



University of Pennsylvania
ScholarlyCommons

Departmental Papers (ASC)

Annenberg School for Communication

11-1999

Theorizing Diffusion: Tarde and Sorokin Revisited

Elihu Katz

University of Pennsylvania, ekatz@asc.upenn.edu

Follow this and additional works at: https://repository.upenn.edu/asc_papers



Part of the [Communication Commons](#)

Recommended Citation

Katz, E. (1999). Theorizing Diffusion: Tarde and Sorokin Revisited. *Annals of the American Academy of Political and Social Science*, 566 (1), 144-155. <https://doi.org/10.1177/000271629956600112>

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/asc_papers/272
For more information, please contact repository@pobox.upenn.edu.

Theorizing Diffusion: Tarde and Sorokin Revisited

Abstract

This article is a call for volunteers to stand on the shoulders of Gabriel Tarde and Pitirim Sorokin, who dared to theorize the process of diffusion over a wide variety of disciplines. While all of the social sciences and humanities regularly produce case studies of diffusion, theorizing seems paralyzed. This paralysis stems from the ostensible incommensurability of diffusing items; their refusal to hold still in transit; the complexity of their interactions with the cultures, social structures, and media systems in which potential adopters are embedded; the difficulty of reconciling voluntary action and external imposition; and the lack of a disciplinary home.

Disciplines

Communication | Social and Behavioral Sciences

Theorizing Diffusion:

Tarde and Sorokin Revisited

By ELIHU KATZ

ABSTRACT: This article is a call for volunteers to stand on the shoulders of Gabriel Tarde and Pitirim Sorokin, who dared to theorize the process of diffusion over a wide variety of disciplines. While all of the social sciences and humanities regularly produce case studies of diffusion, theorizing seems paralyzed. This paralysis stems from the ostensible incommensurability of diffusing items; their refusal to hold still in transit; the complexity of their interactions with the cultures, social structures, and media systems in which potential adopters are embedded; the difficulty of reconciling voluntary action and external imposition; and the lack of a disciplinary home.

It cannot be far wrong to assert that every one of the social sciences and humanities has, at least intermittently, given attention to the question of how things- ideas and practices- get from here to there. The problem is as central to the history of religion as it is to the anthropology of culture contact or the sociology of fashion. In medical epidemiology, it is a matter of continuous concern. Marketing is all about diffusion, and so are major aspects of folklore, geography, demography, and art history. Altogether, diffusion research is (or at least was) a way of describing, maybe even explaining, social and cultural change. Yet, there has been very little generalizing of findings across disciplines and, more surprisingly, within disciplines, which is just another way of saying that there is a poverty of theory. There is an apparent paradox at work: the number of diffusion studies continues at a high rate while the growth of appropriate theory is at an apparent standstill.¹

Some part of the paucity of diffusion theory results from the very lack of a label to point to the commonalities between the many disparate case studies of diffusion. Without a label, the spread of hybrid seed-corn in Iowa (studied by rural sociologists and by econometricians) would seem to have little in common with the adoption of fluoridation (studied by social psychologists and political scientists), the AIDS epidemic (studied by epidemiologists), or stylistic change (studied by linguists and historians of the arts). A major new study on the spread of early Christianity, for example, does not even use the word "diffusion," though it is equipped with the most advanced sociological and historical theories and methods, including up-to-date ideas about social networks (Stark 1997).

Elihu Katz is Trustee Professor at the Annenberg School for Communication at the University of Pennsylvania, and professor emeritus of sociology and communication at the Hebrew University of Jerusalem. He also is a research fellow at the Van Leer Jerusalem Institute and at the Guttman Center, Israel Democracy Institute. He is coauthor of several diffusion studies, including Personal Influence: The Part Played by People in the Flow of Mass Communication (with P. F. Lazarsfeld), Medical Innovation: A Diffusion Study (with J. S. Coleman and H. Menzel), The Politics of Community Conflict: The Fluoridation Decision (with R. L. Crain and D. Rosenthal), and The Export of Meaning: Cross-Cultural Readings of "Dallas" (with T. Liebes).

NOTE: The author wishes to thank Ying Ma for help with locating references to Tarde and Sorokin. The author also wishes to thank the Bogliasco Foundation for its hospitality at the Liguria Study Center, where this article was completed.

The fact is that hardly anybody with the major exception of Everett Rogers-has taken charge of claiming, collecting, and cataloguing these disparate cases for comparison.² Moreover, comparison is exceptionally difficult because there is so much difference between diffusing items, because the items themselves refuse to hold still, because it is difficult to separate form from function from meaning, and because of the incredible varieties of cultures and social structures involved. Moreover, there is confusion over how to theorize diffusion based both on voluntary acceptance and on imposition and force. These difficulties have frustrated the process of generalization even within those disciplines- such as rural sociology and marketing that see the problem of diffusion as central. There are only a few disciplines that focus explicitly on diffusion problems, and fewer still that perceive, or cope with, its inherent interdisciplinarity. Almost nobody admits to owning the problem, and the state of theory shows it.

The most recent contender for the role of custodian of diffusion theory and research is the field of mass communication. Anthropology, archaeology, and geography made their bids rather long ago but withdrew; at least they did not persist into modernity.³ It might seem obvious that communication research should subsume diffusion research, but the fact is that the premises of the study of mass communication are at odds- or used to be- with those of diffusion research. Empirical research on the effects of mass communication harks back to assumptions about mass society. These assumptions postulated (1) atomized and alienated individuals, connected to each other only instrumentally or contractually, and (2) powerful new media- beginning with radio- capable of imposing ideas effectively and simultaneously, as if by remote control. This image of the workings of the electronic media- albeit an exaggerated one- virtually negates the image of diffusion as the progress of innovation over time and space, based on more or less voluntary acceptance.⁴

But empirical research on the actual workings of media influence soon found that the media were less powerful than had been thought, and that, far from having vanished, primary relations were alive and relevant to the flow of mass communications. Interpersonal relations, it was found, act both as custodians of social norms and as networks of information and influence.⁵ Among Paul Lazarsfeld's group at Columbia University, this correction to the image of mass society led to a subsequent series of studies on the interaction between mass media and interpersonal communication in the diffusion process.⁶ As a further result, and partly by coincidence, these media sociologists bumped into the parallel work being carried on, quite without any mutual awareness, by the group of sociologists studying the diffusion of new farm practices (see Katz 1960, 1961). (The rural sociologists, working at the more traditional end of the sociological spectrum, had never assumed that farmers did not talk to other farmers.)

This union was very promising for it strengthened the idea that a new interdiscipline of communication (mass and interpersonal) might emerge as the locus in which to grow diffusion theory. Methodologically, it promised to marry survey research with sociometry. Substantively, it pointed toward shared interest in the role of communication in Third World modernization, which was ultimately derailed because of ideological concerns. Apart from giving a major impetus to network research, and a continuing presence in the study of health campaigns, this bid also seems to have faltered, and little of theoretical interest seems to be happening nowadays, as far as I can see. Moreover, academic fashion has moved the

spotlight away from a view of communication as transportation, emphasizing the flow of influence in space, to a view of communication as culture or ritual, emphasizing the time-biased production of meaning and identity (Carey1977).

AN ACCOUNTING SCHEME FOR DIFFUSION STUDIES

I may be wrong, but I think that the best we can say about the state of diffusion theory is that there is a more or less agreed paradigm--better, an accounting scheme--that allows for the classification of the wide variety of available case studies. True, there is the general S curve in the adoption of innovations and its more sophisticated elaborations; there is the general rule of trickle-down from higher to lower status; and there is the apparent need for reinforcement from peers prior to adoption. But the serious work of theorizing is still undone.

Rather, what we have is a set of tools for making generalizations possible, providing that somebody is willing to do the work. Good diffusion studies can usually answer to the definition that they are addressing the spread of (1) an item, idea, or practice, (2) over time, and (3) to adopting units (individuals, groups, corporate units), embedded in (4) channels of communication, (5) social structures (networks, community, class), and (6) social values, or culture (see Katz, Levin, and Hamilton 1963). To move inductively from this classificatory paradigm requires a content analytic scheme to classify the attributes of the diffusing item "objectively" from the point of view of the observer, and "subjectively" from the point of view of the potential adopter. The inductive move also requires a parallel scheme to characterize the attributes of potential adopters in terms of their social structural connectedness (networks, community, class) and their relevant attitudes and values. It further requires a map of the communications media and other external sources to which adopters are connected, and a measure of time to track the spread of adoptions, disadoptions, or failures to adopt, in time and over space. The challenge is to make comparisons between hypothetically similar and different cases, and/or to infer similarity from similar behavior. This would then return us to rural sociology, where such comparisons have been tried; to the history of religion--Stark (1997) compares the spread of early Christianity to the modern spread of Mormonism--and to the occasional attempts to compare across disciplines. The new possibilities of computerized methods may help overcome past difficulties and put us back on the road to which pioneering theorists such as Gabriel Tarde and Pitirim Sorokin pointed us.

FORGOTTEN FOREFATHER: GABRIEL TARDE

For some years now, I have been trying to promote Gabriel Tarde's candidacy as founding father of the empirical study of public opinion and mass communication (Katz 1992; Katz et al. 1998). Paul Lazarsfeld saw the relevance of Tarde, but major credit goes to Terry Clark for his detailed introduction to Tarde's work and its bearing on contemporary theorizing (Tarde 1969). Presently, Jaap van Ginneken is carrying the torch (van Ginneken 1992). Following in these footsteps, I have mobilized several generations of students to create

a propositional inventory of the observations, generalizations, and hypotheses explicit and implicit in Tarde's essay "L'opinion et la conversation," first published in 1898. The idea is to show how much of what we have learned in the past 100 years was anticipated by Tarde. However deserving he is of elder statesmanship with respect to opinion and communication in general, Tarde is all the more deserving for making diffusion so central to his thinking. In this aspect of my nomination, Kinnunen seconds the motion, referring primarily to Tarde's *Laws of Imitation* (van Ginneken 1992; Tarde 1903). I want to comment both on the better-known book (on which I do not claim expertise) and on the undeservedly neglected essay, only parts of which have appeared in English.⁷

Tarde was a jurist, criminologist, novelist, statistician, and social psychologist who died in Paris in 1904. He was well known to turn-of-the-century sociologists in both Europe and the United States and influenced a number of important scholars. Gradually, however, he dropped out of sight, although not completely. Ironically, he is best remembered for two things that did him in. One is the famous intellectual duel he lost to Durkheim defending his voluntaristic social psychology of action against Durkheim's exteriorized normative pressures. The other is the unfashionable (today) choice of the concept imitation as the basis for his general theory and especially for his theory of diffusion.

Our language is full of words meaning influence, ranging from the most explicit ("persuasion," "command") to the most implicit ("contagion"). On the explicit side, both parties to the transaction--influential and influencee--are aware of what is going on; at the implicit end, it is likely that neither party knows that influence is being transacted (as in influenza). In between, we have words like "manipulation," for influence known to the influential but unknown to the influencee, and words like "imitation" that imply the influencee knows he is copying the influential, but the influential may not be aware of his role.⁸

I want to venture that had Tarde used the generic word "influence," instead of "imitation," he would be much better remembered. The idea of interpersonal influence is implicit, often explicit ("inter-mental" is one of the concepts he uses) in *The Laws of Imitation*. Yet, it is overshadowed by the copycat aspect of imitation and by its proximity to the unthinkingness of suggestion and contagion.⁹ True, he chose "imitation" because he really believed that interconnected individuals (and groups and nations) copied each other (albeit not random others) in a semi-conscious way, and that "invention" and "imitation" were the keys to cultural change. Nevertheless, he became increasingly aware of the problematic nature of the concept. Indeed, in his preface to the second edition (1895) of *The Laws of Imitation*, he scoffs at those critics who refuse to see that he is using the concept in a generic sense, as the elementary product of social relations. In a difficult passage, he enumerates the varied relations of "talking and listening, beseeching and being beseeched, commanding and obeying, producing and consuming, etc." He goes on to propose that these relations are of two kinds:

The one tends to transmit from one man to another, persuasively or authoritatively, willingly or unwillingly, a belief; the other, a desire. In other words, the first group consists of various kinds or degrees of instruction; the second, of various kinds of command. And it is precisely because the human acts which are imitated have this

dogmatic or commanding character that imitation is a social tie, for it is dogma or power which binds men together. (Tarde 1903, xvi)¹⁰

In his later work, as he moved from an interest in crowds to an interest in publics, he made it abundantly clear that conversation- not one- sided copying- was the key to imitation (that is, influence). He also saw conversation as a major element in the formation of uniformities of opinion and behavior. This is the essence of his essay, to which we shall return (Tarde 1989).¹¹

Inventions- mostly new means to old ends- arise from the interaction of elites, says Tarde, in societies that provide adequate leisure and a system that insulates leadership against direct populist pressure. It is from such places that innovations are launched: from capital cities, from cities with dense populations, from institutional elites (scientists, clergy) who can interact intensively, from the nobility or from the democratic leadership that replaced them. From these sources, innovation spreads in concentric circles, flowing smoothly until it encounters hostile barriers, whether environmental or cultural, including the onset of a competing invention. The flow proceeds in stages, "a slow advance in the beginning, followed by rapid and uniformly accelerated progress, followed again by progress that continues to slacken until it finally stops" (Tarde 1903, 127). The proper task of the sociologist, he says, is to choose indicators- behaviors, ideas, products- that are associated with similar and different wants and needs in order "to trace out the curve of the successive increases, standstills, or decreases in every new or old want and in every new or old idea, as it spreads out and consolidates itself or as it is crushed back and uprooted" (110).¹² This, for Tarde, is the true definition of history- continuing surveys of the careers of human values and of the career of those inventions designed to serve them. "According to the learned, history is a collection of those things that have had the greatest celebrity," he says. "I prefer to consider it a collection of those things that have been the most successful, that is, of those initiatives that have been the most imitated" (139).

His "logical" law of imitation deals with what we would call "compatibility"- that is, the goodness of fit between the attributes of a diffusing item and the social and psychological attributes of the potential adopter, all other things being constant. "Logical laws operate whenever an individual prefers a given innovation to others because he thinks it is . . . more in accord with the aims or principles that have already found a place in his mind (through imitation of course)" (Tarde 1903, 141). In my opinion, this proposition is central to theorizing the process of diffusion. Stated otherwise, the idea of compatibility may relate to the relative ease with which an item fits the other elements in the diffusion accounting scheme. For example, diffusion is affected by the availability of a compatible adopting unit. "It takes two to tango" or use the telephone; it takes a municipality to adopt a fluoridation system; and it takes a centralized bureaucracy to flood the Nile River. Diffusion also is facilitated by a compatible social structure. Christianity is more compatible with patrilineal than with matrilineal tribal structure, and a trucking system is more compatible than a railroad with a nation of mutually hostile tribes. Similarly, success depends on a compatible value system (contraception has a harder time in Catholic countries) and compatible media (print serves participatory democracy better than television does).¹³ At its simplest, the notion of compatibility asks whether a given innovation expects the farmer to get up earlier in the

morning, or whether it expects him to go to the market to purchase hybrid seed. The less upsetting an innovation--the lower its cost--the more likely its adoption. It follows, of course, that the most rational strategy ("logical," Tarde calls it) is to adopt the things one already has.

His "extra-logical" laws have to do, first of all, with the direction of flow, typically from superior to inferior what has been called trickle-down and, second, with the general proposition that the diffusion of ideas precedes their material expression. He insists, as we have seen, that desires (ends) precede the means of their satisfaction, that belief precedes ritual, that ideas for legislation-civil rights would be a contemporary example--precede their enactment in law.

SOROKIN'S AMENDMENT

Forty years later, Harvard sociologist Pitirim Sorokin wrote a chapter on diffusion in his *Social and Cultural Dynamics*, which is reprinted as an appendix to *Social and Cultural Mobility* (Sorokin 1941). He takes issue with Tarde on several major points, the most interesting of which is that diffusion is reciprocal--the proposition that diffusion flow is two-way. What seems like one-way export from capital cities to the hinterland or from high to low status is usually a more balanced relationship where one side diffuses raw material while the other side produces "finished" products and rediffuses them. This applies equally to the movement of folk tunes from the countryside into Beethoven symphonies and back again, as it does to the classic relationship between colonial powers and their colonies. The processes of invention and diffusion are more distinct for Tarde than for Sorokin; Sorokin is more interested in how diffusing items "transform" in being shipped back and forth. Thus popular art, says Sorokin, is often a decadent form of high art. Many of our popular tunes are the children of the refrains of popular opera of the eighteenth century, he says. Sorokin qualifies this generalization by asserting that "on the eve of revolutions," or in periods of social decay, the upper classes import finished products from the lower, just as "the obsession of literature and theater with ... the dregs of society is ... symptomatic of the present decline of our upper classes" (568). In general, however, the influence of the "finished" is more powerful than the "raw" because manufactured items travel together as an interconnected "system" rather than as a "congeries" or a single trait (and here begins Sorokin's typology of diffusing items). Essentially, he agrees with Tarde that when an elite ceases to innovate, it is a "sign that its work is done."

Sorokin also takes issue with Tarde's observation that diffusion travels in concentric circles around the point of invention. This is true, Sorokin asserts, only when the means of communication and transportation are also concentric--which is rare. Rather, he insists that diffusion follows the routes of the traveling salesmen, missionaries, scholars, travelers, adventurers, journalists and of men, more than women, because men take charge of "foreign relations" (1941,580). Sorokin leans more toward Tarde than toward Marx in rejecting the rule that the diffusion of things precedes the diffusion of ideas or ideas of things, but he resists both generalizations; rather, he says, what comes first depends on who arrives first--the merchant or the missionary.

But diffusion is not limited to voluntary imitation, Sorokin tells Tarde, even though Tarde is aware of this, as we have seen. "Some values are imposed, some others penetrate before a population even has an idea of these values ... [they] want them because they have

come in contact with them or because they have been imposed. . . . Therefore one cannot claim that in penetration of the values, the inner desire to have them precedes the outer acceptance of them" (Sorokin 1941, 634). Here, Sorokin reinstates that elusive dimension of diffusion research that has to do with imposition-and power! It is the third of Sorokin's three rules: (1) that finished products move "downward," (2) except in situations of elite decline, and (3) except when a conqueror imposes. Even in the latter case, conquerors may sometimes adopt the culture of the conquered.

Sorokin is also skeptical about the universality of the "cumulative normal curve" of diffusion. At best, he says, there are several different S curves, again agreeing, more than disagreeing, with Tarde. Moreover, he calls attention to short-lived, usually simplistic best-sellers ("butterflies," he calls them) and long-term, usually complex classics. It is a rare case when simplicity coincides with perfection, causing a short-term best-seller to continue as a classic.

Sorokin's work on diffusion—although more recent—is as little remembered as Tarde's, as far as I can judge. As theory, it is sophisticated, as is Tarde's, and as learning it is prodigious, like Tarde's. Both men propose to do what still needs doing: to find ways of theorizing across disciplines and across discrete case studies. Answering his own rhetorical questions in the affirmative, Sorokin (1941, 549) asks, Are there some uniformities in the genesis, multiplication, mobility, and spread of sociocultural phenomena in space? Are there any time uniformities in such a change? Are there any quantitative uniformities in the field (in the increase, now decrease in certain crimes, fashions, beliefs, styles, and whatnot)? Finally, are there any qualitative uniformities (the new becomes old; the strong, weak; the bright, dull; and so on)?

PUBLIC OPINION AS A DIFFUSION PROBLEM: TARDE AND BRYCE

Sorokin's interest in diffusion stems from his interest in social mobility, which he generalizes to the "mobility" of culture. Tarde's interest in diffusion generalizes more specifically to the formation, diffusion, and aggregation of public opinion. This deserves our further attention.

In his essay "Opinion and Conversation," which followed his work on imitation by a decade, it is clear that Tarde (1989) has shifted emphasis from suggestion to interpersonal influence, which coincides with his parallel distinction between crowds and publics. For Tarde, as for Benedict Anderson, the nation is an "imagined community," united by the ubiquity, language, and shared agenda of the newspaper (Anderson 1983). The daily press set the boundaries of the nation and constituted myriad small groups that could now engage in the same conversation, aware that everybody else in the national public was doing so. Thus, the newspaper appeared in coffeehouses and salons as a menu of ideas. It triggered conversation, which, in turn, percolated opinions on issues of the day. These considered opinions, refined in the process of group discussion, then circulated until they coalesced as one, sometimes two, opinions, which constituted public opinion. The press then reentered the scene to represent these opinions and thereby informed action at both micro- and macro-levels. At the micro-level, aggregate opinion influenced the choice of leaders, votes,

the evaluation of products, fashions, and so on. At the macro-level, the aggregation and representation of opinion constituted "a brake on government."

Tarde's press-conversation-opinion action was Lazarsfeld's two-step flow of communication, as Clark has pointed out (Tarde 1969). Lazarsfeld himself was only dimly aware of this, although he praised Tarde's interest in conversation.

Tarde did not specify how a myriad of opinions, arising from a myriad of conversations, differed from cafe to cafe and converged on one or two opinions. Nevertheless, he made clear--based on observation, not normative theorizing--that public opinion is not a private affair. In effect, he was giving us the ingredients of what has come to be called "the public sphere."¹⁴ These include a nation-state; a press to mediate between government and citizens; a knowledgeable and sociable citizenry; agreed public spaces in which to carry on conversation; a process of aggregation (which we still know little about); the representation of such aggregation; individual choice expressed in votes, values, products, and fashions; and collective pressure on decision making. These interactions between the institutions of government, on one hand, and assembly, press, and opinion, on the other, make clear how interdependent is research on communication, public opinion, and diffusion.

A contemporary of Tarde's from across the channel, Lord Bryce, deserves equal credit for theorizing the interaction of press, conversation, and opinion. In a recent article DeFleur (1998) proposes a propositional inventory of Bryce's view of workings of American democracy, paralleling our inventory of Tarde. The similarities between the two conceptions are striking. Unlike Tarde, however, Bryce presumes that the media evoke an immediate response on the part of the individuals--even before they find their way to the café and to conversation. He places an emphasis on a spiral of exchange between citizen and media that leads to the gradual emergence of a polarized map of opinion about an issue on which the individual takes a side. Like Tarde, he attributes importance to the role of conversation in mapping where others stand. For Bryce, however, public opinion seems to coalesce, from successive exposure of individuals to successive representations of opinion by the media.¹⁵

If I am correct, Tarde is more interested in the ways in which opinion wends its way from cafe to café from conversation to conversation gradually cohering in one or two opinions, which the media then represent. Of the two men, Tarde is the more interested in the mysterious ways of diffusion, while Bryce gives the press a more decisive role. The Monica Lewinsky case--showing the relative independence of public opinion--would seem to illustrate Tarde's approach; *mutatis mutandis* press influence on perceptions of the Kosovo tragedy seems to favor Bryce.

DIFFUSION AND MULTIDISCIPLINARITY

The multidisciplinary writings of Tarde and Sorokin provide useful benchmarks in any attempt at theorizing diffusion. Whether in the broad conceptualization of compatibility, in the investigation of general patterns of diffusion, or in theorizing participatory democracy as an application of diffusion processes to the interaction of public opinion and the media, these scholars created basic schematics that remain relevant today. These scholars began to conceptualize the dynamic processes implicit not only in cultural change but also in the day-to-day workings of social systems. Unfortunately, these men are no longer around to

remind us that a multidisciplinary approach is essential to theorizing diffusion or to remind us that there are too few of us trying to stand on their shoulders.

Notes

1. Kinnunen (1996) cites the several editions of Rogers 1995.
2. Kinnunen (1996) cites additional archives in addition to Rogers 1995. For a recent review of opinion leader studies, see Weimann 1994.
3. See the historical review by Heine Geldem (1968).
4. There is much debate over the centrality of the mass society model in the minds of communications researchers in the 1940s.
5. The pioneering work was Lazarsfeld Berelson, and Gaudet 1944. See also Katz 1957 and Hagerstrand 1968. "Even today," wrote Hagerstrand, "when the sheer quantity of information pouring forth from the mass media may seem to make everything known equally well everywhere without much delay, the fact is that personal communication between pairs of individuals and direct observation are still the basic instruments for the diffusion of innovation" (176). Hagerstrand postulated that most contacts are at close physical distance, only a minority maintaining wider contacts on a national scale, at best. He did not foresee how the Internet-only thirty years later-might change the patterns of interpersonal contact.
6. Especially Coleman, Katz, and Menzel (1966).
7. The essay, part of a two-part book, has recently been reissued in France, with a new introduction by Dominique Reynie (Tarde 1989). The English excerpts are in Tarde 1969.
8. I have elaborated on this typology in Katz and Lazarsfeld 1956.
9. Van Ginneken (1992, 218) also notes Tarde's growing awareness that "inter-action" is a concept that would serve him better.
10. That belief is associated with instruction (or persuasion) sounds right, but it is not clear why Tarde associated desire-that is, the imitation of wants and needs-with commands. "Belief" and "desire" are central to Tarde's system; these are what we imitate. Thus, Tarde is seriously interested in the meanings we associate with things.
11. "L'opinion et la conversation" in Tarde 1989.
12. In his chapter 4, *What Is History: Archaeology and Statistics*, Tarde (1903) enumerates many different indices that correspond to "some special desire or idea," such as an annual numerical inventory of living-room furniture, for example.
13. Bibliographical references to these and many further examples are in Katz 1976.
14. The term "public sphere" was made famous by Jürgen Habermas (1989).
15. Bryce's *American Commonwealth* (1888) is a classic of political science and is often cited as the parallel to Tarde 1989. These comments on Bryce lean almost exclusively on DeFleur 1998. But I would also like to thank Susan Herbst for her persistent prodding on Bryce's behalf.

References

Anderson, Benedict. 1983. *The Imagined Community*. London: Verso.

- Bryce, James. 1888. *The American Commonwealth*. Rev. 2d ed., 1889. New York: Macmillan.
- Carey, James W. 1977. Mass Communication Research and Cultural Studies: An American View. In *Mass Communication and Society*, ed. James Curran, Michael Gurevitch, and Janet Woollacott. London: Edward Arnold.
- Coleman, James S., Elihu Katz, and Herbert Menzel. 1966. *Medical Innovation: A Diffusion Study*. Indianapolis: Bobbs-Merrill.
- DeFleur, Margaret H. 1998. James Bruce's 19th Century Theory of Public Opinion in the Contemporary Age of New Communication Technologies. *Mass Communication & Society* 1(1-2):63-84.
- Habermas, Jürgen. 1989. *The Structural Transformation of the Public Sphere*. Cambridge: MIT Press.
- Hagerstrand, Torsten. 1968. The Diffusion of Innovation. In *International Encyclopedia of the Social Sciences*, ed. David L. Sills. New York: Crowell-Collier and Macmillan.
- Heine-Geldem, Robert. 1968. Cultural Diffusion. In *International Encyclopedia of the Social Sciences*, ed. David L. Sills. New York: Crowell-Collier and Macmillan.
- Katz, Elihu. 1957. The Two Step Flow of Information: An Up-to-Date Report of an Hypothesis. *Public Opinion Quarterly* 21:61-78.
- . 1960. Communication Research and the Image of Society. *American Journal of Sociology* 65:435-40.
- . 1961. The Social Itinerary of Technical Change. *Human Organization* 20:70-82.
- . 1976. On the Use of the Concept of Compatibility in Research on the Diffusion of Innovation. *Proceedings of the Israel Academy of Sciences and Humanities* 5:126-45.
- . 1992. On Parenting a Paradigm: Gabriel Tarde's Agenda for Opinion and Communication Research. *International Journal of Public Opinion Research* 4:80-86.
- Katz, Elihu, Sharon Docter, Jodi Gusek, Miriam Metzger, Jacqueline O'Connell, and Jane Stokes. 1998. Press-Conversation-Opinion-Action: Gabriel Tarde's Public Sphere. In *Paul Lazarsfeld 1901-1976*, ed. Jacques Lautman and Bernard-Pierre Lecuyer. Paris: L'Harmattan.
- Katz, Elihu and Paul Lazarsfeld. 1956. *Personal Influence: The Part Played by People in the Flow of Mass Communications*. Glencoe, IL: Free Press.
- Katz, Elihu, Martin L. Levin, and Herbert Hamilton. 1963. Traditions of Research on the Diffusion of Innovation. *American Sociological Review* 28:237-52.
- Kinnunen, Jussi. 1996. Gabriel Tarde as a Founding Father of Innovation Diffusion Research. *Acta Sociologica* 39:431-41.
- Lazarsfeld, Paul, Bernard Berelson, and Hazel Gaudet. 1944. *The People's Choice*. New York: Duell, Sloan, & Pearce.
- Rogers, Everett. 1995. *Diffusion of Innovations*. 4th ed. New York: Free Press.
- Sorokin, Pitirim. 1941. *Social and Cultural Mobility*. New York: Free Press.
- Stark, Rodney. 1997. *The Rise of Christianity: How the Obscure, Marginal Jesus Movement Became the Dominant Religious Force in the Western World in a Few Centuries*. New York: HarperCollins.
- Tarde, Gabriel. 1903. *The Laws of Imitation*. Trans. Elsie Clews Parsons. 1st French ed., 1880; 2d ed., 1885. New York: Henry Holt.

---. 1969. *Gabriel Tarde on Communication and Social Influence*. Ed. Terry Clark. Chicago: University of Chicago Press.

---. 1989. *L'opinion et la foule*. Introduction by Dominique Reynie. 1st ed., 1898. Paris: Presses Universitaires de France.

van Ginneken, Jaap. 1992. *Crowds, Psychology, and Politics: 1871-1899*. New York: Cambridge University Press.

Weimann, Gabriel. 1994. *The Influentials: People Who Influence People*. Albany: State University of New York Press.