CHAPTER 10

A SOCIETY OF MONADS?[321]
REVISITING TARDE'S MAIN EPISTEMOLOGICAL ARGUMENT

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ABSTRACT

In his *Monadology and Sociology* Gabriel Tarde presents the findings in Chemistry, Physics, the Natural Sciences, and Sociology that seem to affirm Leibniz's hypotheses about monads. Within this framework, the social individual in Sociology, the living cell in cell theory and the chemical atom are ultimate elements only in view of their particular science. The ultimate principles of reality are in fact in the domain of the 'infinitesimal'. They exist on the scale smaller than the one which is the current research focus. This descent to the infinitesimal, which is logically leading to the monads, also implies that in phenomenal transitions it is not the large (e.g., the Divine) source of the small but on the contrary, the small (e.g. scientific elements) is source of the large. In this micro level, relations are the crucial factor supporting a renewed Socialized Monadology. Tarde's *modus ponens* is based on the conditional claim that if we observe any phenomenon, then we observe a society. Any continuity in phenomena is formed through the totality of other beings. Everything is a society. The critical examination of that epistemological argument reveals some new insights of his truly innovative theoretical approach.

Keywords: Monadology, sociology, epistemology, infinitesimal, perception, phenomena

INTRODUCTION

Gabriel Tarde (1843 – 1904) published his book *Monadology and Sociology* in 1895 (although a first version was published as an article entitled *Les Monades et la Science Sociale* in 1893). This period was particularly fruitful in terms of intellectual activity in Europe. In Chemistry and in Physics, the atomic theory had entered the scientific mainstream. Scientists were dealing also with Louis Pasteur's remarkable discoveries in the causes and prevention of diseases, the assertion that all living organisms are made up of cells and the discussions caused by the theory of evolution. Within this environment of stochastic excitement, Tarde's book attempted to project the universality of a social nature of phenomena by employing a *modus ponens* argument. In what follows, we will see how he did that.

PULVERIZING THE UNIVERSE

Some 180 years before *Monadology and Sociology*, Gottfried Leibniz (1646 – 1716) published one of his most well-known works, *The Monadology* (1714). In his short text Leibniz introduces the monads; mind-like simple substances endowed with perception and appetite and the only beings that count as genuine and real. Mass is a phenomenon resulting from these simple substances. Matter is reduced to a single mental entity: "*The monad …is merely a simple substance, …that is to say, without parts*".[322] "Now where there are no parts, neither

321 Title borrowed from Latour, B. 'Gabriel Tarde and the end of the social', in Joyce, Patrick (2002). *The Social in Question. New Bearings in History and the Social Sciences*, 120.

322 Leibniz, G. W. (1714/1890). *The Philosophical Works of Leibnitz*. Trans. G. M. Duncan, 218, §1.

extension, figure nor divisibility is possible. And these monads are the true atoms of nature, and, in a word, the elements of things.[323] This work inspired Tarde.

Tarde states from the beginning that all the secondary hypotheses implicit in Leibniz's Monadology have been proved scientifically. In his view, Chemistry, Physics, the Natural Sciences, History, and even Mathematics in late 19th century seem to lead, in their progress, to the monads. More specifically, the new Chemistry of the mid-19th century gave particular value to chemical atoms, by adopting that matter is composed of these discrete units. Discoveries in this field have led people to affirm the atom and to deny a *superficial material continuity*. Extension, movement, and growth that seem to reveal the continuity of the physical and living manifestations of matter is in serious doubt. There is no evolution and no transition: the dividing lines are clear and stark even though everything appears to be harmoniously graduated in phenomena. New theories in Chemistry, such as Charles Adolphe Wurtz's (1817–1884),[324] make an essential point: "*The properties of the radicals are referred to the elements themselves. Formerly they were considered as a whole… To discover and define the properties of radicals we go back to the atoms of which they are composed*". Based on Wurtz's examples, Tarde makes the inference that among the atoms of a radical, there is one in particular on whose atomicity (outlasting the saturation of all the others), the combination, which is produced, ultimately depends.

In Physics, Newton's assumption that the gravitation of a planet is only the sum of the gravitation of all its individual portions shows that the terrestrial bodies gravitate towards each other. So, even the smallest particles of these masses attract each other.[325] Until then celestial bodies have been regarded as distinct superior unities, whose internal relations bore no resemblance to its relations with other bodies. Now, this individuality is broken.

Moreover, cell theory scientists seem to follow Newton's vision.[326] In the entire organism, or in each cell, there is no vital force distinct from matter. Thus, all phenomena of vegetable or animal life must be explained by the constituents of matter, i.e. the properties of atoms. For the same reasons, Darwin's theory of evolution seems to prevail. Here the source, reason, and ground of the phenomenal finite and separate is in the infinitely small, in the integral of individual variations. In turn, these depend to cellular variations whose basis consists of a myriad of elementary changes.[327] Moreover, the germ theory of disease, established by the work of Louis Pasteur, explains any disorders by means of the internal conflicts of miniscule organisms. Tarde states that according to this theory, which is even today the accepted scientific theory for many diseases, these parasites have their own parasites and so on.[328] Illnesses are now pulverized into infinitesimal disorders of biological tissues.

In his review of sciences, Tarde also includes cultural-political entities, namely nations. Similarly with stars, living things, illnesses, or chemical radicals, nations are entities which have long been taken for true beings within historical discourse. Contrary to the "*convenient point of view*" that political or social change (like a revolution) stems spontaneously from the "*genius of the race, from the bowels of the people*", Tarde argues that the cause of any political or social manifestations is individual action.[329] All historical events could thus be explained by individual actions, i.e. the action of inventive men who served as a model for others reproducing thousands of copies of themselves, in the same way that cells reproduce in an organism.

323 Leibniz, *The Philosophical Works of Leibnitz*, 218, §3.
324 (Wurtz, A. (1880). *The Atomic Theory*. Trans. E. Cleminshaw, 265-266 as cited in Tarde, G. (1895/2012). *Monadology and Sociology*. Trans. Theo Lorenc, 7.
325 Tarde, *Monadology and Sociology*, 6.
326 Theodor Schwann (1810-1882) was one of the key early proponents of the theory that all living organisms are made up of cells.
327 Tarde, *Monadology and Sociology*, 9.
328 *Ibid*, 7.
329 *Ibid*, 7-8.

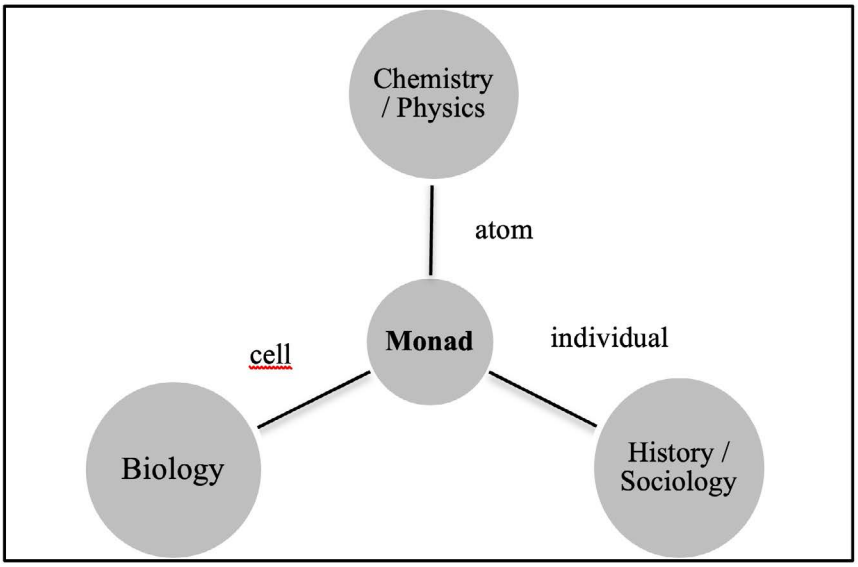

Figure 1.
The monad at the heart of sciences.

THE PERCEPTUAL FACTOR

So, there are ultimate elements that form the final stage of every science. But here a first clarification is made. The social individual in Sociology, the living cell in cell theory and the chemical atom are ultimate only from the *point of view* of their particular science. They themselves are composite, not excepting the atom itself.[330] Atoms are not simple substances. They are in fact complex constructions, animated by complicated internal movements. Following this line of thought, one might argue that there are no ultimate elements in the world, because there is always something existing on the scale smaller than the one which is the current focus of a particular science. These objects of attention are ultimate only from the point of view of that particular science'.[331] For instance, when studying human societies, the element is the individual human, and when studying an organism, it is the cell. It is always the scientifically based infinitely small.

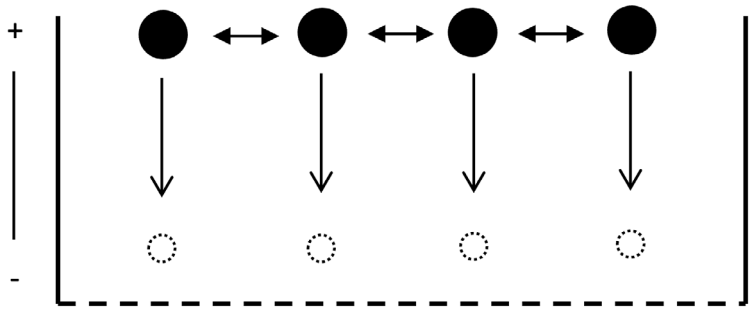

Figure 2.
A graphical representation of the ultimate elements within the infinitesimal "pool."

The principles of reality are in the domain of the 'infinitesimal '. Pragmatically, the elements are smaller than any assignable entity which can be identified, and relative to a particular perspective.[332] These ultimate elements of the world are those that defy its finite conception. In the broader sense, there is no way to put a stop to this descent to the *infinitesimal*, which seems to become the key to the entire universe. This might also explain, and perhaps ratify, the growing importance of the infinitesimal calculus in Mathematics throughout 19th century. This tendency towards the infinitesimal is logically leading to the monads, fulfilling, as Tarde notes, the most daring promises of Leibnizian spiritualism.[333] As Leibniz puts it: "*It is not in the object but only in the modification of the knowledge of the object, that monads are limited.*

330 See William Thomson's (1824 –1907) 'vortex theory of the atom' and the work of J. J. Thomson (1856 –1940).
331 Tarde, *Monadology and Sociology*, 8.
332 Lorenc, 'Afterword', 81.
333 Tarde, *Monadology and Sociology*, 7.

They all tend confusedly toward the infinite, toward the whole, but they are limited, and distinguished by their degrees of distinct perceptions".[334] That is, besides representing the whole, each monad represents most distinctly the body which is particularly appropriated to it.

THE INFINITESIMAL

Then, Tarde makes a rhetorical question: Why is this dominant concept of 'infinitesimal ', as an explanation of phenomena, not widespread? A quite possible explanation is that the human capacity of *reason deceives*. Reason 'sees' finite, e.g. extension, movement and transition in the physical manifestation of matter. For instance**,** if we are presented with two distinct living species (very distant or closely related), let us say a flower and a fungus, in neither case will it be comprehensible (through reason) that one could suddenly and *with no transition* turn into the other.[335] To not be able to grasp the no-transition hypothesis is due to a prejudice which has been formed in us by the *association of ideas*. Following Hume (1748/2007),[336] we naturally associate the idea of the impression of the fungus with that of the plant by combining *resemblance* and *causation* (f.i. fungal reproduction). For us to accept that there is no transition, that is to say there is no common ground between (the foundations of) these two states, seems inconceivable. The rationale here is schematically represented as follows: Reality → Experience → Reason / Prejudice → No transition. In fact, reality, the source of the experience which gives birth to this prejudice, conforms (according to science, as shown above) to the explanation of the finite by the infinitesimal.[337]

Furthermore, this prejudice shows that the way our mind works is more inclined to see in the large (the phenomenal world around us) the source of the small than in the small the source of the large. Any observed phenomenal transition seems as the cause of any change in composition (see the above-mentioned example of the flower and the fungus). Along this line of argument, we would also believe in divine forms. Science though, Tarde argues, confirms that it is not the large (e.g. God/the Divine) the source of the small but on the contrary, the small (atoms etc.) is the source of the large. For that point of view he gives an example: the presence of the correct astronomical theory in millions of human brains is due to the multiplied repetition of an idea which appeared one day in a cerebral cell of Newton's brain.[338]

One could argue here that the use of the concept of God is now changed by referring to the micro, instead of the macro, level of reality. Furthermore, a criticism of Tarde's claim could be put forward. The human capacity of reason that purportedly causes this prejudice is the one that led to the conception of the discrete "*uncuttable*" first units of nature and to the concept of infinitesimal. So, it is not the human capacity of reason that deceives us, but perhaps the unprocessed, in rational terms, sense-data that feed our senses from the beginning to the end of our lives. It is the surplus of experience and observation against rationality that deceives after all.
Back to Tarde's approach, the infinitesimal is not differed only by degree from the finite; it is also qualitatively different. Movement has a cause distinct from what appears in phenomena. It comes from the infinitesimal and returns to it. So, the infinitely small, in other words the element, is the source the goal and the reason of all things. This unique element, initiates

334 Leibniz, *The Philosophical Works of Leibnitz*, 227, §60.
335 Tarde, *Monadology and Sociology*, 7.
336 According to David Hume (1711 – 1776), ideas are drawn from memory or the imagination and arise when we reflect upon our impressions. Thus, an idea is, for example, the memory of seeing the color blue or a thought concerning sorrow. Hume presents three (3) principles by which ideas might be associated: i) *resemblance*, where a picture of a flower naturally leads our thoughts to the original, ii) *contiguity* in time or place, where mention of one apartment in a building naturally introduces a discourse concerning the other apartments, and iii) *cause* or *effect*, where the thought of a wound makes us think of the pain which follows it [Buckle, S. (ed.) (1748/2007). *Hume: An Enquiry concerning Human Understanding and other writings*, 19-20].
337 Tarde, *Monadology and Sociology*, 10.
338 *Ibid*, 10.

(some) change, movement, vital evolution, mental or social transformation.[339] For instance, in scientific theories the expansion of gained knowledge moves by going straight from one thesis to the next and consists of linking them by a chain of logical positions between the two. This coincides with the historical order of appearance of the successive discoveries which are synthesized in science (see the academic field of History and Philosophy of Science). For example, the Theory of Evolution (1859), itself evolves. It evolves by the accumulated efforts of scientists and theoreticians (the elements here), occupied in modifying the fundamental theory to fit it as closely as possible to a) the scientific data known to them, and b) to the preconceived ideas they hold. This theory is for them a *generic form* which they are working to specify, each in her own way.[340] In society this necessity ascribes to all individuals. This direct, regular, and rapid process of any social transformation is accomplished by *hidden workers* who collaborate in realizing some specific plan for reorganization, previously conceived by *one among their number.*

IDENTIFYING MATTER WITH MIND

Therefore, science tends to pulverize the universe and to multiply beings indefinitely. Scientific findings lead to monads which in turn represent an identification of matter with mind. Science thus tends, no less distinctly, to unify the Cartesian duality. Hence it is inevitably leading to what Tarde calls a *psychomorphism*.[341] While in *hylomorphism* change is analyzed as a material transformation –it is matter that undergoes a change of form–,[342] in p*sychomorphism* change is analyzed as a mental transformation; mind is what undergoes a change of form. In the above example with the flower and the fungus, the mental elements within it are transforming it into a fungus. Following this line of thought, we conclude that *matter is mind*, nothing more. This universal psychomorphism can be effectively conceived as a panpsychist monism. For Tarde it is the only comprehensible one, and the only one leading to the desired reduction. Furthermore, identifying mind with matter leads to two alternate readings: an *idealistic* and a *monadological* one.[343] According to the first the material universe, other egos included, is mine, exclusively mine. It consists of my states of mind. If we reject this solipsistic approach, we must abide with the second, monadological reading: external universe is composed of souls distinct from my own but fundamentally similar.

This identification of mind with matter is also examined in light of *perception.* In this regard Tarde puts forward an obvious contrast between the purely quantitative variations of movement in matter, whose deviations are themselves measurable, and the purely qualitative variations of personal sensation, whether they concern colors, odors, tastes or sounds. This contrast which has been and continues to be a main subject in philosophical research, could be normalized, if, among our internal states, distinct *ex hypothesi* from sensation, there were to be found some states which vary *quantitatively.* These states could bridge the gap between sensation of phenomena, such as movement, extension etc. and phenomena (or between sense and sense-data in line with Bertrand Russell). According to Tarde, these states of the soul, or rather these two *forces of the soul* are *belief* and *desire,* whence derive *affirmation* and *will*.[344] Belief and desire play exactly the same role in the ego, with respect to sensations, as do space and time in the external world with respect to material elements.

339 *Ibid*, 11.
340 *Ibid*, 13.
341 *Ibid*, 15.
342 According to Aristotelian *hylomorphism*, being (*ousia*) is a combination of form (*morphe*) and matter (*hyle*). Humans perceive objects through the reception (using sense organs) of their form. These forms refer to shapes, colors, textures, and flavors. For instance, we have a piece of wood that is formatted in a handle. Wood is the matter. In terms of perception, this matter dismisses a form, i.e. the piece of wood, and acquires a new one i.e. a handle.
343 Tarde, *Monadology and Sociology*, 15.
344 *Ibid*, 16-20.

Within this framework, Tarde's monism highlights the most of the Leibnizian idea of force. Monads, according to Leibniz, seem to possess forces or active powers that are necessary conditions for their substantial status. These mind-like substances may be described just in terms of forces: *"… the natural changes of the monads proceed from an internal principle, since an external cause could not influence their interior*".[345] So, as will/desire moves towards certitude within human perception, as the movement of stars and atoms moves towards their definitive agglomeration within the external world, the idea of force, both mental and physical, leads naturally to the idea of substance.

THE SOCIETAL FACTOR (FROM PHENOMENA TO SOCIETY)

Tarde puts forward one main epistemological argument, consisting of two levels. His argument is one from analogy and concerns the natural world. In the first level exists the analogical inference that the observation of reality leads to the ascertainment that it is structured like a society and the entities which make it up behave like living things. In the second level, we humans *know* ourselves a) as beings with both mind and body and b) members of a specific society (that is, members of a culture). This immediate knowledge of ourselves is the only reliable knowledge of being we have.[346] Both levels involve epistemic conditions. As far as the first level is concerned, the mental and the physical are two ways of describing the same elements, that is monads, functioning as a society. For the second lever, the social elements (individuals) hold each other in a variety of ways, and from their competition all the achievements of any civilization are born. In addition, in the second level there is realization of the first level's status. Humans' self-knowledge is simultaneously knowledge of reality. A reality in which diversity rules.

As shown above, within Monadology, the continuity of phenomena is resolved into an elementary (monadic) discontinuity. Furthermore, what we perceive as material continuity is actually continuity in the form of the totality of other beings. At the basis of each thing are all real or possible things. A representative example is the discovery of gravitation, of action at a distance; of material elements that are brought toward one another.

Thus, everything is a society ; every phenomenon is a social fact. Scientific observations tell us of animal societies, societies of stars, of cells (see cell theory) and why not of atoms.[347] So, according to Tarde, all sciences seem destined to become branches of sociology. Societies are not organisms. Organisms have become societies of a particular kind.

Following this line of thought, one could argue that the existence of a particular kind of society is not only a necessary condition for the creation of an organism or the appearance of a phenomenon but also an efficient one. Tarde seems to imply here a *modus ponens* syllogism:

> [*Within the context of any scientific theory*] →
>
> If we observe any phenomenon, then we observe a society.
>
> We observe a phenomenon.
>
> Therefore, we observe a society.

A plant or an animal is a society, as is a molecule. Any apparent difference between cellular

345 Leibniz, *The Philosophical Works of Leibnitz*, 219, §11.

346 According to Lorenc's detailed analysis there are two arguments for *panpsychism*: one analogical and one conceptual. The argument from analogy is that reality is structured like a society. The conceptual or epistemological argument is that we know ourselves immediately and from within not just as thinking subjects. Our introspective self-knowledge is already complex and structured [Lorenc, T. 'Afterword', in Lorenc, Theo (2012). *Gabriel Tarde Monadology and Sociology*, 73]. This paper argues that it is essentially a two-level argument.

347 Tarde, *Monadology and Sociology*, 28.

phenomena observed in plants and animals and molecular phenomena observed through the microscope should in no way lead us to reject this conjecture. The nature of inorganic beings and the nature of living things can be associated with each other. It refers to an evolution that is also evident in our societies.

Human societies can take on alternately the attributes of both natures. They evolve from a barbaric to a mechanical phase. In the former, people simply recall the characteristics and processes of life and they then gradually pass to the latter phase where they adopt an administrative, industrial and scientific reasoning. In addition, all great regular *mechanisms* –the social mechanism, the vital mechanism, the stellar mechanism, or the molecular mechanism can be broken down by one condition: The ascertainment that the constitutive parts of these mechanisms always belong only by one aspect of their being to the world they constitute, and by other aspects escape it. For example, each mass, each molecule of the solar system has for its physical and mechanical property not descriptions like extension, mobility and so on, but all the other masses, all the other molecules.[348] The 'solar world' would not exist without them; without the "solar world", conversely, these elements would still be something. This abides with Leibniz 's assertion that "*… each simple substance has relations which express all the others, and that consequently it is a living, perpetual mirror of the universe* ".[349] There is a connection of all things to each and of each to all: "*And as the same city regarded from different sides appears entirely different and in perspective is as if multiplied, so also it happens that, because of the infinite multiplicity of simple substances, there are as it were so many different universes, which are nevertheless only the perspectives of a single one, from the different points of view of each monad*".[350] In another paragraph, we read: "*Thus, although each created monad represents the entire universe, it represents most distinctly the body which is particularly appropriated to it and of which it forms the entelechy.*"[351] Each substance is thus a *camera obscura* where the whole universe of other monads is represented in a reduced form and from a particular angle.[352]

Tarde's radical move is to expand the discussion on monads within a much broader multi-scalar perspective. His approach is not so much a Leibnizian sociology, as a socialized monadology. It is this radical 'universal sociological point of view' that leads Tarde to conclude that the whole (the whole society, the whole individual) is always less complex and indeed weaker than the sum of its parts, since these parts are always simultaneously part of other wholes ad infinitum.[353]

REVISITING THE ARGUMENT

The main points of Tarde's approach, as set out above, are:

1. The principles of reality are plural in nature. There are ultimate elements that form the final stage of every science.
2. There exists an infinite multitude of these simple substances. Scientific research has a tendency leading to the infinitesimal.
3. Phenomena are caused by the infinitesimally small (element).
4. Elements identify matter with mind (humans included). These substances are souls.
5. Organisms and phenomena are in fact societies.

348 Ibid, 53.
349 Leibniz, *The Philosophical Works of Leibnitz*, 226, §56
350 *Ibid*, 226, §57.
351 *Ibid*, 227, §62.
352 Tarde, *Monadology and Sociology*, 26.
353 Candea, M. (ed.) *The social after Gabriel Tarde: Debates and assessments*, 8-9.

Any progress regarding modern science favors the blossoming of a renewed socialized Monadology. The real property of any reference entity is a set of other reference entities. In Chemistry, each atom of a molecule has for its chemical property all the other atoms of the same molecule. In Biology, each cell of an organ has for its biological property, all the other cells of the same group of tissues. In all these cases, possession is reciprocal, as in every intra-social (or psychological) relation; but it can be unilateral, as in the extra-social relation of master to slave, or of the farmer to his cattle.[354]

Within this socialized Monadology, *strict* Monism seems incapable of explaining our ability to see the parts of organized beings as made for the whole, or the whole as made for the parts. Organized beings do not result from a process of fabrication by a single being, or from the regular differentiation of a single homogenous substance. Strict Monism does not lead to what is observed in sciences and in life. The only viable monistic assumption is that matter is mind. This assumption leads naturally to the theory of monads.

Each monad draws the world to itself, and thus has a better grasp of itself. Monads belong to each other to a greater or lesser extent and each one of these mind-like substances attempts to learn new ways of adaptations with and to the other ones. This explains their transformations and consequently any observed physical transformation.

Now, with regard to the primacy of the social factor (see the *modus ponens* syllogism and point 5), one could argue that it constitutes a logical fallacy. It is an Equivocation (also known as doublespeak), since the term 'society ' is ambiguous and has at least two distinct meanings. On the one hand it refers to a group of people and on the other hand to a group of elements. The use of this particular word in multiple senses makes this argument misleading. Nevertheless, one might counter argue, including Tarde himself, that people (that is, bodies with soul) might be regarded as elements or monads. In fact, Lebniz seems to leave this open: "*… when we fall in unconsciousness or when we are overpowered by a profound and dreamless sleep…the soul does not differ sensibly from a simple monad; but as this state is not continuous and as the soul frees itself from it, it is something more than a mere monad*".[355] So, the fallacy stands only if humans beings ≠elements.

Gabriel Tarde's rationale on how Sociology is associated with Monadology is primarily a conceptual one. Tarde proceeds by clarifying and discussing appropriate terms that could fit in his renewed socialized Monadology. Examples from science and society (atoms, cells, individuals) play a key role in this endeavor. Yet, these references seem odd nowadays because there is a clear distinction between the social and the physical sciences. Social phenomena cannot be reproduced and therefore be predicted based on absolute data. However, at the end of the 19th century, Tarde placed them in the same reference framework. His rationale was that both areas have the same infinitesimal ontological structure (see point 1). After all, that is what Tarde is discussing: ontological status. "*To be*" is "*to have*". Being is having relations, social relations, with the other.

The ontological approach of Leibniz is enhanced through that emphasis on the role of the monads ' relations. Sociology is amending Monadology. The key to resolving any difficulties in Leibniz's theory (for example, individual human beings as both exemplary monadic elements and as composed of numerous elements) is the dominant notion of 'relation'. It is not the element itself which is the basis of reality but its relation to the social aggregates of which it forms a part.[356] It is the theory of Monadology, not Monism that implies the dominance of such relations.

354 Tarde, *Monadology and Sociology*, 54.
355 Leibniz, *The Philosophical Works of Leibnitz*, 220-221, §20.
356 Lorenc, 'Afterword', 80.

CONCLUSION

In his *Monadology and Sociology* Gabriel Tarde attempts to reunite the 'Siamese twins' of Philosophy and Science which had, long ago, been separated. In this context, Leibniz 's metaphysics meets modern sciences. The conceptual figure that emerges explains the world. At the same time, it is been explained by the concept of "society ". Society or in other words the relation to others, is the link between philosophy and science. It is also the key to understanding the world both at the macro and at the micro level.

This society of monads is the basis of reality which, in epistemological terms, is not called into question. Within this interaction of souls, belief and desire as psychological quantities are bridging the gap between sensation of phenomena and phenomena. It is a normative approach of the ego that normalizes the way we derive knowledge about the external world and supports the scientific status of the main argument. However, as mentioned above, a conceptual identification, necessary for validating the argument, could be challenged, especially nowadays.
Concluding, Tarde, a truly daring but also totally undisciplined mind, according to Latour,[357] seems enthusiastic. This enthusiasm stems from the scientific discoveries of his time and the emergence of social theory as a compatible explanation of living organisms. This enthusiasm is also realized in philosophical terms. Through his analysis, he offers a comprehensive response to metaphysical causality, when stating that in phenomena it is not the large (e.g. the Divine) source of the small but the small (e.g. Science) is source of the large. His renewed socialized Monadology is structuring micro and macro reality like a society. All entities are primarily mind and body and members of a society; and this knowledge is the only reliable knowledge of being we have.

357 Latour, 'Gabriel Tarde and the end of the social', 118.

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