

**Innovation and Imitation:
Why is Imitation not Innovation?**

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Abstract

Innovation theorists relegate to non-existence a series of concepts outside of the semantic field of innovation. Such is the case of imitation. This paper looks at when, how and why imitation, as an early meaning of innovation, was removed from the discourses on innovation. The paper suggests that cultural values, disciplinary work, market ideology and semantics are key factors in explaining the neglect of imitation in discourses on innovation, particularly theories.

When some encyclopaedists started using innovation in a positive sense in the nineteenth century, they were initiating, together with a few other writers, a long term movement of thought. To take one example, Octave Delepierre's *Aperçu historique et raisonné des découvertes, inventions, innovations et perfectionnements, en Belgique, dans les sciences, les arts, l'industrie, etc. depuis les Romains* surveys "les hommes et les choses remarquables de la Belgique" [remarkable men and things of Belgium] in industry, agriculture, fine arts and science. The author makes use of the concept of innovation within a national perspective. Delepierre's aim is to "faire voir combien les Belges en toutes choses ont constamment été en progrès, et très souvent même, ont donné l'impulsion aux autres nations" [show the world how much Belgians have been constantly progressing in all things, and often have even given the impulse to other nations] (Delepierre, 1836: 5).

To Delepierre, innovation is a new invention or an invention's introduction into the world for the first time. Briefly stated, innovation is originality or priority. This is a totally different view of innovation from that of the previous centuries. Until then, namely since the Reformation, innovation had been a bad word (Godin, 2015b). At a time when the Reformation was incomplete and still in the making, the Catholics accused the reformers of innovating. The Puritans served the same argument to the Protestant Church, accused of bringing the Church back to Catholicism. The word served both sides of the debate: reformers and counter-reformers. It was precisely in the context of the Reformation that the concept entered everyday discourse. In the following centuries, everyone shared this representation of innovation. Natural philosophers, from Francis Bacon onward, never referred to innovation as what is certainly the most innovative project in science: the experimental method. Equally, very few artisans and inventors talked of their invention in terms of innovation. Innovation was political. It had nothing to do with creativity.

With a view of innovation as originality, the nineteenth century introduced a totally new vocabulary. While order was the context of innovation in the previous centuries, innovation is then contrasted to customs, tradition and conservatism. The semantic field makes of imitation one of the main opposites to innovation.

This paper documents why, to the theorists of innovation, imitation is not innovation and innovation not imitation and when and how innovation came to be defined based on the dichotomy innovation-imitation. The first part looks at early thoughts on innovation as imitation and the loss of this meaning in the seventeenth century. The rest of the paper documents the emergence of the concept of innovation among scholars in the twentieth century. For a second time, innovation lost the meaning of imitation, or rather, imitation competes with originality for a place in the semantic field. The last part discusses four factors that explain the neglect of imitation in theories of innovation.

The paper concentrates on early scholars' work on innovation, particularly before the 1960-70s. By that date, the main concepts used to talk of innovation in the following decades had been introduced. To be sure, new perspectives on innovation emerged after

that date. Yet, the view of the time laid the foundations of what would become the dominant one thereafter.

The Multifaceted Meaning of a Concept

Innovation entered the Latin vocabulary in the third and fourth centuries. *Kainotomia* is taken from the Greek verb *kainizein*, an old form of *kainein* (make new). *Kainotomia* had a revolutionary connotation: bringing changes into the established order. In contrast, *kainizein* had a connotation of originality, not in the sense of creativity, but that of being first in time: inaugurating, doing something for the first time, something strange. It is originality in the sense of priority. The Latin translation (*innovo*) changed this meaning to renewal – in line with the other (Christian) terms used at the time: renovation, reformation, regeneration. The Vulgate (mid-fourth century) was one of the first books to use innovation in the sense of renewal (renewing the soul). Christian writers and poets of the following centuries followed. In the fifteenth century, Church authorities gave innovation a legal connotation: renewing past decrees or laws.

Niccolò Machiavelli (1469-1527), to take one example, is no exception to such a meaning. In spite of his ‘revolutionary’ writings, Machiavelli used innovation in different senses, among them was that of imitation. To be sure, the word innovation is of rare occurrence in Machiavelli’s works. His words for discussing men’s actions are changing, modifying, altering, etc. Others are from a family of words with the radical “re”: renovate, reform, restore. Still others are initiative, undertaking.

To Machiavelli, a ruler must innovate. In *The Prince* (1513), innovation means changing the basic political institutions by introducing new laws, new practices and new methods. Such innovation allows a prince to discipline the people and to maintain order, and brings honour to the prince. Using Francesco Sforza, Duke of Milan, as a model, Machiavelli says that it is necessary (*The Prince*, VII):

To deal effectively with [one’s] enemies, to gain allies, to conquer (whether by force or by cunning), to inspire both devotion and respectful fear in the people, to be obeyed and respectfully feared by troops, to neutralise or destroy those who can or must be expected to injure you, to replace [*innovare*] old institutions with new ones, to be both severe and kind, both magnanimous and open-handed, to disband loyal troops and form a new army, to maintain alliances with kings and other rulers in such a way that they will either be glad to benefit you or be slow to injure you.

Yet, innovation as introducing new laws, entirely new laws, is only one meaning of innovation in Machiavelli’s works. *The Discourses* (1517) carries another connotation, or rather keeps to another connotation of the time. Innovation is going back to foundations, or renewing. Time corrupts things, as it does the human body. Hence the need to renovate, revive, restore to foundations, origins or principles. A republic starts with one man, a prudent and virtuous organizer (*The Discourses*, I, 9). But there is need for strategy. “It always remains difficult to maintain liberty in a state or to get one state from servitude to freedom: some people will always remain hostile”. Two courses are

available: “defective institutions must either be renovated [*innovare*] all at once ... or little by little” (The Discourses, I, 18).

This is the essence of *The Discourses*, written a few years only after *The Prince*. Innovation is imitation of great (successful) men’s deeds and imitation of (return to) ancient institutions. The study of the past suggests to Machiavelli the concept of renovation: restoring (revival, re-birth) of (religious and government) institutions to their foundations. This is what great men did to contribute to Rome’s greatness:

Changes make for their [institutions’] conservation which leads them back to their origins. Hence those are better constituted and have a longer life whose institutions make frequent renovations possible [“laws which put a check on human ambition and arrogance”], or which are brought to such a renovation by some event which has nothing to do with their constitution ... Without renovation, these bodies do not last ... The way to renovate them ... is to reduce them to their starting-point ... There is nothing more necessary for a community, whether it be religious establishment, a kingdom or a republic, than to restore to it the prestige it had at the outset, and to take care that either good institutions or good men shall bring this about rather than external force should give rise to it (The Discourses, III, 1).

To Machiavelli, innovation has thus a large semantic field and multiple meanings, incorporating both Greek and Latin writers’ views, depending on the context (or text): from a connotation of the past (*renewing* institutions – according to the ancient model) to one of the future (*making new* forms of government – new to the citizens), from the particular (introducing new laws) to the most fundamental (founding a new order).

To Machiavelli, innovation serves to stabilize, not to revolutionize. The world is changing constantly, hence the need for innovation to stabilize it. There is need to stabilize a ruler’s power and secure it through innovation: to establish a new political order to consolidate power (governing and maintaining a state; retaining a rank or position of ruler). In contrast, to modern theorists, the world is too stable and needs innovation to change it, even revolutionize it.

The meaning of innovation as (renewal and) imitation changed in the following century. Starting in the late 1620s, clergymen, monarchists and pamphleteers began to accuse their enemies of innovating. By innovating they meant that people were introducing ideas and practices opposite to the established order, political and religious. The Reformation was a key moment in the history of the concept of innovation. The English puritan Henry Burton (1578-1648) was an emblematic writer. Every later argument on innovation would be found in the pamphlet *For God and the King* (1636), the sum of two sermons preached on November 5 “to teach my people obedience to both” God and the King in these times of “innovations tending to reduce us to that Religion of Rome”. Innovators are those who transgress the disciplinary order and intend to change it for evil purposes, in the present case bringing the Protestant Church back to Catholicism doctrine and discipline. Innovating is a private liberty – as heresy is – that creeps imperceptibly and, with time, leads to dangerous consequences.

This was only a beginning. Soon the meaning of innovation was to be enlarged. First, to the political: the monarchists of the seventeenth and eighteenth centuries accused the republicans of being “innovators”. No republican – no citizen in fact, even the most famous Protestant reformers or the French revolutionaries – thought of applying the concept to his own project. Innovation is too bad a word for this. In contrast, and precisely because the word is morally connoted, the monarchists use and abuse the word and label the Republican as an innovator. This linguistic practice continued until the French Revolution – and later –, and casted a general disrepute on the idea of innovation.

Second, innovation widens its meaning to the social. The social reformer or socialist of the nineteenth century is called a “social innovator”. His aim is to overthrow the social order, namely private property. Innovation is a *scheme* or *design* in a pejorative sense – as it is a conspiracy in the political literature (words used are *project* or *plan* or *plot* or *machination*).

From then on, innovation acquired a strictly negative connotation for centuries to come: political, revolutionary and violent. Innovation as imitation changed to innovation as subversive of the established order.

The Closure of a Concept

Until then, innovation was not theorized at all. It started being studied in the late ninetieth and early twentieth century. In a matter of a few decades, innovation became the new concept to discuss changes in society. It was used in reaction to social theories that centered on order, stability and roles (e.g. Talcott Parsons; Robert Merton) and economic theories that stress equilibrium (classical economists).

From the very first theoretical works on technological innovation, imitation has no place in the analysis. The dominant representation of technological innovation developed among scholars over the twentieth century was originality. Originality is a concept with different meanings: origins, difference, creativity. For the theorists of innovation, originality is priority: *being the first* to have an idea or to do something differently or, more generally, to introduce something new. This representation has a privileged place in economically-oriented theories of innovation as well as management, where innovation means being first to commercialize a new invention or product/process: “When an invention is introduced commercially as a new or improved product or process, it becomes an innovation” (Maclaurin, 1949: xxi). In the following decades, innovation as first commercialization became the standard view of technological innovation. It gave rise to studies by the dozens on measuring the “time lag” between invention and (first) commercialization, or “imitation lag” as Chris Freeman called it (Freeman, 1963: 38-39). Hence, the several studies on gaps between nations, or the study of the introduction in other countries of an invention produced commercially elsewhere.

Theories of industrial innovation contrast innovation to imitation, either implicitly or explicitly. Economist Freeman, a mainstream author on technological innovation, contrasts the generation of original invention to the firms’ “traditional strategy [the use of

invention as] essentially non-innovative, or insofar as it is innovative it is *restricted* [my italics] to the adoption of process innovations, generated elsewhere but available equally to all firms in the industry” (Freeman, 1974: 257). To Freeman and his colleagues, innovation “excludes simple imitation or ‘adoption’ by imitators” (SPRU, 1972: 7). No one put it better than economist Jacob Schmookler: “The first enterprise to make a given technical change is an innovator. Its action is innovation. Another enterprise making the same technical change later is presumably an *imitator*, and its action, *imitation*” (Schmookler, 1966: 2). One finds similar views everywhere in the literature of the time. To take one more example, to Theodore Levitt, from the Harvard Business School, one of the few authors who devoted himself to early conceptual thoughts on what innovation is, “When other competitors in the same industry subsequently copy the innovator, even though it is something new for them, that is not innovation, it is imitation ... Strictly speaking, innovation occurs only when something is entirely new, having never been done before” (Levitt, 1966: 63).

Although dominant today, this is a contested definition. As early as 1939, Joseph Schumpeter suggested that innovation “need[s] not necessarily have occurred in the industry under observation, which may only be applying [imitating], or benefiting from, an innovation that has occurred in another” (Schumpeter, 1939: 89, footnote 1). Hence Schumpeter’s distinction between invention and innovation. Fritz Redlich, in an early study of Schumpeter’s typologies, distinguished between primary or genuine innovation *versus* reinnovation, and between imitation and copy. While not “genuine” (or primary) innovation, imitation is nevertheless innovation (Redlich, 1951). Twenty years after Schumpeter, Charles Carter and Bruce Williams, wrote that a firm “may be highly progressive [innovative] without showing much trace of originality [research]. It may simply copy what is done elsewhere ... It is nonsense to identify progressiveness with inventiveness” (Carter and Williams, 1958: 108). A few others in the 1950s and 1960s took imitation seriously (e.g. Yale Brozen, Edwin Mansfield; William Comanor), but they are few.¹ Dennis Mueller and John Tilton are among the very few students of technological innovation who considered imitation not as copy but as variant, and made it a stage in the process of technological innovation. Imitation is one “stage” of technological growth or development: innovation → imitation → technological competition → standardization (Mueller and Tilton, 1969: 571). More recently, Richard Nelson in a classic of the literature on technological innovation, suggested imitation as one of two strategies available to firms, the other being innovation (Nelson and Winter, 1982). The imitator, conclude the authors, is an “innovator, since most of the problem [adaptation of an original] is really being solved independently” (Nelson and Winter, 1982: 124). The imitator has “an extremely sparse set of clues about the details” of the competitor’s original. The imitation is not duplication or likeness but creation.²

¹ E.g.: William Comanor defines technical change as “new to the firm regardless of whether [the innovations] have been introduced previously by competitors” (Comanor, 1965: 182).

² For an early consideration of imitation in an econometric model, on a par with research, see Nelson and Winter, 1977.

What Has Been Left Out?

Such views are not part of the innovation *credo* today. Alternative views have existed for a long time but have been eclipsed. Under different terms, imitation was a key concept in anthropology to sociology for decades.

No one invention is identical, claimed anthropologist Franz Boas during the invention/diffusion controversy (whether changes in culture come from new inventions or the diffusion of existing inventions), rather taking many forms.³ The diffusion of invention is not mere imitation or “mechanical additions” but is in itself invention (or inventive). Diffusion is a “stimulus to new inner development” which produces new “mixed cultural types” (Boas, 1924: 344). Other anthropologists held a similar view, like William Rivers, Arthur Kroeber, Bronislaw Malinowski, Melville Herskovits and Homer Barnett (Godin, 2014). Mere “diffusion never takes place: it is always a readaptation, a truly creative process” (Malinowski, 1927: 46). Imitation is “adaptation, transformation and re-invention”. As sociologist Everett Rogers put it later: “Most scholars have made a distinction between invention and innovation ... This difference, however, is not so clear-cut when we acknowledge that an innovation is not necessarily a fixed entity as it diffuses within a system; in fact, a new idea is frequently redefined in the process of its implementation” (Rogers and Kim, 1985: 103).⁴

In the decade following the publication of *The Diffusion Controversy* in anthropology (Smith et al., 1927), a new concept (first suggested in the late 1800s) came into vogue among diffusionists: acculturation. In 1936, the US Social Science Research Council (SSRC) appointed a committee to analyze both the term and studies on acculturation. A memorandum to this end was published in *The American Anthropologist* (among others), under the authorship of Robert Redfield, Ralph Linton and Melville Herskovits (Redfield et al., 1936). Acculturation “comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups” (Redfield et al., 1936: 149).

One of the emphases of acculturation studies is selective and creative adaptation: acculturation is “neither a passive or colorless absorption ... It is both creative and destructive”: adjustments, reorganizations, reinterpretations, syncretisms and fusions of inventions occur between two cultures, and disintegrations and conflicts such as those between “progressives and conservatives” develop (Siegel et al., 1954: 985-87). To the Social Science Research Council, “the very act of copying alien traits entails some modification of them since no copy is perfect reproduction” (Siegel et al., 1954: 985). The receiving culture “function[s] as selective screens”: it accepts some elements from another culture and rejects others (Siegel et al., 1954: 984-85). Acculturation is not a

³ At the time, innovation was not part of the vocabulary of anthropologists. They talked of invention and diffusion, the same two concepts that came, with time, to define innovation: a process, from invention to diffusion.

⁴ The concept of “reinvention” used by Malinowski was theorized later on by Everett Rogers (Rice and Rogers, 1980) and Roy Rothwell (Rothwell 1986; Rothwell and Gardiner, 1988a; 1988b).

one way process from one society to another. To emphasize this, anthropologists contrasted acculturation to other concepts like change, diffusion, assimilation, incorporation, adoption, imitation, borrowing and transfer. Acculturation is a specific kind of diffusion. It is bidirectional; it is reciprocal give and take; it involves interchanges with re-workings, reinterpretations and selective adaptation. A transmitted cultural trait never retains its whole identity. Diffusion is inventive.

The most explicit writing on imitation and innovation from anthropologists comes from Homer Barnett. In *Innovation: The Basis of Cultural Change*, Barnett introduced a definition of innovation as “any thought, behavior, or thing that is new because it is qualitatively different from existing forms” (Barnett, 1953: 7). Innovation is the result of a mental process of “combination”, namely the “linkage or fusion of two or more [existing] elements” in a new way (Barnett, 1953: 181). To Barnett, as a member of the committee on acculturation, the user or adopter of a new practice – the imitator – is an innovator: he does something new “instead of doing what he is accustomed to doing” (Barnett, 1961: 34). “Imitation is innovation”: “imitation necessarily produces a modification”; “assimilation and copying are innovative” (Barnett, 1953: 49-54, 330-32).

Combination is an old idea (Godin, 2015a). To literary critics and artisans of the previous centuries, imitation is invention because, when combining elements from nature, it combines the best of them, and by so doing improves nature. Combination “creates a whole that is more perfect than nature”; it is as nature ought to be (Wittkower, 1965: 148). Equally, in combining previous schools of thought, the combination surpasses the work of past authors. *Compilatio*, a “wide literary activity which encompassed various genres in the Middle Ages” (and after), is combination of others’ material into a new work, a *unio* (Hathaway, 1989: 41).

Sociologists held a similar view as anthropologists, from Gabriel Tarde onward (Tarde, 1890). Everett Rogers’ definition of innovation is “an idea, practice or object that is perceived as new by an individual or other unit of adoption” (Rogers, 1962: 13). Innovation is not necessarily world-first, but subjective to the individual or group who adopts it. Such a view of innovation existed before Rogers,⁵ and has remained commonplace among theorists. Rogers’ definition was reproduced regularly in the following decades by sociologists and others (e.g. Zaltman et al., 1973). In this sense (innovation as something new to the adopting unit), most people are imitators or followers: innovators represent only “the first 2.5 per cent of the population to adopt new practices” (Rogers, 1959: 133). As Tarde put it: “Les hommes ont toujours été beaucoup moins originaux qu’ils ne se flattent de l’être ... Nous imitons infiniment plus que nous n’innovons” (Men have always been less original than they pretend ... We imitate much

⁵ Innovations “are not necessarily new ... They may already be in existence in some areas of culture and may spread to other areas, or may have been borrowed ... They may be only a slight modification ... They are innovations because they are new in some particular situations” (Noss, 1944: 2-3); “may be borrowings from other cultures”, recognized “by the group as new” (Mowrer, 1942: 36-37); “technological changes are envisaged as having taken place when a tool, a device, a skill or a technique, however unknown or well-known elsewhere, is adopted by an individual in a particular community and is regarded as new by the members of that community” (Hodgen, 1952: 45).

more than we innovate) (Tarde, 1890 : 156, 158). To use anthropologists' terms, diffusion (imitation) rather than invention is the source of change.

The Use of a Concept

Four factors explain the neglect of imitation among scholars of innovation today.

1. Creativity is a major cultural value in our society, a culture which places emphasis on change and novelty (Mason, 2003), whereas imitation refers to tradition and customs. Innovation is both a result and a cause of this culture. As citizens of this society, scholars are no strangers to valuing innovation. Their contribution takes many forms, of which the pro-innovation bias, as Rogers called it, is fundamental. Scholars take for granted that innovation is a good thing. Innovation is not only a phenomenon to study but a panacea to resolve social problems. Imitation is rarely studied but, if ever, as second-rate strategy and policy. The innovators deserve analyses but not the followers, even less the laggards.

2. Yet, scholars differ as to their appreciation of imitation. Depending on the disciplines, imitation is either excluded from the theories of innovation, or admitted under other terms, or accepted explicitly. The imitation-innovation dichotomy is a theoretical construct. The dissident views of scholars owes to disciplinary work. Anthropology and sociology are cultural-social oriented disciplines, while economics is industrial oriented. Anthropologists and sociologists have a far larger meaning of innovation than economically-oriented scholars. They are concerned with more than technological innovation too. They study the effects of innovation, of whatever type (political, social, cultural, industrial), on society and culture, through the study of *diffusion* of innovations. To many extents, the study of diffusion is that of imitation, and was called as such at the beginning. "It is not enough to invent" was a leitmotif of the 1960-70s; one has to apply the invention, namely innovate. As Rogers put it: "Research alone is not enough to solve most problems; the research results must be diffused and adopted before their advantage can be realized" (Rogers, 1962: 2-3). Like the anthropologists put it, it is not invention that matters but diffusion. The study of the diffusion of innovation goes back to sociologist Gabriel Tarde. *Les lois de l'imitation* (1890) is concerned with how innovations diffuse or get accepted among societies. To Tarde, imitation – a not uncontested word, he admitted later on in reply to his critics –, is what we call diffusion today (e.g. Rogers).

In contrast, economics and policy-makers are interested in the *generation* of innovation, not diffusion. Early scholars of industrial innovation wanted to open the black box of invention, so they said. Invention, as source of innovation, is where research and development (R&D) or creativity and originality are. Hence the study of invention rather

than diffusion.⁶ The study is that of the process of innovation, from invention to commercialization, leaving the study of diffusion to others.

In sum, to researchers from sociology, politics and business schools, with the exception of economists (neoclassical or evolutionary), innovation need not be new, in the sense of being first or new to the world. When scholars limit or primarily study the generation of innovation they generally exclude imitation as not original or creative. Imitators are followers, copiers. As economic historian Abbot Usher put it: “Many presume that the diffusion of technical knowledge and applications of known techniques are imitative acts devoid of novelty ... These interpretations ... fail to recognize the pervasiveness of novelty in our behavior” (Usher, 1955: 523). In contrast, those who study the diffusion of innovation include imitation, by definition. Others go further and suggest that imitation is itself innovative.

3. The concept of innovation participates in market ideology. A market perspective on innovation focuses on being first to commercialize a product on the market, so that the firms can appropriate the whole economic benefit (profits) of an innovation. Such is the essence of David Teece’s much-cited article: “Innovating firms often fail to obtain significant economic returns from an innovation while customers, imitators and other industry participants benefit” (Teece, 1986: 285). As a consequence, theories of innovation are concerned with ways of preventing imitation or “keeping imitators/followers at bay” (Teece, 1986: 290), that is, how can firms get the full benefit of their innovation, how the “innovator is to avoid handing over the lion’s share of the profits to imitators” (Teece, 1986: 292). Teece discusses the “strategies the firm must follow to maximize its share of industry profits relative to imitators and other competitors” (Teece, 1986: 300-301). Patent laws have, to many extents, been influential here. An invention has to meet criteria of novelty and originality, and imitation is forbidden by law.

4. The last factor contributing to the neglect of imitation in theories of innovation is semantics. In a culture centered on creativity, imitation is a pejorative word – as was innovation in the preceding centuries, when the dominant culture of societies was order. The pro-innovation bias limits the questions addressed in the discourses on innovation. But in fact, the main strategy of organizations is not innovation but imitation (Abrahamson, 1991). Organizations are “relatively rigid”: they are “typically much better at the tasks of self-maintenance in a constant environment than they are at major change, and much better at changing in the direction of ‘more of the same’ than they are at other kind of change” (Nelson and Winter, 1982: 9-10).⁷ Yet, imitation is not studied. When accepted within a theory, imitation is used using other words. Barnett talks of acceptance,

⁶ The economics of technological change is an exception. It studies the use of innovation in firm processes of production. For example, mainstream economist Edwin Mansfield’s writings of the early 1960s on technological innovation used imitation in the sense of adoption/diffusion

⁷ Levitt put it the following way in 1966: “because no single company can afford even to try to be first in everything in its field”, a company is compelled “to look to imitation as one of its survival and growth strategies” (Levitt, 1966: 65). To Levitt “the greatest flow of newness is not innovation at all. Rather, it is imitation”.

Rogers of adoption (and diffusion) ⁸ and others of acculturation, contagion, transfer, absorptive capacities. Certainly, imitation, acceptance, adoption and diffusion are etymologically different concepts. Yet, they share a common genealogy, at least as regards theories of innovation. In this sense, and despite the claims to the contrary, imitation remains fundamental to theories of innovation today, under other names.

Conclusion

Over the twentieth century, innovation acquired a specific connotation. Innovation is originality or priority. Definitions of innovation as originality are voluminous in the literature. Alongside “first”, the vocabulary is composed of “major” and many other qualifications such as “important” and “significant”. To sociologists, innovators are the *first* to adopt a new practice. To economists, innovators are the *first* to commercialize a new invention. For centuries, innovation was not considered as such. Innovation had nothing to do with creativity and originality. The stress put on originality in modern times has led to the minimization of previous connotations of innovation, among them that of imitation. Machiavelli’s innovative ruler is an innovator by imitation (of great Roman builders). To ecclesiastic authorities of the seventeenth and eighteenth centuries, innovation means returning to the original Church.

Today, imitation has a bad press among the theorists of innovation. Imitation is explicitly excluded from innovation. Yet, innovation need not be new, in the sense of being first or new to the world. An individual may imitate another’s behavior, yet he innovates at the same time. As contrasted to his past behavior, he adopts something new to himself, as Barnett stated. However, very few scholars provide a positive view of imitation, and even fewer integrate imitation into their theories. This is particularly true of economists. Rare are those who, like sociologist Edward Shils, talk in terms of dialectics between imitation and innovation – tradition is past innovation and innovation depends on tradition (Shils, 1981). This was nevertheless a serious concern to Tarde: customs give rise to innovations which, in turn, become new customs; the innovator is at the same time a traditionalist and a conservative. This was a serious concern to Georg Simmel too: fashion is both imitation and novelty (Simmel, 1904) More recently, some natural scientists have explored imitation as a successful strategy in human cultural evolution as being as successful as, if not more successful than, innovation (Rendell et al., 2010).

⁸ To Rogers, adoption is individual and diffusion is social. “The adoption process is the mental process through which an individual passes from first hearing about an innovation to final adoption ... Diffusion is the process by which an innovation spread ... from its source of invention or creation to its ultimate users or adopters innovation ... The diffusion occurs among persons while adoption is an individual matter” (Rogers, 1962: 76). The inventor “creates” (“unites by combining”), the innovator “adopts” (Rogers, 1962: 195-96). Gerald Zaltman held a similar view: “The adoption of innovations refers to the processes whereby an innovation comes to be the most acceptable alternative available at that time ... The diffusion process is the process whereby an innovation is disseminated and accepted among individuals or other adopting units. Adoption occurs at a micro level, whereas diffusion occurs at a macro level” (Zaltman and Stiff, 1973: 417). Gabriel Tarde too: “Les lois de l’invention appartiennent essentiellement à la logique individuelle; les lois de l’imitation en partie à la logique sociale” (Tarde, 1890 : 434).

To be sure, since the beginning of the twentieth century, scholars developed dozens of models that consider adoption (of existing inventions) as an essential stage in the process of innovation (Godin, Forthcoming). Some consider diffusion as an act of innovation too (reinvention), not only an act of adopting an existing invention (imitation). Yet, scholars generally stopped at studying the generation of innovation, leaving diffusion outside the analysis (Edgerton, 1999).

The innovation-imitation dichotomy has four discursive functions. It serves the cultural values of a society. It demarcates disciplinary work. It contributes to the ideology of an epoch – that of the market. It creates a vocabulary, ordering concepts according to counter-concepts. Yet, imitation remains fundamental to defining innovation in the twentieth century, but in a negative way. While the writers of the previous centuries made a contrast between innovation and tradition, a contrast which continues in the twentieth century,⁹ imitation becomes THE counter-concept to innovation. A whole vocabulary develops defining innovation as “first introduction” or “first adoption” or “first commercialization” of an invention.

⁹ For example: Thomas Kuhn on tradition and innovation (Kuhn, 1959); Robert Merton (1938) and Michael Mulkey (1972) on conformity and innovation.

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