance, F.C. Hart, "Organization of Co-operative Marketing Associations," Ontario Department of Agriculture, Co-operation and Marketing Branch, Bulletin No. 234 (August 1915).
[16] On the many forms of agricultural cooperation, see Seymour Martin Lipset, *Agrarian Socialism: A Study in Political Sociology*, (Berkeley: University of California Press, 1950), 62-63; David Laycock, *Populism and Democratic Thought in the Canadian Prairies, 1910 to 1945*, (Toronto: University of Toronto Press, 1990); Ian MacPherson, "Selected Borrowings: The American Impact upon the Prairie Co-operative Movement," in *One Path to Co-operative Studies: A Selection of Papers and Presentations*, (Victoria, BC: New Rochdale Press, 2007), 53-73; Murray Knuttila, '*That Man Partridge': E.A. Partridge, his Thoughts and Times*, (Regina: Canada Plains

principle of improving market access and dividing profits amongst shareholders, the Kingsville Co-op came closer to Crerar's end of the co-operative spectrum. Indeed, M.H. Swatman, one of the Co-op organizers, took acquisitive markets as the norm, reportedly asserting at a meeting, "He had no fault to find with the buyers. They had treated him very well, but every man is out for the money. That is what the buyers are doing and so should the growers do the same."[17] This broad acceptance of the ideological underpinnings of the buyer position would persist amongst many tobacco organizations, though farmers persistently debated exactly what relationship tobacco organizations should have with market buyers.

It is, perhaps, too much to expect tobacco farming to generate much broader sentiment about the merits of cooperation as a viable alternative to competitive capitalism. Raising tobacco, a non-essential crop, had a different connotation than raising wheat, which had any number of positive cultural associations. Wheat was the 'staff of life,' the core ingredient of food of 'civilization,' bread. As John Varty notes, British social scientists used the consumption of bread as a measurement for gauging the development of a nation. Nor did tobacco have the same cultural cachet as the cultivation of orchards in the Okanagan Valley, the preferred agricultural pursuit of the middle class gentleman farmer who mixed cultural pursuits with economic endeavour.[18] Organizers of wheat pools or fruit cooperatives could point to the essential and moral nature of their production.[19] No, tobacco was a commercial crop, and a distinctly unromantic one at that. Felix Charlan made this point in a letter discussing the St. Césaire cooperative, noting that while butter and cheese cooperatives were essentially agricultural concerns, tobacco was primarily an industrial one—a distinction that had a moral dimension, since it barred tobacco cultivation from the agrarian arguments regarding the essential nature of their production.[20] The idea of tobacco as industrial persisted; a crop report from Port Ryerse, Norfolk, in 1929 noted pithily, "Tobacco

Research Centre, 1994), chpt. 2; Ian McKay, *Reasoning Otherwise: Leftists and the People's Enlightenment in Canada*, *1890-1920*, (Toronto: Between the Lines, 2008), 274-276.

[17] "Big Gathering of Local Tobacco Growers," *Leamington Post and News*, 29 January 1920.

[18] Varty, "On Protein, Prairie Wheat, and Good Bread," chpt. 2; Jason Patrick Bennett, "Apple of the Empire: Landscape and Imperial Identity in Turn-of-the-Century British Columbia," *Journal of the Canadian Historical Association/Revue de la Société historique du Canada*, Vol. 9, No. 1 (1998): 63-92.

[19] On the moral basis of cooperation, see Macpherson, *Each for All*, 35-39.

[20] Felix Charlan to George O'Halloran, 15 novembre 1911, RG17, Vol. 1164, File 220294, LAC. On the articulation of farming as moral, see Adam Crerar, "Ties that Bind: Farming, Agrarian Ideals, and Life in Ontario, 1890-1930," (PhD Dissertation, University of Toronto, 1999), chpt. 3

appears to be good, but it is not food, a luxury only."[21] Further, tobacco, particularly flue-cured tobacco for cigarettes, had only just 'won' its battle with prohibitionists, and its production remained difficult to square with the moral claims of early cooperative organizers. The distinction between the wheat cooperatives and the tobacco producers can be overdrawn; as Robert Irwin noted, companies like the Saskatchewan Cooperative Elevator Company operated on principles that aimed to manage, rather than confront, capitalism.[22] Tobacco also fit more comfortably with the business-orientated nature of the wheat pools that emerged between 1923 and 1931, and indeed the rise of more commercially orientated cooperatives generally at the time.[23] Nevertheless, rare was the tobacco farmer who asserted the fundamentally moral character of their production.

The characterization of tobacco as an industrial crop also stems from the simple fact that, unless one sold to an informal market, production was bound to a manufacturer.[24] Therefore, industrial standards stretched deep into the farmer's barn, although difficulties in achieving those standards also impeded the industrialization of tobacco production. As a Southwold farmer who became frustrated with tobacco cultivation told John Kenneth Galbraith, "We are accustomed to handling crops that will stand rough handling of any sort. We can toss wheat or oats or barley sheaves about pretty lively and not seem to lose. You can't do this with tobacco. To squeeze or rub a leaf means the leaf may as well be thrown away."[25] In 1929, Mitch Hepburn, the M.P. for Elgin West and the future Liberal premier of Ontario, noted that he also ceased tobacco cultivation on his farm because "We had as fine a crop of tobacco as anyone would care to look at but in some way we did not know how to do the handling."[26] Other industrial crops like cotton that were bound for manufacture also had to conform to strict standards defined by manufacturer grades. However, whereas cotton could largely be "fictitiously reduced" by the 1870s to a single standard in order to facilitate futures trading, fragile tobacco leaves remained impossible to reduce in such a way.[27] Cooperative tobacco

[21] 'Port Ryerse, *Simcoe Reformer*, 12 September 1929.
[22] Robert Irwin, "Farmers and Managerial Capitalism: The Saskatchewan Cooperative Elevator Company," *Agricultural History*, Vol. 70, No. 4 (Autumn 1996): 626-652. V.C. Fowke also made this point, *The National Policy and the Wheat Economy*, 150.
[23] Fowke, *National Policy and the Wheat Economy*, chpt. 11; Badgley, *Ringing in the Common Love of Good*, 143; Macpherson, *Each for All*, 106-109.
[24] Flax has also been characterized as an industrial crop because of this fact, see MacFayden, "Fashioning Flax," 10-11
[25] Galbraith, "Farmer Ruminates on Beans and Tobacco; He Grows Beans," in *Does it Pay?,* 548.
[26] Galbraith, "M.F. Hepburn Tells Plowman the Difficulties of Farming," in *Does it Pay?* 571.
[27] Beckert, *Empire of Cotton*, chapter 11.

companies hoped to carve a role from themselves created by the difficulty in handling the leaf to industrial specifications by instructing their members how to handle and ship leaf, though old buyers like William Gregory were highly skeptical that they could adequately instruct their members how to handle tobacco.[28]

That the Kingsville Co-op's most immediate goal was to distribute profits to its shareholders indicated that it shared a capitalist, industrial view of agriculture. When anticipated returns did not materialize, members began to agitate. The Kingsville Co-op was not organized as a producer pool that controlled the entire supply of tobacco, although it sought to get members to bring their production to the company to be sold collectively.[29] Without the commitment of a pool, shareholders were quick to sell their crop to other potential buyers if they felt they could get higher prices. This tendency led to several disputes. One member, Lem Sloan, launched a legal challenge in 1923 contending that the cooperative had failed to pay him for his flue-cured tobacco crop, the Kingsville cooperative countered that Sloan had failed to deliver his contracted tobacco. Ultimately, the Supreme Court of Ontario found in favour of the Kingsville co-op. The dispute suggested a distinct mercenary spirit towards the cooperative existed amongst the membership, one that was unwilling to tolerate problems in light of a broader ideological aim. The Essex County Agricultural Representative, Justus Miller, detected this tension, writing in his 1923 report, "This Co-operative enterprise has a large membership but is at present in difficulty, due in large part to the poor quality of product, lack of suitable marketing contracts between members and the company and lack of confidence in the company by many of the members."[30]

Bookkeeping problems undermined the sense that farmers were gaining more control over the tobacco market through cooperation. During a 1923 meeting, members were upset to learn that non-members were receiving cash advances and processing services, which made them question the value of purchasing shares in the first place. Shareholders also questioned the salary drawn by Co-op leadership, noting that Coghill had drawn $13,200 in salary over the last three years of the

[28] On cooperative hopes to fulfil this role, see J.S. Pickel to Martin Burrell, 3 January 1912, RG17, Vol. 1164, File 220294, LAC (for the St. Césaire cooperative); on Gregory, see "Tobacco Crop of 1924 in Southwestern Counties," *Leamington Post and News*, 15 January 1925.
[29] 'By-Laws of The Canadian Tobacco Growers' Co-operative Company, Limited,' Provincial Secretary's Department Appointments Files, RG 8-28, Box No. 3, B223974, Archives Ontario.
[30] 'Ontario Department of Agriculture Report of the Essex Branch for the Year Ending October 31st 192[4],' Agricultural Representative Reports, Essex County, RG16-66, B266720, Archives Ontario.

Co-op's operations.[31] This salary came despite early problems in disposing of all the crop taken on by the Co-op.

In response to these criticisms, Coghill and the co-operative redoubled their efforts to expand into the British market as a means to provide stable returns for its membership. The Co-op logic recognized the farmer weakness within the commodity chain, exacerbated by the fact that buyers processed and stored tobacco leaves *and* controlled the manufacturing plants, giving them a considerable advantage in knowing exactly how much tobacco they required. By co-operatively storing and processing its own tobacco, the Co-op could receive bank loans for its tobacco, improve its storage capacity, and provide its shareholders with greater control and knowledge of tobacco stocks.[32] Using these stores and expanding sale to Britain, Co-op leadership contended, would expand the farmer's markets and enable larger returns for its shareholders. The Kingsville organizers took heart in the fact that the British market showed some interest in the Comstock Spanish cigar leaf grown by the St. Césaire based cooperative.[33] The Co-op sought to forge its own links along the chain, sending agents to the British market, in an effort to circumvent the powerful Imperial Tobacco network.[34] The cooperative also sent a major display of their crop to the 1923 Tobacco Trade Exhibition and the British Empire Exhibition at Wembly in 1925 as part of a largely successful showing by Canadian producers.[35] According to the London based *Tobacco Trade and Review*, viewers had a favourable impression of the Kingsville Co-op Burley.[36] With Imperial Preference rates in place for tobacco, the cooperative hoped that Britain would serve as a key outlet for their production. Penetrating the British market stretched beyond an economic exchange; it would validate the farmer-led cooperative as capable of fulfilling the rigid grading and packing requirements—the instrument of the modern market rendering nature into categories—that the British buyers held.

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[31] 'Co-operative Tobacco Committee's Report," *Leamington Post and News*, 15 November 1923.
[32] On these expanded powers, see "Co-operative Co. Controls 10,000,000 Pounds Tobacco," *Leamington Post and News*, 5 May 1921.
[33] On the limited demand for Quebec cigar leaf in Quebec at this point, see Felix Charlan, "Canadian Tobacco in England," RG 17, Vol. 2833, Microfilm T-6992; "Tobacco Growing Within the Empire," *Tobacco Trade and Review*, Vol. 53 No. 633, 1 September 1920, 28.
[34] 'Town and County,' *Essex Free Press*, 18 December 1925.
[35] "Report of Trip to the Seventh International Tobacco Show at Olympia and the British Empire Exhibition at Wembly, April 17 to July 24, 1925," RG17, Vol. 3227, File 164.3-1, LAC.
[36] "The Tobacco Trade Exhibition," *Tobacco Trade and Review*, Vol. 56, No. 666 (1 June 1923), 25.

By 1927, cooperative leaders found that the British market offered little respite for their troubles. In a letter to Minister of Agriculture Motherwell, Jesse Sherman, who had replaced Coghill as president, alleged that the fault did not lie with the cooperative, but with the failure of the government to ensure that benefits from Imperial Preference reached farmers. He claimed that exports to Britain had increased from 70,000 pounds to six million pounds over the decade, but the cooperative had only managed to get about five percent of this business. The reason, according to Sherman, had nothing to do with quality, or supply or demand, but was a result of "selfish manipulation of a few individuals" who managed to secure tobacco at "ridiculously low prices" and dump that production onto the British market. He charged, "the individual farmer is not getting the benefit of the British Empire Preferential Tariff on the sale of his tobacco."[37] Sherman's successor, S.A. Griggs (who largely oversaw the dissolution of the Co-op), was more inclined to blame the particular nature of tobacco than the failures of government. In a letter to Deputy Minister Grisdale, Griggs observed the cooperative had "failed to realize the enormous increase in production that has in the last year or two arisen in other parts of the Empire," and that they did not appreciate that, as a luxury item, tobacco was "far more susceptible to over-production and combinations than…wheat."[38] Regardless of the precise reason for the Co-op's impending failure, tobacco farmers began to cast for alternative marketing arrangements.

From the failures in Britain and the difficulty in establishing market traction domestically emerged the idea that producers ought to pool their tobacco. The idea had been circulating amongst cooperative organizers since the start of the 1920s. Aaron Sapiro, the famous American cooperative advocate, had addressed a large gathering of tobacco farmers at Ridgetown in 1922 celebrating the merits of a pool. He drew on both efforts by American tobacco farmers and on his own experiences in organizing California fruit growers, pointing to the success of the Kentucky Burley growers, who had managed to organize in the Burley Tobacco Growers Cooperative Association the face of buyer opposition. Such opposition, however, required more than passive adherence to cold by-laws—it required a cooperative spirit backed by a measure of coercion. As he noted, in California, "The association there finds that it can make things mighty unpleasant for

[37] Jesse Sherman to Motherwell, 16 December 1927; RG17, Vol. 3227, File 164.3-1, National Archives. Sherman's numbers roughly correspond to official export numbers given in Tobacco Division, 'Report of the Officer in Charge, N.T. Nelson, For the Years 1927, 1928, and 1929,' (Ottawa, 1930), 9-10.
[38] S.A. Griggs to J.H. Grisdale, 9 June 1928.

any who attempts to break their contract…Good motives are not enough, nothing must be left to chance."[39] The question of whether or not to make pooling compulsory for all producers of a crop, as Sapiro advocated, had flared up in the Prairie provinces during the end of the 1920s, as the United Farmers of Canada had sharp disputes over the merits of compulsory pooling that ended up in legal disputes.[40]

For some farmers, compulsion seemed less unsavory than the low prices they were receiving. Initial organization of the pool in 1928 was buoyed by a series of well-attended meetings seemed to indicate that a new mentality was emerging, one that moved beyond the interests of cooperative shareholders, as farmers began to speak about the possibilities of organization. The final meeting at Chatham that launched the pool had some three thousand attendees.[41] Representatives from the Western Canada Grain Pools and the Saskatchewan Wheat Pool galvanized enthusiasm for the tobacco pool. R.H. Milliken of the Saskatchewan pool tantalized farmers with reports of the successes of the cooperatively run grain elevators, "the largest and richest farmer's company in the West."[42] A tobacco pool might have similar success by controlling the storage and processing facilities for their tobacco more comprehensively than a single cooperative venture.

The distribution of fair returns via pooling depended on a shared commitment to modern tobacco growing principles measured through grading. A pool differed from the previous Kingsville Co-op method because it obligated members to send their production to the pool, which would then market the tobacco and distribute the returns over time. The Co-op strongly encouraged shareholders to contract their production through the Co-operative, but in 1925, John Coghill removed the clause requiring members to bring their tobacco to the Co-operative, perhaps as a result of the lawsuits and difficulties that arose in 1923 and 1924.[43] The pool also proposed to grade and market the production of farmers collectively, rather than trying to sell each members' production individually, following the model of the Northern Wisconsin Co-Operative Tobacco

[39] 'Tells Tobacco Growers How to Co-operate," *Leamington Post and News*, 16 March 1922. On the Kentucky coop, see John Van Willigen and Susan C. Eastwood, *Tobacco Culture: Farming Kentucky's Burley Belt*, (Lexington, KY: University Press of Kentucky, 1998), 45-50; on the business-like practices of California cooperatives, see Vaught, *Cultivating California*, chpt. 3
[40] Fowke, *National Policy and the Wheat Economy*, 235-242.
[41] 'Tobacco Growers Approve Pool Selling Plan,' *Leamington Post and News*, 19 January 1928.
[42] 'Pool is Organized by Tobacco Growers of Western Ontario,' *The Globe*, 25 January 1928. See also 'Officials of Wheat Pool Advise Tobacco-Growers,' *The Globe*, 27 January 1928.
[43] "Inside History Revealed of Tobacco Co-operative," 10 January 1929.

Pool.[44] Such a scheme relied on the abstracting principles of the market, but it deployed those principles in a new way, turning them into a strength for the farmer. A pool would offer farmers a way to escape the barn buying system, where a buyer determined the price and grade at a stroke of a pen. A notice encouraging farmers to join the pool put the matter baldly: "With a Pool, you can end the curse of barn selling—sell your crops on their merits—not what some tobacco buyer thinks they are worth."[45] In the estimation of the pool and participating farmers, the problem was not the idea of grading, but the fact that the actual buying practices were not modern enough—the sale of tobacco was done in an egregiously pre-modern way where the buyer determined price individually at the barn, rather than in a systemic way. Just like the Saskatchewan farmers who pooled in the mid-1920s, the tobacco farmers who sought to pool were *more* committed to grading and impersonal exchange than were the buyers.[46]

Government officials also largely approved of this farmer led organization that drew on modern means to measure tobacco. As the 1928 Tobacco Inquiry Commission noted, a pool would allow a farmer to run their business profitably, facilitate access to chemical fertilizers, and establish an educational system to ensure best growing practices.[47] J.H Grisdale chaired the major organizing meeting of the pool in January 1928, attended by both federal minister of agriculture W.R. Motherwell and provincial minister of agriculture John Martin. Mitch Hepburn was also a major organizer.[48] One of the keywords of the pooling movement—stability—held considerable appeal for government officials looking for orderly marketing. Both ministers promised support in the form of grading experts and market surveys. For Motherwell, the entire scheme presented an opportunity to create more harmonious relations between government, farmer, and bank through a shared commitment to "government grading and weighing." John Martin spoke in a similar vein, foregrounding farmer involvement, "Unless you organize…you are at the mercy of anyone who

[44] 'Tobacco Contract,' RG17, Vol. 3227, File 164.3-1, National Archives. See also the 'Grower's Contract--Northern Wisconsin Tobacco Co-Operative Tobacco Pool,' in the same file.
[45] 'Sign the Contract,' RG17, Vol. 3227, File 164.3-1, National Archives.
[46] Bantjes, *Improved Earth*, 110-116. According to the Tobacco Commission of 1928, the majority of the some 800 attendees of various hearings were in favour of a pool. "Report of the Tobacco Inquiry Commission, March 1928," pg. 76.
[47] "Report of the Tobacco Inquiry Commission, March 1928," 85.
[48] 'Tobacco Pool Encouraged for Local Growers: M.P. Hepburn Willing to Aid in Cooperative Plan,' *The Globe*, 9 December 1927; 'Pool is Organized by Tobacco Growers of Western Ontario,' *The Globe*, 25 January 1928.

wants to prey on you. The tobacco companies are in business; they are out to make as fine a showing as they can for their directors."[49]

Efforts to form a tobacco pool were dashed by several factors. Key were the Kingsville Co-op's considerable liabilities, skepticism among farmers that a pool would succeed, fierce personality clashes, and the increasingly large gulf between flue-cured and Burley tobacco growers. Adding to these challenges were compounding ecological consequences of commercial tobacco cultivation, as Old Belt farmers began to struggle with 'Burley sick' soils. Many Old Belt farmers, particularly Burley farmers, who had been involved with the Kingsville Co-op began to wash their hands of tobacco cultivation altogether, with many shifting back to corn.[50] The Kingsville Co-op liabilities were primarily in the form of seven million pounds of unsold Burley tobacco from the 1927 season, deemed inferior by both British buyers and Tobacco Division representatives.[51] Meanwhile, flue-cured growers were receiving good prices, and were questioning the value of cooperative marketing altogether. For instance, in 1928, Burley growers received an average of 11.1 cents per pound for their crop, compared to 31 cents per pound for flue-cured growers.[52] This gulf led to considerable difficulties in cultivating a sense of shared definitions of fairness between the two groups. In one interview, William Gregory referred to the "flue-cured aristocracy" around Leamington and Kingsville that emerged by the mid-1920s.[53] Roderick Macdonald, who had been involved in the early Kingsville Co-op organizing, had given up entirely on cooperative selling for his flue-cured farm, "We have no difficulty getting rid of first class stuff. No, we have little use for co-operative selling! Some of us had had a little experience along that line! The first class stuff sells itself…The big tobacco companies have their man right here watching things."[54]

Divisions between flue-cured and Burley farmers made a pool, which marketed tobacco collectively, organizationally very difficult to sell or execute. One of the pool organizers, D.C.

[49] 'Tobacco Growers Approve Pool Selling Plan,' *Leamington Post and News*, 19 January 1928.
[50] 'To Grow More Corn and Less Tobacco,' *Leamington Post and News*, 4 April 1929; "More Corn, Less Tobacco," *Tillsonburg News*, 18 April 1929; 'Essex Winter Fair Off to Good Start,' *Leamington Post and News*, 13 February 1930.
[51] "Memo re quality of 1927 pack of dark-fired and Burley tobacco of Western Ontario, August 30, 1928," RG17, Vol. 3227, File 164.3-1, National Archives
[52] Department of Agriculture, Dominion Experimental Farmers, "Tobacco Division, Report of the Officer in Charge, N.T. Nelson, Ph.D, for the Years 1927, 1928, and 1929," (Ottawa, 1930), 7.
[53] "Tobacco Crop of 1924 in Southwestern Counties," *Leamington Post and News*, 15 January 1925.
[54] Galbraith, "…Does it Pay?" 66.

Sturgis, reported "indifferent" organization around Leamington and Kingsville.[55] Sturgis did little to help the situation—he, along with C.E. Knister, failed to sign their own crop for the pool, despite their prominent organizational roles.[56] This exacerbated tensions between the pool and the Co-op, with Griggs going so far as to call Knister and Sturgis "numb skulls" in a letter to J.H. Grisdale. With a tone of patrician regret, Grisdale described the pool organization as "rather chaotic," far from the well-organized campaign envisioned by the government during the January 1928 meetings.[57] By summer of 1928, it was clear that the pool had failed. The abstracting principles of the pool could not overcome the managerial shortcomings of its organizers.

Ultimately, banks drove the final nail into the coffin of the Kingsville Co-op, as their anticipated stable returns from loans failed to materialize. The Co-op, which staggered on throughout the pool's organizing drive, collapsed after a lawsuit initiated by a member exposed its precarious finances. Lynn sued the Co-op for the difference between "what he got and what he thought he should get," in a similar situation to the lawsuits the Co-op faced (and won) in 1924 and 1925.[58] The incident and the close scrutiny over the Co-op finances began bankruptcy proceedings, where the Royal Bank of Canada and Lloyd's Bank of England emerged as the primary claimants.[59] Some 1,500 of the approximately 2,000 shareholders of the Co-op disputed the size of their claim of the Co-op's assets, compounding the bitter feelings that emerged from the Co-op's failures.[60] A series of private letters between Griggs and the federal Department of Agriculture reveal that the RBC held almost total influence over the decisions made between 1928 and 1929, including approving of Griggs' appointment as president and steadily refusing to offer the Co-op more credit unless it managed to pool tobacco production.[61] The RBC's support for a pool demonstrates that the search for stability was hardly confined to farmers; banks were also deeply involved with negotiations for

[55] D.G. Sturgis to J.H. Grisdale, 30 March 1928, RG 17, Vol. 3227, File 164.3-1.
[56] "Tobacco Pool Board Has Heated Session; Suspension is Likely," *The Globe*, 2 May 1928; "Three Pool Directors Offer their Resignations," *Leamington Post and News*, 3 May 1928.
[57] S.A. Griggs to J.H. Grisdale, 7 May 1928; J.H. Grisdale to Dr. C.E. Knister, 7 May 1928; RG17, Vol. 3227, File 164.3-1, National Archives
[58] "Inside History Revealed of Tobacco Cooperative," *Leamington Post and News*, 10 January 1929
[59] "Inside History Revealed of Tobacco Cooperative," *Leamington Post and News*, 10 January 1929. According to this source, the Co-op owed RBC $950,311 and Lloyd's Bank $132,958.
[60] W.J. Riley to William Price, 11 February 1929, RG 4-32, M.H. Swatman, Essex Tobacco Growers, Windsor Ont.: Re Canadian Tobacco Growers Cooperative Co., 1929, Archives Ontario.
[61] W. Motherwell to Jesse Sherman, 30 January 1928; Motherwell to Jesse Sherman, 2 February 1928; S.A. Griggs to Organizing Committee of the Ontario Tobacco Pool, 30 April 1928; S.A. Griggs to J.H. Grisdale, 8 June 1928; RG17, Vol. 3227, File 164.3-1, National Archives; see also 'Tobacco Growers Decide on Pool,' *Leamington Post and News*, 26 January 1928.

financing wheat pools around the same period.[62] Any vision of collective tobacco marketing did not fundamentally challenge the role of established banks in issuing and profiting from credit.

Both the Kingsville Co-op and the pool are suggestive of the extent to which tobacco farmers sought to use trappings of modern tobacco, particularly grading and processing, to improve their position in the tobacco commodity chain. However, competition from other Imperial producers, delayed payments to farmers, and managerial difficulties, and persisting problems with marketing Burley as demand for flue-cured tobacco accelerated all contributed to the decline of the Old Belt ventures. Flue-cured farmers who organized in the 1930s did not see these problems as symptomatic of the failings of modern agricultural marketing, but rather would double down, as it were, on modernity, introducing more measures and carving a larger space for corporations in their organization. Board and Association organizers relied on growing government power to fulfil their expanded search for stability. There remained farmers who did not fit into these measures: former tobacco farmers of the Old Belt, new immigrants looking to enter into the market, farmers who objected to the heavy-handed leadership of the organizations ostensibly formed to defend their interests.

Organizing Flue-Cured Tobacco Growers

Between the high prices they were receiving and the fact that flue-cured tobacco required greater specialization than any other type of tobacco grown in Canada, flue-cured farmers had little common interest with Burley or other tobacco farmers. Many early flue-cured farmers continued to raise some Burley, but the general trend was towards raising flue-cured tobacco exclusively.[63] The Depression shook the short-lived complacency of flue-cured tobacco farmers. Declining cigarette consumption, coupled with more farmers entering the flue-cured market, created considerable anxiety.[64] During a period when staggering macroeconomic realities challenged entrenched understandings of individual responsibility, citizenship, and fault, fairness became an ever more contested term.[65] The difficult situation created by the Depression engineered an

[62] Fowke, *National Policy and the Wheat Economy*, 247-251.
[63] For a chart reflecting this transitional period, see G.W. Mitchell, "Tobacco Farming in South Western Ontario," 16.
[64] Tait, *Tobacco in Canada*, 126 notes that the average price for flue-cured tobacco fell from 32 cents per pound in 1930 to 16.2 cents per pound in 1932, while production continued to increase during those years.
[65] On the challenges and changes to government articulations of these concepts, from an institutional and familial level, see James Struthers, *'No Fault of Their Own,': Unemployment and the Canadian Welfare State, 1914-1941*,

unprecedented level of support for organized intervention into the tobacco market, through the creation of tools like minimum average prices for crops and acreage quotas.[66] Under the Ontario Flue Cured Tobacco Growers' Marketing Board and the succeeding Flue-Cured Tobacco Marketing Association of Ontario, grading became even more elaborate, as grower organizations further adopted and accepted the metrics first encouraged by government and industry. These tools meant stability for hundreds of growers who were able to survive the Depression with farms relatively intact, but they also generated anxieties about equal opportunities to access markets. These anxieties became more potent as the worst of the Depression passed and criticism of the Marketing Association intensified. By the late 1930s, new organizations, often based on ethnic ties or a shared sense of exclusion from the Marketing Association, emerged.

Reports from the Royal Commission on Price Spreads fueled farmer antagonism against Imperial Tobacco. The barn-buying practices opposed by the pool organizers emerged as a key culprit. As the Stevens Committee found, barn-buying and opening markets late led to panic among farmers, who then sold their crop for less than they might have otherwise.[67] The government particularly targeted one buyer, T.L. Lea, for two reasons. Firstly, accusations emerged that he had deliberately lowered prices from initial assessments following instructions from Montreal; the commission used evidence from buyer books and traced the emergence of a sudden gulf between the estimated value of the crop and the actual price paid in 1931.[68] Secondly, Crown council Norman Sommerville took pain to note that prior to working in Ontario, Lea had worked in Kentucky, grading the production of "negro farmers."[69] This functioned as none-too-subtle reference to Anglo-American ideas about who could and could not grow high-grade tobacco, demonstrating how criticisms of Imperial could rest on racist foundations. In effect, Sommerville contended that Lea could not possibly have been able to grade tobacco raised by white Canadians fairly, because his career had been heretofore-spent grading innately inferior tobacco. In this line of thinking,

(Toronto: University of Toronto Press, 1983); Lara Campbell, *Responsible Citizens: Gender, Family, and Unemployment in Ontario's Great Depression*, (Toronto: University of Toronto Press, 2009).

[66] This sentiment extended beyond tobacco; for dairy organization, see Roy C. Barnes, "The Rise of Corporatist Regulation in the English and Canadian Dairy Industries," *Social Science History*, Vol. 25, No. 3 (Fall 2001): 381-406.

[67] *Report of the Royal Commission on Price Spreads*, 147;

[68] "Memorandum on Effects of Change in Policy as to Prices Following Mr. Lea's Visit to Montreal," RG 33-13, Vol. 66, Exhibit 136, National Archives.

[69] "Tobacco Grower Griefs,' *St. Thomas Times Journal*, 3 May 1934.

ideas about racial inferiority and superiority were disrupting what was supposed to be a culturally neutral process of determining price.

Tobacco farmers also deployed the idea that intuitive fairness demanded they deserved a cost-covering return on their expenses, particularly in light of Imperial profits. A letter to *The Tillsonburg News* by a grower who signed 'N.G.H' captured this sentiment. Echoing earlier cooperative rhetoric, the farmer argued, "Present business methods which tend to build up a few millionaires on one hand and a multitude of paupers on the other may, can, and must be transformed until the producer receives a fair share of the resulting proceeds for his investment and labor."[70] Indeed, the reports from the Price Spreads committee on Imperial profits received considerable attention in the media, furthering agitation against the firm. In one dramatic exchange that combined melodrama and patriarchy, Norman Sommerville, representing the Crown, exclaimed to Imperial president Gray Miller, "Did you hear the wives of farmers who cried at the prices their husbands got?"[71] In the midst of the Depression, the unfairness of the Imperial profits in the face of farmer losses was not difficult to grasp at an intuitive level—no article went into detail about *why* the gulf was unfair—the data on profit spoke for themselves. Gray Miller objected that Sommerville's questions were also unfair, but the headlines proclaiming the profits and salaries of Imperial suggest that Miller's concern failed to gain traction in the court of public opinion.[72]

In the early 1930s, two flue-cured groups emerged to provide farmer responses to their poor market positions. The Southern Ontario Flue-Cured Tobacco Growers Co-operative Association of Tillsonburg formed in 1933 and The Ontario Flue-Cured Tobacco Growers' Association of Simcoe emerged in 1931 with different approaches to the problem. The Simcoe group took an expert-driven educational approach, functioning primarily as an information service for its members, providing information on fertilizer and grading inspections, charging one dollar per kiln to its members. The Simcoe organization drew more members from the ranks of the plantation owners and tobacco experts (or, as Perrett put it, the "better growers of the district"), including Prof.

[70] 'Co-operative Tobacco Marketing,' *The Tillsonburg News*, 7 January 1932.
[71] "Tobacco Grower Griefs,' *St. Thomas Times Journal*, 3 May 1934.
[72] William Marchington, 'Tobacco Prices are Unexplained, Stevens Asserts,' *The Globe*, 5 May 1934; William Marchington, 'Huge Bonuses for Imperial Tobacco Officials,' *The Globe*, 9 May 1934; 'Price Spread Committee Resumes Investigation,' *The Tillsonburg News*, 10 May 1934. Miller's response is in "Brief from Imperial," 50-65, Royal Commission on Price Spreads Evidence, RG 33-18, Vol. 37, LAC.

Archibald Leitch, E.C. Scythes, and H.A. Freeman. They also forged links with the Ontario Tobacco Sales, Ltd., a recently formed company managed by Francis Gregory, who had left Imperial to head the new leaf buying venture.[73] The Tillsonburg-based group in large part revived the old Kingsville model, it sought to commit its members to exclusive five-year contracts, where the co-operative functioned as the exclusive processor of member tobacco, which it could then store and sell to buyers.[74] Headed by William Sutch, the Tillsonburg group had significant support amongst recent Belgian immigrants, and managed to sign up about 35% of the Norfolk crop, with 260 individual members.[75] While the differences between the Tillsonburg and Simcoe group can be overdrawn—they coordinated efforts in establishing the Marketing Board in 1934—their institutional alignments reflected splits in terms of organizational strategy, relationship to expert knowledge, town location, and farm size also pointed to a tension within the tobacco growing ranks that festered during the next two decades.

By 1934, persisting problems with agricultural prices had made firmer government intervention imperative. Both levels of government showed renewed commitment to redressing producer concerns. The 1934 report from Ontario's Minister of Agriculture, Duncan Marshall, contained strong sentiment about market problems: "The tragic contradiction of poverty amidst plenty, as a result of ill-distributed abundance, has shaken all lines of industry in this country to the foundations of its economic structure. Nearly everyone admits to-day that the inequalities of distribution have to be rectified."[76] Meanwhile, Bennett's government was moving forward with the ambitious Natural Products Marketing Act. In motivating the bill, minister of agriculture Robert Weir pointed to many of the problems that cooperatives had confronted; the fact of the growing spread between the price received by producers and the price which the finished good sold for, which had emerged as a result of the increasingly complex amount of processing that was required of natural products. He sought, through regulation, to "instil into the producer a confidence that he will not be exploited, that he will be given a fair share of the consumer's dollar," with the end of promoting

[73] J.K. Perrett, 'Report of Field Work Accomplished During 1933 in Norfolk Tobacco District,'; 'New Tobacco Co-operative is Organized by Growers,' *Simcoe Reformer*, 10 November 1932; Tait, *Tobacco in Canada*, 131.
[74] Tait, *Tobacco in Canada*, 130. The group contracted with the small Norfolk Leaf Company to achieve this aim.
[75] 'Southern Ontario Flue-Cured Tobacco Growers Organized,' *The Tillsonburg News*, 19 January 1933; 'Tobacco Growers Report Desired Objective Near,' *The Tillsonburg News*, 2 February 1933; 'Mayor Sutch Presides as Tobacco Growers Organize,' *The Tillsonburg News*, 16 March 1933. On membership numbers, see J.K. Perrett, 'Report of Field Work Accomplished During 1933 in Norfolk Tobacco District.'
[76] "Report of the Minister of Agriculture for the Year Ending October 31st, 1934," *Ontario Sessional Papers*, Vol. LXVII, Part V, No. 21, 94.

modernization of production. The shortcomings of cooperatives in overcoming the spread, particularly in their difficulties in improving production and in encouraging a sufficient number of farmers to join, Weir asserted, necessitated further government legislation that would strengthen marketing boards.[77] While Weir particularly drew on the experiences of apple growers who had difficulty storing and transporting their production when he introduced the legislation, his observations on the difficulties of cooperatives could just as easily apply to tobacco.[78]

Several farm groups organized under the auspices of the Natural Products Marketing Act, including the Tree Fruit Board in B.C., the Western Ontario Bean Marketing Board, and the Canada-wide Fruit Export Board.[79] The Dominion Marketing Board formally authorized the creation of the Ontario Flue-Cured Tobacco Marketing Board on 2 November 1934.[80] The Flue-Cured Marketing Board received a broad mandate to manage the flue-cured tobacco market. The Tillsonburg group voted sixty-four to five in favour of creating a board, and the Simcoe directors approved a board unanimously. On a wider ballot to flue-cured tobacco farmers, seventy-one percent of flue-cured tobacco growers, representing approximately eighty percent of the total acreage, voted to approve the creation of the board.[81] Vitally, the Board also received the participation of the major tobacco companies, as only Macdonald Tobacco did not join it.[82]

Chaired by Archibald Leitch, the Board was bestowed with considerable power to create an orderly market. The board could "regulate the time and place at which…[tobacco] shall be marketed," and "to determine the manner of distribution, the quantity, quality, grade or class of the tobacco that shall be marketed by any person at any time…To conduct an inspection and appraisal service and determine and make public the date on which the market shall open each year." An amendment to

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[77] Canada, *House of Commons Debates*, 16 April 1934, 17th Parliament, 5th Session, 2201-2202. Growing sense of the need for compulsory marketing also lay behind the formation of the Canada Wheat Board, see Fowke, *The National Policy and the Wheat Economy*, 262.
[78] The Conservative M.P. for Regina, Frank W. Turnbull, did directly cite the example of tobacco farmers in supporting the bill, see Canada, *House of Commons Debates*, 5 June 1934, 17th Parliament, 5th Session, 3698.
[79] Margaret Conrad, "Apple Blossom Time in the Annapolis Valley, 1880-1957," *Acadiensis*, Vol. 9 No. 2 (1980): 25; Bennett, "Blossoms and Borders," 277; "Report of the Minister of Agriculture for the Year Ending October 31st, 1934," 98-99.
[80] "The Dominion Marketing Board," RG 17, Vol. 3554, File 5-6, National Archives.
[81] H. Barton to Robert Weir, 22 October 1934, RG 17, Vol. 3554, File 5-5, National Archives; 'Tobacco Growers Vote to Regulate Their Product,' *St. Thomas Times Journal*, 20 October 1934.
[82] Tait, *Tobacco in Canada*, 134-135; 'Independent Growers form an Association,' *The Simcoe Reformer*, 11 October 1934; "First Annual Report of the Ontario Flue-Cured Marketing Board, for the year ending February 29th, 1936," RG 17, Vol. 3554, File 5-14, National Archives.

the board by-laws gave it powers to "bring about and maintain the orderly marketing of tobacco" through the creation of a Market Appraisal Committee, a body of three grower representatives and three buyer representatives. Well-versed in the language of grading and abstraction, the Appraisal Committee developed eighteen different grades, based on a range of assessments for colour, leaf location on the plant, and texture. From these different grades, the Appraisal Committee then announced a minimum average price that the entire crop sold by all members must reach.[83] This minimum average price, it was hoped, would ensure that the spread between the price for producers and the price for consumers narrowed. If the Board found that, after buyers made all their purchases, the average price of the entire crop was below the negotiated minimum, then the buying companies had to give lump sums of money that would be distributed to producers in order to reach the minimum.[84] However, the minimum average price operated differently than a pool, because growers and buyers still negotiated prices at the farmer's barn, and the buyer would still have their own grades. The farmer could now base his negotiation on the knowledge of the minimum average price the market had to reach for all the different grades of the crop, and they were given an initial assessment of their tobacco by the Board, but it was up to the individual farmer to negotiate the sale. Furthermore, buyers were not obligated to purchase from a farmer at all. Thus, for all the formalization of grades and prices, the actual sale of the crop remained intensely personal, and connected to ideas of liberal individualism as vital to successful market operations.

Large buyers had little to lose with the new arrangement, given their significant profits and the fact they could still decline to purchase a crop. For Leitch and farmers who adhered to the high standards demanded by the exacting grade requirements, the minimum average at least represented a measure of guarantee that their labour and investments would receive a paying return. Emphasizing the newfound détente, both Leitch and Miller expressed their opinion in news reports that the average minimum price arrangement represented the best means to find a fair price, and both expressed disappointment that some growers had not joined the Board—some 370 growers,

[83] 'Amendments to the Scheme Approved by Order in Council dated the 26th Day of October, 1934, P.C. 2679, To Regulate the Marketing of Flue-Cured Tobacco," RG 17, Vol. 3554, File 5-10; "First Annual Report of the Ontario Flue-Cured Marketing Board, for the year ending February 29th, 1936."

[84] A hypothetical example: if the Board announced a minimum average price of 25 cents/lb, and, after all the purchases were completed, farmers sold 35 million pounds of tobacco at an average price of 23 cents/lb, then buyers would have to give $700,000 that would then be distributed to the producer members who sold tobacco. (35,000,000*$0.25=$8,750,000; 35,000,000*$0.23=$8,050,000; $8,750,000-8,050,000=$700,000).

by Leitch's estimate.[85] While farmers were not compelled to join the Board, the fact that buyers who joined the Board (effectively, everyone except Macdonald), would only buy from Board farmers acted as a powerful inducement.[86] Participation in the Board was effectively compulsory.

Acreage restrictions constituted a sort of culmination for commitment to the measurability and expert adjudication of tobacco. The Marketing Board's implementation of acreage quotas largely validated Imperial's long-standing position that farmers had been raising too much tobacco. It also served as a more direct means to enforce an assertion, made in 1932 by an array of provincial, federal, and plantation owners that "A reduced production of the lower grades is imperative."[87] The quotas, then, were not simply a comprehensive reduction of acreage, but were bound to the market based, expert driven concepts of quality. The report particularly called for the elimination of tobacco grown on "unsuitable soils," noting that such tobacco had reduced the overall reputation of Ontario tobacco.[88] In light of these assertions, Board farmers reduced their acreage during the first year of the Board's operation, reducing the overall flue-cured crop from 30,042 acres in 1933 to 24,289 acres in 1934. The average price for flue-cured tobacco increased from 19.5 cents to 24.7 cents in the same period, which seemed to validate the Board's decision to impose quotas.[89] By 1936, acreage allowances had increased back to 36,486, and the Board set the minimum average price at 25 cents.[90] Board leaders presented the quotas as a voluntary means to ensure that prices remained high and the market was not oversupplied.

While the reduction was ostensibly voluntary, the producers who joined with the Board also signed with the Ontario Tobacco Sales Co-operative Limited (the selling agent of the Board), which had a clause enforcing acreage controls. In a memo, Perrett and Leitch explained this clause "in effect permits the grower to contract with any tobacco buyer he wishes so long as he does not grow more than the acreage allotted him by the Cooperative which, in turn, is under the control of the same

[85] 'Imperial Tobacco Company of Canada,' *The Tillsonburg News*, 11 October 1934; 'Tobacco Market Opens on Tuesday, Growers Told,' *The Tillsonburg News*, 1 November 1934.
[86] 'Notes Made Following Interviews with Messrs. Leitch and Perret and Tobacco Growers in the Vicinity of Simcoe, September 24-26, 1936," RG 17, Vol. 3554, File 5-18, LAC.
[87] Joint Advisory Tobacco Committee for Ontario, "The Bright Flue-Cured Tobacco Situation," RG 17, Vol. 3644, File N-5 (37-23), LAC. Underline in original.
[88] Ibid.
[89] Tait, *Tobacco in Canada*, 136.
[90] 'Notes Made Following Interviews with Messrs. Leitch and Perret and Tobacco Growers in the Vicinity of Simcoe;' Tait, *Tobacco in Canada*, 72.

group that have supervision of the Marketing Board and the Acreage Adjustment work."[91] Essentially, a farmer who joined the Board and exceeded their allotted acreage was then contractually obligated to sell to the Cooperative, which would penalize the grower for exceeding their acreage by delaying payments. According to Perrett and Leitch, most farmers were compliant; the Board sent 182 letters to farmers for exceeding acreage during its final year of operations (1936), and only four growers refused to destroy their excess production.[92] The mixture of promised higher returns and penalties for non-compliance had some parallel to the more famous Agricultural Adjustment Act of Roosevelt's New Deal, though the AAA penalized non-compliance with tobacco quotas through heavy taxes.[93] The Board was thus a mixture of government regulation, compulsive cooperative marketing, and individual initiative at the barn. It also enhanced the direct institutional power of experts, as people like Leitch, Freeman, and Perrett, who used to only be able to advise farmers through speeches and tracts, now had more direct control over acreage and practice.

From Marketing Board to Marketing Association, 1936-1939

The comparison to the AAA is also germane because the Natural Products Marketing Act fell to legal challenge. Intriguingly, Supreme Courts advanced provincial and state prerogatives as the core reason for overruling them. The U.S. Supreme Court deemed the AAA far too great an expansion of federal and presidential powers in 1936, much as they did with the National Industrial Recovery Act the previous year.[94] Likewise, the Canadian Supreme Court ruled the National Products Marketing Act *ultra vires* because "Regulation of individual trades, or trades in individual commodities in this sweeping fashion, is not competent to the Parliament of Canada and such a scheme of regulation is not practicable[.]"[95] Fortunately for proponents of the Flue-

[91] 'Ontario Tobacco Sales Co-operative Limited Producers Agreement;' 'Notes Made Following Interviews with Messrs. Leitch and Perret and Tobacco Growers in the Vicinity of Simcoe, September 24-26, 1936," both in RG 17, Vol. 3554, File 5-18, National Archives. The clause reads: "It is understood and agreed that this agreement shall, at the option of the Producer, become null and void, if such Producer at the conclusion of harvesting tobacco…has not harvested more than ____acres of tobacco."

[92] Notes Made Following Interviews with Messrs. Leitch and Perret and Tobacco Growers in the Vicinity of Simcoe, September 24-26, 1936."

[93] Badger, *Prosperity Road: The New Deal, Tobacco, and North Carolina*, 76-81

[94] Noah Feldman, *Scorpions: The Battles and Triumphs of FDR's Great Supreme Court Justices*, (New York: Twelve, 2010), 106; Winders, *The Politics of Food Supply*, 65-68.

[95] 1936 S.C.R. 398, Reference re legislative jurisdiction of Parliament of Canada to enact the Natural Products Marketing Act, 1934, and The Natural Products Marketing Act Amendment Act,1935.

Cured Marketing Board, Ontario's government, which had been largely supportive of farmer marketing schemes, allowed the Board to reorganize under the aegis of the provincial Companies Act. Both producer and buyer members of the Board were admitted into the new Flue-Cured Tobacco Marketing Association of Ontario, which lasted until 1957.[96] Further, enough farmers, represented through local associations, approved of the operations of the Board to approve organization of a Tobacco Association.[97]

The Marketing Association largely retained the key elements of the defunct Board. Average minimum prices, extensive grade lists, commitment to improvements along expert lines and through crop inspections, and membership of both grower and buyer representatives persisted. The Association, like the Board, remained ostensibly voluntary, but it also continued the practice of binding member buyers' purchases to member producers.[98] The Association held the hearty endorsement of the federal Tobacco Division, and Imperial's Grey Miller spoke optimistically about the capacity of the Association to ensure mutual understanding between producer and manufacturer.[99] In an attempt to bring new meaning to a word that had largely struck fear in producers, the Association's chairman, Archibald Leitch, described the organization as a "beneficial monopoly."[100]

The Association also maintained the acreage controls developed by the defunct Board, thereby more directly controlling market access. The core difference was that the Association did not rely on the convoluted relation between the Board and a sales cooperative. Rather, the revised by-laws allowed the Association to "determine the quantity of tobacco which shall be grown by each producer member in each year," all to ensure that the Association "give producer members of the Association a fair profit on the sale of their crops and to enable buyer members to purchase their requirements at a reasonable price."[101] Initial acreage allotments were based on the quotas granted by the Board in 1934. This decision sparked some protest, as farmers who signed on to the original 1934 agreement argued farmers who entered in 1935 or 1936, when quotas increased, were given

[96] Tait, *Tobacco in Canada*, 137
[97] "Take Steps to Form New Market Setup," *Simcoe Reformer*, 2 July 1936.
[98] A useful summary of the by-laws are found in Tait, *Tobacco in Canada*, 139-140.
[99] 'New Tobacco Plan Told to Growers,' *Simcoe Reformer*, 30 July 1936; Gray Miller, "The Canadian Flue-Cured Tobacco Business," *The Lighter*, Vol. 8 No. 1 (January 1938), 1.
[100] 'New Tobacco Plan Told to Growers,' *Simcoe Reformer*, 30 July 1936
[101] 'By-Laws Flue-Cured Tobacco Marketing Association of Ontario, July 29th, 1936," Bylaw 45(d) and preamble.

an unfair advantage. Aggrieved farmers further alleged that some farmers did not heed the call to reduce acreage in 1934, and were then granted an unfair advantage when their acreage allotment in 1936 was greater than that given to farmers who did reduce their acreage. Leitch was inclined to accept the arguments of these 'older' farmers because they had sacrificed their acreage on behalf of newer farmers who were acquiring acreage rights, and in 1938, the Association gave them priority for receiving quota increases.[102] The dispute reveals that acreage rights, ostensibly based on marked demand and farm soil suitability, blended with amorphous concepts of fairness. The intuitive sense of farmers who saw some neighbours get an unfair advantage compelled Leitch and the Association to retool their acreage measurements to allow for an exceptional circumstance.

Acreage controls required considerable attention to the annual market variations. Quotas were adjusted annually in an attempt to match supply with demand. For, members of the Association, once given an acreage right, also had to adhere to the annual acreage allotment announced by the Association board. The 1956 Restrictive Trade Practice Commission report on tobacco (about which more will be said) provided a useful summary of the allotment. For thirteen years between 1936 and 1956, members of the Association could actually grow between 90 and 100 percent of their acreage allotment. In the other years, acreage allotment was below 85 percent, with a low of 66.6 percent in 1940 and 1952.[103] The Association relied heavily on the measurability of the tobacco market and the compliance of farmers with their quotas.

Stability was the aim of the system of acreage controls and price minimums. In a series of letters to growers published in 1938, the Association leadership presented their reasoning on three vital elements of market management: the need to eliminate 'distress' tobacco through acreage controls, the careful monitoring of both domestic and foreign market demand, and the kiln appraisal system that provided farmers with grades for their production. Collectively, these tools were designed to distill the daunting complexity of tobacco cultivation—the annual shifts in quality, the myriad grades, consumer demand for a consistent product, competition from other producers—and provide farmers with a measure of certainty. Evoking the uncertainty amongst farmers in the early 1930s, the first letter asserted that without acreage controls and agreed minimums, farmers who

[102] Tait, *Tobacco in Canada*, 142; ''New Deal' for Growers in Industry Before 1934,' *The Tillsonburg News*, 5 May 1938.
[103] Canada, Restrictive Trade Practices Commission, *Report Concerning the Production, Purchase and Sale of Flue-Cured Tobacco in Ontario*, (Ontario, 1956), 48-49.

sunk considerable capital into raising their flue-cured tobacco would become "panicky and sell at any price." Preventing this situation required manufacturer cooperation, because they had the capacity to process and store tobacco whereas individual farms and cooperative farmer ventures had failed to create this capacity. The industrial nature of tobacco, the Association argued, produced the need for grower-manufacturer cooperation.[104]

The letters on kiln appraisal and markets sought to explain the challenges of ensuring that a complex natural product, whose quality depended on so many factors, met the stable manufacturer requirements. They note that manufacturers in Canada and Britain could only introduce new tobacco varieties gradually, because consumers would reject abrupt changes to their favoured tobacco.[105] Whether these rejections were actually a product of finely attuned taste or successful branding is an open question, as British Mass Observation polls found that smokers struggled to distinguish between brands during blind tests.[106] Nevertheless, the perception of the exacting smoker was powerful enough to entrench the idea that consistency was key. The kiln appraisal system was the mechanism by which individual crops were squared with the aggregate production of the industry to produce a consistent product. Recall, there was a market-based minimum average price that the total tobacco crop had to reach. In order to reach this minimum price and encourage consistency, a seventeen-grade appraisal system was used. The letter explaining this system acknowledged imperfections, because the many variations in tobacco could never be entirely classified; for "every kiln contains three or more grades of leaf."[107] However, the Association expected that the buyer would be able to, on average, get enough of the leaf they wanted even when allowing for the variation in quality within each grade and each kiln. They also contended that the system on average would ensure that farmers with higher quality leaf would receive higher prices. Between buyer-grower cooperation, acreage controls, market assessments, and kiln appraisals, the Association contended, farmers would avoid the panic of selling at the first price offered at the barn. Order and stability would govern the market.

[104] 'No Distress Tobacco Among Members, Ass'n Aim,' *The Tillsonburg News*, 29 September 1938.
[105] 'Marketing Association Third Letter on Markets,' *The Tillsonburg News*, 13 October 1938.
[106] Hilton, *Smoking in British popular culture*, 127.
[107] 'Committee Explains Kiln Appraisal System," *The Tillsonburg News*, 6 October 1938.

Limits to Order: Opposition to the Association, 1936-1956

Who would oppose such a reasonable, consensual marketing regime? Despite the placating tone of the 1938 letters, many farmers opposed the Association. Criticism emerged from several different sources: from new farmers seeking to acquire elusive acreage rights, from farmers who found themselves blacklisted by the Association, and from farmers who, despite being members of the Association, increasingly felt that the body defended manufacturer interests more enthusiastically than those of farmers. Critics of the marketing schemes also drew on a more abstract appeal to British liberty and the need to allow any and all to buy and sell tobacco as they saw fit. W.S. Pollard, a realtor and tobacco farmer, emerged as a key organizer of opposition to the Marketing Association. In letters and petitions, Pollard referred to the "dictatorial" powers held by both the Board and the Association.[108] Gathering some sixty signatures in 1936, Pollard made a very similar argument in a petition to Ontario's Premier (and one time tobacco farmer) Mitch Hepburn and Minister of Agriculture Duncan Marshall. In a letter to his MP, A.S. Rennie, Pollard referred to the Marketing Association as a combine, thereby questioning its legal validity.[109] He wrote these letters as a farmer, rather than as a realtor, since his stake in selling farms for tobacco rather detracted from his lofty rhetoric about dictatorships.[110] Nevertheless, Pollard articulated a very real concern for the many farmers who found themselves outside the good graces of the Marketing Association.

Other farmers expressed skepticism about the merits of their so-called benevolent monopoly. Writing to the federal Minister of Agriculture, James Gardiner, in 1936, sharecropper Delbert Matthews recounted the consequences of a refused acreage application for a farmer on the economic margins. Matthews resented the fact that "big growers" seemed to receive most of the acreage. He pointedly asked Gardiner "why cant they cut down the big fellows acreage instead of increasing and give the other that need it a chance, istead [*sic*] of letting them hog it all and I can just mearly exist[.]"[111] Gardiner was hardly alone in his plight; in 1938, for instance, Leitch estimated that only 480 of 725 applicants would receive an acreage allotment.[112] Matthews also

[108] "Letters to our Editor," *The Tillsonburg News*, 26 November 1936.
[109] W.S. Pollard to A.S.Rennie, 9 December 1936, RG 17, Vol. 3354, File 5-11, National Archives.
[110] See, for instance, his ad in *The Tillsonburg News*, 21 October 1937.
[111] Delbert Matthews to Min of Ag [Gardiner], 30 March 1936, RG 17, Vol. 3354, File 5-19, National Archives
[112] '4,000 Acres to New Growers,' *St. Thomas Times-Journal*, 4 February 1938; 'Statement on 1938 Tobacco Acreage,' *The Tillsonburg News*, 10 February 1938.

cast aspersions on foreigners, arguing that "southerns" and "Belgiums" should not receive acreage before the "Canadian born." However, foreigners shared Matthews' plight. Hungarian born Wendell Rell also found himself trying to grow tobacco without acreage rights for three very difficult years—payments were precarious, and he relied on the odd jobs procured by his children to keep his farm interest alive.[113] It is possible that the Association rejected Rell because of environmental conditions—perhaps his soil lacked the requisite sandy characteristic—but his account indicates that the Association's search for stability left some farmers on a very precarious sideline.

Farmers outside the Association were not quiescent about their situation. The same year as the Association organized (1936), Intercounty Tobacco Growers, Limited formed to handle the crops of farmers who found themselves blacklisted—in other words, farmers who had exceeded their acreage allotment given to them by the Board during the 1935-6 season.[114] About 120 farmers attended Intercounty's organizing meeting on 7 December 1936, and listened to organizer W. Edwards Macdonald exclaim that no-one could tell a farmer what he could or could not do with his land, especially not to an Association influenced by "one large interest which I do not care to name."[115] For these farmers, Imperial Tobacco's very presence on the Association undercut any claim that it acted as a body that prioritized the farmer's fair treatment. The profits of the early 1930s were not so easily forgiven. Intercounty persisted as a small independent concern for several years, focusing particularly on the British market—a strategy that proved costly during the Second World War, when the declining fortunes of the firm were blamed on U.S. tobacco sent to Britain as a part of the Lend-Lease program.[116]

The so-called 'Tobacco Strike' of November 1937 revealed that not all farmers were satisfied with the minimum average price arrangement. Skepticism over the Marketing Association's ability to balance the interests of buyer and grower intensified when the announced minimum average price was set at 24.5 cents, down from the 1936 minimum average of 25 cents. Some 1,200 of the

[113] Delhi Tobacco Belt Project, File 9959.4.
[114] J.K. Perrett to W.C. Hopper, 11 January 1937 RG 17, Vol. 3354, File 5-11, National Archives. Technically, the allotment was through the Ontario Tobacco Sales Co-operative.
[115] 'New Group has Another Meeting at Courtland," *The Simcoe Reformer*, 7 December 1936.
[116] Intercounty Tobacco Growers Limited to M.F. Hepburn, 17 February 1941, R 8-5, B226522, Archives Ontario; on U.S. exports see Eldred E. Prince, *Long Green: The Rise and Fall of Tobacco in South Carolina*, (Athens: University of Georgia Press, 2000), 175-176.

estimated 2,200 flue-cured growers in the province, particularly Hungarian and Belgian growers, called for a minimum average of 34 cents. A delegation to Ontario's Department of Agriculture noted that the Association had increased the allotted acreage, but had failed to negotiate a higher price than the previous season.[117] Farmers who had restricted their acreage and adhered to the conditions of the Association expected steady returns in return; by asserting such confidence over the ability of the Association to manage returns through anticipation of demand, Leitch found himself in a very difficult position when those returns failed to materialize. The 'strike' subsided fairly quickly, as fear that the price would collapse further spread, and the market largely proceeded according to the Association's plans in December. However, sentiment that the Association worked primarily for buyer interests spread. In a letter, prominent Belgian grower Cyril De Meyer [Demeyer] noted that while the industry had a network of graders and appraisers, who continued to value a farmer's tobacco at the barn and influence the grades of the Association, the grower representatives had no such network.[118] In essence, the gap between buyer and grower knowledge and assessment capacity had been streamlined under the auspices of the Marketing Association prioritizing market stability. The fact that over the next two seasons the minimum average price continued to decline, hitting a low of 19.5 cents a pound in 1939, strongly suggested the buyers had a distinct upper hand.[119]

Opposition to the Marketing Association manifested in the formation of new organizations that particularly articulated the concerns of smaller and recent immigrant farmers. In 1938, Belgian and Hungarian growers formed two separate but linked groups that protested the limited acreage allotments, contending that the Marketing Association prioritized the interests of syndicate farms and failed to give smaller farmers information needed to negotiate prices with buyers.[120] Opposition to the Association formalized between December 1939 and March 1940, when J.E. Carter (the former mayor of Guelph) and William Sutch (the occasional mayor of Tillsonburg) organized some 1,500 to form the Union Tobacco Growers Co-operative. The cooperative presented itself as an important body for the "New Canadians" who were underserved by the

[117] 'Tobacco Men Plan to Appeal to Minister,' *The Globe*, 4 November 1937; 'Buyers Will Use Own Appraisals,' *The Simcoe Reformer*, 8 November 1937; 'Queen's Park to Mediate Tobacco War,' *The Globe*, 9 November 1937.
[118] 'The Tobacco Situation as I See it,' *The Tillsonburg News*, 2 December 1937.
[119] Tait, *Tobacco in Canada*, 72.
[120] 'Tobacco Growers Want Best Price,' *St. Thomas Times-Journal*, 4 November 1938; 'Association President Sees Crisis for Industry,' *The Tillsonburg News*, 15 December 1938; 'Tobacco Marketing Board Drawing More Criticism,' *St. Thomas-Times Journal*, 16 December 1938.

Association. Carter took strong exception to reports that his cooperative was a result of foreign agitation, contending that the newspapers were using 'foreigner' in a pejorative sense. He insisted that these 'foreigners' were "Canadian by adoption," and people who had invested significantly in their farms.[121] This group sharply criticized the grower representatives, broadly arguing that people like Leitch and Perrett were "yes-men" dominated by the buyer interests.[122] The chief aim of the new cooperative, which extended into Essex, was to secure government loans on their member's unsold crops, and to get government experts, rather than Association members, to determine acreage rights.[123] Even in dissent, the Union Cooperative accepted the need for market stability through management; they simply sought to replace buyer representatives with more rigorous government controls. However, echoing the struggles of the Kingsville Co-op, the Union Cooperative dissolved after only managing to sell off its members' 1940 production in 1943.[124]

In 1943, Perrett announced that there would be no acreage restrictions, due to the accelerated demand for tobacco, removing a fundamental point of contention over the Association's operations.[125] However, disputes continued to emerge over the average minimum price. In 1944, no average minimum was reached as growers and buyers disputed how to measure the increased costs that war shortages had imposed on farmers. High demand prevented any losses from being too substantial, and farmers received an average of over thirty cents per pound for their crop.[126] Nevertheless, the dispute pointed to a troubling trend of the Marketing Association being unable to fulfill its mandate of providing a stable, predictable market, and did nothing to assuage concerns that buyers dominated the Association. These concerns persisted and intensified in the postwar period.

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[121] 'Letters to the Editor: J.E. Carter takes Issue,' *The Tillsonburg News*, 25 April 1940. He was responding to reports like 'Improvements of Tobacco Marketing Board Proposed,' *St. Thomas Times-Journal*, 18 April 1940.
[122] 'Tobacco Association Holds First Meeting,' *The Tillsonburg News*, 28 December 1939; 'Tobacco Growers Organize for Co-operative Selling,' *St. Thomas Times-Journal*, 20 March 1940.
[123] 'Tobacco Growers Propose Using Marketing Act Plan,' 7 March 1940; *St. Thomas Times-Journal*, 'Protective Association Elects J.E. Carter toPresidency,'*The Tillsonburg News*, 21 March 1940.
[124] 'Small Surplus of Tobacco Now on Hand,' *The Globe*, 15 July 1942; 'Flue-Tobacco Review,' *Simcoe Reformer*, 29 December 1943.
[125] 'No Restrictions to be Placed on Acreage—J.K. Perrett,' *Canadian Cigar and Tobacco Journal*, (February, 1943), 20.
[126] 'Efforts Fail to Fix Price for Tobacco,' *The Globe*, 5 December 1944; 'Tobacco Buying Starts Today on Open, Unrestricted Market,' *The Tillsonburg News*, 7 December 1944; 'Tobacco Leaf Market Opened Minus Minimum Average Price,' *Canadian Cigar and Tobacco Journal*, (December 1944), 32; Tait, *Tobacco in Canada,* 77.

Acreage rights created further tensions, as they became a market in themselves. As the Association allotment system persisted, farmers held acreage rights that they kept irrespective of whether or not they remained on the farm they possessed when they were first granted the acreage right. In other words, the quotas became less a matter of controlling the supply of tobacco, but a valued good in its own right, increasingly abstracted from actual production. For instance, some farmers with rights reported the value of their farms doubling between 1940 and the mid-1950s. Another grower estimated that having a tobacco farm granted basic acreage rights might increase the value of the farm by $20,000 to $30,000.[127] Further, a farmer might not sell their acreage rights with the farm, instead opting to take their rights with them to a new farm. A 1956 inquiry into the flue-cured tobacco industry by the Restrictive Trade Practices Commission reported that these acreage allotments were "jealously guarded" by farmers, especially because no new members had been admitted to the Association between 1950 and 1955.[128] In 1951, in an effort to establish new tobacco rights, members of a group of Elgin-based tobacco farmers promoted a referendum to market tobacco under the Ontario Farm Products Marketing Act, rather than through the Association. However, the Association, at this point led by former Imperial buyer Francis Gregory, managed to defeat this referendum in large part by stoking fears that farmers would lose their long-held tobacco rights if the market reorganized.[129] At the cost of deep divisions between farmers, the Association provided a sense of stability and cooperation between farmer and producer in the market.

The nature of the Canadian tobacco commodity chain, with its high capital costs, limited number of buyers, and competition from other Commonwealth producers like Zimbabwe contributed to the sense that the Association was founded on fear as much as stability or fairness.[130] According to the Restrictive Trade commissioners, perceptions that the Association had provided good business for farmers and buyers alike mixed with "fears of what might happen if the present arrangements were changed[.]"[131] Farmers had grown to fear expulsion from the Association, to

[127] Canada, Restrictive Trade Practices Commission, "Report Concerning the Production, Purchase and Sale of Flue-Cured Tobacco in Ontario," (Ontario, 1956), 21, 51
[128] Tait, *Tobacco in Canada*, 142; "Report Concerning the Production, Purchase and Sale of Flue-Cured Tobacco in Ontario," 43-51. Tait's commentary on this period is particularly interesting, as he emerged as a key opponent to the Association.
[129] Tait, *Tobacco in Canada*, 159.
[130] "Report Concerning the Production, Purchase, and Sale of Flue-Cured Tobacco in Ontario," 80-90.
[131] On Commonwealth producers, see "Report Concerning the Production, Purchase, and Sale of Flue-Cured Tobacco in Ontario," 75.

fear a reduction in their acreage allotment, to fear that the minimum price would not allow them to pay off or secure bank loans. Indeed, the high capital costs of tobacco farms meant that many farmers were obliged to take substantial loans from banks; one bank manager estimated that each farm had an average loan of $12,000 to $13,000.[132] Their ability to contest the dictates of the Association were limited by the fact that all major buyers operated through the Association and the fact that export markets never emerged as a competing market for independent growers, as the Union Co-operative discovered. The Association had succeeded in creating value for its members through use of modern mechanics of measurement and through stabilizing measures, but the measures remained fundamentally controlled by buyers.

From Association to Board: The Ontario Flue-Cured Tobacco Growers' Marketing Board

For twenty years, the Association managed to retain enough support among farmers to continue its program for stability, a program that prioritized cooperation between producers and manufacturers. However, the tensions that emerged from the beginning, the voices of protest from excluded farmers and from producer members who saw the influence of manufacturers in the average minimum price could not be contained forever. Two events catalyzed opposition to the Association, leading to its dissolution and the formation of the Ontario Flue-Cured Tobacco Growers' Marketing Board, which organized under the Ontario Farm Products Marketing Act and did not include buyer members. Firstly, the Association acquiesced to buyer demands that they have equal membership on the Association's Board of Directors in 1954. Secondly, opposition to the Association was buoyed by the aforementioned 1956 Restrictive Trade Practices Commission report, which was quite critical of the Association's use of two of its most fundamental tools: acreage controls and grading. The Report was widely available, as it was mailed to every registered tobacco grower.[133] In effect, the organization designed to produce market stability was producing growing discord.

A reformulated principle of equality lay behind the Association's idea of an equal number of buyer and grower members on its Board of Directors. In a statement promoting the shift, the Association

[132] "Report Concerning the Production, Purchase, and Sale of Flue-Cured Tobacco in Ontario," 23.
[133] Tait, *Tobacco in Canada*, 170.

board advanced it as the best means to promote "a spirit of give-and-take."[134] Motivating the measure, Francis Gregory, who recently ended his period as chair of the Association, claimed that the organization had been hobbled by acrimonious debate and that buyers required equal representation, since they had an equal stake in the success of the organization.[135] Many farmers were not particularly placated by this rationale, and the decision to allow buyers equal representation on the board of directors became recast as "rule by buyers" amongst opposing farmers.[136] The government investigators reported that the decision contributed to the sense that growers "consider that the buyers occupy a dominant position in the marketing of flue-cured tobacco."[137] For all the cozy rhetoric of harmony and equality between grower and buyer, class frictions remained.

As buyer control of the Association tightened, more farmers found themselves outside the organization. There was an expansion of membership between 1946 and 1950, when the number of farms in the Association grew from 2,833 to 3,557, and the number of independent farms decreased from 274 to 76. However, during the 1950s, when the distribution of new acreage allotments largely stopped, independent farms grew from 76 to 523 by 1955, while Association farms remained only slightly altered at 3,564.[138] The steady increase in independent farmers, who were able to sell their tobacco after the Association members sold theirs, increasingly undermined a core plank of the Association, namely, to manage and predict supply. The government commission took the growth of independent farmers as evidence that the Association was no longer working to stabilize the market, but was rather functioning as a body that was creating an unfair impediment for new farmers. In essence, the report questioned whether the Association was a "benevolent" monopoly. It seemed to merely function as a monopoly in the pejorative sense of the term, and one that was increasingly incapable of predicting supply and demand.

The Association's other tools of market management, minimum average prices and kiln appraising, also fell into disrepute. Growers revived complaints that the grading was hardly neutral, and the government report corroborated their argument. Buying still took place at the barn,

[134] "Endorse Equal Representation of Growers, Buyers on Board of Flue Cured Marketing Group," *Leamington Post and News*, 25 March 1954.
[135] "Gregory Urges Revisions in Tobacco Board," *Leamington Post and News*, 1 April 1954.
[136] Grey Hamilton, "Tobacco Board Aimed at Ending Rule by Buyers," *The Globe and Mail*, 12 September 1957.
[137] "Report Concerning the Production, Purchase and Sale of Flue-Cured Tobacco in Ontario," 123.
[138] "Report Concerning the Production, Purchase and Sale of Flue-Cured Tobacco in Ontario," 59.

and buyers still used their own grades, while producers only had Association grades as a guideline. Further, buyer determination to meet the minimum average led to them thinking in terms of overall market aggregates, to the detriment of some producers. As the Report noted, "[I]n buying individual crops the buyers think in terms of the over-all cost to them of the tobacco and tend to adjust their prices towards meeting the minimum average price…[this] tends to penalize producers of quality crops to the advantage of the producers of the poorer crops."[139] This result was precisely the opposite effect that the system of minimum averages and kiln appraisal were supposed to have. Further, the continued lack of grower control over grades contributed to the sense that farmers had lost control of the Association.[140] For farmers, the utility of abstraction as represented by minimum average prices had reached its limit.

In May 1957, by a two to one majority, farm owners rejected the idea that buyers and producers could work harmoniously in a single body (sharegrowers were not eligible to vote).[141] Intriguingly, the Essex County flue-cured growers opposed the new Board more than any other voting region—perhaps memories of the Kingsville Co-op still stung.[142] By organizing under the Ontario Farm Products Marketing Act, which replaced the Farm Products Control Act in 1947, tobacco farmers indicated that a grower led board under government oversight worked as a better guarantor of producer returns than did cooperation with corporations. Indeed, the campaign opposing the Association specifically cited the Restrictive Trade Practice Commission as providing "great assistance" for their cause, albeit indirectly.[143] However, the vote did not end the matter, as tobacco farmers split over how to engage with tobacco buyers, leading to a protracted dispute between 1957 and early 1958.

In the summer of 1957, over one thousand farmers, representing about half of the flue-cured tobacco acreage in Ontario, formed the Tobacco Growers' Protective Committee. Formed by

[139] "Report Concerning the Production, Purchase, and Sale of Flue-Cured Tobacco in Ontario," 99.
[140] "Tobacco Men Vote to Alter Market Plan," *The Globe and Mail*, 22 May 1957.
[141] 'Tobacco Men Vote to Alter Tobacco Plan,' *The Globe and Mail*, 22 May 1957. For the rules of the vote, see "The Vote on the Proposed Ontario Flue-Cured Tobacco Growers' Marketing Plan," 15 May 1957 and F.B. Stewart to J.A. Leathong, 31 May 1957, Flue-Cured Tobacco Growers' Marketing Plan, RG 16-250, B352787, File 1.1, Archives Ontario.
[142] "Official Count Vote on the Proposed Ontario Flue-Cured Tobacco Growers' Marketing Plan," Flue-Cured Marketing Plan, File 1.1, Archives Ontario. Essex voters accounted for 130 of the total 3324 votes cast, or 3.9%. 104 Essex farmers voted no, the highest no vote of any polling division.
[143] Tait, *Tobacco in Canada*, 177-179.

former Association Vice President (and plantation manager) F.K. Ashbaugh and endorsed by the deposed (and despised) Francis Gregory, the group sought to restore the model that included buyers and growers. In a circular to tobacco farmers, the Committee rejected the idea that buyers had possessed too much control in the Association, contending, "The buyers are our only customers. We cannot see what is gained by a program of 'hate the buyers.'"[144] The group also drew enthusiastically on Cold War rhetoric, branding the mandatory membership in the Board as "socialistic," and declaring that Board organizers were "a bunch of Reds."[145] In a pointed memo to G.F. Perkin, the chair of the Ontario Farm Products Marketing Board, Ashbaugh defended the profits of the tobacco leaf brokers who felt threatened by the new board, saying that Board tobacco packing "…would be a long step in the direction of Socialism, which should be deplored by a Conservative Government[.]"[146] The Protective Committee's model of fairness and stability incorporated buyer interests and re-invoked the idea of tobacco as industrial by rejecting the idea that farmers had been suffering because of the buyer membership in the old Association. Manufacturer participation was fundamental to tobacco cultivation, in their view.

Despite the overblown Cold War rhetoric, the succeeding Ontario Flue-Cured Tobacco Growers' Marketing Board had much continuity with the Association. It accepted acreage control as an important means for ensuring good prices, and it still insisted that farmers individually sell their tobacco to buyers. However, they altered how farmers sold their tobacco through establishment of an auction system, where the Board planned to use federal grades to sort the tobacco of its members, and then allowed the farmer to sell his tobacco anonymously to buyers at one of the three auction exchanges in Alymer, Tillsonburg, or Delhi. The auction system, based on a Dutch clock system that started at a high price and ticked downwards, had precedent in the Ontario Cheese Producers' Marketing Board.[147] North Carolinian flue-cured farmers had been auction

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[144] "Tobacco Growers' Protective Committee, Simcoe Ontario," 17 June 1957, Flue-Cured Tobacco Growers' Marketing Plan, RG 16-250, B352787, File 1.1, Archives Ontario.
[145] 'Growers Voted Out Marketing Scheme In Jealousy: Gregory," *The Globe and Mail*, 10 September 1957; 'Notice to Tobacco Growers Protective Committee Members,' *The Simcoe Reformer*, 27 September 1957; 'Protective Committee Charges Tobacco Board Ruling Creates Confusion Among Growers,' *The Simcoe Reformer*, 4 October 1957.
[146] F.K. Ashbaugh to G.F. Perkin, "Supplement to Brief, Causes of the Formation of the Tobacco Growers' Protective Committee," Flue-Cured Marketing Plan.
[147] Tait, *Tobacco in Canada*, 118-124; 'Tobacco Auction Plan to be Pushed Through Despite Opposition," *The Globe and Mail*, 20 September 1957; on cheese board precedent, see "Memorandum of Meeting of Protective Committee and Tobacco Marketing Board, held in Agricultural Office Simcoe, Saturday, July 20, 1957," Flue-Cured Tobacco Growers' Marketing Plan, RG 16-250, B352787, File 1.1, Archives Ontario.

selling for decades.[148] This system replaced the barn-buying system that had favoured buyer grades. Even within the auction system, heated debates over whether crops should be sold by graded individual bales or by the full crop erupted. Opponents of the bale system, largely members of the Protective Association, feared that selling by bales of tobacco would slow down sales and make returns more precarious. Proponents insisted that sales through graded bales would lead to higher returns, and that selling by the full crop at the barn could lead to the revival of the old problem of farmers not realizing the highest price for their best tobacco leaves.[149] The new Board sought to use the abstracting grades of government to reward individual success in the field more precisely. They also pointed to an Arbitration Board, where buyer and grower representatives could seek third party arbitration to determine minimum prices for grades.

Given the acrimonious debate, the first winter of auctioning was beset with problems. Board representatives accused buying companies, who remained unhappy with the new buying system, of deliberately slowing the pace of sales by closing sales at 3:30 PM and examining only ten bales of tobacco at a time, when the Board proposed thirty. The Board particularly singled out Imperial Tobacco, which controlled approximately seventy percent of purchases during the season, as being resistant to extending the buying time. Imperial also complained that too much of the tobacco was tied up for export, when they wanted more loose tobacco for domestic use.[150] By early January, *The Globe and Mail* reported that the auction system was in "crisis," and farmers were fretting about whether their tobacco would sell at all—a situation that Ashbaugh, from his Florida address, smugly claimed to have predicted.[151]

By mid-February, the flue-cured auctions were selling 2.5 million pounds of tobacco a day, and farmers had received an average price of 50.32 cents per pound, four cents higher than the crop sold by the defunct Association.[152] The acceleration happened for two reasons. Firstly, Leslie

[148] Badger, *Prosperity Road*, 15-18.
[149] The *Simcoe Reformer*, which tended to oppose the new Board in favour of the Simcoe based Association, ran a number of articles on the opposition on 6 January 1958, 'Tobacco Opposition Mounts.' See also "Memorandum of Meeting of Protective Committee and Tobacco Marketing Board."
[150] "Memorandum Regarding Certain Aspects of Marketing of the 1957 Flue-Cured Tobacco Crop by Bale Auction;" Flue-Cured Marketing Plan, File 1.2; M. Demaiter, G. Vanden Bussche, and H. Catry to William Goodfellow, 8 January 1958, Flue-Cured Marketing Plan, File 1.3, Archives Ontario.
[151] "Crisis Foreseen on Slow Sales of Tobacco Crop," *The Globe and Mail*, 10 January 1958; F.K. Ashbaugh to Frank Perkin, 21 December 1957, Flue-Cured Marketing Plan, File 1.2, Archives Ontario.
[152] G.F. Perkin to Leslie Frost, 23 April 1958, Flue-Cured Marketing Plan, File 1.3, Archives Ontario.

Frost's Conservatives faced a by-election in Elgin County, and sought to resolve the matter to improve their electoral position.[153] Secondly, the Ontario Marketing Board head G.F. Perkin, the government's main official on the file, endorsed the Tobacco Board's vision. A (possibly unsent) November 1957 letter from the Minister of Agriculture, William Goodfellow to Protective Association head Ashbaugh, which still seems suggestive of the mentality at the department, objected to the socialist epithet:

> "I cannot let the opportunity pass of pointing out that the Ontario Farm Products Marketing Act and its predecessor, the Canadian Products Marketing Acts were copied from the British Agricultural Products Marketing Acts of 1931 and 1933…So if you are going to bring race into it the…Act had a good sire and Russia had nothing to do with it.[154]

When Premier Frost publically intervened in the dispute on 13 January 1958, Perkin privately sent memos blaming the buyers for slowing down the auctions, underlining "the 1957 crop cannot be put through the auction warehouse at the date in view of the flow permitted by the buyers[.]"[155] With government intervention, Imperial Tobacco and the other buyers agreed to accelerate the auctioning process, setting an important precedent for future auction years. The Board agreed to guarantees of bale quality.[156] The episode confirmed that the government retained a fundamental role in defining the market, and that most farmers accepted that role. Without government backing, buyers could resort to drawing on the fears of farmers.

Private speculation by Goodfellow about the possibilities of expanding the Board to include Quebec growers also indicated broad government approval of the project.[157] Indeed, in 1958, the Quebec flue-cured growers established their own Marketing Board, and held their first tobacco auction in January 1959. However, buyers there were equally opposed to the bale auction system, and much of the tobacco went unsold until farmers gave up and reverted to a whole crop sale. The head of the Quebec's Agricultural Marketing Board, Georges Héon, had earlier predicted that the

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[153] This is the main reason Tait gives for government intervention, see *Tobacco in Canada*, 230-231.
[154] "Suggested Reply" of Minister of Agriculture to F.K. Ashbaugh, 8 November 1957, Flue-Cured Marketing Plan, File 1.1, Archives Ontario.
[155] G.F. Perkin to Leslie Frost, 7 January 1958, Flue-Cured Marketing Plan, File 1.3, Archives Ontario.
[156] S.C. Barry to G.F. Perkin, 23 January 1958, Flue-Cured Marketing Plan, File 1.3, Archives Ontario; Tait, *Tobacco in Canada*, 228-231.
[157] Bill [William Goodfellow] to F.A. Stinson, 30 September 1957, Flue-Cured Marketing Plan, File 1.2, Archives Ontario.

provincial government would not be particularly interested in supporting a tobacco board; the failure of the auction validated his prediction. While the Quebec Flue-Cured Tobacco Growers' Marketing Board persisted as a body to coordinate export sales, it never again attempted a domestic auction.[158] This brief episode confirmed the importance of government backing for a farmer-driven marketing system in tobacco.

In Ontario, the resolution of the 1957 crop meant that the broad contours of the flue-cured tobacco market were set for a period, despite frequent disputes over prices requiring arbitration. As the Board struggled to adjust production quotas to declining buyer demands arising from the health risks of smoking, reductive adjustments to the acreage quota system were made, including a shift from acreage rights to poundage rights in 1978. The 1980s saw a reversal of the stories of prosperity, as farmers recalled years of financial and personal difficulty in adjusting their production away from tobacco.[159] The Ontario Flue-Cured Tobacco Growers Marketing Board persists to this day, licensing 243 growers during the 2013 season, though they now only oversee direct licenses between buyers and individual growers, and their auction exchanges are all closed.[160]

Conclusion

The various marketing schemes all sought to enhance farmer control using the tools of the modern tobacco marketplace, tools like processing, grading, and measuring. Ontario flue-cured farmers, by and large, accepted the terms of modern tobacco farming—they purchased the fertilizer, steamed the beds, tested the soil, hired the curers, and so forth. They accepted that market criteria largely shaped the terms for how they raised their tobacco. However, farmers expected a return on their crop that would cover their expenses. When these returns did not materialize, tobacco farmers, like many farmers in other sectors, sought to consolidate their control over the supply side

[158] Tait, *Tobacco in Canada*, 244-246. For Héon's position, see an exchange between G.F. Perkin and Georges-H Héon in the file. Flue-Cured Marketing Plan, File 1.2, Archives Ontario.
[159] Doug Ramsay, Carol Stewart, Michael Troughton, and Barry Smit, "Agricultural Restructuring Of Ontario Tobacco Production," *The Great Lakes Geographer,* Vol. 9, No. 2, (2003): 76-78; Doug Ramsay and Barry Smit, "Impact of changes in the flue-cured tobacco sector on farmers in Ontario, Canada," *Applied Geography*, Vol. 21 (2001): 347-368.
[160] Michael-Allen Marion, "Tobacco crop falls short of target," *Woodstock Sentinel-Review*, 9 December 2013*;* "Ontario Flue-Cured Tobacco Marketing Board," Tobacco in Elgin County online exhibit, Elgin County Archives, http://www.elgin.ca/elgincounty/culturalservices/archives/tobacco/marketingboard.html.

of the market to improve market stability and make returns more predictable. To achieve this, it was necessary to gain more control over the mechanisms of modern, industrial tobacco: processing, storage, grading, and exporting. The different organizations considered here all sought to achieve these goals in varying ways—cooperatives through farmer control of processing and marketing, the Association through cooperation with industry, and the 1957 Board through use of government grading and a grower controlled marketing scheme. Each iteration held some degree of commitment to farmer cooperation, though not out of an aim to change the competitive nature of the capitalist system, but rather, to establish a measure of stability within the market.

Each system had some success. Even the ill-fated cooperative managed to spark a brief period of optimism for Burley farmers. However, each model of market management also created its own instabilities. The Kingsville Co-op created pressure to produce returns for shareholders and expand into the British market. Pooling plans revealed the growing distance between Burley and flue-cured growers. The Association excluded farmers, creating a group of people who sought to sell their tobacco on the margins of the industry, and even the 1957 Board provoked debates over the imperative of access to marketplaces for individuals and the acceptability of compelling membership in a selling organization. The tools of modernity that were meant to bring stability also created their own sets of challenges. Grades never perfectly captured the myriad variations within nature. Acreage allotments never captured the exact requirements of the market, generating frustration amongst the independent growers. Furthermore, until the creation of the auction system, the entire tobacco marketing system continued to rely on the intensely personal moment of a buyer confronting a seller at the farm barn. No system of purchasing could entirely overcome the power of personalities, either, from the feud between Griggs of the Kingsville Co-op and Sturgis of the Pool, to a bemused Department of Agriculture head explaining to a furious plantation owner why the Board was, in fact, not a communist plot. These moments of disjuncture peek out from behind the tables and graphs of tobacco production that speak of order and controllability, disrupting their smooth calculations.

Conclusion

While much of this dissertation considered the rise of commercial tobacco farming in Canada, the predominant story of the industry over the last few decades is one of decline. In response to health concerns, domestic demand for tobacco had plummeted, the last flue cured auction exchanges in Ontario had closed (Tillsonburg in 2007, Delhi in 2009), and the federal government announced a Tobacco Transition Program in 2008 offering cash to farmers to leave the industry, on the condition that they not return to tobacco farming. The program also worked on the basis of abstraction, since it was not necessarily actual production, but quotas that allowed for a farmer to produce tobacco under the auspices of the Ontario Flue-Cured Tobacco Growers Marketing Board, that were purchased out.[1] This 2008 program was part of a trend stretching back to the 1980s, when the Ontario Ministry of Agriculture worked with the Marketing Board to retire tobacco acreage quotas.[2]

In 2012, the activity of the Six Nations based tobacco firm Grand River Enterprise prompted a small resurgence in tobacco farming. Grand River Enterprise, a major firm in the First Nations "takeback" of the tobacco industry, signed a three-year agreement with a Chinese purchaser, China Tobacco International, prompting a brief revitalization in tobacco growing.[3] The farmer rationale for continuing their cultivation resonates with justifications that farmers had been using since the 19th century. For instance, the Mayor of Norfolk, Dennis Travale, noted, "It's still the most lucrative cash crop you can grow per acre."[4] Farmers expanding their production must be tempted, as so many Canadians are, by the steady demand offered by large Chinese market. As a tobacco equipment importer told a CTV reporter, "The farmers are just looking for stability."[5]

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[1] Agriculture and Agri-Food Canada, 'Details on Transfer Payment Program for Agriculture and Agri-Food Canada,' Archived Web Page, http://www.tbs-sct.gc.ca/dpr-rmr/2008-2009/inst/agr/st-ts05-eng.asp#anc-23 (accessed 6 August 2013).
[2] Doug Ramsey et al., 'Agricultural Restructuring of Ontario Tobacco Production,' *The Great Lakes Geographer*, Vol. 9 No. 2 (2003), 82-84.
[3] On Grand River's role in this "takeback," see Poling Sr., *Smoke Signals*, 195; Daniel R. Pearce, 'Deal could mean huge boost for tobacco industry,' *Simcoe Reformer,* 21 March 2012.
[4] Mark Brown, 'Tobacco's quiet revival,' *Canadian Business*, 18 March 2013. http://www.canadianbusiness.com/companies-and-industries/tobaccos-quiet-revival/
[5] CTV Kitchener, 'Local tobacco growers get big boost from Chinese demand,' 10 June 2013, http://kitchener.ctvnews.ca/local-tobacco-growers-get-big-boost-from-chinese-demand-1.1319937

This resurgence seems to have proven short lived, and the stability offered by the export market seems precarious. In 2013, 243 growers raised around 62 million pounds. However, by the time of this writing (2015), the resurgence seems to have fallen again, as about 43.3 million pounds were expected to be harvested from some 15,539 acres in Ontario, from 230 growers.[6] Furthermore, Grand River Enterprises finds itself embroiled in a legal dispute with New York State, which accuses the firm of smuggling cigarettes into the state.[7] Without commenting on the specific legal complexities of the case, it seems that state concerns over cigarette smuggling have at least some connection to older anxieties over the persistence of informal economies. Government retains its power in defining the tobacco market. This brief (and unfinished) episode in tobacco cultivation recalls many themes considered in this dissertation: the search for farmer stability, the influence of global commodity chains on farms, the pressures arising from the high capital costs of commercial tobacco cultivation, the role of government in defining markets. Mayor Travale's comment about tobacco being a high paying crop and the decision of a few farmers to re-abandon tobacco farming also has long historical precedent, for tobacco has generally been a high risk, high reward crop, one that had been made stable only through the now withdrawn government support.

The fact that few people, especially people outside southwestern Ontario, would lament any failing of this revived tobacco cultivation emerges from the fact that, just as commercial tobacco rapidly depletes the soil of nutrients, tobacco deteriorates the health of its users. The capitalist forces that contributed to the rise of the cigarette and the emergence of flue-cured tobacco only intensified the rate of depletion. The sources considered here were, with only a couple exceptions, largely silent on the health ramifications for the tobacco farmers, ramifications that would greatly shape North American understanding of the crop as the 20th century wore on and the tobacco company obfuscations were gradually overcome. The health defects from smoking tobacco products remained largely disputed for the period, but the difficulties that could result from handling the leaves or using the pesticides were largely uncommented on. This may be, in part, a product of the difficulty in capturing all aspects of the ready-at-hand history (or, as it has been referred to here, the History 2) of farming. Perhaps the nausea and faintness associated with green tobacco sickness

[6] Michael-Allan Marion, "Tobacco acreage is declining again this year," *Simcoe Reformer*, 2 May 2015.
[7] Steve Buist, "New York seeking $350 million from Six Nations," *Hamilton Spectator*, 28 November 2014.

was simply attributed to the difficulty of handling tobacco, with all of the bug hunting, bending and cutting it required, in the hot summer sun.

As the commodity link metaphor suggests, changes in production and consumption are connected and mutually reinforcing. Moments like cultivating and priming tobacco plants and the emergence of cigarettes as a powerful consumer commodity are intimately linked. Underpinning many of these moments were the demands of the ATCC/Imperial Tobacco and the corporate search for profits, but just as powerful were the decisions of farmers, immigrant and established alike, who sought to establish their families on mortgage free farms. The corporate demand to make nature predictable and to develop tobacco that would be suited for mass production drove many changes in how farmers worked their land. New chemical fertilizers were adopted. Soils were classified, tested, and redefined. New technologies, like flue curing kilns and greenhouses, were deployed. All of these changes demanded increased capital costs for farmers, which committed them further to specializing in tobacco. Every instance of abstraction generated by the capitalist tobacco economy, from grading to surveys to price measurements, demanded material changes.

This economy produced new forms of expert knowledge. This knowledge came from state experiments by the Tobacco Division, from corporate buyers who sought to make their product more predictable, and from U.S. Southerners who were able to use their experience and the idiomatic association between the U.S. South and quality tobacco to assert their expertise in Canada. The production of expert knowledge depended on the exclusion of other understandings of tobacco, most notably those of Indigenous peoples and of French Canadians who raised the difficult to define *tabac canadien*. Tobacco that could not be classified was wild, and therefore outside the tobacco market. Experts determined where tobacco could and could not be grown, based on environmental factors shaped by commercial demand. These determinations could have great value, as the farmers who established themselves in the New Belt or in the northern tobacco districts of Quebec discovered. However, shifting definitions of desirable tobacco also came with costs, as Old Belt Burley growers discovered when demand for their crop plummeted.

From its early interventions through tariffs and questions over youth consumption, government played an instrumental role in defining the tobacco economy. Far from being a market operated by laws of supply and demand that existed above social and cultural understandings, competing

interests of farmers and manufacturers and state desire to promote a seemingly lucrative agricultural sector all compelled the government to define and refine the tobacco market. Questions about foreign-owned monopolies and the best supply chains to link farmer to producer to consumer all occupied government attention. Disputes over the distribution of tobacco profits between farmers and producers led to the federal government endorsing a tobacco economy based on stability, even if that stability largely left the dominant market position of Imperial Tobacco, which continued to be guided by the capitalist quest for more capital, intact.

Farmers were not quiescent when confronting these changes. In some cases, farmers drove the modernization process, committing more rapidly to using chemical fertilizers and specializing in larger commercial tobacco crops than some experts desired. Through meetings, letters, and editorials, farmers also articulated their concerns with expert opinion, as people like Felix Charlan and Archibald Leitch discovered. Farmers also disagreed with each other concerning how best to engage with the capitalist tobacco economy, forming a range of cooperatives, boards, and associations that could work at cross-purposes. Tobacco cooperatives, in particular, struggled to establish themselves as viable links in the commodity chain, struggling to navigate between its dual purposes of coordinating farmer activity through processing plants and pools while distributing individual profits and returns to those farmers. The Flue-Cured Tobacco Marketing Association of Ontario (as well as its preceding and succeeding organizations) solved the disputes between farmers through stabilization via the industry-approved tools of exclusion, including acreage controls and quotas. These tools generated considerable benefits for some farmers, including achieving the greatly desirable aim of securing land and family stability, but frustration for others, including some immigrants who were never able to secure that farm or stability.

Environment acted as both a stage and an agent during all these changes. In some ways, the project to classify and reassess the value of sandy, well-draining soil was a success, as land near Joliette and in the Norfolk Sand Plain went from being seen as "vile" or "desert" land to fostering lucrative agricultural ventures. Through use of fertilizers, cover crops, and rotations, many farmers were able to secure good yields over many years. However, people can never entirely control nature. Fungi and viruses could wipe out entire crops, despite the intervention of water steamers. Various pests damaged leaves and roots, and defied both physical and chemical efforts to eliminate them. Even if a crop was carefully fertilized, planted in soil that had been prepared through rotations,

judiciously topped and suckered, and largely free of pests, a hailstorm or sand storm could ruin much of the crop in an afternoon. The exacting demands of buyers, combined with the fundamental uncertainties created by the environment, meant that tobacco was always a risky crop. No market stabilizing mechanism could change this point for the individual farmer.

All of these developments should make us aware of the dialectic between opportunities and limitations that shapes rural modern capitalism. New products, like cigarettes, and new understandings of soil produced opportunities for farmer and corporations alike. Chemical fertilizers offered a way to expand the productive capacity of marginal soils. Abstracting metrics like grading provided ways to assess and value the application of expert knowledge in the farm, which could provide considerable returns to farmers who managed to adhere to the grading standards. However, all of these opportunities produced limits: chemical fertilizers could prove challenging to apply properly, and they could never overcome the damage caused by weather or insects. Grades excluded and devalued as much as they raised the value of some crops. The intensive capital requirements of commercial tobacco farming became an increasing burden as the health ramifications of tobacco use became too obvious to ignore (or cover up).

For all the large-scale changes to the tobacco industry, the changes wrought by modernity and capitalism, it is vital not to lose sight of the smaller events and moments that defined much of this development. Things like the mud that slowed down the educational lectures of Dugas and Blaise given to curious, if skeptical, crowds. Emotions like the anxiety a sharecropper felt when he spotted the local Imperial leaf buyer headed towards the tobacco barn, with a notepad full of grades and notations hidden from view. The pleasure of a Belgian immigrant, who, pockets flush with cash after a good year on the farm, was able to return home to spend Christmas with his friends and relatives back home. Finally, the exhausted tedium felt by the farm family who, after arranging the sale and baling their crop, waited in a long line of wagons, prepared to deliver their year's crop to the train station. It is during these moments, as much as during any government commission or corporate meeting, where modern capitalism is shaped and lived.

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The Lighter/Le Briquet

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