

CHAPTER 07

INNOVATIVE TECHNOLOGIES AND SOCIAL TRANSFORMATIONS: DISCUSSING REPETITION, IMITATION, AND SIMILITUDE AFTER G. DE TARDE Kostas THEOLOGOU

ABSTRACT

French sociologist and criminologist²³⁵ Gabriel de Tarde's ideas, even in the 21st century, from time to time, emerge to contribute to novel readings of the social phenomena. Social scientist and economists might have paid insufficient attention to his ideas, largely devoted to the laws of imitation and invention. The purpose in this paper is to underline the laws of imitation and invention as his most significant contribution to the linking between technology and society and to claim that the core concepts of imitation, repetition, similitude of the masses are interwoven to foster wider social transformations, even promote new social Paradigms. Though de Tarde's theory is related to economic theories, like Joseph Schumpeter's, in this paper it is claimed that de Tarde's laws of imitation and his concepts of invention and social evolution may influence contemporary society and might explain the technological novelties in the field of bioethics and cyber-identities.

Keywords: *Tarde, invention, imitation, repetition, masses, similitude, transformation, cyber-identity*

INTRODUCTION

Gabriel Tarde (1843-1904) was a French lawyer and a sociologist, a philosopher in his time, whose name often emerges in the contemporary discourse; he is somehow considered either as a minor contributor in modern sociology^{236, 237} while others think of him very highly, like an enormous star who was inevitably eclipsed by a solar phenomenon named Émile Durkheim (1858-1917); in any case he is not an indifferent case in scholar debates. One could claim that trying to prove him minor could easily produce the opposite effect. Two of his major studies, *Les lois de l'imitation* (1890/1993)²³⁸ as well as *La logique sociale* (1895/1999)²³⁹, contain several ideas, either implicit or explicit found in the core of almost all evolutionist theories of technological change and innovation. *Les Lois de l'imitation* is Tarde's most significant work; his laws of imitation are universals concerning not only social sciences but physical sciences as well (the natural living world and the physical environment). Imitation is thus a fundamental component of the social relationship, which also comprises two others, i.e.: *opposition* and *adaptation*. Society is defined by the law of imitation and not by the economic law of exchange of services, nor division of labour. Society is made up of individuals (monads) who resemble each other because they either imitate (adopt) or counter imitate (oppose to) each other.

235 For a documented reference to Tarde as a criminologist see : André Davidovitch, 1963, « Remarques sur la criminologie de G. Tarde », texts from two lectures on 19 and 26 of April at the seminar of *Histoire de la sociologie empirique en France*, dir. by Paul Lazarsfeld in: Jean-Christophe Marcel- Laurent Muchielli « André Davidovitch (1912-1986) et le deuxième âge de la sociologie criminelle française », *L'Année sociologique*, vol. 56, no 1, 2006, pp.83-117. Paris: PUF. Available from: https://www.researchgate.net/publication/240988455_Andre_davidovitch_1912-1986_et_le_deuxieme_age_de_la_sociologie_criminelle_francaise [accessed Jun 10 2025].

236 Muchielli, L. (2000). *Le scandale des tournantes: Dériver médiatiques, contre-enquête sociologique*. La Découverte.

237 Muchielli, L. (2004). *Le Tournant punitif. Essai sur la montée des populismes pénaux en Europe*. La Découverte.

238 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé.

239 Tarde, G. (1999). *La logique sociale* (Original work published 1895). Les empêcheurs de penser en rond.

The *argument* according to Tarde's concepts in this paper is as follows:

- P₁ : *the invention is a motor of social evolution (1902^b)*
P₂ : *technology facilitates repetition and repetition facilitates imitation*
P₃ : *imitation forms similitude to the masses*
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C : *∴ similitude of masses fosters social transformations*

Therefore, the subchapters of our paper are structured after the 3 premises [P₁, P₂, P₃] of the argument and the conclusion [C] claims the title of the paper itself.

1. THE INVENTION IS A MOTOR OF SOCIAL EVOLUTION AND IMITATION IS A UNIVERSAL ...TRUTH

Gabriel de Tarde was also a visionary social philosopher. In a lecture given to the *Society of Sociology* in Paris (June 11, 1902), he made a feisty effort to explain social evolution and he claimed that successful initiatives signify the drivers (*moteur*) of social evolution. The direction of the evolutionary path depends on small insignificant random forces, which are combined with *new forces* creating, thus, a new sort of *periodical reproduction* of the system. In his own words:

« Dans tous ces exemples, on voit que la direction des grandes forces constantes (c'est-à-dire périodiques dans leur action) appartient à des petites forces accidentelles, nouvelles, qui, en se greffant sur les premières, déterminent une nouvelle sorte de reproduction périodique. Autrement dit, sur des répétitions se greffe une variation, point de départ de répétitions nouvelles ».^{240, 241}

Evolution and change is made possible through individual *invention* based on *repetition*. Repetition consists of elements such as the climate, the sun, the race, as well as by tradition, custom, ideas, and acquired attitudes. In fact, climate and race are characterized by *periodical* movements (tide-winds and successive hereditary generations of the same race, respectively, etc.) Tarde emphasized the fact that inventions come from a new combination of already existing resources and concepts, i.e. from imitation.

« Toute machine nouvelle se compose d'outils anciens, de procédés anciens, autrement agencés ».^{242 243}

Tarde's purpose in writing *The Laws of Imitation* –one of most important books– was to establish a genuine and rather general science of society (*Sociologie*) and state its laws unbound of contingencies of space and time.²⁴⁴ Specifically, Tarde argues that social development is determined by “individual renovative initiatives”, which could be described as inventions, discoveries or innovations and thus he declares his *contrast* to Durkheim's accounts. These inventions, discoveries and innovations are diffused and spread by imitation and eventually *appropriated* by people in the mode of technology or knowledge transfer and appropriation. Since « Tout n'est socialement qu'inventions et imitations »,^{245, 246} consequently the fundamental

240 Tarde, G. (1902a). *Psychologie économique*. Félix Alcan: Paris.

241 In all these instances it is seen that great, constant forces are given a direction by small, accidental, new forces, which, by being grafted on the first ones, set into motion a new kind of a periodic reproduction. Upon repetitions is grafted a variation, origin of new variations.

242 Tarde, G. (1902b). L'invention, moteur de l'évolution sociale. *Revue internationale de sociologie*, X (7), 562-574.

243 Every machine consists of old tools, old methods, combined in a *different way*.

244 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. XXII.

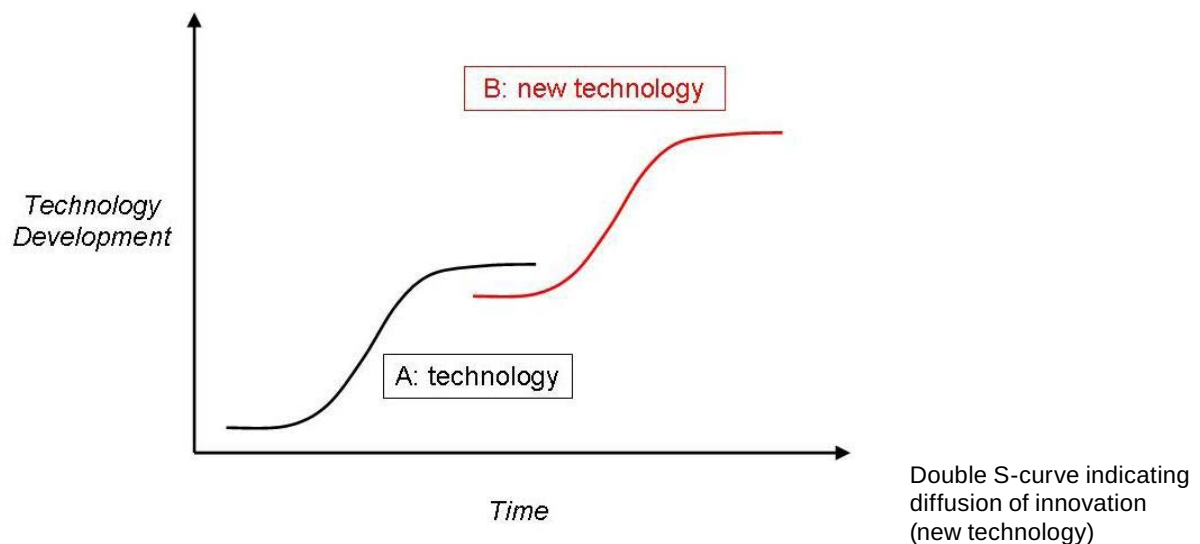
245 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 3.

246 Socially, everything is just inventions and imitations.

principles of social progress and development are found within the invention-imitation bi-pole. The identification of a *universal phenomenon of repetition* is a crucial constituent for Tarde's approach. His goal in the book mentioned above is both to shed light on that phenomenon by disclosing its societal manifestations and to investigate its logical laws and influences.²⁴⁷

It is, specifically, universal *repetition* that explains similarity, whether social, biological or physical. According to Tarde, *repetition* and *similarity* (resemblance) are universal²⁴⁸ phenomena that determine the existence of all sciences, social sciences included. Similarities in the social world consist of the consequences of various expressions of imitation, whether determined by religion, education, fashion, obedience, conformism, sympathy, or custom, whether deliberate, instinctive, or imposed etc. « *Toute similitude sociale a l'imitation pour cause* ». ^{249, 250} Thus, the belief of existing patterns or *resemblances* and *repetitions* attracted human attention and scholarship to observations and measurements of phenomena. On the other hand, a relationship must be repeatable, so that one establishes a cause-and-effect link between those events, the cause and the effect. In the social sciences, *the synonym of repetition is imitation*. To better perceive repetition's particularities and forms in social phenomena measures think of floating vote fluctuations, tech and gadgets freaks, social attitudes like divorces, women equality in specific socio-economic circumstances, religion followers, etc. These collective phenomena allow us to proceed to various counting and measurements and thus produce statistical data and virtually establish a concrete social science. *Imitation as a repetition mechanism functioning in the social sphere has certain characteristics*.

Firstly, it is subject to a *law of geometric progression*: inventions exhibit a general tendency toward a regular, unending, geometric progression. In this sense, Tarde would seem to be a precursor of *innovation diffusion theory*, and *in particular of the S curve*, in both economics and other disciplines (Rogers, 1995; Kinnunen, 1996; Marsden, 2000).^{251, 252, 253}



247 Djellal, F. & Gallouj, F. (2005). Les lois de l'imitation et de l'invention : Gabriel Tarde et l'économie évolutionniste de l'innovation. 11ème Colloque international de l'ACGEPE, pp. 2-3.

248 A "universal" in Philosophy is a claim of truth which holds all over the world, for instance the temperature of boiling water which is 100oC and in such significance we use it in this context.

249 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 40.

250 Each instance of social similarity has its origins in imitation.

251 Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). Free Press.

252 Kinnunen, J. (1996). Gabriel Tarde as a founding father of innovation diffusion research. *Acta Sociologica*, 39(4), 431-442. <https://doi.org/10.1177/000169939603900403>

253 Marsden, P. V. (2000). Social influence and social network analysis. In K. S. Cook & J. Hagan (Eds.), *Annual Review of Sociology*, 26, 121-136. <https://doi.org/10.1146/annurev.soc.26.1.121>.

Tarde discussed three extra-logical factors affecting the *diffusion of innovations*.

- i. imitation proceeds from the internal to the external and affect precedes *cognition*, which precedes *behaviour*. Ideas may be transmitted before the words used to express them, doctrines before rites, ends before means.
- ii. the *prestige hierarchy structures the paths of imitation*: innovations introduced by social superiors are more likely to be imitated than those introduced by social inferiors.
- iii. in the same social system, receptivity to different kinds of innovations fluctuates: at times, what is old, traditional, and proved is the most likely to be accepted; at other times, it is the exotic and avant-garde that is most in favor.

These shifts in perspective apply to all institutional areas of a society —*language, religion, government, the economy, morality, and the arts*. Tarde's third extralogical principle parallels his principle cited above concerning the level of rational development: both predict that *cultural innovations are most likely to be adopted when they resemble other institutionalized elements within the culture*.²⁵⁴

Secondly, this repetition is never automatic or mechanical, indicating that an innovation is modified and *socially reconstructed* in the course of the imitation process. To put it simply, imitation- and generally *repetition*- does not foster convergence and monotony in the world, but out of necessity imitation produces differentiation and variation. *Les répétitions sont donc pour les variations*.^{255, 256} The “objects” of imitation like the words of a particular language or the myths of a religion, are very concretely being modified in the process of imitation, as a new fruit of changes of context, being passed from one culture to another, from one tribe or race or nation to another, from one firm to another, etc. This process resonates the *technology transfer* and its *appropriation*, aptly discussed by historians of technology and civilization (e.g. Pacey, 1974, 1983, 1990).²⁵⁷

Thirdly, imitation can be vague or concrete, conscious or unconscious, deliberate or spontaneous.²⁵⁸ Finally, separate imitation processes may come into contact with each other and either strengthen or compete with each other.

Tarde's consideration on the universal nature of repetition led him to elaborate a new definition of society. At first, he rejected the economist's definition of society as an *interaction* by distinct and separate groups of individuals performing services for each other, based on the exchange of services or utility and on the division of labour. Tarde introduced a definition based on the principle of *resemblance* and *imitation*, by which a society is constituted by individuals resembling each other either because they imitate each other or, because they counter-imitate each other. *L'être social, en tant que social, est imitateur par essence*.²⁵⁹

Social science, any discipline or branch of science that deals with human behaviour in its social and cultural aspects. The social sciences include cultural (or social) anthropology, sociology, social psychology, political science, and economics. Also frequently included are social and economic geography and those areas of education that deal with the social

254 “Tarde, Gabriel”, International Encyclopedia of the Social Sciences, available at: <http://www.encyclopedia.com/social-Encyclopedia.com>, (accessed on September 26, 2017).

255 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 7.

256 Thus, repetitions are favourable to variations.

257 Pacey, A. (1974). *The Maze of Ingenuity: Ideas and Idealism in the Development of Technology*, London, Allen Lane, (1975, 2nd ed.), New York, NY: Holmes & Meier, Cambridge, MA: MIT Press.

Pacey, A. (1983). *The culture of technology*. MIT Press.

Pacey, A. (1990). *Technology in world civilization: A thousand-year history*. MIT Press.

258 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 192.

259 Social beings, by virtue of their own *sociability*, are imitators by nature.

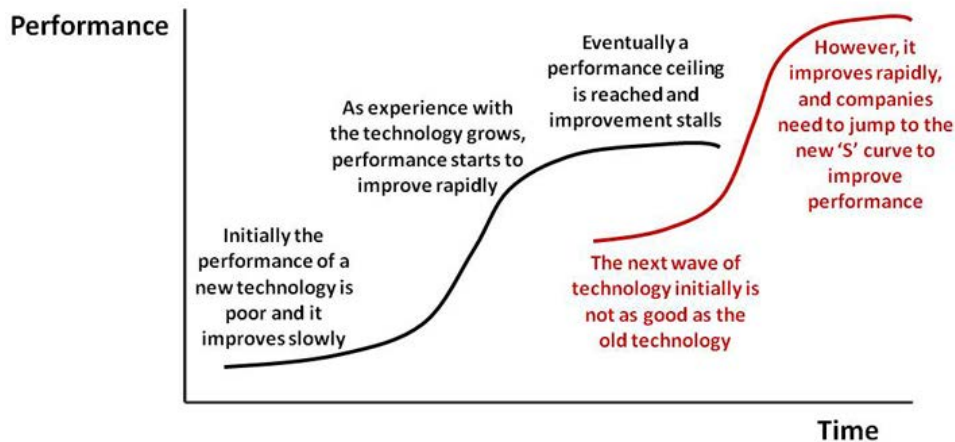
contexts of learning and the relation of the school to the social order. History is regarded by many as a social science, and certain areas of historical study are almost indistinguishable from work done in the social sciences. Most historians, however, consider history as one of the humanities.

2. TECHNOLOGY FACILITATES REPETITION AND REPETITION ENHANCES IMITATION

The logical causes of imitation are those that lead an individual to choose (to imitate) an innovation, on the grounds that he considers it to be '*the most useful* or most well-founded', that is the one that accords most closely with his own goals or principles (which, it should be noted, are themselves established and internalized through imitation). The extra-logical causes are analogous to a subjective assessment of the innovation on the basis of its individual, temporal or spatial origins (reputation, etc.). There are two mechanisms that can be used to describe them. The first is that imitation operates from inside individuals towards the outside. Paradoxically, therefore, internal models (i.e. personal goals or ideas) are imitated before external models (i.e. means or expressions). The second is that imitation operates on the top- down principle (from the superior to the inferior). In other words, the innovations associated with entities (individuals, groups, places, even dates, etc.) assumed to be superior are more likely to be imitated than those associated with inferior entities.

The 'S' Curve model explains how innovations start slow, accelerate, then hit a ceiling requiring companies to jump to a new technology

THE 'S' CURVE



Source:
strategicthinker.wordpress.
com/s-curve/
(accessed 21.9.2017)

Of course, this distinction between logical and extra-logical factors is ideal-typical, since the logical causes of imitation seldom manifest themselves in a pure form. In other words, extralogical factors, such as the prestige or poor reputation of the purveyor of the innovation, his geographical or historical origin, also play a role. Thus, it is quite often the case that the worst options for imitation from a logical point of view are, for extra-logical reasons, given preference over better choices.

Another important question concerns the content or substance of the basic social acts of invention and imitation. Tarde's answer is that they can ultimately be reduced, on the one hand, to beliefs and, on the other, to desires (i.e. needs). Thus belief and desire are the two basic social and psychological factors that form the substance of invention and imitation. Societies are organized around converging or competing beliefs. Similarly, they function on the basis of converging or competing desires (i.e. needs). In other words, social progress, whatever it may be (like individual progress, incidentally), is driven by two mechanisms: 1) the

substitution of one discovery or invention (that is of a need or a belief) by another, a process that Tarde denotes by the term logical combat or duel ; 2) accumulation, that is the addition of one invention or discovery (that is of a need or belief) to another. This process of mutual reinforcement is described by Tarde as a logical union or pairing (or even combination).

The desire for combat or union and the outcome of that combat or union depend on the forces of imitation. The logical duel (yes/no, choice between two religions, two theories or two commodities) is initially an individual matter. It is when it has ceased to be individual, that is when an individual has made a choice (that is, when he imitates), that it becomes social. As long as an individual hesitates, he is not imitating. However, 'it is only in so far as he imitates that he is part of society'. The logical duel can have three different outcomes: 1) the natural and irresistible propagation of one of the alternatives; 2) violent substitution; 3) the emergence of a third alternative (innovation) to displace the others. As far as the logical pairing is concerned, Tarde proposes a distinction between those inventions or discoveries that can accumulate indefinitely (e.g., the words of a language, the myths of a primitive religion or the listing of scientific facts) and those which, beyond a certain threshold, have to be replaced (grammar, the dogmas of a religion, scientific theories, etc.). The multiplication of "logical pairings" contributes to the development of coherent corpora or systems.

3. IMITATION FORMS A SIMILITUDE TO THE MASSES

Gabriel Tarde's insight into imitation as a social mechanism reveals a foundational process through which collective life is structured. While imitation begins as an individual psychological act, its systematic repetition across individuals produces patterns of resemblance –what Tarde called *similitude*. This similitude, in turn, is not merely descriptive but constitutive of the masses. In other words, social collectivity, or what we term "the masses", is shaped by the aggregation of shared beliefs, habits, gestures, and technologies disseminated through imitation.

For Tarde, every act of imitation carries the potential to induce a wider repetition, producing social cohesion. He claimed, « *Toute similitude sociale a l'imitation pour cause* », ²⁶⁰ emphasizing that social likeness arises not from structural preconditions (as Durkheim would argue), but from the contagious transmission of innovations, behaviors, and desires. Thus, societies are not primarily integrated by institutions, but by the shared rhythms of imitation that structure common behavior.

In this light, the masses are not an abstraction, but a statistical and phenomenological outcome of overlapping imitative acts. As innovations spread in geometrical progressions –sometimes visualized through diffusion curves or S-curves—²⁶¹ the resulting social fabric is marked by homogeneity. These convergences are observable in fashion, political behavior, consumer habits, and even technological appropriation. The spread of the smartphone, the replication of digital gestures (e.g., scrolling, swiping), or the global synchronization of social media trends, all bear witness to the mass-producing effect of imitation. Yet this imitation is never a mere replication. Tarde's concept is dynamic: the act of imitating involves transformation. An invention changes as it is adopted, localized, or appropriated within differing social contexts.²⁶² Therefore, the similitude of the masses is not an erasure of difference, but a dynamic formation of collective identity through the interplay of similarity and variation. As such, imitation produces a *living similitude* –one that evolves, reconfigures, and responds to new social and technological stimuli. This dynamic can be viewed in contrast with mechanical uniformity. Tarde warned against interpreting imilitude as stagnation. On the contrary, « *les*

260 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 40.

261 Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). Free Press.

262 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 7.

répétitions sont donc pour les variations »²⁶³ –repetition gives rise to novelty. The mass is thus not a dead weight but a fertile ground for further differentiation. This resonates with Tarde's belief that every act of imitation opens the possibility for inventive deviation.

In mass societies –amplified by the media and now by digital platforms– imitation becomes infrastructural. Newspapers, as Tarde noted, shaped public opinion and formed “publics”.²⁶⁴ Today, digital platforms operate in a similar fashion, functioning as echo chambers and vectors of accelerated imitation. Virality, meme culture, and algorithmic feeds reproduce and amplify similitude across populations. What is new is not the phenomenon, but its scale and speed. The simultaneity of imitation across the globe transforms similitude from a local to a planetary phenomenon. Moreover, Tarde's theory presciently accounts for the tension between individual agency and mass conformity. Since imitation proceeds “from the internal to the external”, and since affect often precedes cognition,^{265, 266} people may adopt behaviors that resonate emotionally before they fully rationalize them. The masses, therefore, are not passive receptacles, but emotionally and cognitively engaged in the processes that produce their own likeness. This framework finds echoes in contemporary theories of social contagion and network effects, where affective resonance plays a key role in spreading trends and ideologies.

Finally, it must be emphasized that similitude of the masses is both an epistemic condition for social science and a normative challenge. On one hand, the statistical regularity that imitation produces allows for measurement, prediction, and generalization. As Tarde noted, only when social acts are repeated do they become intelligible to science. On the other hand, this very regularity risks producing monocultures or systems of domination via conformity. Thus, similitude is ambivalent: it stabilizes societies but may also limit the scope for critical variation.

In sum, imitation forms similitude by diffusing shared forms of life across populations. This similitude is not static uniformity but a dynamic convergence that defines the masses as social subjects. Through this lens, Tarde's theory provides a conceptual toolkit to understand how society is woven not only by institutions and structures, but by mimetic rhythms of life –repeated, shared, and transformed across the social body.

CONCLUSION: SIMILITUDE OF MASSES FOSTERS SOCIAL TRANSFORMATIONS

At the heart of Gabriel Tarde's social theory lies a simple but powerful thesis: « *Toute similitude sociale a l'imitation pour cause* ».²⁶⁷ This assertion –that all social similarity arises from imitation– provides a critical foundation for understanding how social transformations occur. In Tarde's view, **similitude is not merely the outcome of passive replication, but the very medium through which societal change becomes possible**. Through imitation, repetition, and innovation, the masses acquire a shared repertoire of behaviors, desires, and beliefs that make large-scale transformation both intelligible and actionable. The similitude of the masses –defined here as the convergence of social behaviors through mimetic mechanisms– does not imply homogeneity in a reductive sense. On the contrary, Tarde emphasized that repetition produces variation : « *Les répétitions sont donc pour les variations* ».²⁶⁸ Social resemblance, therefore, is not static; it is a **dynamic field of continual differentiation**, in which shared forms are adapted, reframed, and recontextualized across individuals and communities. It is precisely this dialectic between similarity and transformation that renders the masses not inert

263 Ibid., p. 7.

264 Tarde, G. (1901). *L'opinion et la foule*. Félix Alcan, p. 83.

265 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé.

266 Djellal, F. & Gallouj, F. (2005). Les lois de l'imitation et de l'invention : Gabriel Tarde et l'économie évolutionniste de l'innovation. 11ème Colloque international de l'ACGEPE.

267 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 40.

268 Ibid., p. 7.

or mechanical, but **generative agents of historical change**. Tarde's sociology thus displaces structural-functional models –like those of Durkheim– that attribute social transformation to macro-institutional shifts. Instead, he locates social evolution in the **micro-processes of imitation and invention**, which operate at the level of intersubjective interaction. When masses imitate a particular gesture, idea, or technology, they co-produce a *similitude* that renders society governable, observable, and malleable. This mimetic alignment allows for the **emergence of new institutions, practices, and paradigms**, not because imitation erases difference, but because it synchronizes collective attention and affect around new forms.

Technology plays a pivotal role in this process. It does not merely transmit imitation but intensifies and automates it. Digital media, algorithmic personalization, and global communication platforms have accelerated the *temporal and spatial reach of imitation*, enabling the formation of mass *similitude* at a planetary scale.²⁶⁹ From viral trends to global consumer habits, the synchronized rhythms of digital imitation generate new collective formations that exceed traditional sociological categories. These formations, grounded in *similitude*, become the *infrastructure of social change* –whether in the form of political movements, economic disruptions, or ethical realignments.²⁷⁰ Importantly, *similitude* provides not only a descriptive category but also an **epistemological tool** for social science. Tarde argued that only when behaviors are repeated –only when they take on the form of statistical regularity– do they become amenable to sociological analysis.²⁷¹ In this way, the *similitude* of the masses allows researchers to identify patterns, model change, and theorize innovation. At the same time, this regularity is the *precondition for transformation*: it is only when behaviors converge that they may be contested, reformulated, or reoriented toward new ends.

Thus, *similitude is a paradoxical force*: it stabilizes society through shared norms and routines, yet simultaneously incubates novelty through cumulative variation. The repetition of an idea across a population does not guarantee its uniform adoption but ensures its social inscription. In this context, *similitude* is both the mark of existing order and the mechanism of its transcendence. In conclusion, Tarde's mimetic theory reveals that the *similitude of the masses is not a symptom of conformity, but a condition of possibility for social transformation*. Through the diffusion of innovation, the propagation of affect, and the recursive structure of imitation, *similitude* becomes the collective substrate upon which societies evolve. By recovering Tarde's insight into the creative and generative power of mimetic convergence, we gain a vital framework for interpreting contemporary transformations in an age where imitation is digital, instantaneous, and global.

Gabriel Tarde's theoretical contributions, long overshadowed by the structural-functional dominance of Émile Durkheim, are increasingly reclaiming scholarly attention for their prescient insights into the mechanisms of social change. In this paper I tried to reconstruct and mobilize Tarde's key concepts –invention, repetition, and imitation– as tools for analyzing the link between technological innovation and social transformation. Drawing upon Tarde's *Les lois de l'imitation* (1890/1993) and his later writings on invention and social evolution,²⁷² the argument presented here holds that the *similitude* of the masses, shaped and reproduced through imitative processes, constitutes both the material and symbolic foundation for large-scale social transformations.

My final remark is to underline that *invention*, for Tarde, *represents the primary engine –or moteur– of societal evolution*. It is not merely a technical or creative act but an epistemic rupture, a novel recombination of existing elements within a cultural or technological repertoire.²⁷³

269 Djellal, F. & Gallouj, F. (2005). Les lois de l'imitation et de l'invention : Gabriel Tarde et l'économie évolutionniste de l'innovation. 11ème Colloque international de l'ACGEPE, pp. 2-3.

270 Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). Free Press.

271 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 115.

272 Tarde, G. (1902b). L'invention, moteur de l'évolution sociale. *Revue internationale de sociologie*, X (7), 562-574.

273 Ibid., p. 563.

However, inventions do not alter the social world autonomously; their diffusion, and thus their transformative power, depends on the law of imitation. Imitation is for Tarde the principal conduit through which inventions become embedded in the collective life of societies. This process is cumulative and generative: each act of imitation may lead to further variations, creating feedback loops of innovation.²⁷⁴ In this way, repetition does not negate novelty –it is the very condition of its emergence and proliferation.

274 Tarde, G. (1993). *Les lois de l'imitation* (Original work published 1890). Kimé, p. 7.

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