Economy and Society
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713685159

Gabriel Tarde: imitation, invention and economy

Andrew Barry; Nigel Thrift

Online Publication Date: 01 November 2007
To cite this Article: Barry, Andrew and Thrift, Nigel (2007) 'Gabriel Tarde: imitation, invention and economy', Economy and Society, 36:4, 509 - 525
To link to this article: DOI: 10.1080/03085140701589497
URL: http://dx.doi.org/10.1080/03085140701589497

Economy and Society Volume 36 Number 4 November 2007: 509–525

Gabriel Tarde: imitation, invention and economy

Andrew Barry and Nigel Thrift

Abstract

This paper provides an introduction to the sociology of Gabriel Tarde and to the papers in this special issue. The first part of the paper examines how Tarde conceived of the relations between sociology and the natural sciences, including astronomy and physical geography. It also discusses Tarde's account of the significance and value of statistics and archaeology as sociological methods. The second part of the paper focuses on the importance of the concepts of imitation and suggestion in Tarde's economic psychology, and discusses the contemporary relevance of his work.

Keywords: Tarde; invention; imitation; suggestion; economic psychology; history of sociology.

Although the work of Gabriel Tarde dates from the end of the nineteenth century, his preoccupations can often seem strikingly contemporary. As Rogers (1995: 40) puts it, he was 'undoubtedly an intellectual far ahead of his time' whose work appears to resonate with many of the prevailing tendencies of social thought. For example, he criticized political economists for their narrow focus on labour, land and capital, and their consequent failure to theorize the importance of ideas and invention in economic life, thereby foreshadowing Schumpeter by many years. He could be said to have founded diffusion research by concentrating on the mechanisms of imitation (Kinnunen 1996). He highlighted the importance of the growth of the media as a prime transmitter of imitation and invention (Katz 2006). He described the ebb and flow of consumer culture in ways which are now becoming a new management orthodoxy. His analysis of the motivations of particular criminal acts and, most

Andrew Barry, School of Geography, Oxford University Centre for the Environment, South Parks Road, Oxford OX1 3QY, UK. E-mail: andrew.barry@geog.ox.ac.uk

ISSN 0308-5147 print/1469-5766 online
DOI: 10.1080/03085140701589497

especially, the process of 'deviation', did much to found modern criminology (Beirne 1987, 1993). At the same time he appears to have anticipated the interest of contemporary social scientists in micro-sociology, not least by advocating what would now be called ethnographic research methods, as well as by espousing a parallel interest in semiconscious processes and gestures (Williams 1982; Leys 1993).

Whereas his contemporary and intellectual opponent Émile Durkheim strenuously sought to demarcate the realm of 'society' from the realm of the psychological and geographical, Tarde's conception of sociology appears more generous in its scope, pointing towards the possibility of connections between the work of sociologists, psychologists and researchers in the natural sciences and humanities, and being fully in tune with the interdisciplinary outlook that has now become common. Nonetheless, in the English speaking world, explicit reference to Tarde's work has been limited and indirect for at least sixty years. Following the translation of *Les Lois de l'Imitation* and *Les Lois Sociales* in the 1900s, his work influenced the development of social psychology, sociology, anthropology, and public opinion research in the United States in the early twentieth century, although the nature and extent of his influence requires further research (Clark 1969; Leys 1993; Blackman, this volume). In the introduction to his collection of Tarde's work published in 1969, Terry Clark notes that 'Park and Burgess', the bible of interwar US sociology, contained 'more references to Tarde than to Comte, Cooley, Durkheim, Simmel, Thomas, or Weber' (Clark 1969: 68; Joseph 1999: 12). While, according to Ruth Leys, Tarde's account of 'imitation suggestion explained how social assimilation and political consensus could be brought about in a rapidly changing American society marked by heterogeneity and difference' (Leys 1993: 279–80). Yet, with a few exceptions, citations to the work of Tarde in the English language literature in the latter half of the twentieth century are, in comparison with the earlier period, rare. Tarde's work became absorbed into US social science and then, it seems, it was largely forgotten or mediated through the work of early twentieth century sociologists and social psychologists such as Park and G. H. Mead.

The publication of this special issue comes in the wake of something of a rediscovery of Tarde in his native France, leading to the republication of Tarde's major books and many of his essays.[1] By comparison the recent literature on Tarde in English remains very limited, reflecting the lack of availability of his works in translation.[2] In this context, this collection of essays aims to promote a wider critical assessment in English of Tarde's work. At the same time we publish a translation of a substantial extract from his two volume study, *La Psychologie Économique*.

There is good reason for choosing this text. It demonstrates plainly that while it is right to emphasize the contemporary resonances of Tarde's approach his work is, of course, infused by the preoccupations of late nineteenth century scientific thought. Indeed, it is the peculiar mixture of these preoccupations with the power of foresight into contemporary concerns

which we suspect is what now makes Tarde such an attractive figure to so many. In this brief introduction we therefore focus on two central themes from Tarde's voluminous body of work and its relations to the natural sciences and psychology of the period. First, we examine how Tarde conceived of the relation between the social sciences and the natural sciences or, as he put it, the relation between the domains of the social, vital and physical. As we shall see, Tarde conceives of the sciences as existing in parallel to one other rather than organized hierarchically. Indeed, the parallels between the social, vital and physical domains are sufficient for Tarde to argue that not just social relations but 'every thing is a society, every phenomenon is a social fact' (Tarde 1999a: 58). Second, we argue that Tarde should be understood as a sociologist of relation, translation or communication, a sociologist of what he was to call the 'inter-spiritual' or the 'inter-psychological' (Tarde 1902a, this volume). The elementary social fact for Tarde is not the individual or collective consciousness, but the forms of relation through which difference is produced. Tarde's work highlights, in particular, the importance of suggestion and imitation in social life and the limits of forms of analysis which confine themselves to the study of representation or inscription.

The social

In a footnote to the concluding chapter of his *Les Lois Sociales* Gabriel Tarde proposed a remarkable sociological research project:

> If we wish to make sociology a truly experimental science and stamp it with the seal of exactness, we must, I believe, generalize the method of Abbé Rousselot in all its essential features, through the collaboration of a great number of trustworthy observers. Let twenty, thirty, or as many as fifty sociologists, from different sections of France or any other country, write out with the greatest care and in the greatest possible detail the succession of minute transformations in the political or industrial world, or some other sphere of life, which it is their privilege to observe in their native town or village, beginning in their own immediate surroundings.
>
> (Tarde 1899: 198)

Tarde's project was not, as far as we are aware, ever carried out. Yet his proposal does indicate a core theme of his sociology. For Tarde, experimental scientific research demanded an extraordinary attention both to detail, and to the singularity of the example. Tarde was irritated by the vague generalizations made by sociologists about the general state of society or politics (Joseph 1999: 11; Tarde 2001a: 205). But this irritation had nothing to do with methodological individualism or a lack of concern with the study of long-term historical transformations, nor did it reflect an aversion to generalization *per se*. In his writing, Tarde often drew analogies between sociology and the study of astronomy and physical geography.[3] Both fields dealt with objects (such as

galaxies and river systems) that were in continual process of transformation, and whose changing form depended on a whole series of specific conditions and events. At the same time, the study of astronomy depended on knowledge of the relations between objects which derived from analysis of very simple micro-astronomical systems involving only a small number of bodies. The difference between the study of history and the study of astronomy was then partly one of emphasis. Astronomers tended to conceal the heterogeneity and path-dependency of systems of relations, whereas historians and sociologists revealed phenomena in all their diversity (ibid.: 68–9). Abbé Rousselot's meticulous empirical documentation of the language of individuals stretching over several generations of his own family provided one model for Tarde's sociology, just as astronomy and physical geography depended upon very precise and detailed measurements of specific phenomena. For Tarde, the analogy between, for example, the transformation of social institutions, or phonetic systems and the study of the evolution of galaxies or physical landscapes would have been clear enough (Antoine 2001: 24).[4] The contingent historical formation of social and political institutions, like galaxies and landscapes, could only be understood as a product of a whole series of specific interactions. Just as astronomers refrain from 'transforming a solar system into a non-resolvable nebula', sociologists should not frame history in terms of vague generalizations.[5] In this context, Tarde dismissed the use of such 'mysterious conceptions' as the social environment or the collective spirit to explain social phenomena (Tarde 1901: 5): 'it is social changes that must be caught in the act and examined in great detail in order to understand social states, and the opposite is not true' (quoted in Alliez 2004: 32). Tarde's social theory is resolutely anti-structuralist, rejecting the idea that it is possible to develop a synchronic analysis of social structure prior to an analysis of the contingent process of social change.

Tarde's conception of the relations between sociology and the natural sciences had three distinct aspects. First, there were, Tarde noted, 'certain obvious analogies' between the sciences: 'now my readers will realise, perhaps, the social being, in the degree that he is social, is essentially imitative and that imitation plays a role in societies analogous to that of heredity in organic life or that of vibration among organic bodies ' (Tarde 1903: 11). The social according to Tarde was 'like the vital' but could also be understood through an analogy to geology, chemistry or astronomy. Although the phenomenon of propagation through repetition, for example, was universal, it took different forms in different domains.[6] As an example, the physics of waves provided a helpful analogy for understanding the rapid propagation of ideas in contemporary societies:

> I light a match, the first undulation which I start in the ether will instantly spread through a vast space ... the well-known laws of Malthus and Darwin on the tendency of the individuals of a species to increase in geometrical progression, are true laws of human radiation through reproduction ... nowadays the diffusion of all kinds of useful processes is brought about in the

> same way, except that our increasing density of population and our advance in civilisation prodigiously accelerate their diffusion, just as the velocity of sound is proportionate to the density of the medium.
>
> (Tarde 1903: 17; 2001a: 77)

Tarde developed a similar argument in relation to each of his core concepts: repetition, adaptation and opposition (Joseph 1999: 15; Tarde 1999b,c, 2001a). According to Tarde, the same kinds of relations (repetition, adaptation or opposition) could be observed in different domains (the vital, the social, the molecular and the stellar), although they took more or less different forms (Tarde 2001a: 67). Throughout his writing it was quite common for Tarde to introduce a theoretical concept by demonstrating how this concept could be applied across a range of both natural and social phenomena. In *Les Lois Sociales*, for example, he distinguished between three forms of opposition: of sign, series and degree. 'The oppositions of every sort – of *series*, *degrees*, or *signs* – may take place between terms that find expression either in one and the same being (whether the same molecule, organism, or self), or in two different beings (two molecules, masses, organisms, or human consciousnesses)' (Tarde 1999b: 83).[7] Given that the same forms of relation can be analysed across the social and natural sciences it made perfect sense for Tarde to make the radical claim that one can talk not just about human societies and animal societies, but even molecular and atomic societies (Tarde 1999a: 58).

Second, in Tarde's view, the relation between the various sciences is not hierarchical. He did not consider physics to be the most fundamental of the sciences or imagine that the insights of sociology were underpinned by the science of psychology. But nor did he argue that sociology only dealt with the study of large-scale phenomena. He neither attempted to reduce, nor to explain away or contextualize, the results of one form of scientific thought to another. Rather, he stressed that all the sciences generated their own fundamental entities, such as the social individual, the cell or the chemical atom (Tarde 1999a: 36). Yet these fundamental entities should themselves be considered composite and in process. For Tarde, the individual entity was not an isolated unit but a point of intersection or interference between diverse lines of imitation. In this way, there is a sense in which the smallest entities can be considered 'richer in difference and complexity than their aggregates . . . that we observe from far away' (Latour 2001: 119).[8] As the sciences progressed, crude accounts of large-scale phenomena could be displaced by more subtle analyses:

> . . . we do not mean to say that science, as it advances, tends to eliminate fundamental differences, or to diminish the number of unrepeated aspects of phenomena. For while it is true that the grosser and more obvious distinctions of the mass dissolve under the penetrating gaze of the observer, their place is taken by others which are at once more subtle and more profound, which multiply indefinitely, thus keeping pace with the uniformities among the elements.
>
> (Tarde 1999b: 48)

Third, Tarde's sociology is, above all, a sociology of relations. For Tarde, the elementary social acts were the relations which led to modifications in states of consciousness. Again, an analogy with the field of astronomy was utterly appropriate:

> What is the basic mechanical fact (*le fait mécanique élémentaire*)?[9] Is it movement? No, in the same way that the basic social fact cannot be defined as consciousness. Consciousness is the prerequisite of sociology just as movement is the prerequisite of mechanics. The basic mechanical fact is the communication or any kind of modification of a movement determined by the action of one molecule or mass on another. In particular, the basic astronomical fact can be defined as the attraction exerted by a sphere, along with the effect of these repeated attractions involving the continued elliptical movement of celestial bodies. In the same way, the basic social fact is the communication or modification of a state of consciousness through the action of a conscious being on another.
>
> (Tarde 1898a: 64)

As this analogy makes clear, Tarde was not an individualist. The elementary social fact of Tarde's system was the relation of modification or communication (such as affect, obedience, sympathy or education), not the subject which was modified (Williams 1982; Blackman, this volume). His sociology neither assumed the existence of an autonomous or rational individual nor a global network which connected individual nodes. He concluded the footnote of *Les Lois Sociales*, introduced earlier, with a question concerning the site of a very specific modification in behaviour. In the research project he proposed he suggested, 'it might be first asked, by whom and how the custom of not saluting the well-to-do landowners of their neighbourhood was originally introduced and propagated among the peasants of certain rural districts in the south of France' (Tarde 1999b: 131). In *Thousand Plateaus*, Deleuze and Guattari gave a particular political reading to Tarde's remarks, drawing a contrast between Tarde's political micro-sociology and the reductive macro-sociology of the orthodox Left.[10] This interpretation is certainly at odds with Tarde's own political analysis, which laid great stress on the inventive capacities of political elites and scientific geniuses (Tarde 1969: 152; Toscano, this volume). But Tarde's question concerning the conduct of the peasants in rural France provides a critical insight into his method nonetheless. As his interest in the work of Abbé Rousselot (1891) suggests, he was preoccupied by the question of the moment, the location, and the mechanism, through which difference or invention are produced (cf. Foucault 2000: 226–7).

Archaeology and statistics

As Deleuze and Guattari note, Tarde's work influenced the development of American micro-sociology (1987: 218). The statement is correct historically (Clark 1969; Antoine 2001: 9), but it is puzzling in the context of Tarde's

emphasis on the importance of archaeology and statistics for sociological research. How could archaeology and statistics be of interest to a sociologist who extolled the virtues of the Abbé Rousselot's extraordinarily meticulous records of speech in a single village?

In considering the significance of archaeology and statistics in *Les Lois de l'Imitation*, Tarde recognized that these methods had both advantages and disadvantages. There are disadvantages, in so far as the use of archaeology and statistics both 'simplifies and transfigures' social and historical process. For the archaeologist, history 'consists merely of the advent and development, of the competition and conflicts, of original wants, or, to use a single term, of inventions' (1903: 102). Yet this simplification is an advantage too since, in focusing on similarities and differences in material cultural forms over time, the archaeologist is able to render subtle changes in such forms visible:

> Below the surface, in some way, of the violent and so-called culminating events that are spoken of as conquests, invasions, or revolutions, the archaeologists show us the daily and indefinite drift and piling up of the sediments of true history, the stratifications of successive and contagion-spread discoveries.
>
> (Tarde 1903: 91)

On the one hand, this simplification makes it possible for the archaeologist to understand changes, in part, as a result of the imitation of external elements and the conjunction of different imitative currents. In this respect, the archaeologist is able to decompose material culture, carrying out a practice analogous to that of chemical analysis: 'there is no assignable limit to [the] archaeological decomposition of civilizations: there is no social molecule which their chemistry has not a fair hope of resolving into its constituent elements' (Tarde 1903: 99). On the other hand, the approach of archaeology pointed to what more recent economists of innovation term the path-dependency and irreversibility of technical change (ibid.: 100).

The value of statistics, likewise, can be understood through an analogy with chemistry and, in particular, the statistical interpretation of thermodynamics. Tarde valued statistics not as a means to compare societies synchronically, but as a way of making visible imitative and inventive activity over time. In *Psychologie Économique* he argued that both individuals and populations could be distinguished by whether they could be characterized by closed curves, in which imitation was the rule, or open curves, where invention existed, and new possibilities emerged (Tarde 1902a: 157). Other curves in which there was temporarily no rate of change pointed to the existence of unstable equilibria:

> Plateaux, let me add, are always unstable equilibria. After an approximately horizontal state has been sustained over a more or less prolonged period, following the appearance of new auxiliary and confirmatory or antagonistic and contradictory inventions, the curve begins to rise or fall and the series begins to grow or diminish.
>
> (Tarde 2001a: 175)

The notion of the plateau is highly suggestive of Tarde's approach. For it indicates how an attention to detail and to the infinitesimal could lead to an understanding of the indeterminacy of long-term social change and the emergence of new social phenomena. Statistics were of value to Tarde not because they served to isolate the domain of specifically social phenomena, but because they allowed the sociologist to trace the emergence of new passions and desires and their consolidation in the form of habit and custom (Tarde 1902a, this volume).

In this context, Tarde argued, the difference between archaeology and statistics was not so great. Statistics could, in principle, make a contribution to the archaeology of contemporary life and the results of archaeological and statistical research had, according to Tarde, a remarkable resemblance (Tarde 1883: 363). Indeed Tarde imagined the possibility of carrying out a complete statistical inventory of different kinds of furniture and their annual variation in a given country (Tarde 1903: 112). However, the critical weaknesses of statistics were that it only counted phenomena rather than weighing their importance, and that it only enumerated those things that could easily be counted:

> ... successful imitations are numerous indeed, but how few are they in comparison with those which are still unrealised objects of desire. So-called popular wishes, the aspirations of a small town, for example, or of a single class, are composed exclusively, at a given moment, of tendencies, which, unfortunately, cannot at the same time be realised to ape all particulars some richer town or some superior class. This body of simian proclivities constitutes the potential energy of a society. To convert it into actual energy, it takes only a commercial treaty, or a new discovery, or a political revolution, events which make certain luxuries and powers which had before been reserved for those privileged with fortune or intellect, accessible to those possessing thinner purses or fewer abilities. This potential energy then, is of great importance, and it would be well to bear its fluctuations in mind. And yet ordinary statistics seem to pay no attention to this force.
>
> (ibid.: 107; 2001a: 166)

Tarde's comments on statistics point in two directions. One was his antagonism towards the crowd, which he regarded as being likely to have a threatening aspect, precisely because of its spontaneity. Indeed Tarde is figured as one of the founders of crowd theory (Moscovici 1985), work that is currently undergoing something of a revival, as Borch's essay underlines (see also Borch 2006; Schnapp and Tiews 2006). Yet, at the same time, his interest in the crowd was paralleled by a concern with the constitution of the public, a kind of dispersed crowd, created by the kinds of 'action at a distance' made possible by the development of the newspaper (Tarde 1901: 6).[11] Tarde noted that statistics, in the form of movements in the stock market, were already printed in daily newspapers. His fantasy was that statistics would begin to displace the

polemic which tended to fill the press and, ultimately, different branches of statistics would become the day-to-day sense organs of society: 'the public journals, then, will become socially what our sense organs are vitally' (Tarde 1903: 136; see also Tarde 1969: 231).

In effect, the production of statistics would lead to the quantification of what we might call the economy of desires (Williams 1982: 360–65; cf. Callon *et al*. 2002b).[12] Such a quantification has subsequently come about, although perhaps not exactly in the way that Tarde hoped or foresaw. Thus, a multiplicity of information that can be statistically manipulated is now available, from official statistics which are pored over by multiple agencies (such as those concerning interest rates or inflation) through the rise of large corporate databases which precisely try to track and trace the flow of consumer desires by using geodemographic and other consumer classifications, to the myriad pieces of information about individual consumer choice which circulate on the internet and can be aggregated in ways that attempt to trace the dynamics of the 'inter-psychological' (Latour 2005: 13; Tarde 1902a, this volume).

Invention and economy

At the heart of Tarde's account of this economy is the notion of imitation. But, for Tarde, imitation was never exact. It always contained a potential surplus which allowed an event or an action to deviate into invention (Lepinay, this volume). Thus every event contained the seed of something else. Though Tarde is often understood as a purveyor of the sign of genius, he was clear that inventiveness was not just associated with genius: 'I have certainly applied the name to all individual initiatives, not only without considering the extent to which they are self-conscious – for the individual often innovates unconsciously, and, as a matter of fact, the most imitative man is an innovator on some side or another ...' (Tarde 1903: xiv). In other words, the moment of invention could be a conscious act, yet it could equally result from the unanticipated conjunction of imitative currents (Tarde 2001a: 103). It could derive, indeed, from nothing more than hesitation or confusion (Deleuze 1994: 314), through which an idea or practice which has been repeated routinely becomes uncertain or contradicted. Perhaps one of the attractions for Tarde of Rousselot's work on phonetics was that it pointed to the possibility, unrealized within sociology, of locating the precise site and moment at which difference was generated. Just as physicists sought to account for large-scale phenomena through the study of micro-physical relations and transformations, Tarde directed sociology to the study of the incremental and the infinitesimal (Alliez 1999: 10; Tarde 1999a: 37).[13]

Moreover, Tarde was continually struck by the rapidity of diffusion of new technologies, ideas, and intellectual fashions ('We ... no longer have epidemics of penitence, unless they are in form of contagious pilgrimages – those unique manifestations of the power of suggestion – but we do have epidemics of

luxury, of gambling, of lotteries, of stock-speculation, of gigantic railroad undertakings, as well as the epidemics of Hegelianism, Darwinism etc.'; Tarde 2001a: 205, 1903: 146). In this context, Tarde placed great emphasis on the importance of new infrastructural technologies such as the telegraph and the railway which led to the rapid transmission of ideas.[14] The development of such technologies intensified the rate of propagation of beliefs and desires which he viewed as critical to social and geographical change.

> An industry, born from an invention, or rather, always, from a group of successive inventions, is only viable to the extent that the desire for consumption to which it corresponds has sufficiently spread from individual to individual by means of an inter-psychological action which is fascinating to study; and the development of that industry is entirely subordinated to the propagation of this desire. Inasmuch as this desire, following certain obstacles thrown up by difficulties in communication, the borders of states, the separation of classes, mores, or religious ideas, will remain enclosed in a narrow region or in a given and not so numerous class of the nature, the industry will not be capable of becoming a great industry.
>
> (Tarde 1902a, this volume)

It is perhaps no surprise then that Tarde has become a key that can be used to unlock certain tendencies in modern 'economic' life (Lazzarato 2002; Thrift 2006). But care needs to be taken. As Lepinay makes clear, Tarde did not understand the economic as having its own specific fabric. Rather in his neo-monadology, inherited from Cournot and ultimately from Leibniz,[15] Tarde argues that 'invention is the first cause of wealth', a stance that chimes with so much contemporary writing on the so-called knowledge economy. But Tarde meant to go farther than simply adding another factor of production to the standard triptych of land, labour, and capital. For Tarde, invention was key to social evolution: 'When I say that social transformations are explained by individual initiatives which are imitated, I do not say that invention, individual initiative, is the only acting force, nor do I say that it is actually the strongest force, but I say that it is the directing, determining, and explaining force' (Tarde 1902b, cited in Taymans 1950: 616). But Tarde was not arguing for a slavish evolutionary approach: inventions produced new and original combinations which acted to perturb the system in all kinds of unforeseen and 'accidental' (not haphazard or involuntary) ways: 'take away Archimedes, Descartes, Leibniz, Lagrange, not to mention the living, what will remain? Others you would say, would have taken their place. Are you sure? Others would have discovered something else' (Tarde 1902b, cited in Taymans 1950: 619).[16]

But fundamental to invention is imitation, and for Tarde the modern economy is also a machine for promoting *passionate* imitation. His epidemics are outbreaks of passionate interests (Latour and Lepinay 2008) and markets are simply a means of underscoring and amplifying those interests. Indeed, according to Tarde, the most productive inventions have often derived from the desire for luxury goods (Tarde 1902a, this volume). The 'economy'

described by Tarde is perhaps closest in form and spirit to modern consumer 'flock and flow' economies which are based on tracking and periodically initiating consumer enthusiasms, not least by drawing on the inventions of consumers as well as those who are located within the firm, so as to make the extraordinary into an ordinary (or, at least, calculable) state of affairs. It is an economy which depends on tracking as well as generating the propagation of desires.

The papers

In the papers that follow these and other themes are picked up and developed further by our contributors. Lepinay's paper demonstrates the centrality of the concept of the germ and the notion of invention to Tarde's economic psychology. As Lepinay argues, Tarde displaced labour from the central role it is given by the classical political economists: 'exit labour and its centrality in classical political economy, enter the germ as a model to understand the dynamics of economies'. In many respects Tarde's analysis of invention anticipated Schumpeter's later analysis of the critical role of entrepreneurs in developing new technologies (Taymans 1950).[17] Yet to simply equate Tarde's approach with Schumpeter's would underestimate the distinctiveness of Tarde's analysis, for three reasons. First, according to Lepinay, there is no specific fabric to economic life in Tarde, as there is for Schumpeter. Second, Tarde's notion of the inventor or creator should not be equated with the figure of the entrepreneur in Schumpeter. The inventor might be understood as a point of interference or conjunction between lines of imitation as we have noted. Third, Tarde's notion of the germ points to the existence of potentialities through which both difference and uncertainty are created. Tarde's economy is one in which, as Lepinay argues, the shifting and unstable desires of consumers and the genius of inventors displace the 'merely reproductive' labour of the worker from the centre of economic analysis.

Borch's paper focuses not on *La Psychologie Économique* but on Tarde's contribution to crowd theory. As Borch notes, crowd theory has played a significant if arguably marginalized role in the analysis of market behaviour. Theoreticians and practitioners have drawn on crowd theory in order to develop rational ways of both controlling the market and acting as a market participant. Yet for Borch, the key insight of crowd theorists is their focus on the dynamics of contagion and suggestion. Tarde's work, in particular, points to the centrality of suggestion and semiconscious imitation in the operation of markets: for 'society is imitation and imitation is a kind of somnambulism' (Tarde 2001a: 147). For Tarde, although economists have 'not entirely ignored the subjective aspect of the subject ... they conceived of a human heart so simplified and so schematic, a human soul so mutilated as it were, that this minimum of indispensable psychology had the air of a mere postulate fated to support the geometric unfolding of their deductions' (Tarde 1902a, this volume).

The idea of suggestion is examined in greater depth in Lisa Blackman's paper. Blackman argues that the process of suggestion has been neglected and marginalized not just in economics but in contemporary social and cultural theory: 'for many cultural theorists, it would seem that the time of the psychological is seen to be over' (Blackman, this volume). On the hand, social theorists have, in different ways, dismissed the role of suggestion as a psychological or social psychological category, which is taken to imply an outmoded and essentialist understanding of subjectivity. On the other hand, in so far as suggestion is recognized as important, it is associated with the merely 'irrational'. Even within contemporary theorizations of affect there has been a reluctance to draw upon psychological accounts of suggestion and the question of what early social psychologists termed 'contagious communication'. Tarde's work is important, Blackman suggests, in challenging the continuing split between social and psychoanalytic theory and certain strands of social psychological research. At the same time, Blackman argues that early twentieth century social psychologists, such as William McDougall and Edward Ross, oscillated between the idea that 'the suggestive realm is the ontology of the social, through to its foreclosure by attempts to replace contagious communication with normative forms of conscious deliberation' (ibid.). This oscillation is to be found in Tarde himself. For Tarde's work addresses the question of the process of imitation and suggestion, thereby potentially reopening the question of the relation between social and psychoanalytic theory and psychology (see also Joseph 1999: 33). But, at the same time, Tarde himself also looked towards the possibility of channelling, monitoring and managing the forms of imitation and contagion that he observed and theorized (Tarde 2001b).

In his paper, Alberto Toscano interrogates Tarde's relation to politics. For Toscano the Deleuzian interpretation of Tarde as a 'prophet of a molecular politics of difference that seeps through the crack of the molar identities of class or nation' gives us, at best, a distorted view of Tarde. For Tarde, according to Toscano, might be better understood as a theorist of a certain vision of cosmopolitan imperial power. Tarde theorized the production of difference, but at the same time he stressed the importance of the exercise of sovereignty in providing the conditions within which the maximization of *harmonious* difference is possible: 'the centralisation of powers (whether in the hands of one man, or a group of men, Parliament, Constituent Assembly, Convention) is the necessary and transitory precondition for the transformation of an illogical diversity into a logical diversity' (Tarde 2003: 29, quoted in Toscano, this volume). Tarde looked towards the production of harmonious difference, as Toscano argues, as an alternative to what he perceived as the kinds of merely oppositional or destructive differences which he associated with class struggle, socialist politics or the unpredictable dynamics of the crowd. Thus, Tarde can be best understood as an advocate of what Toscano terms 'empowering pacification': not so much a 'molecular politics of difference' but an 'elite model of pacification from above' (ibid.).

Conclusions

If Tarde is understood, in part, as a micro-sociologist, his understanding of what is the proper object of sociological enquiry stretches the limits of what is conventionally understood to be micro-sociology. He was concerned, as we have seen, with the analysis of the very smallest variations and transformations in style, pronunciation, habit and technology. He was interested in the study of subconscious and 'inter-psychological' processes, including suggestion, which have been considered to be at the margins of social and economic analysis. Yet, at the same time, Tarde viewed the study of such small variations as the key to the analysis of collective phenomena. In doing so his approach sought to imitate what he took to be the arguments of contemporary natural scientists. Tarde did not set out to demarcate social from biological, material or psychological phenomena, but rather to draw out the analogies and relations between different domains.

One of the reasons that Tarde's programme for sociology may be quite difficult to put into practice, however, is that, to put it simply, it demands huge resources. For Tarde not only argued for the need for an attention to detail, but for the collection of detailed information over time, and in many specific locations. In this respect, a certain form of Tardean programme for social research is only beginning to be realized, although it is likely to be carried out not primarily by academic researchers but by corporations, market research agencies, governments, and regulators. It involves not just the production of statistics, as Tarde imagined, but an array of techniques, including interactive media and ethnographic research, which are intended to draw consumers and users into the invention of new products and the development of new forms of market organization (Thrift 2006). Tarde's last major book, *La Psychologie Économique*, was well named. For the dynamics of this economy depend on an increasingly tight feedback between forms of economic and political organization and the desires, concerns and passionate interests of consumers and citizens.[18]

Notes

1 The question of whether the work of Tarde was ever 'lost' in France and has only recently been rediscovered is a matter of some debate (Mucchielli 2000; Alliez 2004). However, the recent interest in Tarde in France owes much to Deleuze's commentary on Tarde in *Difference and Repitition* (1994: 313–14) and Deleuze and Guattari in *Thousand Plateaus* (1987: 216–19) and the editorial work of Eric Alliez and his colleagues (Alliez 1999, 2004). Many of Tarde's publications, including English translations of *Social Laws*, the *Laws of Imitation* and *Underground Man* (see also Tarde 2005), can be accessed via the website of the École Nationale d'Administration Pénitentiare: < http://www.enap.justice.fr/7/biblio.php > .

2 Toews (2003), Borch (2005).

3 Tarde's breadth of interest in the range of the natural sciences and humanities found justification, in particular, in the philosophy of Cournot. Tarde compared Cournot's

attention to the differences between the fundamental ideas and frameworks of different sciences to Comte's efforts to provide a complete and systematic account of the hierarchical relations between the sciences with which he disagreed (Tarde 2002: 150).

4 'The Nile or the Ganges are merely masses of water endlessly renewed and locked in between two banks. It is true that the stability of their general form, contrasted with the fragility of their waters is vaguely reminiscent of one of the distinguishing features of living beings, that of having a stable form and a changeable matter (whilst, in the inorganic world in general, it is matter that stays still and the form which changes)'.

5 'From Bousset to Auguste Comte, via Vico, Montesquieu, and Hegel, we have nothing but celebrated geniuses attempting to encompass in a single glance and to confine in a single formula the entire course of history, with no apparent concern for first studying its hydrostatics' (Tarde 1898b: 84).

6 This observation raises the question of how different domains are differentiated by Tarde and what kinds of relations exist between them. In our view, Tarde is unclear on this point, although he does observe that vital and social facts were connected by a joint (*jointure*) (Tarde 2001a: 161). On the question of the relation between the social and the biological and physiological see also Tarde (1898a: 65).

7 For Tarde 'every real opposition implies a relation between two forces, two tendencies, two directions' (Tarde 1999b: 81). An opposition of sign indicated the existence of a diametrical opposition between two forces or tendencies (i.e. A vs not-A). An opposition of series indicated a process of evolution from one state to another (A, A', A'', A''' ...). An opposition of degree indicated a merely quantitative difference.

8 Marilyn Strathern makes a similar observation in relation to the assumption that large-scale phenomena are necessarily more complex: 'Thus the question of complexity seems from one point of view a simple matter of scale. The more closely you look, the more detailed things are bound to become. Increase in one dimension (focus) increases the other (detail of data). For example, comparative questions that appear interesting at a distance, on closer inspection may well fragment into a host of subsidiary (and probably more interesting questions)' (Strathern 2004: xiii).

9 *Le fait* might also be translated in this quote as act or deed, as something which is done. A social (f)act is a relation which produces a modification such as affect or force.

10 'May 1968 in France was molecular, making what led up to it all the more imperceptible from the viewpoint of macropolitics. It happens that people who are very limited in outlook or a very old grasp the event better than the most advanced politicians, or politicians who consider themselves advanced from the point of view of organization. As Gabriel Tarde said, what one needs to know is which peasants, in which areas of the south of France, stopped greeting the local landowners. A very old, outdated landowner can in this case judge things better than a modernist. It was the same with May '68: those who evaluated things in macropolitical terms understood nothing of the event because something unaccountable was escaping. The politicians, the parties, the unions, many leftists, were utterly vexed; they kept repeating over and over again that "conditions" were not ripe' (Deleuze and Guattari 1987: 216; see also Lazzarato 2002: 400).

11 The distinction between publics and crowds is a complex one: 'Let us agree nonetheless that publics are less extremist than crowds, less despotic or less dogmatic, but on the other hand although their despotism or dogmatism is less shrill, it is far more tenacious and chronic than that of crowds' (Tarde 1901: 33).

12 In this respect there is a clear link between Tarde's earlier and later work. The title of Tarde's first published article was 'La croyance et le désir: la possibilité de leur mesure' (Salmon 2005). Tarde defined consumption 'as the reproduction of desires of which certain riches are the object, and judgment as to how riches will satisfy desires'

(Tarde cited in Williams 1982: 360) and praised the work of the metallurgist Frédéric Le Play, who had carried out pioneering work on family budgets in the 1850s (Williams 1982: 365; Le Play 2005/2006).

13 In this context, it is interesting to note that Tarde's major writings coincided with early research on radioactivity by Roentgen and, in France, by Henri Becquerel and Marie Curie. Radioactivity is an internal event in an entity precipitated by a relation between entities. Radioactivity revealed that atoms were themselves composed of smaller entities.

14 In this respect Tarde's work anticipates Harold Innis' later explorations of the relation between Empire and media of communication (Innis 1950).

15 Indeed, Tarde can be portrayed as the vital intermediary between Maine de Biran's work on habit and the active striving of the self and Bergson's work on creative energy, quite literally in the sense that Tarde, elected to the Chair of Modern Philosophy at the College de France in 1900, was followed, on Tarde's death in 1904, by Bergson, who proceeded to pay tribute to the thinker 'who opened so many horizons to us . . .' (cited in Alliez 2004: 50).

16 In this context, Tarde's contribution can be viewed as an intervention in a debate concerning the question of whether inventions and discoveries were inevitable or depended on the individual contribution of the inventor (Macleod 1996). Delanda (2006), who draws upon a combination of Deleuze and complexity theory, argues something not far from Tarde in a number of instances.

17 It is interesting to speculate on whether Schumpeter ever read Tarde but no connections seem to be apparent (see McCraw 2007).

18 Earlier versions of the papers by Lepinay, Blackman and Toscano were given at the workshop on *Gabriel Tarde: Economy, Psychology and Invention* held at the Senate House, University of London, in December 2005, and organized and supported by the Centre for the Study of Invention and Social Process, Goldsmiths College, and *Economy and Society*. Original papers from the workshop can be downloaded from: < http://www.goldsmiths.ac.uk/csisp/source/events/events_2005_2006.html#one > . Thanks to Vincent Lepinay, Georgina Born, Alberto Toscano, Louise Salmon and Matei Candea for their helpful comments and suggestions for further reading. In this paper, extracts from Tarde were translated by Emilia Wilton-Godberfforde and Andrew Barry. Some early translations of Tarde have been modified.

References

Alliez, E. (1999) 'Tarde et le problème de la constitution', in G. Tarde (1999a), 9–32.

—— (2004) 'The difference and repitition of Gabriel Tarde', *Distinktion: Scandanavian Journal of Social Theory* 9: 49–54.

Antoine, J-P. (2001) 'Statistique et métaphore: note sur la méthode sociologique de Tarde', introduction to Tarde (2001a).

Beirne, P. (1987) 'Between classicism and positivism: crime and penality in the writings of Gabriel Tarde', *Criminology* 25: 785–820.

—— (1993) *Inventing Criminology. Essays on the Rise of 'Homo Criminalis'*, Albany, NY: State University of New York Press.

Borch, C. (2005) Urban imitations: Tarde's sociology revisited', *Theory, Culture and Society* 22: 81–100.

—— (2006) 'The exclusion of the crowd. The destiny of a sociological figure of the irrational', *European Journal of Social Theory* 9: 83–102.

Callon, M., **Barry, A.** and **Slater, D.** (2002) 'Technology, politics and the market: an interview with Michel Callon', *Economy and Society* 31(2): 285–306.

Callon, M., **Méadel, C.** and **Rabeharisoa, V.** (2002) 'The economy of qualities', *Economy and Society* 31(2): 194–217.
Clark, T. (1969) 'Introduction', in *Gabriel Tarde on Communication and Social Influence*, Chicago: Chicago University Press.
Delanda, M. (2006) *A New Philosophy of Society. Assemblage Theory and Social Complexity*, London: Continuum.
Deleuze, G. (1994) *Difference and Repetition*, London: Athlone.
Deleuze, G. and **Guattari, F.** (1987) *Thousand Plateaus: Capitalism and Schizophrenia*, London: Athlone.
Foucault, M. (2000) 'Questions of method', in *Power: Essential Works*, Vol. 3, London: Penguin.
Innis, H. (1950) *Empire and Communications*, Oxford: Clarendon Press.
Joseph, I. (1999) 'Gabriel Tarde: le monde comme féerie', in G. Tarde, *Les Lois Sociales*, Paris: Les Empêcheurs de Penser en Rond.
Katz, E. (2006) 'Rediscovering Gabriel Tarde', *Political Communication* 23: 263–70.
Kinnunen, J. (1996) 'Gabriel Tarde as a founding father of innovation diffusion research', *Acta Sociologica* 39: 431–42.
Latour, B. (2001) 'Gabriel Tarde and the end of the social', in P. Joyce (ed.) *The Social in Question: New Bearings in History and the Social Sciences*, London: Routledge, pp. 117–32.
—— (2005) *Reassembling the Social: An Introduction to Actor-Network Theory*, Oxford: Oxford University Press.
Latour, B. and **Lepinay, V.** (2008) *L'économie, science des intérêts passionnés*, Paris: Les Empêcheurs de Penser en Rond.
Lazzarato, M. (2002) *Puissances de l'invention: la psychologie économique de Gabriel Tarde contre l'économie politique*, Paris: Les Empêcheurs de Penser en Rond.
Le Play, F. (2005/2006) 'Anthologie et correspondance' (ed. S. Baciocchi et J. David), *Les Études Sociales* 142–144: 5–277.
Leys, R. (1993) 'Mead's voices: imitation as foundation, or, the struggle against mimesis', *Critical Inquiry* 19: 277–307.
Macleod, C. (1996) 'Concepts of invention and the patent controversy in Victorian Britain', in R. Fox (ed.) *Technological Change: Methods and Themes in the History of Technology*, Amsterdam: Harwood Academic.
McCraw, T. K. (2007) *Prophet of Innovation. Joseph Schumpeter and Creative Destruction*, Cambridge, MA: Harvard University Press.
Moscovici, S. (1985) *The Age of the Crowd*, Cambridge: Cambridge University Press.
Mucchielli, L. (2000) 'Tardomania? Reflexions sur les usages contemporains de Tarde', *Revue d'Histoire des Sciences Humaines* 2: 161–84.
Park, R. and **Burgess, E.** (1921) *Introduction to the Science of Sociology*, Chicago: Chicago University Press.
Rogers, E. M. (1995) *Diffusion of Innovations*, 4th edn, New York: Free Press.
Rousselot, L'Abbé (1891) *Les Modifications Phonétiques du Langage Étudiées dans la Patois d'une Famille de Cellefrouin*, Paris: H Welte.
Salmon, L. (2005) *Gabriel Tarde 1843–1904*. Available at: <http://www.criminocorpus.cnrs.fr/article.php3?id_article=45>.
Schnapp, J. T. and **Tiews, M.** (eds) (2006) *Crowds*, Stanford, CA: Stanford University Press.
Strathern, M. (2004) *Partial Connections*, updated edn, Oxford: AltaMira.
Tarde, G. (1883) 'L'archéologie et la statistique'", *Revue philosophique* XVI: 363–84.
—— (1898a) 'Les deux éléments de la sociologie', *Annales de l'Institut international de sociologie*, VIII, in *Études de Psychologie Sociale*, Paris: V. Giard & E. Brière.
—— (1898b) 'La Sociologie', in *Études de Psychologie Sociale*, Paris: V. Giard & E. Brière, pp. 73–105.
—— (1899) *Social Laws*, New York: Macmillan.

—— (1901) *L'Opinion et La Foule*, Paris: F. Alcan.
—— (1902a) *Psychologie Économique* (two vols), Paris: F. Alcan.
—— (1902b) 'L'invention considérée comme, moteur de l'évolution sociale', *Revue Internationale de Sociologie* 7: 561–574.
—— (1903) *The Laws of Imitation*, New York: Henry Holt.
—— (1969) *On Communication and Social Influence*, ed. T. Clark, Chicago: Chicago University Press.
—— (1999a) *Monadologie et Sociologie*, Paris: Les Empêcheurs de Penser en Rond.
——, **X** (1999b) *Les Lois Sociales*, Paris: Les Empêcheurs de Penser en Rond.
—— (1999c) *L'Opposition Universelle: essai d'une théorie des contraires*, Paris: Les Empêcheurs de Penser en Rond.
—— (2001a) *Les Lois de L'Imitation*, Paris: Les Empêcheurs de Penser en Rond.
——, **X** (2001b) *Penal Philosophy*, New York: Transaction.
—— (2002) *Philosophie de L'Histoire et Science Sociale*, Paris: Les Empêcheurs de Penser en Rond.
—— (2003) *Les Transformations du Pouvoir*, Paris: Les Empêcheurs de Penser en Rond.
—— (2005) *Underground. (Fragments of Future Histories)*, Brussels: Les Maîtres de Formes Contemporains.
Taymans, A. (1950) 'Tarde and Schumpeter: a similar vision', *Quarterly Journal of Economics* 64: 611–22.
Thrift, N. (2006) 'Re-inventing invention: new tendencies in capitalist commodification', *Economy and Society* 35: 279–305.
Toews, D. (2003) 'The new Tarde: sociology after the end of the social', *Theory, Culture and Society* 20: 81–98.
Williams, R. (1982) *Dream Worlds: Mass Consumption in Late Nineteenth Century France*, Berkeley, CA: University of California Press.

Dr Andrew Barry is Reader in Geography at Oxford University and a Fellow of St Catherine's College. He is author of *Political Machines: Governing a Technological Society* (Athlone, 2001) and co-editor of the *Technological Economy* (Routledge, 2005). He has recently completed empirical studies of interdisciplinary research and of the politics of oil.

Prof. Nigel Thrift is a Professor and Vice-Chancellor of the University of Warwick. He is also a Visiting Professor at the University of Oxford and an Emeritus Professor of the University of Bristol. His recent books include *Knowing Capitalism* (Sage, 2005) and *Non-Representational Theory* (Routledge, 2007). His main research interests are in the changing practices of capitalism, cities, new forms of politics, and the history of time.