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Source: *Annual Review of Sociology*, Vol. 24 (1998), pp. 313-343

Published by: Annual Reviews

Stable URL: <http://www.jstor.org/stable/223484>

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COMMENSURATION AS A SOCIAL PROCESS

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KEY WORDS: commodification, quantification, measurement

ABSTRACT

Although it is evident in routine decision-making and a crucial vehicle of rationalization, commensuration as a general social process has been given little consideration by sociologists. This article defines commensuration as the comparison of different entities according to a common metric, notes commensuration's long history as an instrument of social thought, analyzes commensuration as a mode of power, and discusses the cognitive and political stakes inherent in calling something incommensurable. We provide a framework for future empirical study of commensuration and demonstrate how this analytic focus can inform established fields of sociological inquiry.

INTRODUCTION

Consider three examples. Faculty at a well-regarded liberal arts college recently received unexpected, generous raises. Some, concerned over the disparity between their comfortable salaries and those of the college's arguably underpaid staff, offered to share their raises with staff members. Their offers were rejected by administrators, who explained that their raises were "not about them." Faculty salaries are one criterion magazines use to rank colleges. Administrators, mindful of how fateful these rankings are, wished to protect

their favorable ranking with preemptive faculty raises. Partly because college raters pay closest attention to professors' incomes, faculty and staff compensation plans are not considered comparable.

Several working mothers recently described their strategy for managing their anxiety about the amount of time they spend away from their young children. Each week, they calculate a ratio of mom-to-caregiver hours. If the ratio is close, or favors mom, they feel better. One woman admitted to "fudging" her numbers to produce a guilt-ameliorating figure. An opposite appeasement strategy involves the invention of "quality time," when harried parents try to convince themselves that what matters is the richness, rather than the volume, of time spent with their children. The emergence of "quality time" as a way to mark the specialness of parental involvement corresponded to the large influx of mothers moving into the paid work force. But some mothers who embrace traditional roles, or who sacrifice careers and income to stay home with their children, sniff at the self-serving aroma of "quality time" (Hays 1996, Berger 1995:43–44).

An economist evaluating a proposed dam faced the problem of how to estimate the value of tubing down the river, an activity that the proposed dam would eliminate. Committed to including in his analysis the "cost" of losing this recreation enjoyed by thousands each warm weekend, he tried to synthesize a demand curve for tubing. Despite valiant efforts and sizable expenditures, his efforts to derive a robust price for tubing failed. As is common with characteristics that are hard to measure, the value of tubing was excluded from the analysis of the dam (Espeland 1998).

Commensuration—the transformation of different qualities into a common metric—is central in each of these examples. Whether it takes the form of rankings, ratios, or elusive prices, whether it is used to inform consumers and judge competitors, assuage a guilty conscience, or represent disparate forms of value, commensuration is crucial to how we categorize and make sense of the world.

The consequences of commensuration are complex and varied. Commensuration can render some aspects of life invisible or irrelevant, as the failure to price river tubing illustrates. The expansion of commensuration can be a political response to exclusion or inequality. This tactic is embraced by some lawmakers, environmentalists, and bureaucrats (including the economist just described) who wish to expand what is considered relevant in bureaucratic decisions (Taylor 1984, Espeland 1998), by women advocating comparable worth as a means for redressing pay inequity (Nelson & Bridges forthcoming, England 1992), or by economists grappling with problems of externalities (Baumol & Oates 1979). For the working mothers, commensuration can be a deeply personal way to negotiate difficult contradictions. But rejecting commensuration as an appropriate expression of value can also be a political response for those,

like some homemakers, who see their identities jeopardized by the commodification of their work and the quantification of their investments.

We argue that commensuration is no mere technical process but a fundamental feature of social life. Commensuration as a practical task requires enormous organization and discipline that has become largely invisible to us. Commensuration is often so taken for granted that we forget the work it requires and the assumptions that surround its use. It seems natural that things have prices, that temporality is standardized, and that social phenomena can be measured. Our theories presume that we commensurate when choosing and that values can be expressed quantitatively. Commensuration changes the terms of what can be talked about, how we value, and how we treat what we value. It is symbolic, inherently interpretive, deeply political, and too important to be left implicit in sociological work.

Commensuration warrants more sustained and systematic treatment. (Scholars working toward this project include Porter 1995; Radin 1996; Anderson 1993; Espeland 1992, 1998; Hurley 1989; Sunstein 1994; Desrosières 1990; and Zelizer 1994.) We need to explain variation in what motivates people to commensurate, the forms they use to do so, commensuration's practical and political effects, and how people resist commensuration. This is possible only when commensuration is investigated as a field. Our neglect of commensuration as a general phenomenon and our failure to provide a framework for its investigation as such have kept us from appreciating its social and theoretical significance. Our goal is to begin building such a framework. We start by defining commensuration, describing its long intellectual history, and explaining its significance. We then discuss the cognitive and political stakes inherent in calling something incommensurable, we offer guidelines for future empirical studies, and we illustrate how this focus can illuminate current sociological research.

WHAT IS COMMENSURATION?

Commensuration is the expression or measurement of characteristics normally represented by different units according to a common metric. Utility, price, and cost-benefit ratios are common examples of commensuration, although the logic of commensuration is implicit in a very wide range of valuing systems: college rankings that numerically compare organizations; censuses and social statistics that make cities and nations numerically comparable; actuarial projects that attempt to quantify and compare vastly different kinds of risks; commodity futures that make uniform units out of products that may not yet exist; voting, and the pork-barrel trading of diverse interests that often lies behind it; calculation of different kinds of work in terms of labor costs; and the ad hoc calculations of trade-offs among such potentially incomparable values as

career and family, breadth and depth in scholarship, and freedom and commitment in love.

Commensuration transforms qualities into quantities, difference into magnitude. It is a way to reduce and simplify disparate information into numbers that can easily be compared. This transformation allows people to quickly grasp, represent, and compare differences. One virtue of commensuration is that it offers standardized ways of constructing proxies for uncertain and elusive qualities. Another virtue is that it condenses and reduces the amount of information people have to process, which is useful for representing value and simplifying decision-making. The complexity of decisions has propelled the spread of commensuration in decision-making (Stokey & Zeckhauser 1978); so too has our growing appreciation of people's cognitive limitations (Tversky & Kahneman 1974, 1981; Thaler 1983; for a good review see Heimer 1988). Commensuration makes possible more mechanized decision-making. Computer programs that calculate utility functions, elicit and measure values, and identify alternatives that maximize people's utility can assure the consistency that people lack; in some cases, they mechanically tell people what to do. The technical advantages of commensuration can be enormous, but sometimes its symbolic and political advantages are paramount (Feldman & March 1981).

Commensuration sometimes responds to murky motives. It may be prompted by a desire to look rational, limit discretion, or conform to powerful expectations. Commensuration may be spurred by a desire to expand democratization (Cohen 1982, Espeland 1998), or by a wish to hide behind numbers, impose order, or shore up weak authority (Porter 1995). Commensuration can provide a robust defense for controversial decisions, expand a group's organizational or professional turf, or even be a means to appease God (Carruthers & Espeland 1991).

Our desire to manage uncertainty, impose control, or secure legitimacy propels us to create a dazzling array of strategies to use when we standardize. The scripts delivered by salespeople, the forms we use when we enroll our children in kindergarten or visit the doctor, and the practiced smiles of flight attendants are all forms of standardization. What distinguishes commensuration from other forms of standardization is the common metric it provides. When commensuration is used in decision-making, the procedure for deriving this metric amounts to a series of aggregations.

Most quantification can be understood as commensuration because quantification creates relations between different entities through a common metric. Commensuration is noticed most when it creates relations among things that seem fundamentally different; quantification seems distinct from commensuration when the objects linked by numbers already seem alike. When we assume the unity conferred by numbers, when the homogeneity among things appears to be a property of the object rather than something produced by quan-

tification, then we imagine we are simply counting or measuring something rather than commensurating disparate entities. For example, the census appears to be a method for counting people rather than a mechanism for constructing and evaluating relations among citizens of a state or region. This is because implicit in the act of counting is a conception of citizenship or identity that renders unproblematic the coherence of the relations among diverse people. As Theodore Porter (1986:24) put it, "It makes no sense to count people if their common personhood is not seen as somehow more significant than their differences."¹

Commensuration is fundamentally relative. It creates relations between attributes or dimensions where value is revealed in the comparison. When used to make decisions, commensurated value is derived from the trade-offs made among the different aspects of a choice. Value emerges from comparisons that are framed in terms of how much of one thing is needed to compensate for something else. In complex choices, commensuration often occurs at several levels of analysis. For example, before building a dam, analysts want to know how the dam would affect the quality of water. Water quality has many dimensions (e.g. temperature, the amount and nature of dissolved solids, turbidity, pH), and even though these dimensions are already quantified, they are measured with different scales. Aggregating these attributes according to some broader metric creates "water quality."

The structure of value rooted in trade-offs is like that of an analogy: Its unity is based on the common relationship that two things have with a third thing, a metric. How difficult or controversial commensuration is depends partly on whether it is used routinely to express the value of something, on whether people accept it as a legitimate expression of value, and on how disparate-seeming are the entities being commensurated. For example, commodification has become so naturalized that it is hard to construe the value of some goods in forms apart from price.

Commensuration can be understood as a system for discarding information and organizing what remains into new forms. In abstracting and reducing information, the link between what is represented and the empirical world is obscured and uncertainty is absorbed (March & Simon 1958:138–39, 150–51). Everyday experience, practical reasoning, and empathetic identification become increasingly irrelevant bases for judgment as context is stripped away and relationships become more abstractly represented by numbers.

¹Counting and measuring may be controversial if the likeness or comparability of the units being counted is disputed. For example, during the Constitutional Convention of 1787, Southerners who rejected slaves' citizenship rights nevertheless wished to expand their political clout in the House of Representatives. For the purposes of apportioning representatives, they agreed that slaves should count as "three-fifths of all other persons."

As we demonstrate below, the forms commensuration takes vary on several dimensions. First, modes of commensuration vary in how technologically elaborated they are. Some are highly elaborated, as in the cost-benefit analyses first developed by government bureaucrats and then elaborated by economists and decision theorists to adjudicate between diverse and often costly social policies (Porter 1992, 1995:148–89). Other modes are only marginally elaborated, such as the often ad hoc calculations made by spouses to determine the relative equitability of household chores (e.g. Hochschild 1989). Second, modes of commensuration vary in how visible or explicit they seem. There is some correlation between elaborateness of a mode of commensuration and explicitness of the project. For an economist trying to synthesize a demand curve for river tubing, the labor involved in commensuration is both deliberate and apparent; for spouses trying to equalize household contributions, the process may seem as natural as it does commonsensical. But performing some highly elaborated modes of commensuration, such as generating identical units of value in stocks or commodities futures (Cronon 1991:97–147; Porter 1995: 45–48), are complex technical feats that seem “natural” to traders and stockholders nevertheless. This suggests a third dimension of variation in modes of commensuration—institutionalization—which we address in further detail below. Finally, modes of commensuration vary according to who their agents are. Some modes are the jealously guarded turf of distinct professional bodies; actuary work in insurance is a prime example (Porter 1995:101–13). Other modes are made routine and then embedded in complex divisions of labor, as in the lower-level diagnostic and charting work done by nurses and physician residents, who standardize patients in part by transforming vital signs into discrete numerical measures (Bosk 1979, Chambliss 1996). Still other modes are common features of everyday social experience, as in consumers’ efforts to locate bargains at the grocery store or make trade-offs among purchases.

HISTORICAL LEGACIES

The linking of rationality to commensurability, and irrationality to incommensurability, are old ideas that appealed to some of our deepest thinkers. As Martha Nussbaum wrote (1984:56–57; 1986), the pairing of numbering, measurement, and commensuration with order, the pairing of comprehension with control, and obversely, the pairing of incommensurability with chaos, anxiety, and threat are characteristic of Greek writing in the fifth and early fourth centuries BCE. Nussbaum argues that commensuration was crucial to Plato’s understanding of the Good, since Plato believed that we need to make our ethical values commensurate in order to prioritize them. Complex ethical concerns, if left incommensurate, would create conflict, confusion, and pain.

As others would argue much later, Plato believed that commensuration as a mode of perceiving the world would also change those who used it. Commensuration would make us more rational and render human values more stable and less vulnerable to passion, luck, and fate. One of the great virtues of commensurability for Socrates and for Plato was that it could help us eliminate *akrasia* by structuring our choices in ways that make it obvious what we should do; commensuration would make our ethical or practical problems easy to solve in the same way that it is easy to choose between \$50 and \$200 (Nussbaum 1986:114).

But for Plato, an equally important feature of commensuration is that this willful elimination of the heterogeneity of values also stabilizes our emotions and attachments by removing motives for irrational behavior, motives such as commitment to passionate, singular love. If in using a general concept of value we can frame our choices as between more or less of the same quantity, we no longer feel the same way toward those things. If we understand our lover not as a uniquely compelling person but rather as one who provides us with some specific amount of general pleasure, we value our lover not only differently, but less. The more interchangeable our lover is with someone nearly as beautiful or more clever, the less vulnerable we are, and the less likely we are to pursue our lover with reckless abandon.

Plato's claim is powerful. He understood that in making us more stable and less passionate, commensuration was both appealing and frightening. For Aristotle, Nussbaum argues, eliminating our vulnerability, and therefore our passion, was a prospect too disturbing. He believed our sense of beauty depends precisely on its ephemeral qualities, that our ethics require us to invest in the singularity of others. Investing in what is unique is risky, but the loss of vulnerability is even more threatening, for goodness requires ethical risks, valuing things for their own sake, passion. For Aristotle, the fragility of goodness is undermined by understanding value as general and homogeneous (Nussbaum 1986, p. 235–354).

Commensuration can change our relations to what we value and alter how we invest in things and people. Commensuration makes the world more predictable, but at what cost? For Aristotle, a price too high; for Plato, an essential sacrifice. The homogeneity commensuration produces simultaneously diminishes risk and threatens the intensity and integrity of what we value. These two important themes found in Plato's and Aristotle's view of ethics reemerge in our most compelling critiques of modernity: in Karl Marx's critique of capitalism, where commodification distorts human relations by turning people into means and things into ends; in Max Weber's analysis of the constraints of the iron cage and the disenchantment attending rationalization; and in Georg Simmel's analysis of money, where the objectification of value inserts distance between us and what is valued, fostering intellectualization and detachment.

Commensuration is crucial for capitalism and so is a prominent theme in Karl Marx's work. For Marx, commensuration is key for understanding the central social categories of capitalism: labor, value, commodity, and money. Marx argued that under capitalism, labor is the great commensurator. Value is derived from labor, and the commensuration of value is also accomplished through labor. Value exists in precise quantities in all commodities but is not measured according to the particular products of various kinds of labor. Rather, value is expressed in terms of what these have in common: the general experience of labor, what Marx (1976 [1867]:992) calls abstract labor, which is measured as labor-time.²

Labor has dual qualities. Concrete labor is the distinctive labor process shaped by the particular things it produces, things that have specific uses for people, such as food to eat or clothes to wear. Concrete labor produces use-value, but it does not produce value in the general sense. Abstract labor, on the other hand, is the "socially necessary general labor" that produces undifferentiated value. It is the peculiar way we obtain goods under capitalism, where what we produce has no intrinsic relation to the products we ultimately acquire through our labor (Postone 1996, p. 149). Value, as an expression of abstract labor, commensurates because it abstracts away the distinctiveness of the particular forms of work, objects of work, and practical uses of these objects. The concrete labor that produces use-value and the abstract labor that constitutes value are not two separate kinds of labor but rather two aspects of labor under capitalism (Postone 1996:144).

The theoretical commensuration implicit in Marx's conception of abstract value is in turn crucial for his conception of commodity—the basic social form of capitalism. Abstract labor is what is common to all commodities. A commodity possesses both use-value and exchange value: It is both a product and a social relation that embodies exchange value. For use-value, labor matters qualitatively; for exchange-value, it matters quantitatively (Marx 1976 [1867]:136). The tension between qualitative expressiveness and use of labor, and its quantitative expressiveness (between what is incommensurate and what is commensurate), is part of the dual and contradictory nature of commodities. One way that commodification debases human life is that qualitative differences become quantitative differences: People become means, things become ends.

Money, for Marx, is not what makes commodities commensurate. This is an illusion (Marx 1976 [1867]:188); instead, money is an expression of the commensuration already embodied in abstract labor. But money is powerful, partly for the illusions that it helps sustain. As a means of circulating com-

²This discussion of abstract labor is indebted to Postone (1996, pp. 123–85).

modities, money obscures the social relations behind them. Because it allows us to buy anything, money becomes the universal object of possession. The ultimate "pimp," money mediates between our needs and the object of our needs, between life and the means of life, between my life and others (Marx 1976 [1867]:102). Money appears to us more real than the relations behind it, an end rather than a means to an end. Under capitalism, qualities are quantified, and all qualitative needs that cannot be expressed quantitatively, or bought, are inhibited (Heller 1976:55).

Commensuration and its limits are central themes in Max Weber's investigations of rationalization, which often parallel the dialogue between Plato and Aristotle on the virtues and threat of reason based on calculation. Weber's ambivalence did not allow him to choose sides. For Weber, the expanding role of calculation as a strategy to manage uncertainty was a central feature of Western rationalism and crucial for the development of capitalism. The growing importance of knowledge and technical expertise in everyday life, the increasing depersonalization of structures of power and authority, and our expanding control over material objects, social relations, and self are unifying characteristics of Western rationalism (Brubaker 1984:29–35). Calculation and standardization were crucial in each of these processes.

To take one example, Weber (1981:276) argued that rational capital accounting, a sophisticated form of commensuration, was essential to the development of modern capitalism. Accounting allows capitalists to rationally evaluate the outcomes of past investments, to calculate exactly the resources available to them and project future income, and to assess and compare future investments. Accounting reconceptualizes and depersonalizes business relations and fosters an objective stance toward business. But as Weber shows us, efforts to rationalize can be hard-fought battles. Those who benefit from an existing system of authority often resist mightily the intrusion of commensuration that threatens their privilege (Swetz 1987:181–82; Weber 1981:224).

The efficiency of bureaucracies and economic transactions depends on their growing depersonalization and objectification. The impersonality of economic and bureaucratic rationality is vastly enhanced by commensuration, because it standardizes relations between disparate things and reduces the relevance of context. This impersonality is hostile to ethical systems that depend on personal ties, which explains why religious elites often have aligned with aristocrats to protect patriarchal relations.

One way to think about the tension between ethical systems and formal rationality is to conceptualize it as a contest over the limits of commensuration. Ethical and political systems based on personal relations often emphasize the uniqueness of individuals or the distinctive relations between certain categories of individuals. But rational systems depend on numerous forms of commensuration, on bureaucracies that strictly separate offices from their incum-

bents, and on the elaborate rules that define offices. One might interpret formal rationality as rendering offices unique and the people who hold the offices commensurable. In this way, the incommensurability of individuals that is basic to much ethics confronts the radical commensuration of formal rationality. Conflicts generated by such confrontations are irreconcilable.

Where Weber emphasized the technical superiority of rational forms, Simmel was attentive to their symbolic and constitutive power. He investigated how our collaboration with social forms changes us. Simmel's (1978) extended analysis of money offers a brilliant analysis of commensuration. Simmel sees money as largely responsible for the increasing divergence between the objective and subjective culture that characterizes modern life. Money speeds up the pace of the production of cultural forms, making it harder for individuals to assimilate them. Money advances the development of people's intellectual faculties over their emotional faculties because of its vibrant instrumentality, its character as the "perfect tool." This quality extends the causal connections we make between things to such an extent that the end point, the ultimate value, becomes obscure. This is what accounts for the "calculating character of modern times," where people become obsessed with "measuring, weighing, and calculating" (Simmel 1978:443–44).

When a form becomes taken for granted as a means of understanding relationships and values, things that are hard to assimilate to the form seem increasingly unreal. Money also contributes to the transformation of substantive values into money values; this homogenizes life, but it also offers autonomy, even freedom. Simmel concludes his analysis with a profound point: Over time, money increasingly approximates a pure symbol of the relativity of value and of the relativistic character of existence more generally—a character that money helped to define (Simmel 1978:512).

Simmel's insights about money can be usefully extended to other forms of commensuration. Utility, for example, is an even more enveloping form of relativity because it embodies the relativity of all value, even of those things without prices. Utility can precisely convey any value and its relation to any other value, whether it is fresh air, children, or even death.³

The compulsion to create forms stems from our need to make sense of the world, but as Simmel understood, forms may possess a force that seems to adhere to them independent of their users. Forms create expectations as well as coherence, and a form's familiarity encourages our complicity. This complicity

³One important difference between money and other forms of commensuration is that some commensurated forms are even more abstract than money, having no tangible existence that makes their symbolic expression less distant. Utility cannot be inscribed with the faces of queens, so perhaps this makes it a less effective symbol. Because some forms of commensuration, including money, are so closely tied to our notions of rationality, these forms can symbolize rationality.

ity enhances the rhetorical appeal of forms and is one reason we find them compelling (see Burke 1969:58–59). Commensuration encourages us to believe that we can integrate all our values, unify our compartmentalized worlds, and measure our longings.

Fundamental to classical critiques of modernity, commensuration is also central to many contemporary versions of rational choice theory. Rational choice theory varies in its assumptions, goals, and applications, but many versions make commensuration a prerequisite for rationality. Steinbrunner (1974:25–46) characterizes rational choice theory as deriving from three key assumptions: First, that separate dimensions of values are integrated via trade-offs in a deliberate balancing of competing claims of values. Integration is accomplished by creating some metric that gives the worth of one value in terms comparable to the other, and this commensuration of values must occur in advance of the final analysis of outcomes. Utility conceptually integrates values; it is a measure of absolute value, an ideal measure that would subsume all dimensions of value and provide a basis for making comparisons between choices. Second, alternative outcomes are evaluated and analyzed based on predictions about their consequences. Third, people adjust their expectations as more is known about how alternatives will perform, but these new expected outcomes are evaluated by the same metric.

WHY COMMENSURATION MATTERS

Investigating commensuration is important because it is ubiquitous and demands vast resources, discipline, and organization. Commensuration can radically transform the world by creating new social categories and backing them with the weight of powerful institutions. Commensuration is political: It reconstructs relations of authority, creates new political entities, and establishes new interpretive frameworks. Despite some advocates' claims, it is not a neutral or merely technical process.

Commensuration is everywhere, and we are more likely to notice failures of commensuration than its widespread, varied success. Our faith in price as a measure of value is so naturalized that we now routinely simulate markets for elusive and intangible qualities. Although efforts to price tubing might have failed, there are well-established procedures for attaching prices to everything from corporate goodwill to surrogate pregnancies.

Where markets do not exist they are often invented. Corporations routinely create internal markets for the goods and services produced by subunits, and these fictive prices matter enormously in people's jobs (Eccles 1985). Some business schools require students to bid for their courses. Economists advocate creating markets in pollution to help curtail both pollution and theoretically unsavory externalities (Baumol & Oates 1979). Insurers work to quantify such

consequential uncertainties as the professional reputations of their clients (Heimer 1985).

Economists have developed dazzling techniques for measuring utility, and its conceptual and practical influence is hard to overstate. There is hardly an issue in government that is not framed by the logic of cost-benefit analysis; its deployment in matters of health care and safety (Jasanoff 1989, Weisbrod 1961), education and environment (Smith 1984), and program evaluation (Kee 1994:456–88) is routine. Social science is often synonymous with measurement and model-building. Commensuration is fundamental to management, regardless of whether its object is art or widgets. Bureaucrats and analysts use sophisticated decision models requiring commensurated values when making decisions on everything from welfare to warfare. We devote enormous resources to commensuration. We have industries, agencies, and disciplines dedicated to measuring and managing risk (Heimer 1985, Jasanoff 1986, Clark 1989), measuring public opinion, quantifying intelligence (Carson 1993), simulating prices (Portney 1994), assessing values, and making decisions—all of which depend on our capacity to commensurate anything.

Commensuration is a radical social form, partly because of the assumptions that inform its use. Its long associations with rationality make it ideologically potent. Assuming that values can be made commensurate and that commensuration is a prerequisite to rationality are powerful ideas. Embedded in this logic is another assumption: that all value is relative and that the value of something can be expressed only in terms of its relation to something else. This form of valuing denies the possibility of intrinsic value, pricelessness, or any absolute category of value. Commensuration presupposes that widely disparate or even idiosyncratic values can be expressed in standardized ways and that these expressions do not alter meanings relevant to decisions.

Commensuration is radically inclusive. It offers an abstract form of unity that can potentially encompass any valued thing. Whether commensuration is accomplished in a price, utility curve, cost-benefit ratio, or multi-attribute trade-off scheme, any value or preference can be made commensurate with any other. The capacity to create relationships between virtually anything is extraordinary in that it simultaneously overcomes distance (by creating ties between things where none before had existed) and imposes distance (by expressing value in such abstract, remote ways). In doing so, commensuration creates new things, new relations among disparate and remote things, and changes the meanings of old things (Goody 1986).

According to Hacking (1990:181–95), from 1820 to 1840, unprecedented and nearly universal numerical enthusiasm produced an “avalanche of numbers.” One result was the discovery of an astonishing number of regularities: in worker illness, suicide, crime, epidemics, and childbearing. Determinism was a casualty of the exponential growth in the production of numbers, as quests

for “exactness” gave way to relentless efforts to understand and tame chance. Another consequence was the rapid proliferation of categories—categories invented to name and sort the newfound regularities, categories that then became constitutive.

The category of “society,” Porter argues, is largely a statistical construct (1995:37, 1986:156–57). The regularities revealed in suicide and crime could not be attributed to individuals. A broader category was needed to account for them, and beginning around 1830, they were designated properties of society. Such regularities were powerful evidence of the autonomous existence of society, of “collective forces,” as Durkheim famously argued (1951:297–325; Hacking 1990:182). Society was soon understood as an aspect of life even more basic than state (Collini 1980:203). Interpreted as statistical laws that governed naturally, these regularities helped buttress laissez-faire liberalism. But the invention of crime rates in the 1830s and of unemployment rates some 70 years later as societal characteristics helped define these as collective responsibilities worthy of reform, rather than the just desserts of unworthy persons (Himmelfarb 1991:41).

Even controversial or artificial-seeming products of commensuration, once backed by powerful institutions, become real, fateful, and autonomous. As Porter notes (1995:41–42), bureaucrats and activists have turned Americans of Puerto Rican, Mexican, Cuban, Iberian, and Central and South American descent into “Hispanics.” Once such statistical categories become routinized in bureaucracies or written into law, they became increasingly real and fateful. Deployed by bureaucrats and politicians, distributed by media, and analyzed by social scientists, their use gives them meaning, consequence, and objectivity. Official statistics become, in Latour & Woolgar’s term (1986), “black boxes” that are hard to discredit or even to open.

Economic integration requires commensuration. The capacity to commensurate time, labor, product, monies, and securities has helped create a world where a powerful, if invisible, relationship exists between the unemployed factory worker in the United States and the child laborer in Malaysia.⁴ Commensuration makes possible precise comparisons across vast cultural and geographical distances that allow transactions fundamental to global markets. The worldwide ascendancy of finance and service industries has propelled commensuration, one by-product of which is an increasing polarization of wealth.

⁴Commensuration was central to Taylor’s (1947) efforts to control labor. Armed with stopwatches and calculations, scientific management would reduce work to its most elemental, standardized forms; Taylor wished to make management a scientific endeavor governed by rules and calculations and to transform relations between workers and managers by depersonalizing authority (Bendix 1956:274–81). The wages and perks of many Americans who talk on phones for a living are linked to performance evaluations performed by computers that track the volume and length of their calls and the seconds between them (Schwartz 1994:240–41).

The development of an international property market means that real estate prices in Manhattan are linked to those in London or Paris and are shaped by flows of capital from Japan or Hong Kong (Sassen 1994:5–6, 99–117). Japanese investors' forays into New York real estate, for example, drove up prices and squeezed many small businesses out of the market.

When built into large institutions, commensurative practices are powerful means for coordinating human action and making possible automated decision-making. Sophisticated forms of commensuration have transformed our financial markets. Computer programs that continually search for discrepancies between stock prices, futures, and options prices have generated new investment strategies and have mechanized a broad array of investment decision-making. Now, distinctions are made between "discretionary" traders, who rely on their own judgment and "system" traders, who rely on mechanically produced signals to make decisions (Lucas & Schwartz 1989).

Techniques for commensurating are not evenly distributed. These patterns may reflect longstanding interests in commensuration, where those with the most to gain from commensuration have become its most sophisticated practitioners. Not surprisingly, water development agencies had sophisticated methods for calculating the benefits of dams long before they devised these for costs (Espeland 1993). Other biases exist. Units of analyses are often used that obscure the distributional effects of policies. Cost-benefit analyses that "discount the future" favor immediate benefits and distant costs over long-term benefits and immediate costs. This spurs development at the expense of environmental costs (Schnaiberg 1980:334–44). Even more fundamentally, presuppositions for commensuration often reflect assumptions about commodification that are inherently political and asymmetrical (Radin 1996, Sunstein 1994).

And finally, efforts to translate incommensurable values into commensurated value not only can distort the character of people's investments but can repudiate identities that are closely linked to incommensurable values.

INCOMMENSURABLES

Commensuration sometimes transgresses deeply significant moral and cultural boundaries. Defining something as incommensurate is a special form of valuing. Incommensurables preclude trade-offs. An incommensurable category encompasses things that are defined as socially unique in a specific way: They are not to be expressed in terms of some other category of value. Following Raz (1986:326–29), we broadly define something as incommensurable when we deny that the value of two things is comparable. An incommensurable involves a "failure of transitivity," where neither of two valuable options is better than the other and there could exist some other option that is better than

one but not the other. [Anderson (1995) and Sunstein (1994) offer slightly different definitions.]

The importance of incommensurable categories will vary, partly because the significance of this symbolic boundary varies. Their salience depends on how passionate we feel about them, on their centrality in defining our roles and identities, and on how much effort is required to breach them. Their importance also depends, as Simmel would argue, on the relative status of their oppositional form, commensuration. The extension of commensuration into more spheres of life may make incommensurable categories more meaningful, their defense more necessary. This extension may produce paradoxical effects, as when "pricing" children in law, labor, and insurance shifted the terms of their value from primarily economic to moral and emotional. Children became priceless (Zelizer 1985).

Sometimes trivial things are incommensurable. If I cannot choose between chocolate cake and lemon pie, and adding whipped cream to the cake doesn't make it better or worse, these desserts are formally incommensurable but hardly significant for how I understand myself or how I treat others. Sometimes incommensurables are expressed for purely strategic reasons, as a bargaining position. One way to get more leverage or a better price during negotiations is to assert the incommensurability of something. Labeling something as bargaining in order to discredit claims can also be a political response (Espeland 1998).

But incommensurables can be vital expressions of core values, signaling to people how they should act toward those things. Identities and crucial roles are often defined with incommensurable categories. Believing that something is incommensurable can qualify one for some kinds of relationships. When incommensurable categories are important for defining how to "be," Raz calls them "constitutive incommensurables" (Raz 1986:345–57). People facing a choice involving a constitutive incommensurable will often refuse to participate; for some, the idea of such a choice is abhorrent.

For Yavapai residents whose ancestral land was threatened by a proposed dam, land was a constitutive incommensurable (Espeland 1998). The Yavapai understood themselves in relation to this specific land. Valuing land as an incommensurable was closely tied to what it means to be Yavapai. The rational decision models used by bureaucrats to evaluate the proposed dam required that the various components of the decision be made commensurate, including the cost and consequences associated with the forced resettlement of the Yavapai community. This way of representing Yavapai interests and expressing the value of their land was a contradiction of those values and of Yavapai identity.

There are many other, common examples of constitutive incommensurables. Two of Raz's examples are children and friends. Believing that the value of children is not comparable to money and that the very idea of ex-

changing a child for money is repugnant is fundamental to being a good parent. The inappropriateness of using commercial means for valuing children is one way we define good parenting. Likewise, believing that friendship cannot be bought or that what we derive from our friendship with a person is distinctive and cannot be had with any other person is basic to what it means to be a good friend. Thinking that our friends were somehow interchangeable could keep us from having genuine friendships. The pain of selling a childhood home, the reluctance some feel about selling their blood, our disapproval of sex for profit, or even faculty qualms over ranking graduate students or evaluating subordinates compared to "benchmarks" are examples of people grappling with incommensurable categories. Believing in incommensurables is a way to limit what can be rationally chosen, and this can be an important social relationship.

Just as commensuration is a considerable social accomplishment, so too the creation of incommensurables requires work. Some party must draw boundaries around the thing whose value is to be kept, or made, distinctive and then defend the boundaries from encroachment. Sometimes these tasks are the purview of experts: art critics and museum professionals who certify some objects as masterworks or as especially worth exhibiting (Becker 1982, Alexander 1996); attending physicians who invoke clinical wisdom and professional privilege to designate some medical cases extraordinary (Bosk 1979). Sometimes these tasks are the purview of intimate others: the mothers and fathers of premature newborns, for example, who are encouraged by hospital staff to name their babies, dress them in clothes brought from home, personalize their ward cribs with toys and photographs, and otherwise mark their infants as unique (Heimer & Staffen 1998). In still other instances the production of incommensurables is the main business of entire organizations, even bureaucratic ones: preservation agencies, for example, that designate official historic sites, landmark neighborhoods, and wildlife habitats, as well as the organizations that do the grunt work of enforcing the rules. Whether they are priceless artworks, national treasures, or precious children, incommensurable things are often regarded as somehow sacred, and like all sacred objects, their distinctiveness is defined through symbols and ritual. This marking can be elaborate, or mundane: For example, the sequestering of certain cash in a special jar or drawer can define it as money for distinctive purposes and thus incommensurable with other savings (Zelizer 1994).

STUDYING COMMENSURATION

Commensuration is a general social process, it is political, and it is capable of transforming social relations. It deserves closer, systematic scrutiny. We next offer core guiding questions that help reveal variation in how naturalized, how fateful, and how resisted commensuration can be.

How Institutionalized Is the Commensurative Act?

Instances of commensuration vary by how institutionalized they are, that is, they vary in how automatically commensuration gets done and in how natural the process seems to involved parties. [This conception of institutionalization is indebted to Garfinkel 1967, Berger & Luckmann 1966, and the work of John Meyer and his colleagues (e.g. Meyer 1971, Zucker 1977, Jepperson 1991).] Attending to institutionalization enables us to appreciate the extent to which commensuration constructs what it measures.

Some instances of commensuration are so deeply institutionalized that they help to constitute what they purport to measure. For example, futures traders buy and sell agricultural commodities by virtue of standardized grading systems that constitute products for entire industries. Grading systems create explicit categories of relative quality, and hence relative value, that make possible trade in products that may not yet exist (Cronon 1991:97–147; Porter 1995:45–48). Rankings of academic institutions, which purport to measure relative quality according to some common metric of excellence, sometimes prompt members to reevaluate their perceptions of their own schools (Elsbach & Kramer 1996). As our earlier example suggests, institutions often respond directly to raters' criteria; even if members dispute the accuracy or legitimacy of rankings, they are too fateful to ignore.

Some commensurative practices exist only in theory, such as comparable-worth wage programs. Intended to improve chronic income disparities between women and men, comparable-worth programs commensurate skill and pay levels between traditionally female and traditionally male occupations (England 1992). But comparable-worth advocates have met with very little success in implementing such policies or even in securing judicial approval of them (Nelson & Bridges 1998). Such instances of commensuration are weakly institutionalized because so few parties use them. Little more than an argument (however good a one), this commensuration effectively exists only on paper.

But what determines the extent to which a commensurative act gets institutionalized? Phenomenological sociology suggests a preliminary answer. Berger & Luckmann argue that socially constructed meaning becomes more fact-like when it is objectivated or reified, that is, when social practices are organized to sustain the appearance that meaning stands outside of individual subjectivity, as part of the world (1966:47–92; Berger 1967:3–24). In keeping with this insight, we argue that as commensuration gets built into practical organizations of labor and resources, it becomes more taken for granted and more constitutive of what it measures. Thus, however arbitrary, the Chicago Board of Trade's standardized grades of grain quality became ever more constitutive of what they measured as the number of parties who used the measures grew: not only farmers and merchants, but also elevator operators, banks,

the trade press, and ultimately the state legislature. In time, Chicago businessmen could make or lose fortunes trading in futures—commodities that exist only by virtue of a commensuration system (Cronon 1991:97–147).

Institutionalization as reification enables us to make predictions about the potential trajectory of other commensurative practices. We might expect, for example, that college rankings will become more constitutive of what they measure as their audiences expand: parents considering where to send their tuition dollars, faculty plotting careers at prestigious schools, and foundations whose grant-giving attends to such measures of institutional quality. On the other hand, commensurative acts that fail to get etched into practice, such as comparable-worth policies, will remain the purview of academic specialists and disappointed reformers.

How Does Commensuration Refract Power Relations?

Some proponents see commensuration as a technology of inclusion. This makes it especially valuable in democratic, pluralistic societies (Stokey & Zeckhauser 1978). Commensuration offers an adaptive, broadly legitimate device for conferring a formal parity in an unequal world; for pragmatic reformers, this is a hopeful beginning (Espeland 1998, Brown 1984). In decisions characterized by disparate values, diverse forms of knowledge, and the wish to incorporate people's preferences, commensuration offers a rigorous method for democratizing decisions and sharing power.

For supporters, the discipline of commensuration creates robust, "objective" knowledge that can constrain power. For example, Marx used the "moral statistics" of his day as essential weapons in his indictment of capitalism; Weber (1978:225) saw commensuration facilitating the leveling effects of bureaucratic rationality by providing sturdy mechanisms for challenging old forms of privilege; today, discrimination is often fought most effectively with numbers, by lawyers girded with statistics; and when standardized tests are used in hiring decisions, the odds for minorities can improve (Neckerman & Kirschenman 1991).

Critics of commensuration come from both the right and left. Conservatives disdain its equalizing effects, the loss of elite discretion that it fosters. Left-leaning critics see commensuration as another conduit of power that mystifies power relations, partly by emphasizing results at the expense of process and distribution (e.g. Tribe 1971, 1972). Commensuration, in propelling "decisionism," helps sustain the pretense that facts and values can be separated, that politics can be rendered technical (Habermas 1973:253–82).

But commensuration is not merely a tool of the powerful, a way to wage interest politics numerically. Porter (1995) argues that recourse to quantitative methods evinces weak authority. The spread of quantitative expertise represents a quest for "mechanical objectivity"—knowledge whose authority is

based on close adherence to quantitative rules. Mechanical objectivity is most valued when decision-making is dispersed, when it incorporates diverse groups, when powerful outsiders must be accounted to, when decisions are public and politicized, and when decision-makers are distrusted. The legitimacy offered by numbers diminishes autonomy, because discretion is replaced by disciplined methods. This is why quantitative technologies are the province of weak elites and why they are resisted by those whose authority depends on expert judgment, character, or informal knowledge.

Understanding commensuration as a calculus of power requires that we appreciate the various guises of power, whether these are obvious or opaque, strategic or constitutive. While examples of numbers malleable enough to conform to powerful interests are easy to find (e.g. Delaney 1994), commensuration, once launched, can become hard to control. Strategic commensuration, our capacity to create numbers that reflect our will, is perhaps greatest when commensuration is less public and less accessible and when methods are new or not grounded in academic theory (which creates new partisans). Those who think they can manipulate numbers at will are often proved wrong in the long run.

Commensuration's constitutive power is perhaps an even more formidable force, altering the people and places where it intrudes. The capacity to create new categories and enforce mechanical objectivity are consequential powers, ones often associated with states or firms. Official statistics may be more important for the subjects they create ("Hispanics," "the unemployed," "gifted children") than for the technical advantage this knowledge confers. Once the categories are in place, people's behavior increasingly conforms to them. This is not the obvious power of coercion but the more elusive, passive power of discipline, increasingly self-inflicted. The validity of censuses, test scores, or public opinion polls requires complicity from their subjects. Individuals are made governable (Foucault 1991:87–104) and numbers become self-vindicating (Porter 1995:45) when measures guide the activities being measured or shape the images of those whose characteristics they measure.

Commensuration produces depersonalized, public forms of knowledge that are often deemed superior to private, particularistic forms of knowing (Reddy 1984). The authority of those who know most about something can be undermined by the rigorous methods of distant, if less informed, officials. For example, before measures were standardized by states, regions and villages often had their own distinctive measures. Such heterogeneity in measurement enhanced the salience of local knowledge and facilitated negotiability. A "just price" for a unit of grain could be accomplished by peasant strategies for manipulating how densely packed it was. This flexibility favored local interests over state powers; hence rulers often eagerly imposed new, standardized measures (Kula 1986).

Commensuration refracts power in many ways. It can enlarge decision-making or legitimate preordained decisions. It can be cynically manipulated by elites or it can limit their discretion. It can create disciplined subjectivities or arm dissenters. This variety makes commensuration a useful lens for investigating the multiple forms of power.

When Are Claims about Incommensurables Made?

Perhaps because of their ability to constitute value and alter power relations, some instances of commensuration generate discontent. Claims that some values are incommensurable—that they cannot or should not be ordinarily compared with other values—are not uncommon. Nor are they random. We hypothesize that the most frequent and most durable claims about incommensurability occur at the borderlands between institutional spheres, where different modes of valuing overlap and conflict. We suspect also that claims about incommensurables are likely when commensuration threatens some cherished identity.

Friedland & Alford (1991:232) define institutions as both supraorganizational patterns of activity and symbolic systems through which we give meaning to activity. Because societies are complexes of multiple institutions, they are characterized by multiple modes of valuing. We value monetarily when we enter a labor or commodity market; emotionally when espousing friendship or love for children or a mate; and bureaucratically when we gauge merit or fault by reference to formal rules. These different modes of valuing are not necessarily consistent with one another. A job that pays well may estrange us from loved ones if it requires a move to another city. Meticulous devotion to formal rules may make us adequate bureaucrats but horrible friends (Heimer 1992).

Institutional theorists argue that inconsistency and contradiction between institutions can be opportunities for social innovation and change (Orren & Skowronek 1994, Clemens 1997) but also sites of deep struggle as different modes of behaving, cognizing, and valuing conflict (Friedland & Alford 1991). We suspect that claims about incommensurables are likely to arise at the borderlands between institutions, where what counts as an ideal or normal mode of valuing is uncertain, and where proponents of a particular mode are entrepreneurial.

Debate surrounding commercial surrogate motherhood provides a clear example of dispute about incommensurables at the borderlands between institutions. Sometimes called contract pregnancy, commercial surrogate motherhood is a reproductive arrangement in which, for a fee, a woman agrees to become pregnant, carry the child, and relinquish her parental rights after delivery (see Anderson 1993:168–69). The practice has generated considerable controversy among feminists and legal scholars (e.g. Moody-Adams 1991, Satz 1992, Radin 1996). For its critics, commercial surrogate motherhood is an en-

croachment of market modes of valuing into intimate spheres of life. To combat the encroachment, some argue that “[w]omen’s labor is *not* a commodity” (Anderson 1995:189, original emphasis), nor are the children born of that labor (Radin 1996:136–53).

What makes commercial surrogate motherhood a locus of claims about incommensurables? The practice exists in a social space where neither intimate nor market modes of valuing are hegemonic. As the legal scholar Margaret Radin notes, the distinction between the baby-selling of commercial surrogate motherhood and the baby-giving of traditional adoption arrangements—in which adoptive parents often wait for a child of a particular race or age and pay many costs associated with pregnancy—is a fragile one (Radin 1996:136–53). In such uncertain terrain we are likely to find vocal advocates for one or another mode of valuing, and claims about incommensurables can be viable weapons in the struggle to control the contested turf.

Incommensurables will also be claimed where entrepreneurs of one mode of valuing wish to move in to novel terrain. Radin’s careful bid for the market incommensurability of children (1996), for example, is a direct response to celebrated arguments for a market in them (Posner 1992:150–54; Landes & Posner 1978; Becker 1981).

Claims about incommensurables are also likely when commensuration threatens a cherished identity. When commensuration seems to discount some component of the self, the short-changed may disavow the implicating mode of valuing. Like their forbearers in the alternative-school movement (Swidler 1979), many parents who home school their children are suspicious of letter grading and formal achievement tests that enable their children’s skills to be compared quantitatively with those of other children. Deeply protective of the individuality of their children, home schoolers fear that standardized performance measures at best prevent, at worst erode, a conception of children as uniquely gifted persons (Stevens 1996).

Because collective identities are often defined symbolically, efforts to commensurate symbolic objects with other valuables can meet with fierce resistance. Because geographic territory is often deeply symbolic of national identity, for example, disputes over territorial sovereignty are often long and bitter. The impassioned territorial commitments of Israeli and Palestinian peoples have confounded countless efforts to commensurate territorial interests at diplomatic bargaining tables (Friedland & Hecht 1996).

That claims about incommensurables are sometimes made by parties who may risk loss suggests that such claims may be more strategic than constitutive. It is tempting to infer that claims of incommensurability are themselves a kind of bargaining strategy, akin to bluffing in a poker game to cover a bad hand or to up an opponent’s ante. Surely some claims of incommensurability are strategic in this way. But claims about incommensurables may also simul-

taneously reflect deeply held convictions and clever bet-hedging. People who lose their community to an industrial disaster may find the symbolic void irreplaceable but will also use that loss as grounds for material compensation (Erikson 1976). Disentangling the constitutive from the strategic in claims about incommensurables requires careful empirical work and recognition that people often have multiple and even contradictory incentives.

COMMENSURATION IN ACTION

We believe that attention to commensuration provides novel insights into established fields of sociological inquiry. To conclude, we illustrate how such an analytic focus might inform work in three broad substantive areas: gender and work, politics and social movements, and institutional sociology. Our goal is to sketch the potential utility of this way of theorizing in order to encourage further and more systematic efforts.

Feminist Commensuration and Its Discontents

That commensuration has the potential to transform what it measures is demonstrated in the repeated efforts of feminists to value household work in metrics used to quantify paid labor. Nineteenth-century reformers (Siegel 1994), twentieth-century feminists, and social scientists have sought to re-value the typically unpaid cooking, cleaning, child-rearing, and household management tasks women do for their families in metrics of time and output. The goals of such efforts have been multiple: to implicate housework in broader critiques of capitalism (Luxton 1980, Hartmann 1981); to quantify unequal distributions of domestic work between men and women (e.g. Walker & Woods 1976, Hochschild 1989); to argue for paid housework (Oakley 1976:226); and to emphasize how much of housework is a low-status chore (Mainardi 1970). However, some women have been reluctant to commensurate their own home work with paid labor, which suggests both a symbolic boundary around domestic relationships and a fissure between feminist and “pro-family” women that the analytic lens of commensuration can help to define.

Central to “modern” conceptions of family (see Stacey 1990:3–19) is the belief that family relations are of a fundamentally different character than those of the marketplace: Families are havens partly because relations among family members are governed by something more than self-interested individual calculation (Lasch 1977). If families are partly defined by their nonmarket exchanges, then attempts to commensurate these exchanges with labor market transactions may undermine the distinctiveness of familial relations. If household work is made formally commensurate with other forms of paid labor, then families appear more like the nodes of resource agglomeration, consumption, and social reproduction that some economic theory imagines (Becker 1981)

and less like the havens envisioned by “pro-family” movements both historical and contemporary (e.g. Ryan 1981, Martin 1996).

The transformative potential of commensurating housework with other kinds of labor is double-edged. Feminists who have advocated direct comparisons have done so in order to alter women’s relationships to other family members and to the broader labor force. By encouraging housewives to think of themselves as workers, laboring under oppressive conditions, early liberal and radical feminists sought to change women’s appraisals of their household situations in ways that would incite them to domestic activism: At least, men would do more and women less at home than the modern-traditional rules prescribed (Hole & Levine 1971:85); at most, more equitable allocations of housework and childrearing would allow radical new models of family (Firestone 1970). The commensuration of housework with other kinds of labor has helped feminists to argue convincingly that gender asymmetries in the division of domestic work unjustly constrain women’s lives.

Other women have resisted workplace modes of valuing at home. Opponents of the Equal Rights Amendment (ERA) resisted the legislation partly because of how its advocates conceived of housework. The domestic arrangements that feminists found so impoverishing were a way of life for millions of women. Commensurating housewifery with other occupations and declaring it wanting further undermined the already eroding status of angry homemakers (Mansbridge 1986:90–117). Within the abortion controversy, many pro-life activists object to the commensuration of motherhood with paid-work occupations. Many full-time homemakers believe that workplace logic diminishes them, that their lives measured poorly on metrics of income, occupational attainment, and personal autonomy (Luker 1984:158–215).

By commensurating housework with paid labor, feminists sought to transform both social appraisals and the social organization of domestic work. By most accounts, however, their efforts are only weakly institutionalized. Feminists have succeeded in demonstrating the low status of housework and in altering the life expectations of many women. But as Hochschild (1989:12) states succinctly, “There has been a real change in women without much change in anything else”: Men contribute only minimally more to household duties, workplaces only reluctantly accommodate employees’ family demands, and childcare remains a domestic, not a public or corporate, obligation.⁵ And as the ERA and abortion battles make clear, feminist efforts to com-

⁵In childcare, commensuration has also directed attention to other sorts of distinctions: quality vs quantity time; individualized attention vs group socialization; daycare or preschool; a nearby relative, a certified caregiver, or an imported au pair. With housework less emotionally loaded than childcare, fewer distinctions seem necessary. Nevertheless, commensuration remains contested in both arenas.

mensurate domesticity have generated concerted arguments about incommensurables. Women invested in domesticity have found some of the feminist equations deep threats to their identities.

Politics and Social Movements

Commensuration makes possible modern politics. Opinion polls, in eliciting and organizing attitudes, create the object we call public opinion (Herbst 1998). Politics, as the art of compromise, is a broad instance of commensuration. Political negotiation entails seeing one's own interests as comparable to the interests of others. Our conception of interests as a basic unit of political analysis implies commensuration. When political disputes are framed as a contest over interests, parties are granted a formal, categorical equality among those with a political stake. Interest-group politics portrays outcomes as if differences were a matter of magnitude—of how much something matters, or of whose interests were served—rather than as disparate modes of investment in the decision. Voting is one way to commensurate interests. Trading—of campaign dollars for a sympathetic ear in office, of my vote on your project for yours on mine (the essence of pork-barrel politics), of tit for tat at the bargaining tables where multiple interest groups attempt to forge mutually advantageous coalitions—requires that traders evaluate diverse interests along some shared order of magnitude. Such commensurative acts are at the heart of normal politics, explaining puzzles such as why we have so many dams (Reisner 1986) or why tax reform requires sports stadiums (Birnbbaum & Murray 1987). Making qualitatively unlike interests comparable can be a formidable cognitive achievement; that politicians, campaign contributors, and rank-and-file voters do such commensurating all the time is testament to the extent to which the equation of diverse values is commonplace in modern life. (Of course, the mode of commensuration matters here: Trading votes is regarded as acceptable political behavior; buying and selling them is not.)

But as many social-movement activists discovered, commensurative politics brings its own quandaries. Many New Left student activists of the 1960s and 1970s avoided participation in normal party and electoral politics because they believed that the structures of those institutions were morally flawed. Some New Left activists equated negotiation and trading of interests with moral compromise. For them, conventional political activism was suspect precisely because it required trade-offs among inviolable interests and illegitimate ones. The New Left's "great refusal" to participate in the commensurative art of normal politics has been cited both as its greatest moral accomplishment (Breines 1989) and as a cause of its ultimate political weakness (e.g. Gitlin 1987).

The recent history of the Religious Right indicates just how consequential choices to commensurate interests can be. Although a few conservative Chris-

tian leaders have long advocated translating the faith into political activism (Ribuffo 1983), only relatively recently did large numbers of rank-and-file believers begin to conceive of themselves as distinctive players in the realm of normal politics (Himmelstein 1990). A great accomplishment of conservative Christian leaders since the 1970s has been convincing many rank-and-file Christians to enact their faith in the political arena: Doing so has obliged believers to consider the comparability of their faith-based interests with the more secular agendas of other conservative factions (e.g. Klatch 1987, Rozell & Wilcox 1996). Typically cultural-traditionalists, conservative Christians cooperated with libertarian and economic conservatives to win three consecutive Republican presidencies (e.g. Himmelstein 1990, Martin 1996). But the believers were dismayed when their unequivocal stances on abortion, school prayer, and homosexuality became compromisable interests at Washington bargaining tables (Diamond 1995, Martin 1996). The powerful Christian Coalition has recently confronted a difficult choice: holding close to policy positions dear to conservative Christians or becoming more flexible in its stances on abortion, homosexuality, and other divisive issues in order to cooperate with other interest groups and a wider array of politicians (e.g. Reed 1993). Throughout its recent past, then, the Religious Right has wrestled with whether, and how, to commensurate its faith-based commitments with the secular parties and profane interests it encounters in the broader political arena.

That some movement activists from left to right have been wary of the compromises normal politics requires suggests their awareness of the transformative potential inherent in commensurating disparate values.⁶ When we opt to negotiate with parties who do not share our vision of the world (e.g. members of the "Establishment," those not born again), we risk alienation of our interests. Negotiation requires commensurating with the enemy: It requires comparing the cherished with the reprehensible in ways that make the former less distinctive, less incomparably valuable than it once was. Not surprisingly, movements that stake their identities on incommensurables—radical democracy, heavenly truths, and native lands, for examples—face a dilemma even coming to the bargaining table.

(Of course, sometimes social movements embrace commensuration as a legitimating device. For women's reform organizations during the Progressive Era, the substitution of money for personal service was a way for women to

⁶Just as commensuration creates new social relations, so too does creating incommensurables. Not all incommensurables carry the same cultural weight, but some things defined as incommensurable may be subject to distinct rules of conduct. For example, family heirlooms bestowed on particular persons are often subject to special uses and, except under extraordinary conditions, are removed from markets.

signal that theirs were serious, modern organizations. As Clemens (1997: 209–10) argues, these women understood that citizenship required cash.)

Institutional Sociology

The ability of commensuration to create new social relations and even new social entities is clear in recent work by institutional sociologists. Studies of the elaboration and worldwide diffusion of census activity (Ventresca 1995) and of formal accounting procedures (Meyer 1986, Miller & O'Leary 1987, Carruthers & Espeland 1991) show how particular measuring, recording, and ranking processes help to make and remake phenomena they ostensibly describe.

Ventresca (1995) argues that the worldwide diffusion of relatively standardized modes of census administration helped render different parts of the world formally comparable. Shared counting procedures help shape how different populations make sense of one another and of themselves. With similar censuses, societies with wildly disparate histories, cultures, and economic and political structures are made to seem easily comparable. Vital statistics on scores of nations can be aggregated, summarized, and ordinally ranked—on a single page—facilitating charitable, diplomatic, and market linkages across vast stretches of social and geographic space.

Studies of accountancy offer parallel pictures of commensuration practices that make qualitative unlikes quantitatively comparable. Standardized accounting procedures make a firm's varied assets and liabilities, from raw materials to workers, uniformly calculable in monetary terms (Miller & O'Leary 1987) so as to produce values like "net worth." Like census figures, net worth is easily compared across firms (Carruthers & Espeland 1991). Such comparability permits us to understand firms as financial portfolios rather than as productive units. With accountants busy creating comparable bottom lines, executives can buy and sell firms while focusing on their profitability rather than on what they produce (Espeland & Hirsch 1990, Fligstein 1991).

But commensuration does more than produce new relations. It can also produce new entities. Common to these quite different studies of censuses and accounting procedures is the notion, informed in part by the work of Foucault (1973, 1977, 1978), that preponderant administrative practices create what they purport to describe. For example, Ventresca argues that modern census procedures help to create the nation-states they quantify. Censuses define the boundaries of state sovereignty by specifying just who is within those boundaries and who is not. The very structure of a census as an official count of persons assumes an aggregate relationship between nation and individual—the nation-state is the individuals it counts. Censuses also reify these individuals, marking them as non-, quasi-, or full citizens of a particular state and lending

broad cultural salience to those facets of individual identity about which census counters, and their questionnaires, query (Ventresca 1995). In rendering nation-states more comparable, censuses also constitute what they compare (Desrosières 1990).

Conceptually similar processes characterize the rise of formal accounting procedures. Accountants, promising information that will improve efficiency, have historically sought ever more elaborate means of measuring labor output and labor costs; such measurements enable designation of modal and optimal levels of productivity against which many workers can be ranked and compared. Accounts thus help to construct such organizationally consequential beings as the average worker, the ideal worker, and the suboptimal worker (Miller & O'Leary 1987).

Social critics from Simmel to Foucault have sought to portray how modernization reconstitutes human subjectivity and transforms long-established social relations. Examining particular instances of commensuration may enable institutional scholars to better discern the mechanics of those changes. Recent theoretical work underscores this potential. Neoinstitutionalists operationalize modernity as a "Western cultural account," global in scope, that among other things assumes the calculability of all social values. In that modern story, human progress is incremental: Only by measuring can individuals or nation-states know how they are faring in personal or global history (Meyer et al 1994). Acts of commensuration facilitate comparative measurement across vast differences of sentiment, person, kind, culture, and nation. Rationalist, imperialist, and at times transformative, they may be key ways that we make ourselves modern.

ACKNOWLEDGMENTS

This research was supported in part by the Hamilton College Dean of Faculty. Thanks to Michael Burawoy, Bruce Carruthers, Dennis Gilbert, Peter Levin, Michael Lounsbury, Philip Klinkner, Kirk Pillow, and Marc Ventresca for scholarly assistance. Detailed comments by an anonymous reviewer greatly improved the effort.

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