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How philosophy should be done:
A research on the practice of philosophy and its method.

Disertační práce

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The main goal of this work is to put forward an argument in favor of the existence of a particular method of philosophizing. On balance, this work is an argument for the existence of a method proper to philosophizing, using concepts and theories coming from the field of Cognitive Linguistics as argumentative tools.

It seems to be propitious to acknowledge that the views presented here have been informed by the readings and literature I have been exposed over the last years. Particularly, Lakoff, G. Johnson, M. 1999 *Philosophy in the flesh*. Lakoff, G. 1987. *Women, fire and dangerous things: what categories reveal about the mind*. Rorty, R. 1980. *Philosophy and the mirror of nature*. Rorty, R. ed. 1992. *The Linguistic Turn*. Rorty, R. 2002. *A Pragmatist View of Contemporary Analytic Philosophy*. Husserl, E. 2002 *Philosophy as rigorous science*. Gilbert, N. 1960. *Renaissance concepts of method*. McKeon, R. 1951. *Philosophy and Method*. Kuhn, D. 1991. *The skills of argument*. Glock, H-J 2008. *What is Analytic Philosophy?*

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Prohlášení

Prohlašuji, že jsem tuto disertační práci vypracoval samostatně pod vedením svého školitele Prof. RNDr. Jaroslava Peregrina CSc. a uvedl jsem všechny použité prameny a literaturu.

Declaration

I hereby declare that this thesis is my own work, elaborated under the supervision of my supervisor Prof. RNDr. Jaroslav Peregrin CSc., and that I make reference to all the sources and literature used in this thesis.

V Hradci Králové dne

Podpis

Annotation

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This research has as main goal to find a satisfactory answer to the problem of philosophical method, which, in turn, lies in the lack of consensus over the existence of a common and appropriate procedure to pursue philosophical research. The source of difficulty of such lack of agreement arises when we think of philosophy as a discipline, which is taught and cultivated at different academic outposts. Certainly, the lack of a common procedure calls into question philosophy status as a discipline, since methods are usually associated with the way a given body of knowledge is taught, learnt and pursued as a research area. Put in a more practical but reflective way, how a given student is supposed to be introduced to philosophy without a clear sense of the way it should be done.

In this sense, we argue that such lack of consensus is rather ostensible and a standard procedure could be made visible if we focus on the way philosophy is actually performed by some representative thinkers, rather on the methods they advocate or propose. Such strategy is supported on the idea that philosophy is, as any human activity, a pattern governed behavior whose main feature is its argumentative character. For such purposes, we examine some case studies of philosophizing, paying special attention to the conceptual frames underlying and shaping philosophers' arguments. Similarly, we explore the metaphoricity of the concept of method.

Keywords: method, conceptual frames, metaphors, argumentation, philosophical research.

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Introduction

Since the beginning of the modern era, the proper method to philosophizing became a problem. To be sure, it is not an attempt to say that there was not discussion over methodological matters before, but the development of sciences such as mathematics, occurred during modern times caused many to be skeptic about the possibility of achieving apodictic knowledge in philosophy. Since then, many philosophers thought that such type of knowledge could be attained by designing a procedure, a method, coming to propose several of relative value.

However, despite the many pages devoted to this topic, consensus has not emerged over the method proper to philosophy, leaving us with banal platitudes such as one philosopher, one method. It might seem that we could manage with such platitudes, but in reality, it poses more practical questions regarding philosophy status as a discipline susceptible of being taught and an area of enquiry requiring specific skills, which can be developed over the course of educational training. In this sense, this research arise from the desire to propose an argument or perspective, which renders philosophy a full-fledged discipline in which teaching, learning and research, beyond institutional matters, are no longer problematic, since, we argue, it has a specific method.

For such purposes, we draw on the results of research and theories coming from the field of Cognitive Linguistic. Such choice has arisen for the following reasons: 1.) Philosophy, as any human activity, has its own culture, a particular set of behaviors and beliefs and specific ways of self-understanding the profession so pervasive and ingrained that could not be easily recognized from within the philosophical community. Therefore, such culture and values may be evaluated more evenly using external sources, concepts, theories, views, etc. 2.) Philosophers provides no conclusive evidence to back up their claims - that is not their job either-, rather they argue in favor of a certain evaluative or prescriptive view to be accepted on more or less reasonable grounds. That is to say, in the absence of proofs, argumentation is indispensable, which makes philosophy an activity relying heavily on discourse (language). From our perspective, all this constitutes an essential condition for the adoption of theories and concepts from the field of Cognitive Linguistic, since language is its specific

scientific domain of research. Cognitive Linguistics, in this sense, could contribute to provide a better understanding of the activity.

Along these lines, this work is to be seen as composed of two parts, which are conjoined in their reliance on theories and results developed in the field of Cognitive Linguistics as indicated above. The first is dedicated to the presentation of the problem addressed. Likewise, it is presented an historical outline of the philosophical conversation over the proper method to philosophizing. Most importantly, being consistent with our proposed choice of Cognitive Linguistics concepts and theories, in such part of the work we will make an examination of three representative cases of philosophical method (Plato, Descartes, Russell), devoting special attention to the conceptual frames underlying such philosophies and the impact they have on philosophical argumentation and philosophers' methodological suggestions, in an attempt to make a frame-based linguistic analysis.

The second part, on the other hand, focus on the analysis of the notion of method. To be precise, the metaphoricity of the concept of method is examined in order to assess its cognitive value in our representation of knowledge. For these purposes, the theory of conceptual metaphors developed by George Lakoff, Mark Johnson and others is put to work, which is equally a theory in the field of Cognitive Linguistic.

Clearly, those are different research orientations, which could be developed and treated separately. However, taken together they fit perfectly the purposes of this research in the sense that it helps us to gain more insightful perspectives on not only the notion of method itself and its cognitive value. Additionally, it might facilitate to understand the process of philosophizing by uncovering the assumptions entertained in the frames adopted by philosophers and the argumentative role played by the methods advocated by one philosopher or another.

It is easily noticeable that this work is informed by the results, concepts or theories product of empirical research conducted in the sciences, in this case on the cognitive aspects of language. This is due in large part to the fact that theories in the sciences not only seek understanding, but also they are supported by factual research. Unlike the scientific theories, though philosophical arguments may provide insight and in that sense attempt to bring understanding, they are not supported by factual research and are in a way less sophisticated.

Lastly, it can be seen that we assume that philosophy is discursive or argumentative activity, which is not arbitrary or gratuitous. In fact, there is evidence showing that philosophers outperform other professionals in assessing arguments. The evidence, in this sense, comes from Deanna Kuhn's research work on the development of argumentative skills. Philosophers, according to Kuhn, develop the sort of skills that she calls 'reasoning expertise'. The survey conducted by Kuhn found that philosophers performed better "in generation of genuine evidence, alternative theories, counterarguments and rebuttals" (1991, 258).

Additionally, Kuhn claimed that philosophers performance shows that "it is possible to attain expertise in the process reasoning itself, independent of any particular content to which this reasoning is applied" (1991, 262). In the same vein, Livengood and others claimed that reflectivity is an important trait of philosophical temperament, that is, they found that "philosophical training is positively correlated with cognitive reflectivity even when overall education is taken into account." (2009, 314-315).

Assuming the results of the investigations conducted makes plausible to maintain that philosophical expertise, on a more positive account, might be related to some sort of argumentative skills. It allows us to say, to my mind, that philosophers are professional arguers in the sense that philosophical training and the activities philosophers commonly engage in are related to the evaluation, building, challenging or rebuttal of arguments.

This is neither new nor surprising, since arguing is what philosophers have been doing for millennia. What is intriguing, however, is why philosophers traditionally have tried to distance, at least discursively, from rhetoric and sophistry, seeing themselves differently and concerned with hard and indisputable truths. Nevertheless, philosophers' self-image is of less importance here, since what is being pursued here is a clearer view of the sort of activity philosophy is and how philosophers do it.

Chapter I - The problem of philosophical method

Defining philosophy is similar to, using Simon Bolívar expression; ploughing the sea, that is, it is a terribly elusive task. However, there are two essential senses conveyed by such word, highlighted by Kant's idea of philosophical activity, which I believe are agreeable, namely, it is an academic discipline (scholastic) and it is traditionally conceived as wisdom, in the sense that it is necessarily concerned with practical guiding principles of human action (mundane / *cosmicus*). On such basis, Kant stressed the importance of both aspects of philosophy for the would-be philosopher, who must possess certain doctrinal knowledge in order to philosophize, which, as an activity, is characterized by the free exercise of one's powers of reason. (1819, 25 – 32)

It should be noted that despite the circumstantial demand among people of the business world of phronetic philosophies of the past such as Stoicism, the cosmopolitan aspect of philosophy, which Kant saw as embodying the venerability traditionally ascribed to it is no longer an exclusive dimension of the philosophical enterprise. Instead, there are many other bids in the market of self-help industry, making philosophy the less attractive option and the philosopher is no longer seen as synonymous with, as Kant put it, a knower and teacher of wisdom.

On the other hand, Kant equaled the scholastic side of philosophy with lecturing to specific audiences (doctrine of address), for which possessing a body of coherently organized knowledge is required. It should be pointed out that Kant deemed philosophy to be a proper science in the scholastic sense of having 'systematic coherence', but also as the only science, which is capable of giving methodical unity to all other sciences.

There is no denying that philosophy exhibits the features typically attributed to disciplines, that is, it has a humongous amount of concepts and theories (terminology) constituting the structured body of knowledge pursued and taught in specific institutional settings. However, when it comes to method, not to mention the too broad range of topics it deals with or the question it poses, it seem that there is no possible definitive way out of the problem regarding what sort of activity philosophy is and how it should pursued.

The above does not appear to be a serious issue, given the current expressions of disappointment with philosophy, which have switched direction, pointing this time to several issues such as ‘compartmentalization of disciplinary areas’, ‘professionalization’, purportedly exposing philosophy to a chance of being isolated. (Bicchieri 2006, 21) In this sense, philosophers such as Susan Haack have concurred saying that “something is rotten with the state of philosophy.” (2017, 40)

Similarly, the reasons Haack listed as contributing to the putrid decomposition of philosophy are related to institutional matters such as the management of universities, academic publishing and departmental pressures to produce Ph.Ds. students, have created an ‘environment of perverse incentives’, making philosophy “more and more out of touch with its own history, more and more hyper-specialized, more and more fragmented into cliques, niches, cartels, and fiefdoms.”(40) In addition, Haack speaks out against a new sort of naturalism, which she equates with ‘scientism’ as a detrimental factor in the current state of philosophy.

In the same fashion, Robert Frodeman has criticized the actual status of philosophy in the United States, above all its institutional and disciplinary manifestations, calling for philosophy to be ‘dedisciplined’. (2012) By ‘dedisciplinizing’, Frodeman seems to mean that the work done by philosophers must be taken out of the traditional institutional (departmental) contexts in which it is practiced at present, co-working with specialists from other disciplines, that is, philosophers should engage in interdisciplinary work, tackling the problems affecting broader audiences, rather than the ones busying their peers within disciplinary boundaries.

There are several matters to attend to here. However, it is central to see that judging by what Haack or Frodeman imaged; philosophy seems to have attained its long sought-after status as a mature discipline to the extent of being ‘hyper-specialized’. Still, if truth be told, there seems to be no way to reach consensus over the proper method to philosophy, let alone the sort of skills required to pursue philosophical research.

This might appear to be a minor issue, since philosophy is already an institutional reality. Quite the contrary, the idea of method plays a significant role in our understanding of disciplines, pointing to the need for order or organization in the learning process of the

knowledge constituting a given discipline as well as in the process of building (discovery) knowledge from the previously accumulated. Clearly, the problem of not having a common procedure and not being able therefore to establish more or less transparently the disciplinary boundaries of philosophy generates practical problems regarding its status as discipline. For instance, how a given student is supposed to be introduced to philosophy without a clear sense of the rules to be followed to perform it appropriately.

To illustrate, the analytical philosophy tradition (the one I am more familiar with) is usually associated with analysis as its central method. However, as Hans-Johann Glock observed, “even *within* the context of the analytic tradition, ‘analysis’ signifies not just diverse but often incompatible procedures. None of these forms of analysis is accepted by all analytic philosophers, and some of them can also be found outside of analytic philosophy.” (2008, 154) In other words, given such lack of consensus, even if a student is told that the activity she is being introduced to has to do with analyzing bits of language, she might be still left disoriented as to how to proceed. She might pick up a couple of standard authors in sympathy with her inclinations and learn how to ‘philosophize’ by way of exemplar cases within the analytical tradition. However, it would cast doubt on the need for having philosophy among the academic offer of any educational institution, since assisted training seems to be dispensable.

It is appropriate to observe that Edmund Husserl underscored before such difficulties regarding philosophical method, claiming that the leitmotif of modern philosophy had been to become a strict science. However, philosophy had failed to do so, since, as Husserl said, “there is still lack here [*in philosophy*] of problems, methods, and theories that have been delimited in a conceptually definitive way and whose sense has been fully clarified.” (2002, 250) Some decades later, Richard Rorty made the same reproach, observing there has been many attempts throughout the history of philosophy at delimiting the scope of philosophy by providing it with clear and generally accepted methodological directions, but such “revolts” ended up in fiasco. (1992, 1)

Certainly, philosophers such as I. Kant or R. G. Collingwood have followed a similar strategy to determine the essential qualities of the philosophical enterprise, which consisted in precisely examining the similarities and differences between philosophy and other activities

as mathematics or art, focusing particularly on their methods. However, such attempts to determine the limits of philosophical practices by establishing one common method to philosophizing has not gained widespread acceptance.

In fact, finding a methodological set of criteria to delimit the practice of philosophy has recently been esteemed as ‘essentialist’, proposing instead a broader criterion based on the Wittgensteinian notion of ‘family resemblance’ (Overgaard et al. 2013, 17 – 44) as a supposed midway between two extreme positions –essentialist vs deflationist- regarding the nature of philosophy. Philosophy, so the narrative goes, is better understood as a concept such as game, to use Wittgenstein example, in the sense of not implying a specific set of features shared by the members of the family, and rather resembling one another differently in some way.

One of the consequence of such view regarding the method in philosophy would be the pluralist admission of the existence of different ways of addressing issues in philosophy, each one being philosophical in some way. Nevertheless, even admitting that philosophy is more appropriately conceived as a game, we are still in need of a description of the sort of game it is, as well as a specification of the rules defining the ways the game of philosophy is to be conducted, which, to my mind, is equally essentialist. Even more, such specifications can never be complete, for there are always exceptions to the rules, which calls for the employment of *post hoc* arguments in order to account for the exceptionality of cases.

It is important to realize that it is of little use calling a certain stance ‘essentialist’, for it amounts to stating a trivial fact about humans’ psychological tendency to categorize and conceptualize the objects populating the world in terms of essential qualities. As the psychologist and linguist Susan Gelman and others have shown, essentialist theorizing is so pervasive that even for undergraduate students of Biology knowing that species are rather interbreeding populations “it may be difficult to overcome the assumption that species are understood in terms of inherent features that each member possess (e.g. a ‘tiger gene’)”. (Gelman -Ware 2012, 471)

Moreover, as Gelman admits, overcoming such sort of essentialist reasoning would demand complex intellectual skills, which, as far as I am concerned, are not proper to philosophers. On such grounds, we are allowed to suspect that telling philosophy students that their field

is better conceived, as a family whose members share some resembling traits, may not help them to overcome the need for established boundaries in order to advance any fruitful theorizing.

The problem we see in trying to find such ‘anti-essentialist’ criteria is not only that essentialism seems to play an important role in our representation of knowledge and is perhaps part of our limited cognitive capacities as species, but also the ‘anti-essentialist’ narrative is politically motivated. That is to say, we live in a moment in which political concepts such as inclusion, equity or diversity, are at the core of global political discourses, and there is no denying that they are worth the fight. However, taken to the intellectual arena, where definitions –which in essence prescribe limits-, are usually sought, its effects are rather retrograde, leaving us with the hands full of useless and shallow slogans such as: ‘there are as many methods as philosophers’.

In this sense, we take the view that there is a conventional way of doing philosophy, i.e., a proper method to it. Certainly, despite the historical efforts of philosophers to differentiate themselves from sophistry, in reality philosophy has ever been nothing but an argumentative and discursive practice. No matter the length, a prototypical philosophical work as a rule takes the form of a written argument favoring a determined hypothetical solution to a wide variety of problems. Sure, seen from an overly broad perspective, any linguistic expression either written or spoken of a communicative act can be seen as an argument, which might suggest that there is nothing distinctively philosophical in it.

All of that may contain, to a certain degree, some truth. However, it is appropriate to make some distinctions to understand what we mean. Accordingly, a distinction should be made between argumentation and arguments, being one the process and the other the outcome, respectively. In this sense, we maintain that argumentation is undeniably quintessential to philosophical methodology and what makes an argument characteristically philosophical must be found in its development (in the process): the claims it puts forward, the grounds offered to accept or reject it and to what it is conducive.

Regarding the sort of assertions made in philosophy, there is a tendency to see philosophical claims as not subjected to restrictions equating philosophy with human curiosity in the sense that there seems to be no limits to the claims, topics or questions it may be raised in the field.

Such an unconstrained view of philosophy is actually misleading, since as in any other area of enquiry, what lies open to be discussed and the sort of claims possibly made are subjected to the development of the field, institutional factors and ultimately to personal inclinations of the professionals.

On the other hand, the acceptability of a philosophical claim is also different from, say, Biology. The theory of evolution, for instance, in Biology is widely accepted among members of the field because it is well substantiated by evidence coming from many other fields, the inference it allows to make, and it has been repeatedly confirmed by many new observations, incorporating and helping us to make sense of new facts. Clearly, the grounds for a claim to be accepted or rejected in Biology are related to the idea of empirical evidence. However, the criteria are much broader in philosophy, including not only factual evidence, but also intuitive, political, ethical, doctrinal tenets as well as the inferential structure of the claim itself, its assumptions and consequences.

Finally, philosophers like to think that philosophical arguments seek to discover truth, however, by accepting or refuting a claim, philosophical argumentation leads rather to understanding and knowledge. Philosophical arguments, in this sense, should be seen as perspectives on a given topic.

The important point here is that there is a common pattern followed by philosophers when doing philosophy, which makes the question ‘how is philosophy done?’ perfectly answerable, adopting a descriptive approach of the actual philosophical practice based on the study of exemplar cases of philosophy. Certainly, answering such question could help to delimit the boundaries of philosophy as an academic discipline, making it less complicated to showing students how it is expected to be performed.

At this point, it is fundamental to observe that the problem of philosophical method, as we see it, is related to the status of philosophy as an academic discipline and its susceptibility of being taught. This is what differentiates the present enquiry into philosophical method from others, which are often more inclined to answer the prescriptive question ‘how philosophy ought to be done?’, assuming that philosophy is more ‘a way of life’ than simply a professional activity.

No doubt such methodological proposals are suggestive, however, most of those recommendations are relative to the conceptual frames or domains a given philosopher, consciously or not, assumes from the beginning, determining the way it formulates its theories and views regarding its subject matter as well as the nature of its professional practice. To be sure, an answer to such query is likely to feature idiosyncratic evaluative judgments, and will be naturally subject to variations due to extra-philosophical or contextual factors.

The above does not mean that a unanimous and satisfactory answer to the question ‘how should philosophy be done?’ is unattainable. On the contrary, I maintain that a reasonable answer is possible, insofar as the actual way philosophy is performed, is brought to light. To explain, showing someone how she is expected to perform a given activity requires a clear idea of the rules constituting such activity.

For these reasons, it seems to us that if we want to attain a more solid view of the sort of activity philosophy is, and how it is performed, it is indeed necessary to adopt a descriptive approach. Yet, it is equally essential to turn our attention to how philosophers conceive (conceptualize) their practices. We believe the latter to be particularly important not only to compare their proposed method with their actual practices, but also to better understand why they prescribe a particular way of doing philosophy and the force it imprints onto the practice of philosophy.

Correspondingly, we will present succinctly, in the next section, an outline of the views regarding philosophical method during the past several decades in order to; first, bring the lack of consensus to the fore as well as to underline the weaknesses involved in such views. Second, I will point out a few reasons why no agreement over the matter has been reached, and, third, I shall express our position on the matter.

Chapter II – The contemporary debate over methods in philosophy

Introduction.

The considerations on the mode of enquiry proper to philosophy, has been around since the birth of philosophical literature. In fact, everything points to Plato who in a rhetorical exercise introduced the word *methodos* (μέθοδος), meaning just investigation (Stat. 260e, Soph. 218d, Phaedo 79e, 97b) or mode of prosecuting an inquiry but sometimes also a theory, teaching, opinion or view (Theat. 183c). In the same direction, in the works of Aristotle, the term ‘method’ has a general connotation, meaning pursuit of knowledge, inquiry or investigation. (Nic. Eth. 1094a-b)

However, it is not until the modern age that it began to be seen as a problematic dimension of the acquisition of knowledge in general and philosophy in particular. It is clear that the idea of method as a mode of pursuing an enquiry is as old as the philosophical literature itself. However, philosophers such as Plato or Aristotle never ascribed the characteristics we currently attribute to methods. At present, ‘method’ is often found in tandem with words such as ‘effective’ or ‘reliable’. Such emphasis placed on results, efficiency and reliability have appeared relatively recently, precisely in the modern era.

Actually, Neal Gilbert in the massive *Renaissance concepts of method* (1960), stressed that the Latin translations of μέθοδος “did not become a philosophical term until much later, in the Renaissance, when, as Melanchthon observed, it was adopted by ‘the dialecticians’ for the most correct order of explication.” (1963, 60) Moreover, in the hands of the Humanist methodologist and its emphasis on the education, ‘*methodus*’ came to be equated with a way of learning the rules composing an art in an orderly and succinct manner, which at the same time may facilitate learning. In this sense, Gilbert said, “the emphasis on speed and efficiency

sets apart the Renaissance concept of method – at least, the “artistic” branch of it – from the ancient concept.” (66)

Gilbert also observed, in contrast, “the methodologist of science” stress on “the scientific, or science-producing, character of their method, which was not intended to make it easy for the pupil, or to improve the rhetorical effectiveness of a teacher's presentation: it was aimed exclusively at producing "science" or knowledge, as opposed to rhetorical persuasion and probable opinion. Theirs, in a phrase, which was only beginning to gain currency during the late Renaissance, was the *methodus scientificus*.” (222)

As can be seen, the early modern period saw the emergence of two different concerns and expectations regarding the purpose of methods, which coincided with the development of modern science. Both attitudes introduced into discussion some demands easily recognizable in the way we currently talk about methods, namely, a method must provide us an easy to apply and follow (learn), well-arranged and efficient set of rules, which purportedly would enable us to discover certain and true knowledge. Such demands, as it is known, were resumed in the methodological proposal of René Descartes who characterized methods as ‘reliable’, ‘easy’, ‘ordered’, ‘knowledge-producing’ set of rules. (1985, 372 -380)

Moreover, the key difference Descartes’ methodology, according to Gilbert, brought about was the suggestion that “a man who would reach true understanding must start from scratch...” and “that he could reach such a final terminus in his quest.” (1963, 228) In other words, the ideas brought forward by Descartes about methods were couched in the same kind of language of the preceding centuries, but perhaps, what was new was a certain attitude that was hostile and mistrustful towards the past philosophies, but at the same time rationalist and optimistic about the prospects of acquiring reliable knowledge by means of reason.

It is key to note that Descartes, along with other philosophers such as Bacon, Hobbes or Galileo developed or designed “the language we use when thinking about scientific questions.” (Wootton 2016, 249) Indeed, the way we use currently concepts such as experimentation, theories, laws, evidence, judgements and so on seem to pertain to the

seventeenth-century philosophy vocabulary.¹ So, by means of a new vocabulary, they also made possible the far-reaching changes usually known as ‘scientific revolution’, giving shape, in turn, to scientific methodology.

Equally important, philosophers such as Descartes thought that, given that, ‘knowledge is always one and the same’, his new methodological directions were equally valid for philosophy and the sciences, which he compared with a tree. However, as the sciences gained more independence from philosophy, soon came the realization that philosophy was methodologically different from the sciences. In that sense, the philosophy of I. Kant represents a milestone by recognizing that philosophy, though aiming at knowledge, was structurally and methodologically different, and not ‘scientific’ in the sense that mathematics is, for example.

Consequently, given the ‘miraculous success of science’, it became the methodological and conceptual model upon which different domains of knowledge, including philosophy, increasingly started to rely.² Moreover, as we shall see in more detail, if one looks at the philosophical landscape broadly over the last century and within the current century, there is a patent influence of science over the many methodological proposal of philosophers of different and often clashing persuasions.

The contemporary debate over philosophical method

Throughout contemporary history, there has been different attempts at answering the prescriptive question regarding how philosophy *ought to* be done that can be clearly identified. It is no less important to say that such methodological proposals imply a conception of philosophy, each of them is defined with reference to science. In this sense, we have spotted the following alternative views of philosophers on the issue of method over the past decades:

¹ To illustrate, David Wootton suggests it may have been Robert Boyle, who in 1662 used the word experiment to praise enthusiastically an experiment carried out by Pascal’s brother in law at the Puy de Dôme Mountain as ‘the crucial experiment’.

² Hans-Georg Gadamer claimed that the problem of method – particularly of human sciences - laid on the fact that its understanding has been molded by the ‘modern concept of science’, which he equated with induction, which, in turn, places *Geisteswissenschaften* in a situation of inferiority. Cfr. Gadamer, H G. (2004): Truth and method. London, continuum. P. 3 - 8

1. Philosophy has its rationale different from the scientific and its method was so universal as to apply to all kinds of knowledge, even science.
2. The realm of philosophy is defined by what science allows it to say and its method is restricted to the analysis of scientific concepts (mind, matter, etc.).
3. There are different methods in philosophy, each fit for particular purposes and equally corresponding to specific philosophical principles, which cannot mean they could not be incorporated or employed simultaneously in the same research.
4. The quest for a philosophical method, since it is anchored to a foundationalist project, must be abandoned. Even more, we should erase from our vocabulary expressions as 'philosophical method' or 'philosophical problem' and replace them with broad expressions, namely; 'research programs', 'vocabularies', etc., stressing contextual values of knowledge attribution.
5. A defense of methodological naturalism, which means that philosophy, should increasingly rely on empirical methods from the social and cognitive sciences, leaving behind the so-called 'armchair' methods.

These tendencies should be understood, on the positive side, as a craving for appropriate criteria to delimitate the scope of philosophy, in the context of a professionalization process of philosophy characteristic of the last centuries. However, such criteria or methods have gained only partial acceptance among certain groups of philosophers, that is, no consensus has emerged yet about the proper way to tackle philosophical problems.

On the other hand, the twentieth century saw the birth and development of some radical and often hostile attitude towards the notion of method in philosophy. In some cases, such stance has prompted many to regard the quest for a single method as pointless and embrace a sort of methodological pluralism, but in other instances, the same temper has led some to suggest the abandonment of such notion, mostly due to its purportedly misleading consequences.

Historically speaking, the first reflections found in the twentieth century on the problem of methods come from German philosophy. Significantly, some representatives of two movements that dominated the philosophical landscape in Germany during the previous

years of the WWI, that is, the neo-Kantianism and the phenomenology (Schuhmann / Smith 1991), offered some ideas regarding philosophical method.

Although its name appears to suggest some sort of revival and strict adherence to Kant's philosophy, most of Kant's ideas did not seem to matter for the neo-Kantian Marburg School representatives. What seems to be undeniably significant for them is the so-called transcendental method. (Ewald 1913, 484) In fact, philosophy itself appears equated to such method and having no space of its own, inseparably connected workings of Science (Luft 2015, 226), that is to say, philosophy is construed as a method in itself.

Notably, Paul Natorp outlined the key points of the transcendental method in his *Kant und die Marburger Schule (1912)*. Such method, according to Natorp, has two fundamental components, to be specific; firstly, it is strictly grounded in the statements of fact (*facta*) of Science, morality, art and religion and, secondly, it should demonstrate the inherent normative basis of such *facta*, which, following its literal Latin meaning, are something made or, one may say, constructed by thought. Such process of 'construction by thought' is, Natorp says, a never-ending logical process. It is equally important to mention that such method is thought to work as unifying basis of all knowledge. (Natorp 1912)

On the other hand, Edmund Husserl, the founder of the phenomenological movement, thought that philosopher's task, though pertaining to a different domain, was interrelated with scientist work. Early in his *Logical Investigations (1900-1901)*, Husserl contrasted the natural scientist and mathematician works with philosophical investigation, which, Husserl maintained, "has quiet other ends, and therefore presupposes quite other methods and capacities." (2001, 159) According to Husserl, philosophy is not concerned with the construction of pure theories, as is the case of mathematics or the discovery of laws that govern the events or the movements of things of the world. Rather, philosophy seeks to get to the essence of things and events "as well as that wonderful affinity which this essence has with the essence of thought, which enables it to be thought, with the essence of knowledge, which makes it knowable, with meanings which make it capable of being meant, etc." (159) Thus, philosophy offers the theoretical insight a scientist and mathematician lack, so philosophy becomes what Husserl calls 'critique of knowledge'.

On the other hand, essences, the main concern of philosophy, “make themselves known in intuition” (166). In this manner, Philosophy is inseparably tied to what Husserl termed ‘phenomenology’ or ‘phenomenological research’, which has as a main concern “experiences intuitively sizeable and analyzable in the pure generality of their essence” (166) Then, it comes as no surprise that Husserl sustained that philosophy, in order to achieve a rigorous scientific status, should “move in spheres of direct intuition”. (2002, 294)

It is important to mention that Husserl did not intend to give a complete outline of his method. Husserl was rather content just to offer a broad perspective or ‘insights’ on the ‘phenomenological sphere’, which, to Husserl’s mind, would suffice “to put into our hands norms of method which have a richer content and which are, at the same time, norms with which all specific methods must square.”(1983, 173) It is clear the suggestion that the phenomenological method is offered as a base of any sort of enquiry.

On other train of thought, Hans Hahn, Otto Neurath, Rudolf Carnap advanced an alternative outlook in 1929, which they termed as *‘The Scientific Conception of the World’*. The members of the self-named Vienna Circle saw themselves as sharing a scientific attitude deeply rooted in the empiricist tradition, which led their members to place a particular emphasis on “anti-metaphysical factual research”(2012, 301). In addition, they saw themselves as advocates of a conception of the world that is penetrable or knowable, hiding no mysteries or, as they would put it, containing “no unsolvable riddle” (306). As a result, they regarded philosophical enterprise as methodologically founded on logical analysis or clarifications of assertions, which, broadly speaking, consisted in “reduction to the simplest statements about the empirically given” (306 – 307), that is, philosophy appears as merely concerned to clarify and analyze ‘scientific language’, so philosophy is seen as an appendix of science.

It is worth noting, as the Vienna Circle members recognized, that the idea of logical analysis of language as the main task of philosophy was an idea put forward in the works of Bertrand Russell and Ludwig Wittgenstein. The first, Russell, in *On Denoting (1905)*, had propounded the idea that some problems arising from sentences containing definite descriptions were “*the result of a wrong analysis of propositions whose verbal expressions contain denoting phrases.*” (1905, 480). The need for such kind of analysis for the philosophical enterprise

was developed in his later works (Russell 2010). The second, Wittgenstein, adopted a sort of anti-philosophical stance in which the problems of philosophy are nothing but non-sense, which come about when philosophers attempt to go beyond the limits of language (2002, 22 – 23). They both assumed that language has a fundamental logical structure accessible by analyzing the components of language, which, in turn, would bring a better understanding of the meaning of the words and the solution (or dissolution) of philosophical puzzles.

Reactions to the views of philosophy and its methods held by members of Vienna Circle and analytic movement came swiftly from the Austrian philosopher Karl Popper. There is a statement of reasons on which Popper bases his criticisms against some of the ideas held by the members of the Vienna Circle that are displayed in the preface to the English translation of his *Logik der Forschung (The Logic of Scientific Discovery)* from 1959.

Although Popper expressed his sympathy for the sort of rational philosophy, which the analytic philosophers seemed to advocate, Popper rejected the assumption that there are any proper method to philosophy. Analytic ideal language as well as ordinary language philosophers, according to Popper, missed the point at the heart of the most important problem of any intellectual pursuit, that is, the advancement or growth of knowledge. Notably, analytic philosophers seem to renounce any claim to the contribution to the solution of the problem of the advancement of knowledge from the moment they reduced the role of philosophy to a mere analysis of language, instead of the analysis of - scientific- knowledge itself. (2002, xix – xxvi)

Indeed, Popper defends the idea that true knowledge is scientific knowledge and that philosophy may contribute to the study of such knowledge, but not by means of any specific method properly philosophical. In fact, Popper claims that there is just one method, which applies equally to science and philosophy, namely the method of ‘rational discussion’ or ‘critical method’ (xix). Such method is, Popper says, but “...*a method of trial and the elimination of errors, of proposing theories and submitting them to the severest test we can design.*” (1979, 16) To put it another way, Popper thought that the method used in science applies equally to philosophy. As it is easily seen, such method is based mostly on error detection, so erroneous or faulty theories are eliminated, but the critical method does not guarantee that the alternative theories that replace the defective ones shall be better. In this

sense, we shall be content with the knowledge gained in the process of detecting the errors of the to-be-replaced theories and hope we get better ones.

Popper's stance on philosophy and its method, generally speaking, differs from the analytic philosophers' in that he does not believe that philosophy is mostly non-sense, for some philosophical theories can be rationally discussed, that is, rejected or accepted. What is more, some scientific theories has found an early and rudimentary formulation in metaphysics, which suggests that philosophy does contribute to the advancement of knowledge. However, Popper reduces philosophy to epistemology, or to be precise, the study of scientific knowledge, for, as Popper put it, "*genuine philosophical problems are always rooted in urgent problems outside philosophy, and they die if these roots decay.*" (1952, 130) So, once again, there seems to be no proper method to philosophy and its relation with science defines its task.

On the other hand, there were some reactions against the realism propounded by the logical positivism and scientism. Those movements dominated at the time the philosophical methodological debate and advocated for a philosophy that followed the methodological patterns of empirical and formal sciences. In this sense, we one may interpret the *Essay on Philosophical Method* (1933) written by R.G. Collingwood as one of those reactions.

In the *Essay*, the main question Collingwood seeks to answer is what philosophy is. An answer to such question is not only relevant but also necessary because, Collinwood says, no progress can be made in philosophy without settling such issue at first. To this end, Collingwood thought that the best strategy was to give an account of the procedure followed when philosophizing, that is, philosophical method. Consequently, Collingwood chose to compare in terms of methodology Philosophy with Sciences (exact and empirical), History and Literature (poetry). In fact, Collingwood claimed that such strategy have been followed by philosophers as Socrates, Plato, Descartes or Kant whose work is full of comparisons between Philosophy and Mathematics. As a result, Collingwood said that philosophical inquiry, differently from the empirical sciences, has a proper procedure, which is not about knowing something by getting more information as the result of observation of the world outside. It is rather about knowing something in a different and better way by thinking on what is already known, in that sense, philosophy is regarded as a discovery. (2008, 11)

It is equally important to say that Collingwood never even characterized the appropriate method to address philosophical problems. Rather, Collingwood described what he estimated as distinctive features of philosophy. So, philosophy, in the opinion of Collingwood, is concerned with concepts, but it is not concerned with them in the same way that sciences are, because in philosophy the concepts are overlapping each other breaking the rules of classification followed by non-philosophical concepts³. Collingwood used the concepts of Mind, Matter and Evolution to exemplify differences in the way the concepts are used in sciences and philosophy so that what is sought in non-philosophical usage is to classify, divide, whereas philosophical usage is committed to see how everything fits together. In his own words:

It appears from these instances that when a concept has a dual significance, philosophical and non-philosophical, in its non-philosophical phase it qualifies a limited part of reality, whereas in its philosophical it leaks or escapes out of these limits and invades the neighboring regions, tending at last to color our thought of reality as a whole. As a non-philosophical concept, it observes the rules of classification, its instances forming a class separate from other classes; as a philosophical concept, it breaks these rules, and the class of its instances overlaps those of its co-ordinate species. (Collingwood 2008, 35)

Collingwood does make clear that he is not suggesting that those non-philosophical ways are good or bad, and much less, that we should not think following those ways. However, the rules followed by non-philosophical would not allow thinking philosophically, which, Collingwood maintained, is about revisiting constantly our starting points. Such characteristic is contrary to the idea of a rigid classificatory system, which Collingwood purports to be sought by Sciences.

Philosophy, according to Collingwood, is systematic in form; though there is a common prejudice against the idea of system in philosophy, for the very idea of system claim for finality, completeness, objectivity, and unity. Those characteristics of the systems are unattainable due to the limitations of human knowledge and capacity. In that sense, Collingwood advocated a philosophy that is to be thought as systematic but in the understanding that no system is final. It means that the systems are always under construction.

³ Collingwood uses the predicate 'non-philosophical' to pick out a set of disciplines as Logic, Mathematics and what has come to be called empirical sciences.

As can be seen, Collingwood ideas about philosophy and its method are very idiosyncratic. For example, Collingwood ended up saying that philosophy is self-reflective, which, to Collingwood mind, makes 'Philosophy' a philosophical concept. Then, the philosophical concepts will not only overlap, they are philosophical in different ways and various degrees, thus the different methods to approach them conforms the general idea of philosophical method. It lead us to think that the *Essay* is far fuller of good intentions than of good arguments in favor of autonomy of philosophy.

It is worth mentioning that Collingwood's views caused a great deal of criticism and controversy, coming from prominent philosophers such as A. J. Ayer or Bertrand Russell. However, one of those critics, Curt J. Ducasse, wrote a whole book entitled *Philosophy as a Science (1941)*, which not only included his criticism, but also what he estimated was his contribution to settle the issue of philosophical methods. Ducasse shows the same commitment in defense of philosophy's independence from science and the existence of a proper method to it as Collingwood did.

However, such commitment to attain a precise delimitation of the scope of philosophy was not fulfilled, partly due to the oddity of his proposals. For instance, philosophy, Ducasse maintained, is solely concerned with appraisals (1941, Ch. X), but assessing the value of things has nothing particularly philosophical, let alone the fact that we do not need philosophical training to do it. On the other hand, the method he had in mind as particularly philosophical resembles a sort of analysis of the meaning of words (Ch. XIV), which may be performed by whoever has any training in linguistics, semantics or other disciplines related to the study of language.

It is important to underlie the important contribution made by Richard McKeon whose acclaimed article *Philosophy and Method* published in 1951, represents a conscious effort not to bring forward another method, but rather to provide an honest classification of the ones that philosophers in the past have proposed. To McKeon, philosophy is a human activity that emerges from human wondering about his conditions and surroundings, in that sense, we can find a philosophy in the ideas that give shape to human actions. Those ideas are stated differently and sometimes changed by individual thinkers who transform philosophy into a specific study area like sciences and arts. Thus, philosophical problems acquires its specific

character when thinkers reflect on the relations and grounds of knowledge, values and principles. On this basis, McKeon says, “*philosophy is universal in scope because of this preoccupation with principles.*” (1951, 653)

It is questionable, McKeon says, the efforts of some philosophers to define philosophy by reducing it to sciences and arts, because those arts and sciences are part of subject-matter on which philosophers reflect. For this reason, the methods devised to make philosophy a science have not attained any consensus. Even more, consensus is to be found in the realm of science concerning results obtained by using a method, following certain principles to a subject-matter, however in philosophy such general agreement is unattainable, being that methods, subject-matter and principles are in question at once (656).

Such important aspect of philosophy, i.e., its universality or inclusiveness makes the task of defining what the proper philosophical method is, hard for us, because no single method has been used by philosophers, as McKeon has pointed out;

“Since the problems of philosophy are not determined by, or limited to, a single subject-matter but include, by some device and in some form, things, actions, and statements as well as the sciences by which they are explained and the arts by which they are developed and used, philosophies have not employed a single method or even methods comparable on a single scheme.” (661)

As a result, McKeon think that all the methods employed by philosophers may be classified under three groups: dialectic, logistic, and of inquiry. Such methods have assumed different forms throughout the history of philosophy, but it does not mean that they do not have some features in common. So that, the dialectical method presuppose the interdependence of finite substances that forms a united whole in which the existing contradictions of nature, experience, knowledge, and actions can be overcome or removed. Likewise, the logistic method involves that knowledge is composed by elements and they are related as a part of a process, so those elements are part of a system of deductive consequences from primitive principles to which such knowledge can be traced back. On the other hand, the objective method of inquiry is the discovery of solutions of problems, in that sense, such method consist of a plurality of methods adapted to the problems which are to be solved.

Sometimes, the differences among philosophies are not only of methodological choices, but also of differences over principles. The principles is the sort of thing that a philosopher assumes as the beginning of his philosophy and, in that sense, determines what a given philosopher considers the subject-matter and the method to be used in order to approach philosophical problems. McKeon identified three principles: comprehensive, simple, or reflective. Each principle is in a sort of correspondence with the methods above mentioned, dialectical-comprehensive, simple-logistic and of inquiry-reflective.

Comprehensive principles are sought by removing contradictions and differences and thereby bringing into relation, rendering intelligible things, ideas and exhibiting their interdependence. In the case of simple principles, they are stated in definitions and postulates from which conclusions are derived making possible the construction of models of any process. On the other hand, the reflective principles are holistic and are sought by analyzing a problem into a homogeneous whole.

It is necessary to say that McKeon does not exclude the possibility of coexistence of such principles and method, actually he asserted:

“The dialectical method is synthetic, but synthesis is a method of inquiry and provides a subordinate place for the formal method of analysis; the logistic method is analytic and its basic truths are identities and tautologies, but the deductive sequences consequent on its simple principles and rules are synthetic and may be used to formalize the results of inquiry; inquiry isolates problems to solve them by analyzing the problematic situation into relevant constituents and by synthesizing hypotheses which are tested in the situation. Each method can claim the virtues of the other two while denying that other methods in fact possess those virtues” (673)

According to McKeon those differences and complementarities are part of the richness of philosophical discussion which is not to be brought to a completion.

As we see it, the underlying idea behind McKeon’s analysis of philosophical methods is the recognition that there is no single way to address philosophical issues, and so we find the first steps towards a pluralistic view regarding philosophical methods. Nevertheless, it might be also interpreted as a sign of tiredness that may linger after a long-held and often biased or fragmentary debate regarding the appropriate procedure to tackle philosophical problems. As we shall see, by the second half of the 20th century, such signs of stagnation and prostration

of the debate over philosophical methods, led to some philosophers, in some cases, to deny the existence of some method particularly philosophical. In other cases, some philosophers proposed, on the one hand, the abandonment of the notion of method.

In this vein, some of Wittgenstein's later ideas undoubtedly marked a turning point for the debate over the nature of philosophy and its method. Notably, Wittgenstein's later philosophy can be accounted, either directly or indirectly, as responsible for setting the scene that revitalized constructivism⁴ and relativism⁵, but also for laying the foundation of semantic normativism.⁶ However, his influence seems to be mostly negative in respect to the methodological debate.

Certainly, we cannot find any explicit proposal about a proper way of doing philosophy in Wittgenstein's later work, but the vague claim comparing methods to therapies found in his *Investigations*, which led to various too wide, clashing and unilateral interpretations. To some, Wittgenstein later work is defying or "designed to make the reader question his own motives for philosophizing rather than to supply him with a new philosophical program." (Rorty 1980, 6) To others, even though Wittgenstein seemed to be against the construction of philosophical theories, his ideas can be held- despite its fragmentary elusiveness- as making possible a new philosophy, so its work is rather constructive. (Horwich 2013)

It is important to emphasize that we are not concerned here with the many interpretations, which Wittgenstein's ideas gave birth. However, it can be certainly found a sort of deflationist view of philosophy; that is to say, philosophy seems to be no longer concerned with the invention of systematic conceptual corpuses, neither with the analysis of propositions, nor with laying the conceptual foundations of science. Rather, philosophy is conceived as an activity whose purpose is describe the uses of language, that is, the many rules to which the multiplicity of language games are subjected, though such descriptions are always incomplete (Wittgenstein 1986, 124). To put it differently, Wittgenstein's ideas on

⁴ An example of this is certainly E. von Glasersfeld's Radical Constructivism.

⁵ Undoubtedly, R. Rorty's *Philosophy and the Mirror of Nature* and *Contingency, Irony and Solidarity* are exemplar cases of works in which relativist views inspired by Wittgenstein's later ideas are advocated.

⁶ The works of Saul Kripke, Robert Brandom, and Jaroslav Peregrin can be accounted as advocators of the view of meaning as being dependent on rules or norms.

method do offer a certain metaphilosophical perspective, yet, in our view, it does not suffice as to be held as a methodological proposal.

Notwithstanding the absence of a concrete methodological proposal in the late Wittgenstein, it did not impede philosophers from finding on Wittgenstein's ideas the ground for its preexisting conceptions. One illustrative example is Thomas Kuhn who took some Wittgenstein's ideas, namely the relation between rules, language-games and family resemblance, to make a case for the primacy of paradigms over rules. For Kuhn, there are some rules that govern and limit the procedures and solutions to the riddles encountered by scientists. (2012, 38) Such rules originate in paradigms, but it does not implicate that there might be a full set of rules always at hand and, by no means, scientist possess complete knowledge of those rules (42).

For such reason, Kuhn wondered how scientists could come up with a solution to problems encountered under such conditions. This is where Wittgenstein's ideas come into play. In Kuhn's words, "paradigms may be prior to, more binding, and more complete than any set of rules for research that could be unequivocally abstracted from them" (46). To clarify, scientists, in the absence of a complete group of rules, rely increasingly on the knowledge and experience that comes with the paradigm, in which they have been trained or are more familiar with. It is clear the resemblance to Wittgenstein's ideas about how we apply or use the same words in different circumstances, which may be sometimes unprecedented.

Of course, such idea apparently have nothing to do with the topic of philosophical method. However, quite a few philosophers were prone not only to find in such idea a convincing explanation of how philosophy works, but also, as we shall see, to replicate the same sort of argument. On the other hand, it is undeniable that the publication of Kuhn's *The Structure of Scientific Revolutions* (1962) is a reference point that marks the emergence of epistemological relativism.

Indeed, one of the main ideas put forward in *The Structure* is "the insufficiency of methodological directions, by themselves, to dictate a unique substantive conclusion to many sort of scientific questions" (4), which, consequently, made way for the idea about the unsustainability of the model of knowledge that relies on the existence of one common

procedure to any intellectual pursuit. Moreover, the ideas of ‘paradigms’, ‘research programs’, ‘traditions’ or ‘styles of reasoning’ dilute the talk of method in broad psychological and socio-historical contexts talk. To put the matter in another way, there is the suggestion that such contexts and the commitments they involve, suffice to explain the procedures and the problems a given scientists or, as the case may be, a philosopher chose to address, including why he or she made such choices.

Richard Rorty was, perhaps, one of the most prominent philosophers that felt tempted to embrace such a view. In his famous *The Linguistic Turn* (1967), Rorty remarked there has been revolutionaries philosophers throughout the history of philosophy that proposed the adoption of a certain method to limit the task of philosophy. Such methods were always thought to bear no philosophical presuppositions. However, such attempts have failed, for the choice a philosopher make for a particular method is always determined by his metaphysical and epistemological assumptions (Rorty 1992, 1). Rorty, at the time, acknowledged that it might give us an idea of the philosophy according to which philosophy is a matter of opinion, a discipline in which there is no definite criteria for solution of philosophical problems and, in this sense, no knowledge can be acquired. In addition, Rorty also recognized that although the former may be true, it is nonetheless true that progress have been made in philosophy (2).

Certainly, early in his career Rorty adopted a sort of relativistic view concerning methods, making methods dependent on the adoption of certain philosophical principles. However, he was still at the time willing to embrace the idea that the new revolt in philosophy, that is, analytical philosophy movement could be placed, as he put it, “among the great ages of the history of philosophy” (33). Soon afterwards, Rorty’s attitude would change, following the same relativistic strategy found in Kuhn’s work. Thus, Rorty maintained that the difference among philosophies was “a matter of style and tradition rather than a difference of "method" or of first principles.” (1980, 8) This amounts to saying, as Kuhn had already suggested, that the differences in philosophical method could be explained as differences over vocabularies or jargons into which students at different levels are introduced (Rorty 2002a, 32).

As it is known, Rorty’s crusade against representationalism, essentialism and the sort of dichotomous thinking he and others claimed is anchored to it, led him to downplay the

usefulness of some notions traditionally held as important, such as ‘philosophical method’ and ‘philosophical problems’, to the point of proposing its abandonment. In his words, “I view the popularity of these notions as an unfortunate consequence of the over-professionalization of philosophy which has disfigured this area of culture since the time of Kant.” (Rorty 2002, 30)

Rorty seems to suggest that when we talk about methods in philosophy as well as in science as implying that there exist a ‘neutral decision procedure’ is misleading, because, for Rorty, such a thing does not exist. Instead, Rorty adopted the same strategy as Kuhn: talk about disciplinary matrices or research programs. Such kind of talk, Rorty thought, makes the talk about method become dispensable. To explain, Rorty thought that when a person is being introduced into a particular field, a sufficient exposure to some type of literature and education is enough to ensure it to meet some theoretical models, topics and a certain type of vocabulary, on which much his or her work as a professional in a particular field will depend.

Certainly, Rorty’s diagnosis of how professional philosophy works is right. Philosophers regularly find themselves engaged in exegetical activities, relying on others philosophers’ opinions or work. Such choices between one philosopher and another are marked by personal interest and ultimately by a given institutional setting, driving much of her future work. Against this, one could even argue that there have been philosophers in the past that never belonged to department of philosophy or education institution, v. gr. David Hume, but it would not mean that Hume never belonged to a philosophical community in a broader sense. Moreover, the current situation in philosophy is different, because a certain person claiming to be a philosopher would find it hard to be read by professional philosophers, if such person is not a member of a particular academic outpost or philosophical community.

On the other hand, we find Rorty’s proposal for the abandonment of the notion of method quite misleading. It is indeed debatable if such a thing as a method has ever existed, but it is beyond doubt that it has played an important role as a concept, shaping the way we construe and evaluate enquiry and knowledge. Furthermore, the notion of method, taken by itself, just points to a certain orderly way that we ought to proceed when seeking after knowledge.

In the same vein, anti-foundationalists such as Stanley Fish have made an interesting case against the possibility of theory and the need for a method. In his *Doing What Comes Naturally: Change, Rhetoric, and the Practice of Theory in Literary and Legal Studies* (1989), Fish made a case against foundationalism, which he defined as “any attempt to ground inquiry and communication in something more firm and stable than mere belief or unexamined practice.” (1989, 341) Such stable ‘grounds’ or ‘foundations’ should serve as a sort of “reference point or checkpoint against which claims to knowledge and success can be measured and adjudicated.” (342)

The foundationalist type appears to be guided by what Fish calls ‘theory hope’, that is, “the hope that our claims to knowledge can be “justified on the basis of some objective method of assessing such claims” rather than on the basis of the individual beliefs that have been derived from the accidents of education and experience.” (321). In this sense, Fish observed that the quest for a method is a cornerstone of the ‘foundationalist project’.

The problem, according to Fish, lies in that foundationalists assume that such ‘grounds’ or methods, if objective and universal, can only be found in relation with something extracontextual. Faced with this, Fish proposed ‘anti-foundationalism’, which “teaches that questions of fact, truth, correctness, validity, and clarity can neither be posed nor answered in reference to some extracontextual, ahistorical, nonsituational reality, or rule, or law, or value; rather, antifoundationalism asserts, all of these matters are intelligible and debatable only within the precincts of the contexts or situations or paradigms or communities that give them their local and changeable shape.” (343)

Undoubtedly, the idea behind Fish’s proposal is that contexts suffice to explain why a given individual makes the choices it makes and that it provides the knowledge we need to answer whatever question we pose. Consequently, since the contexts or situations yield all the knowledge we need to inhabit and operate within them more or less efficiently, there is no need to build a theory, neither rules nor methods to guide our actions within a given situation.

On the other hand, it has emerged recently a movement called experimental philosophy, which is an emerging philosophical movement based on the assumption that, in contrast to traditional philosophy, the best way to solve philosophical problems is to conduct empirical

research, and analysis of psychological processes that form basis of intuitive judgment whose aim is to back up philosophical reflection. In this sense, some exponents of this movement claim that although experimental philosophy continues the long-standing philosophical tradition in the sense that it is concerned with the key aspects of being human, it represents, methodologically speaking, a break with the traditional way of doing philosophy, challenging, based on experimental research, the way philosophy is to be thought (Knobe /Nichols 2008, 3).

According to experimental philosophers, traditional philosophy is largely based on intuitions, that is, philosophers do not only call on intuition as the principal evidence for or against philosophical claims, but also they evoke them through the cases (thought experiments) they develop. It is important to realize that when experimental philosophers use the expression ‘traditional philosophy’, it refers particularly to the analytical philosophy movement whose members adopted the appeal to intuitions as a part of their methodology. (Hintikka 1999)

Clearly, such movement is connection with the idea of a ‘scientific philosophy’ advocated by some of the founding fathers of the analytical movement such as Bertrand Russell who thought that philosophy might benefit from adapting the methods employed in the sciences, specifically logic, but different from Russell, experimental philosophers employ the methods extracted from psychology and social sciences, challenging long-held common places in a wide range of philosophical topics.

The most important contribution –in the correspondence with the topic of this work- of such movement is metaphilosophical. Certainly, experimental philosophy, through psychological research, have undermined some traditional conceptions held by philosophers of the analytical and phenomenological temper equally, regarding the methodological appeal to intuitions (thought experiments) as well as the philosophical expertise in general.

The latter topic is of great deal of relevance here, since it touches the problem of the sort of abilities required to do philosophy. Historically, philosophers from different persuasions, namely, Plato, Kant, Nietzsche, have maintained philosophers are experts or excel at applying particular concepts, because they have developed a sort of skilled intuition about the use of concepts.

In contrast, the research coming from experimental philosophy has shown that such common place in philosophy is rather unjustified. The results of such experimental research suggest that philosophers advocating this trend might be under de illusion of expertise, that is, philosophers erroneously believe that they possess some skills they in fact do not. (Machery 2015) Indeed, it has been argued that some thought experiments used by philosophers fails to provide sound evidence for their claims or arguments. (Machery 2011)

Moreover, the evidence indicates that philosophers' skills at applying certain concepts might not be radically different from laypeople or non-philosophers'. In this sense, evidence shows that intuitions about reference of people with skilled knowledge in linguistic matters (Philosophers of Language, Semanticists, etc.) are not reliable in that they are biased by the theories they are taught, that is to say, expertise does not improve the reliability of intuitions about reference of proper names. (Machery 2012)

In the same vein, long-standing common places about philosophical expert judgement regarding free will and moral responsibility, have been challenged, specifically, evidence shows that expert judgement are affected by personality traits (v.gr. extraversion), that is, expertise does not seem to reduce the effect of irrelevant factors in making judgement about freedom and moral issues. (Schulz, Cokely & Feltz 2011) Likewise, evidence shows that philosophers' moral judgements are equally subjected to order effects bias, so philosophical training does not seems to guarantee soundness of philosophers' judgement. (Schwitzgebel - Cushman 2012) Equally, philosophers as well as ordinary people intuitions regarding moral obligation and permissibility are subjected to actor-observer bias, that is, they tend to have different judgements depending on whether the judgement is about themselves or others. (Tobia, Buckwalter and Stich 2011)

These results coming from experimental philosophy presuppose a certain metaphilosophical view, which has been termed "metaphilosophical naturalism", distinguished by "an empirically grounded and psychologically informed" view of the philosophical enterprise. (Fischer and Collins 2015, 4) Moreover, such view of philosophy, given its reliance on specific methods is supposed to achieve finally "consensual and correct solutions through replicable procedures of experiment, analysis, or argument" (5), that is to say, experimental

philosophy, so the story goes, is supposed to settle the long dispute about the status of philosophy as strict science or discipline.

It is needless to say that we should be suspicious about a well-funded group of people claiming they have resolved an intricate issue in philosophy by opting for an easy solution, that is, let us copy and paste from social and cognitive science to philosophy and voilà. It is true that we could use conceptual resources and the results of sciences to shed some light on philosophical issues, which in fact has been a common philosophical strategy at least since the time of Pythagoras or Plato. However, we should realize that if we use the methods of sciences we are not just transforming a field, but creating a new one. What is perhaps truly philosophical about experimental philosophy is its ambitions and ideals moving it towards certain philosophical directions.

All the twists and turns of the discussion about method we have succinctly sketched so far, reflects, as we have pointed out before, the pressure that the development of science put on the methodological debate in philosophy. Surprisingly, even the stance of those willing to deny the need for a method, might be regarded as a reaction against the scientific discourse and its stress on objectivity, truth, certainty, and so on. In other respects, such claims reflect a subjective sense of lack of internal cohesion within the domain of philosophy among philosophers.

A critical overview of the methodological debate

On balance, the conversation sketched shows some unfortunate and serious shortcomings on the part of philosophers involved in it, from our perspective, brought about mostly by its conceptual and theoretical choices. Such conceptual preferences, it has to be said, respond largely to extra-philosophical or contextual factors, contributing to the process of forming philosophers' particular beliefs, which are to be strengthened by means of argument. Indeed, education, the state of knowledge of the day or even institutional knowledge inform philosophical reflection. However, philosophers are still responsible for what they make of it.

First, it is difficult to deny that philosophy is an autonomous discipline. However, philosophers advocating the idea of philosophy being so are usually inclined to assign it a debatable fundamental role. For example, conceiving philosophy as a method presuppose it has grounding and prescriptive function over other areas of knowledge, giving it a transcendental and progressive character.

Such view of philosophy is mistaken in many ways. One only need to think for example of the conceptual distinctions proposed in philosophy regarding science and pseudoscience. Such conceptual distinction is disciplinarily important in philosophy; however, no practicing scientist would stop for a second, before pursuing its research, to meditate whether what he is doing is ‘scientific’ or not, nor it is advisable.. There is no denying it might offer a different perspective of its actual practice, yet assuming that knowing about such distinction will result in an upgraded research performance is folly. To illustrate, one does not need to know about free-space optical communication to operate a remote control device, that is, there are levels of knowledge each one appropriate for specific contexts.

Second, advocates of the idea of philosophy as contributing to the furtherance of scientific efforts are prone to hold a hyper-idyllic conception of science, so much so that it led them to regard natural language as defectuous on the base of the perspicuousness of formal languages (i.e. Logic). The problem therein lies in the consequent faulty and derogatory image of natural languages. In such view, some features of languages that are precisely a sign of its richness, recursion and expressive power are portrayed as ‘misleading’.

As an illustration, the defenders of the *scientific conception* believed that ‘hypostases’ or, ‘substantialization’ were “linguistic misleading” and so “fatal to philosophers”, relegating it to a feature of poetry-like sort of language. However, talking about abstract things and issues in terms of others more concrete is a common feature of language, allowing us to make sense of abstract constructs such as time, emotions, society, and so on. Even more, such hyper-idealization induced logical positivists misleadingly to equate an artificial language (i.e. Logic) with the structure of the material world, which, in turn, resulted in a dogmatic conception of knowledge and experience.

Third, methodological pluralists often fail to differentiate philosophers' methodological advice from their actual practices, that is, a particular way of framing one's self-image and focus from method. To explain, we could take a couple of exemplary cases of philosophical theorizing, say, Plato, Kant, Hegel or Carnap.

If we take for granted the way, those philosophers envisioned their practices, we are certain to overlook that regardless the labels used to identify themselves (dialectical, transcendental, analytical), they all were putting forward some possible answer to domain-relevant questions, making criticism of competing hypotheses or attempting to secure enthusiastic support from their peers. That is to say, they were all, in the Austinian sense, performing certain acts of communication, which can be broadly regarded as argumentation.

Fourth, the voices echoing the postmodern sense of dissatisfaction and incredulity about scientific self-legitimacy narratives, offer, perhaps, the most accurate diagnosis of the way discursive practices such as philosophy are in reality performed. Thinkers such Rorty and Fish called attention to the role played by instruction, institutional practices and knowledge, exegesis and tradition and ultimately temperamental traits in shaping and driving most of philosophers' work, that is to say, they emphasized the primacy of contexts. In essence, contexts provide information about the word choice, frames and conceptual resources available to philosophers, giving philosophical hypotheses their characteristic configuration.

On the other hand, anti-*x* philosophers' crusade against the notion of method, as probably expected by themselves, is no less explainable as an epochal occurrence. It is certainly motivated by perfectly defensible pluralistic and multiculturalist political convictions, but it is also unlikely to achieve its intended results.

To explain, Rorty, for instance, directed his criticism towards certain cultural view of science distinctive of 'secularized societies', which placed 'science' on a par with notions such as 'rationality', 'truth-as-correspondence', 'method', 'objectivity' and so on. Such cultural understanding of science, in Rorty's view, has resulted in the segmentation of culture, privileging some of its manifestations over others. Taken to the realm of knowledge, it has led, so goes the story, to praise natural science in detriment of humanities, which is seen, to say the least, as a totalitarian segmentation.

It is important to notice the political nature of the motivations behind Rorty's and alike philosophers' criticism of 'scientific narratives'. A critique of this sort is, from our perspective, self-defeating for various reasons. First, it is directed to certain view of science supposedly proper to 'secularized culture', but neither it is a homogenous group of people, nor there is no a unanimous conception of science among the members of such group, of which Rorty and his fellows might be an exemplar case. That is to say, Rorty's critique points to a doubtful 'common belief'.

Second, it is based on the assumption that human beings can define and reshape themselves and its cultural environment purposefully. Evidently, humans give direction to and mold their environments, and by doing so, change themselves. However, it is disputable and potentially ideologically pernicious the idea that it is always done deliberately. To explain, the way we perceive and assess the character and significance of past events is always done by hindsight. From such perspective, past events may appear more articulated or even more orchestrated than they really were; however, historical and cultural changes are far more hazardous than our seeking-pattern brain may allow us to see. The way we presently talk about and regard science may be seen contextually useful, that is, it may cease to be so and determining why, how and when it has to happen is no less totalitarian.

Third, Rorty suggested 'brushing aside' notions such as method because they were part of an obsolete, rigid and oppressive foundationalist epistemological project; however, words do not disappear from every day or technical use just because philosophers decree it. Even more, it overlooks an important aspect of the notion of method, that is, order. Simply put, such notion simply points to a certain order or regularity needed for learning and pursuing specific research.

Lastly, experimental philosophers are equally prey to their conceptual assumptions and philosophical convictions. X-philosophers regard science so highly that they are inclined to believe that 'empirical' evidence must be the rule for any sort of intellectual activity, so much so that they see themselves as challenging the so-called 'armchair' philosophy, which purportedly relies, contrary to x-phi tenets, on intuition and conceptual analysis. Clearly, it is motivated by the long-held ambition of making philosophy a continuous with science.

However, there are several problems with such view, namely, first, the assumption that traditional philosophy relies on intuition furnishes, applying the same X-phi criteria, no factual basis. It is just an assumption that cannot be proved. Second, when it comes to empirical evidence as criterion of scientificity, it is sure philosophy will not satisfy it, because it is a speculative and argumentative activity. Behind such assumptions, there is the veiled desire of making philosophy a completely different activity.

We should take those philosophical perspectives on the issue of method as such, that is, they are hypothetical proposals offered as alternatives to precedent suggestions, regarding how philosophy *should be* conceived and performed as an activity. Such perspectives open up new and emerging interesting ideas to discuss, but they should in no way be regarded as definitive, for, given its prescriptive nature, they are in essence dependent upon one or another philosopher's leaps of faith, animating, in turn, their conceptual and theoretical choices, which, at the same time, determine the character of philosophical hypotheses.

Certainly, the role subjectivity plays in the philosophical enterprise is often overlooked, perhaps, precisely due to philosophers' tendency to model philosophy's self-image on an idealized conception science, failing to see that even scientific theories, in many cases originate from subjective hunches, subsequently turned into to-be-proved hypothesis, which, in turn, are no less subjective, given its lack of confirmation.

Overall, the above shows the way philosophers have been led astray by how they conceptualized and praised the scientific enterprise, preventing them from realizing the character of what they are doing. That is to say, the framing of the relation between philosophy and the sciences ultimately motivates philosophers' methodological proposals.

Naturally, our criticism of the diverse positions presented here is not an attempt to say that they are all wrong. Rather, our personal views on the issue of method echo some of their tenets. To explain, we are convinced that philosophy should be done taking into account scientific results and theories, but it must not try to emulate scientific procedures. Likewise, as anti-foundationalist philosophers pointed out, no philosophy is nonsituational, that is, the contextual factors leave a distinctive influence on philosophical ideas.

However, such proposals failed to acknowledge that philosophy, like it or not, is essentially an argumentative practice, that is, it relies heavily on language and verbal expression. In this sense, assessing philosophical theories demands more attention to be paid to conceptual frames guiding the philosophers' theorizations over specific issues, which requires attention being given to results of cognitive science. For this reason, in the next section, we shall conduct comparative "case studies" of representative ways of doing philosophy, taking into consideration the fact that they are nothing other than arguments, which take specific directions depending on the conceptual frames a given philosophers assume.

Chapter III – Case studies on philosophical method

Conceptual frames and philosophy

As noted above, philosophy has evolved essentially as an argumentative practice, exhibiting specific patterns aiming at convincing others of believing certain ideas. In this sense, it is essential, to my mind, to pay careful attention to language. This is obviously nothing new in itself, since there is a whole branch of philosophy purportedly devoted to the study of language, namely, philosophy of language. However, the way language is treated in such field focuses on formal aspects of linguistic expressions (e.g. truth-functionality), which has frequently resulted in inconsequential quarrels about small portion of a far more complex phenomenon, ignoring the relation between language, human cognitive abilities and contextual factors determining the meaning of words and expressions of a particular language.

Surely, there are more pragmatic-focused suggestive work done falling under the heading of philosophy of language with representative figures such as J.L. Austin, H.P. Grice, W. Sellars among others. Unfortunately, such approaches have not yet been fully developed into a comprehensive philosophical account of language, providing fertile soil for analysis of broader linguistic practices such as philosophy.

Indeed, the above observation must be qualified so as not to judge too severely or seemingly downplay the work done based on such philosophers insights. Definitely, there has been some scientific research conducted, based on philosophical claims about language. There are some important efforts in this sense, for instance, Michael Tomasello, as he himself acknowledged, introduced his usage-based theory of language acquisition having the later Wittgenstein's ideas regarding meaning as a philosophical precedent perspective. (2003)

In the same way, G. Lakoff have acknowledged the contribution of Austin's ideas to expose the deficiency of the classical view of categories. Particularly, Lakoff maintained, "Austin's analysis prefigured much of contemporary cognitive semantics - especially the application of prototype theory to the study of word meaning." (1987, 18) Likewise, D. Wilson and D.

Sperber advanced the relevance theory whose philosophical foundation is P. Grice's views on implicit communication and specially the role of intentions. (2006)

On the other hand, the view of meaning advanced by Sellars according to which learning to use a language - knowing the meaning of words or expressions - is equated with knowing to obey the rules of a given expression use and the inferences it sanctions, has been resumed in the field of Cognitive Science as a theoretical base to generate computational models of linguistic comprehension. (Blouw – Eliasmith 2018)

It should be noted that those are examples of aspiring scientific theories, which have found themselves echoing certain precedent philosophical perspectives. However, it lead us right back to point: there is no full-fledged philosophical account of language. What is more, the scientific study of language is developing so quickly that philosophers are increasingly losing research ground regarding linguistic phenomena, which calls upon philosophers to be cautious and become aware of scientific advancement of the study of language as it is happening in the field of cognitive linguistics where many pragmatist-oriented philosophical considerations on language are incorporated.

The above said points to a characteristic feature of philosophy as an argumentative activity, that is, it is a highly speculative field where numerous hypothetical views are advanced on various matters by way of argumentation. It applies to language, indeed. Although language has been of philosophical interest since the time of sophist and Plato, it was not until the twentieth century when philosophers of many persuasions threw themselves fully into it. However, such views of language are at most suggestive.

Under these circumstances, I would rather adopt one the central tenets of cognitive linguistics known as the *encyclopedic view of knowledge/meaning*. The core idea behind such precept is that a large network of structured knowledge (conceptual systems) underlies the process of meaning construction of a lexicalized concept (words), which, in turn, is regulated by the contexts of use. (Evans – Green 2006, 206 – 44) In this case, for a better understanding of the notion in question, it is useful to introduce some terminological clarification regarding the relationship between categories, concepts, words and meaning.

On the one hand, categorization is a series of processes whose results are the categories. These processes involve classifying information as well as accessing to knowledge about such classes, or simply; it is the process of assigning kind membership to particular things, events and relationships between such entities. In this way, categories enable us to organize information and experiences, besides allowing us to draw upon it to make predictions (inferences) about the way of the world, helping us to understand and explain the particular facts or events that populate it. It is understood, then, that the categories are at the base of the process of reasoning and so communication.

On the other hand, there is an intimate relationship between categories and concepts. Concepts are in some sense categories of material objects, properties, events, single entities and abstract notions or constructions. However, conceptualizing implies having an internal or mental representation in the form of an iconic or prototypical image of entities, activities or processes, allowing us to categorize them in a meaningful way. The concepts are, in short, the prototypical mental representation (image) of members of categories, concentrating the categorial information, making possible the organization of our experience and equally imposing a certain order on it.

Correspondingly, the set of words constituting a particular language are the lexicalization of such concepts, that is, they are the expression by words of specific concepts. In other words, there is a close relationship between conceptual systems and language, although the latter does not reflect in its full complexity the processes behind 'putting into words' our concepts. Clearly, the meaning of words and expressions is conceived here as a function of concepts, which are representations of what is perceived (percepts).

In this way, words, expressions, constructions can only be understood in relation with groups of concepts usually called domains or frames, which are nothing but sets of related concepts incorporating bodies of knowledge or schematized experiences, structuring correspondingly our conceptual systems. (Croft - Curse 2004, 7 – 39) It follows that lexicalized concepts are verbal cues or indications of huge network of knowledge contained in human conceptual systems, elicited in the process of meaning construction by contextual factors intervening in the process of communication. The linguist Ronald W. Langacker has summarized such view briefly in the following way:

*“In this approach, a lexical meaning resides in a particular way of **accessing** an open-ended body of knowledge pertaining to a certain type of entity. This knowledge is represented in figure by a series of concentric circles, indicating that the knowledge components have varying degrees of **centrality**. This ranking for centrality is one facet of a lexical item’s conventionally established value. For a given lexical meaning, certain specifications are so central that they are virtually always activated whenever the expression is used, while others are activated less consistently, and others are so peripheral that they are accessed only in special contexts.” (2008, 39)*

Let us consider for a moment the lexical concept of dog. Dogs are domesticated terrestrial mammalian four-footed animals, occurring in many breeds, with non-retractile claws and typically long muzzles, which bark and howl. As can be noted, there is a wide range of information (knowledge) conveyed through such simple definition whose different aspects can be probabilistically activated depending on the context, some of which are more central (conventional) than others. Consider the following expressions:

- a. The **dog** barked all night.
- b. The **dog** unit was on patrol in the town.
- c. She is a real **dog**.
- d. A **dog** is a man’s best friend.

Those examples show the many possible meanings ‘dog’ can have depending on context. Some of these meanings are generic, characteristic or intrinsic to the entity such as a.) A loud gruff cry typically uttered by dogs. Another are conventional or culturally shared such as b.) Dogs trained to assist the police work and d.) The cultural ideal of a dog being loyal and friendly with humans, which stems from millennial-old domestication. Also, there are metaphorical meanings such as c.) The unattractive aspect of a woman is brought to light.

More simply, the information (knowledge) we possess about an entity plays an important role in the configuration of its lexicalized concept meaning, which implies that meaning is characterized by continuous change. The more information stored in our conceptual systems we have, the more effective the use of words and expressions.

In the light of such view of meaning, the traditional dividing lines between linguistic and extra-linguistic factors determining the meaning of expressions become blurred. Therefore, the classic semantics – pragmatics contrast is no longer seen as stark as it has been for formal conceptions of meaning. Certainly, such view is based on the recognition that language is

learned and use in context of communication as well as the acceptance that human cognitive (linguistic) ability must be taken into account for a reasonable interpretation of the phenomenon of language and what we do with it.

Evidently, up to now we have referred to meaning of words and expressions, however, it is yet to be developed the consequences of the view succinctly exposed above for lengthier forms of verbal expression either spoken or written. Particularly, it remains to be formulated how such perspective might be put to work to analyze philosophical discourse, which customarily takes the form of written argumentative essay.

Of course, such an effort lies outside of our purposes, yet we are firmly convinced that the view of language under discussion might reveal important clues as to why philosophers usually portray themselves as performing a wholly different activity than they actually do. Additionally, it may throw some light on philosophers' self-perception as doing philosophy differently than their peers.

In this sense, it is essential to remember here that linguistic meaning depends largely on conceptualization, which means that the existence of a conceptual substrate must be assumed at the discursive level as well. Such underlying conceptual layer, as Langacker expressed it, involves many facets such as "the many domains of knowledge invoked, mental constructions (e.g. metaphors), the linguistic interaction itself, and apprehension of the context in all its dimensions." (463)

This definition directs attention to conceptual aspects having a primary role to play regarding discursive communication. First, there is the idea previously exposed that conceptual systems group an intricate network of information at our disposal activated according to contextual communicative requirements. Second, mental constructs such as frames, conceptual metaphors or metonymy. Third, communicative interplay. Fourth, the actual discursive context.

In that context, we would like to point out the importance of conceptual frames in philosophical argumentative discourse. A conceptual frame is a theoretical construct suggesting a certain organization of the knowledge we possess about entities, events, properties and relation, which works as scenic representation against which the meaning of

a lexical concept is to be understood. Frames are schematized representation of human experiences, judgments, behavior or expectations defined by cultural institutions, human bodily experience and in general the knowledge arising from usual interaction with our environments. In short, it is “any coherent body of knowledge presupposed by a word concept.” (Croft – Curse 2004, 17)

The key aspect about conceptual frames as tool for evaluating philosophical discourse, we would like to highlight is that they are, as Lakoff and Johnson put it, *inference generating*. (1999, 117). To explain, it is essential to remember that frames are ultimately sets of interrelated information comprising a mental scheme contextually elicited from verbal cues or expressions, enabling understanding of such phrases by participants of communication process. A classic example is the Restaurant frame, for example, an expression such as “*we had a three-course meal and, to be frank, it was worth every penny.*” Such expression clearly evokes the Restaurant frame and its understanding implies inferences drawn from the background knowledge possessed by the individuals engaged in communication and contained in the frame.

It is key to remember that each individual construes reality differently, each individuals sees a given situation from a given perspective, and it is implausible to develop a complete view of the totality of events and objects constituting reality. However, understanding of discourse, including the inferences that could be made, between individuals engaged in communication is possible due to shared experiences conceptually packed in frames. In other words, frames facilitate the sufficient conceptual overlapping enabling effective communication.

Similarly, conceptual frames theory provides insight into linguistic phenomena such as presupposition, since it is a form of inference. Certainly, it has been a topic, which has drawn some attention of philosophers such as P. F. Strawson or W. Sellars. Nonetheless, despite their either logical or pragmatic orientation, the way such philosophers approached the issues around presupposition did not account for cases in real life where speakers might be assuming a purported contradiction. (Lakoff 1987, 131 – 135)

Presuppositions, from the perspective of frame semantics, are regarded simply as part of the background information a given conceptual frame provides. Consider an example expression used by Lakoff:

- You didn't *spare* me a trip to New York; you *deprived* me of one.

The classical ways of analyzing what such expressions presuppose would face serious problems, since it would involve some apparent contradictions. However, from the perspective of conceptual frames theory, the highlighted verbs bring into mind different framings⁷, one is negated and another asserted. Moreover, it generally asserts (presuppose) one of the interlocutors regarded the trip to New York as beneficial and the other as bad or unnecessary.

All things considered, I am convinced that conceptual frame theory is a theoretical tool enabling to acquire more insight into the nature of philosophical activity, that is, the way philosophers develop their arguments and why they believe they do something different than their actual performance. In this sense, the conceptual frame theory and its account of inference and presupposition, which, in turn, are central to argumentation, would provide us a better understanding of what philosophers do and how a given student of philosophy is expected to do it, that is, how philosophy should be done.

Lastly, let us admit that philosophers are often not aware of the conceptual frames – the language - underlying the formulation and transmission of their ideas, which serve as limits for them and allow a series of inferences and general lines for interpretation of the world. Obviously, being fully aware of the assumptions and consequences that the use of a certain type of language entails is not only strenuous, but also paralyzing, and it could ruin any attempt to formulate a theory from the start. However, highlighting and exploring the presuppositions and consequences that the use of certain vocabularies entails, at least since Plato, has been fertile ground for philosophical endeavors.

To specify in detail, the theoretical notion of conceptual frames or domains can be helpful in underscoring the background information (system of concepts) behind philosophical arguments, which, from our perspective, guide the process of construction of research problems, the particular procedures devised or followed to tackle them as well as the proposed solutions a particular philosopher puts forward. That being said, it can be seen that

⁷ It is important to note that we are talking here about different schematic representations of a situation.

identifying the conceptual frames or domains underlying and giving character to philosophical arguments might help us to work out why a given philosopher conceptualized and postulated certain entities, properties, relations and events, which are expected to operate or occur, under normal circumstances (scenes), in specific ways.

It should be stressed that it is not just about frames affecting the linguistic formulation of a theory; rather, the notion of conceptual domains presuppose that the information contained in it is characterized as having scenic organization, involving various elements, namely, actors, inanimate or animate entities whose part in the setting can be inferred on the basis of schematized information in the frame. That is to say, conceptual domains can also work as background sceneries (templates) against which philosophical theories can be compared and contrasted, and accordingly, evaluate the many ways philosophers often exploit the norms of verbal expression by devising new terminology in order to make a case for specific views on a variety of topics. Some of those linguistic innovations may eventually become fashionable, working as cornerstone of entire philosophical research trends or traditions.

Equally, it must be remembered that conceptual domains show a certain angle, understanding or perspective on the way individuals or entities are related within the confines of a specific environment. That is to say, it always makes us concentrate our attention on particular events in a partial and perspectival way, which could facilitate the identification of philosophical hypothesis central focal points. In general, as a tool, it might provide a richer understanding not only of a given philosophical theory, but also of philosophy itself as an activity whose methodology is essentially argumentative or discursive.

As has already been pointed out, the notion of conceptual domains rest directly on a series of assumptions regarding the nature of language, which are the result of factual research on language. Such choice is motivated mainly because research on language is developing rapidly, emerging new more solid approaches to language as a result, which, to my mind, call on philosophers to engage in debating them and, why not, exploit them as resources for the purposes of philosophical theorization as well as evaluation of philosophical ideas.

With this in mind, it must not be overlooked that this is a philosophical research on methods benefiting from cognitive linguistics approaches, concept and theories. It means that it should not be expected to find here a classical lexical research focusing on grammatical

constructions, synonymy or the cohesive linguistic structures of a text or discourse, for instance.

Instead, the following case studies attempts to disclose some details of the conceptual frames adopted by philosophers as well as how it shapes their philosophies and methods. Moreover, given that conceptual frames structures and help to make sense of philosophers' vocabulary and therefore their arguments, an effort is also made to bring to the fore the underlying pattern or order (method) found in philosophical argumentation. As a result, seeing philosophy mainly as a pattern-governed argumentative practice renders the method a given philosopher prescribes rhetorical. To put it another way, the method a particular philosopher puts forward, say phenomenological, dialectical, analysis of language, becomes a mere argumentative rhetorical device.

Case studies

Plato - Dialectics

Platonic dialectic has always been estimated in terms of its relation to dialogue. Perhaps, such view of dialectics originates in Plato's own characterization of the dialectician in his *Cratylus* as someone "who knows how to ask and answer questions". (Crat. 390c) Certainly, Platonic written dialogue strive to emulate Socratic oral conversations, so the question-answer game found in the dialogues may be seen as a way to remain true to inner form of oral dialogue, shaping Plato's literary style. Likewise, Plato was consistently clear regarding the philosophical activity and the sort of skills required to excelling at it. In general, a sufficient qualified philosopher must exhibit conversational and argumentative competences, in which the art of dialectics, as a whole, consists.

Generally, dialectic is portrayed as consisting of two opposed procedures, namely *diaeresis* or division and *synagoge* or collection. In *Phaedrus*, Plato presents such procedures in opposition, but at the same time part of the skills a dialectician should possess. (Phaedrus 256d – 266c) Both procedures seems to indicate that a philosopher should be able to define,

make conceptual distinctions, as well as to be able to reason about concepts regardless its particular applications. That is to say, a great deal of the art of dialectics involves an extensive process of developing one's powers of conceptual and abstract reasoning. (Rep. 539d – 540a)

Since dialectics is a conversational art, Plato insisted in some aspects of dialectics regarding the tempo and tone required to perform it properly, as well as the number of conversant and their roles in the dialogue. Particularly, Plato said that contrary to lectures or monologues, the force or tone suited for dialectics should be moderate. (Meno 75d) Likewise, the rhythm of the conversation should be calm and unhurried; also, it should not be aggressive and lengthy. (Protagoras 336a) As it is obvious, a dialogue needs more than one person and a leading figure. (335d)

Undeniably, dialogue existed before Plato used in dramatic composition and, as far as we know, Plato did not invent dialectics (D. Laertius 2018, 419), though he may have coined the word. (Schiappa 2003, 44) However, it is interesting to consider the reasons motivating Plato's choice for dialectics as the proper method to philosophy. It is commonly thought Plato strived to imitate Socrates' elenctic oral dialogue. However, the character of the procedures composing the art of dialectics seem to suggest that Plato's method of dialectic is conceptually modeled upon geometry. In that sense, before evaluating how dialectic was performed in Plato's dialogues, we shall see how geometry shaped conceptually Plato's philosophy and method.

Geometry and Greek philosophy.

As it is known, geometry did not originate in ancient Greece, but in Egypt. Plato himself tells a story of an Egyptian deity named Theuth who purportedly “invented numbers and arithmetic and geometry and astronomy, also draughts and dice, and, most important of all, letters.” (Phaedrus 274d) Similarly, Aristotle reported, “the mathematical sciences originated in the neighborhood of Egypt, because there the priestly class was allowed leisure.” (Met. 1.981b)

However, it took the Greek genius to axiomatize geometry, turning it into a science in the sense that “they generalize it so as to make it of use in measuring the distance of inaccessible objects, such as ships at sea.” (Burnet 1908, 24) That is to say, ancient Greeks re-formulated

geometry, assigning it different levels of abstraction, making it capable of being applicable to different types of objects regardless its distance or form.

Certainly, the Greeks made real advances in the realm of mathematics in general. Particularly, according to Aristotle, “Pythagoreans applied themselves to mathematics, and were the first to develop this science; and through studying it they came to believe that its principles are the principles of everything.” Notably, Pythagoreans believed, Aristotle continues, “that numbers are the ultimate things in the whole physical universe, they assumed the elements of numbers to be the elements of everything, and the whole universe to be a proportion or number.” (Met. 1.985b – 986a)

In the particular case of geometry, Pythagoreans made of it “a liberal education”, coming to propose several new developments in the field, standing out as influential “the construction of the five regular solids” along with “the Pythagorean theorem”(Gow 1884, 153). The influence of both theories on Plato’s ideas can be found in *Timaeus* (52c – 61c) and *Meno* (82b – 85b), respectively.

It should be noted that, moreover, “a generalized late-fifth-century interest in such themes as harmony, arithmetic, music, astronomy and geometry could be recalled, almost a century – and much mathematics – later, as an emphasis upon numbers.” (Netz 2014, 173) That is to say, the discovery of certain specific numerical patterns and regularities among events, phenomena and objects populating the world must have acted overwhelmingly upon Greek mentality to the extent of to lead some of them such as the Pythagoreans to think of numbers as the principles of everything.

It is true that numbers existed well before Greeks; however, Greeks and Pythagoreans, specifically, attributed to numbers an ontological status. Pythagoreans found in everything to be measurable, and so subjected to be represented by numbers, coming to apply numbers to abstract notions such as justice (4) or soul or mind (1). In this sense, Pythagoreans also made of numbers a principle of knowledge and truth. Numbers, since they were represented by Pythagoreans with pebbles disposed in specific geometrical forms, are regarded as establishing boundaries or limits. Therefore, whatever has no limits, is not numerical or rather, its proportions or measures cannot be ascertained and consequently it is unknowable. (Curd 2011, 133)

Equally important, Pythagoreans gave prominence to the number one (1). As Porphyry tells us, Pythagoreans found in numbers, a mean to express ‘the knowledge in the mind’, ‘incorporeal forms’ and ‘first principles’. In that regard, the One served to designate “the reason of Unity, Identity, Equality, the purpose of friendship, sympathy, and conservation of the Universe, which results from persistence in Sameness. For unity in the details harmonizes all the parts of a whole, as by the participation of the First Cause.”(Fideler 1988, 133) As it is seen, numbers resemble, in some sense, Platonic forms, though, as we know, Plato made some distinctions between numbers and forms. It is undeniable; however, that Greeks found in numbers a model to the kind of entities we could only access using intellectual capabilities.

It is relevant to observe, furthermore, that such interconnection between geometry, mathematics in general and philosophy is partly explainable as a peculiar feature of Greek language itself. In this sense, it has been pointed out that there are several words and cognates in ancient Greek language whose semantic extension relates different conceptual domains of knowledge ranging from mathematics to morality.

As illustrative cases, let us consider the word *ginōskō* (γινώσκω), which means to know, learn, judge or discern as in the Delphic maxim “know thyself” (γνῶθι σαυτόν). (Protagoras 343b) Correspondingly, its cognate word, *gnomon* (γνώμων) means one that knows or examines, an interpreter, discerner when applied to persons. At the same time, it refers to measuring instruments such as water clocks or carpenter’s squares, hence also rules (instruments and norms of conduct). Likewise, it is used with different senses in mathematics to pick out numbers, in geometry to parallelograms and perpendicular lines. As can be seen, such word connects different conceptual domains ranging from mental or intellectual operations to mathematics and even measuring tools. (Cassin 2014, 567)

Similarly, the words *métron* (μέτρον) and *kanōn* (κανών). The former refers to measuring quantities, sizes, space or time and its related word such as *metriotes* (the just mean, moderation), *mésos* (middle, moderate) and *mesótēs* (middle, balance, excellence, virtue) are central to Greek ethical ideal found formulated in Aristotle’s ethical theory. It is the same with the latter, *kanōn* (κανών) referring equally to a measuring instrument, but also it is metaphorically extended to refer to abstract entities such as models, rules, standards, paradigms. That is to say, such words not only “attests to the close relationship in Greek

between mathematics and morality.” (567), also, as we see it, show how mathematics and geometry have shaped conceptually ancient Greek culture, mentality and philosophy.

The importance of mathematics and geometry upon philosophy since the Greeks, to my mind, have been properly put into perspective by Bertrand Russell when saying that

“mathematics is, I believe, the chief source of the belief in eternal and exact truth, as well as in a super-sensible intelligible world. Geometry deals with exact circles, but no sensible object is *exactly* circular; however carefully we may use our compasses, there will be some imperfections and irregularities. This suggests the view that all exact reasoning applies to ideal as opposed to sensible objects; it is natural to go further, and to argue that thought is nobler than sense, and the objects of thought more real than those of sense-perception.” (2004, 44)

Russell’s observation is relevant here because it offers a plausible explanation of some traits of Plato’s philosophy, namely, theory of paradigmatic forms, the belief in a ‘super-sensible intelligible world’ as opposed to the sensible world, as well as its conception of philosophy in the sense of being an intellectual activity, concerned with ideal objects, rather with changing, contingent and worldly ones. As we shall see in more detail, such *more geometrico* way of thinking, also shaped Plato’s epistemological, metaphysical, ethical conception, as well as his views of human essence and capabilities.

Geometry, reason and dialogue

It is widely known that Plato’s praise for mathematics, manifested clearly in including arithmetic and geometry as the propaedeutic knowledge required to be a skilled dialectician. (522c – 527a) It is probably more widespread the story, though it is currently thought to be spurious, of Plato having put an inscription in the frontispiece of the Academy saying: “Let no one ignorant of geometry enter”, let alone the fact Plato developed an appealing mathematical-metaphysical direction known as mathematical Platonism. However, it is rarely observed how mathematics shaped conceptually Plato’s philosophy, marking the beginnings of metaphysics as concerned with supra-sensible objects.

As Aristotle reported, Plato’s introduction of *εἶδος* (pure forms) presupposed a change of direction regarding the question of the first principles. Pre-Socratic philosophers have held the conviction that the first principles were corporeal or material. Unlike them, Plato proposed the unchanging, supersensible and unique archetypical forms, (Met. 1.987 a – b)

regarded as having causal force making things appear as they are. (Phaedo 96a – 101c) Such shift towards the supersensible, as suggested by Russell, may find an explanation in Plato's mathematical inclinations who found in some features of numbers the model of pure forms, namely, non-materiality, can be grasped and 'manipulated' by the intellect, etc.

The philosophical significance of such mathematical conceptual shift has not been properly assessed, often treating Plato's philosophy and mathematics separately. However, mathematics shapes not only Plato's metaphysics, placing at the center of it abstract entities, but also its conception of reason and so the nature of philosophical research.

As evidence of this, let us consider the role that Plato assigns to arithmetic and geometry. Both types of knowledge force the soul to resort to the intellect and reason about what remains, what is in itself, separating it from what is becoming and directing it towards the essence. In the specific case of arithmetic or the art of calculating, it deals with numbers, which, according to Plato, "can only be conceived by thought, and which it is not possible to deal with in any other way." This makes their study compulsory for the philosopher, since, as we said, "it plainly compels the soul to employ pure thought with a view to truth itself." (Rep. 7.526a-b) Likewise, geometry, since it helps to train the intellect in the contemplation of the Idea of Good and the essence, is understood as "the knowledge of that which always is." (Rep. 7.527b)

As can be seen, there is an identification between the abstract character of numbers (characteristic shared with pure forms), the intellect and genuine knowledge. This, in the same way, makes the intellect (reason) have specific properties, namely: it is detached and contrary to our apparatus of sensible perception and escape contingencies and the puzzling of becoming, has the ability to separate or distinguish and penetrate into the essence of things. (Rep. 7.524c)

Certainly, it is worth recalling here a passage found in *Theaetetus* in which Plato wanders away shortly from the main topic of the dialogue to address unsuccessfully the nature of false opinion. On that same issue, Plato admitted that it "is a kind of interchanged opinion when a person makes an exchange in his mind and says that one thing which exists is another thing which exists." (Theaet. 189b – c) That is to say, false opinion occurs when the intellect fails to make clear distinctions (separate) one thing from another.

Here it is important to note that ‘separate’, ‘reason’, ‘calculate’, ‘converse’ and ‘practice dialectic’ are senses equally grouped under the Greek word *dialégo* (διαλέγω) and its derivatives. Hence, it is possible to reason or run through (*dialégesthai*) numbers, words and essences (Rep. 526a), just as one can *dialégesthai* in the sense of conversing or practice of dialectics. (Rep. 526a) In this way, it is not surprising that Plato conceived the act of thinking as a dialogical process when saying that thought is “a silent inner conversation of the soul with itself.” (Soph. 263e) In such process the mind, Plato stated, keeps “asking itself questions and answering, affirming and denying.” (Theaet. 189e – 190a)

As can be seen, Plato’s conception of reason comprises two aspects, namely, it is discriminative and dialectical. Both aspects are tied to geometry, given that such study prepares the mind to draw distinctions and see the true nature of things. As for the art of dialectics, which consists broadly of thinking or considering things in opposites, requires the intellect to indicate differences among things.

Mathematics and more precisely geometry, overall, serves as model of the sort of knowledge Plato aims at attaining, which is not to be found in the realm of sensible perceptions and whose access therefore can only be obtained by the intellect by means of *logos* (concepts, words, discourse). That is, geometry functions as a bridge providing passage over the barrier of the sensible towards the realm of the intelligible where Plato located his so-called pure forms. It should come, for this reason, as no surprise that Plato modeled the art of dialectics, the procedures composing it, upon geometry as well.

Dialectics and geometry

No doubt, dialectics is the only method allowing one to contemplate the mathematically inspired objects Plato called ‘forms’ and also exact an account of the essence of each thing. It has been usually considered to be made up of distinct components, namely *elenchus*, *diáiresis*, *synagogé* and *hypothesis*. However, leaving aside the Socratic refuting element, the remaining ones are of geometrical inspiration.

Plato’s *more geometrico* persuasions are betrayed clearly in respect to the so-called method of hypothesis. As Plato declared, the method of hypothesis is a prototypical example of the procedure followed by Geometricians when considering:

“ whether a certain area is capable of being inscribed as a triangular space in a given circle: they reply—“I cannot yet tell whether it has that capability; but I think, if I may put it so, that I have a certain helpful hypothesis for the problem, and it is as follows: If this area is such that when you apply it to the given line of the circle you find it falls short by a space similar to that which you have just applied, then I take it you have one consequence, and if it is impossible for it to fall so, then some other. Accordingly I wish to put a hypothesis, before I state our conclusion as regards inscribing this figure in the circle by saying whether it is impossible or not.” (Meno 87a – b)

It must be remembered that Plato brings about such exemplar case of reasoning in the middle of an ethical discussion regarding whether virtue could be taught or not, that is, such geometrical procedure is adopted as a model to be applied to philosophical research. It consists, generally speaking, in the evaluation of the consequences of holding certain assumptions or hypothesis.

Such method can be useful in dialogical reasoning in the sense that it allows to work out a plausible solution to a given question. (Meno 86e) Questions, in this regard, are given a tentative answer, that is, a plausible answer (hypothesis) is assumed to explore then its consequences in terms of ideas “not only what happens if a particular hypothesis is true, but also what happens if it is not true.” (Parm. 136a) In addition, it is important, according to Plato, not to mistaking the hypothesis’ consequences for the principles being assumed. (Phaedo 101d, 107b)

It is key to remember that Plato, in the Republic, introduced the allegorical figure of the divided line to represent the different levels of knowledge. There he proposed a further distinction between the mathematical and dialectical sorts of knowledge, both pertaining though to the intelligible order. However, according to Plato, mathematics and dialectics differentiates in the way they treat hypothesis:

“By the distinction that there is one section of it which the soul is compelled to investigate by treating as images the things imitated in the former division, and by means of assumptions from which it proceeds not up to a first principle but down to a conclusion, while there is another section in which it advances from its assumption to a beginning or principle that transcends assumption, and in which it makes no use of the images employed by the other section, relying on ideas only and progressing systematically through ideas.” (Rep. 6.510b)

In other words, mathematical (geometrical) knowledge is dianoetic or discursive, starting from hypothesis (assumptions), which are not demonstrated, drawing conclusions from them

by means of images. While in the dialectical way hypothesis are proposed, inferring from them non-hypothetical principles by mean of ideas, “making no use whatever of any object of sense but only of pure ideas moving on through ideas to ideas and ending with ideas.” (Rep. 6.511c)

As it was mentioned above, the art of dialectics is similarly composed of *Diairesis* (διαίρεσις – *division*) and *Synagogé* (συναγωγή – *collection*). Such complementary operations consists in, on the one hand, “dividing things again by classes, where the natural joints are, and not trying to break any part, after the manner of a bad carver.” (Phaedrus 265e) On the other hand, collection involves “perceiving and bringing together in one idea the scattered particulars, that one may make clear by definition the particular thing which he wishes to explain” (Phaedrus 265d).

It is important to notice that such processes are consistent with Plato’s conception of the intellect, which has as a main feature the ability to separate and differentiate. In the same vein, although both division and collection are interdependent procedures, division seems to be the central one, since dividing genera into species also shows, as Plato put it, “where the natural joints are”. That is to say, while dividing classes we are able not only to tell the differences, but also identify where those classes overlap, making it easier to ‘bring them together’, which is the essence of the process of collection.

With attention to the relation of such procedures with geometry, it might be found in the geometrical theories of commensurability, ratios and proportions. Significantly, the contemporary Greek mathematician Stelios Negrepointis have found out that Plato’s division and collection procedures are close imitations of the procedure of *anthyphairesis* used for the definition of proportionality and the base of the theory of incommensurable magnitudes “and thus Geometry was subservient to Platonic philosophy and dialectics.” (Negrepointis 2019, 86)

To be sure, Plato’s discussion on the nature of knowledge presented in *Theaetetus* features the young Greek mathematician Theaetetus struggling to offer a general definition of knowledge. Such effort led Theaetetus to introduce the notion of incommensurability of square roots as an exemplar procedure to follow when seeking a general conception of knowledge. In Plato’s word:

“Theodorus here was drawing some figures for us in illustration of roots, showing that squares containing three square feet and five square feet are not commensurable in length with the unit of the foot, and so, selecting each one in its turn up to the square containing seventeen square feet and at that he stopped. Now it occurred to us, since the number of roots appeared to be infinite, to try to collect them under one name by which we could henceforth call all the roots... *We divided all number into two classes.* The one, the numbers, which can be formed by multiplying, equal factors; we represented by the shape of the square and called square or equilateral numbers... The numbers between these, such as three and five and all numbers which cannot be formed by multiplying equal factors, but only by multiplying a greater by a less or a less by a greater, and are therefore always contained in unequal sides, we represented by the shape of the oblong rectangle and called oblong numbers... All the lines which form the four sides of the equilateral or square numbers we called lengths, and those which form the oblong numbers we called surds, because they are not commensurable with the others in length, but only in the areas of the planes which they have the power to form. And similarly in the case of solids.” (Theaet. 147d – 148b)

As it is known, Plato agreed to use such geometrical model of reasoning to seek after a definition of knowledge. Specifically, Plato said; “take your answer about the roots as a model, and just as you embraced them all in one class, though they were many, try to designate the many forms of knowledge by one definition.” (Theaet. 148d) It is clearly seen that such procedure contemplates division into classes and grouping or collection as a mean to find a common proof of commensurability of square roots.

Given these points, we would like to place emphasis on the fact that the differences between mathematics and dialectics highlighted by Plato are not to be taken as factual ones but rather figurative. For instance, Plato came up with a distinction between his so-called forms and mathematical objects, coming to consider the latter as intermediate sort of objects, situated between sensible things and pure forms. In turn, ideas or pure forms and mathematical objects share similar characteristics (eternal, immutable, abstract, mental), though ideas, unlike numbers or geometrical figures, are unique.

However, as we know, there are no pure forms anywhere, being rather the product of the inventive mind of Plato, using mathematics as a model for his metaphysical and epistemological theories. On that basis, it is not hard to see why the answers to the problems addressed in his dialogues are rather negative and even more impossible of being answered satisfactorily. It is perhaps illustrative to recall here the words of Theaetetus when asked for a definition of knowledge:

But I assure you, Socrates, I have often tried to work that out, when I heard reports of the questions that you asked, but I can neither persuade myself that I have any satisfactory answer, nor can I find anyone else who gives the kind of answer you insist upon; and yet, on the other hand, I cannot get rid of a feeling of concern about the matter. (Theaet. 148e)

Theaetetus' suspicions are justified indeed, for the sort of answers Plato seeks can be explained as an effect of the sort of essentialist thinking so characteristic of Greek philosophy. That is to say, the sort of enquiries conducted by Plato confine ourselves to a realm of vacuous beings and forces whose existence is explainable only as the product of our imaginative capabilities.

Dialectics at work

As shown above, Plato conceptualized the art of dialectics having geometry as a model, imitating not only the procedures composing it, but also the sort of objects it is supposed to deal with. Nevertheless, dialectics differ from such model in the sense of being a conversational and argumentative technique, requiring conceptual differentiations as well as analyzing chains of reasons supporting one's assumptions and theoretical accounts in order to evaluate the consequences of holding them. Indeed, it involves, as some have put it, "developing the consequences of opposed assumptions" (Gadamer 1980, 93 – 94). That is to say, it is a noetic method, dealing with abstract entities such as concepts and theories (or ideas) and the effects of adopting them.

It is important to keep in mind that the division and collection are two sides of a coin, that is, they are part of a method that seeks to classification and definition, which are, in turn, the main purpose of dialogues such as *Sophist* and *Statesman*. On the one side, division starts with a general concept and then it is dichotomously divided, proceeding the same way with one of the resultant terms. Collection, on the other side, proceeds contrary in direction by conjoining the characteristics that properly define a given term.

As an illustration, let us consider for a moment how collection and division appears displayed in Plato's *Sophist*. As will be recalled, the dialogue in question, though it touches incidentally upon other topics, is extensively devoted to finding a definition of sophistry. In that sense, it starts with the interlocutors (Theaetetus - Stranger) expressing consent to apply the method to a small reference standard, specifically the angler. Such training is not introduced

unintentionally, for the interlocutors discover after consideration that the angler and the sophist both have a likeness to one another in the sense that such activities call for the same skills (acquisitive art).

It is important to highlight that the division is a complex process marked by sudden back and forth jumps and shortcuts. To explain, the dichotomization of classes usually leave one of the resultant categories untouched, which, in turn, may be taken up once again later in the process. As an illustration, some of the categorial divisions made to define angling are resumed to define sophistry. Equally, the sophist is endowed with two sort of skill, namely the productive and the acquisitive art, developing first the latter and the former is taken up anew later in the process.

Let us take the first attempt to define sophist. Plato starts by comparing the sophist to angler, which, according to Plato, are both “a sort of hunters.” (Soph. 221d) Then, Plato proceeds to make the first division, and so hunting is divided “into two classes, and made one division that of swimming creatures and the other that of land-hunting.” (221e) Thus, the angler “turns to the sea and rivers and lakes to hunt the animals in those.” (222a), conversely, the sophist, Plato says, “turns toward the land and to rivers of a different kind—rivers of wealth and youth, bounteous meadows, as it were—and he intends to coerce the creatures in them.” (222a). These divisions are typical examples of such procedure.

Collection, on the other hand, starts once the whole chain of divisions has been completed, at the end of each definition of the sophist. Each division made purportedly offers one essential feature of the concept of the sophist, that is, every feature is grouped into one new class. In the case of the first definition, the concept of sophistry join up the following features: “the part of appropriative, coercive, hunting art which hunts animals, land animals, tame animals, man, privately, for pay, is paid in cash, claims to give education, and is a hunt after rich and promising youths”. (Soph. 223b) That is to say, a concept so defined is supposed to conjure the essential feature of the thing being defined, in this case, the sophist. As it is known, Plato tried out seven definitions of the sophist, following the very same procedure. In the case of the one we have presented, Plato found it inadequate, since it allegedly included some characteristic wrongly attributed to sophistry.

Furthermore, the method of hypothesis is presented in more detail in Plato's *Parmenides*. There, Plato put forward such procedure, which requires scrutinizing a given assumption by assigning it, opposed truth-values, followed by an assessment of its consequences. Additionally, it should be noted that Plato's *Parmenides* deals with topic of oneness and multiplicity, that is, the matters of the dialogue are abstract or conceptual entities, which Plato called Forms.

In particular, Plato set out on the development of the consequences of assuming the existence of oneness. In order to achieve that, Plato considers two plausible variants, namely a positive one and a negative one. Regarding the positive assumption, that is, *if oneness is*, Plato considered the consequences of the existence of oneness *for itself*. For example, to Plato's mind, if one exists, it must be unbounded and formless, unchaining and restless, it must not be composed of parts as to form a whole and so on. (Parm. 137c – 157b) Comparatively, it also considers the consequences for *others* of the same assumption, concluding, "if one exists, the one is all things and nothing at all in relation both to itself and to all others." (Parm. 160b)

On the contrary, Plato estimated the consequences of the negative variant of the same hypothesis, that is, *if oneness does not exist*. Accordingly, following the same procedure as previously, Plato considered the consequences of assuming it for the one and others. Thus, Plato concluded, "whether the one is or is not, the one and the others in relation to themselves and to each other all in every way are and are not and appear and do not appear." (Parm. 166c)

On balance, the procedures making up dialectics, as displayed in Plato's dialogues, are only appropriate to argumentation, that is to say, putting forward reasons in favor of specific tentative hypothesis, definitions or conceptions, evaluating at the same time the consequence of adopting them. Although Plato tried hard to distance itself from other types of conversational practices such as sophistry, such distinctions are to be taken as merely rhetorical, rather than existing differences of procedures and results.

Notably, given that Plato modeled dialectics upon geometry, it became anchored to purposes of attaining a clear view of supersensible entities (forms, essences, etc.), appealing to intellectual human capabilities. However, as we know, the dialectical procedures as put to

work in Plato's dialogue never led to definite conclusions or precise definitions, let alone arriving at knowledge of the entities postulated.

Moreover, the resultant divisions, for example, made by way of dialectic are often capricious, echoing Plato's prejudices on the matter discussed, betraying some form of wishful thinking. Let us mention, for example, the definitions of sophistry Plato offered using dialectic. Most of them depicts sophistry as vicious and deceitful, which is in contrast with the meanings associated with 'sophistry' before Plato. That is to say, Plato framed our understanding of the sophist as a sort of deceiving trader, fortune seeker, appealing to the youth, which is a success in terms of argumentation.

In the light of all this, we are allowed to regard as unlikely that the art of dialectic as envisioned by Plato may yield its intended results, which shows, to my mind, the imagined method standing in vivid contrast against its application. Despite this, it is the impelling force of the conviction that there is a way to improve our reasoning through the evaluation of the concepts involved in it and its consequences, what we find commendable of such method.

Descartes – Doubt and order

Descartes methodology was surely not an innovation. In fact, it preserved Renaissance conceptions of method, meaning that a method's use was simplifying learning and facilitate the discovery of true knowledge. It is not surprise then that some philosophers such as Leibniz expressed contempt for Descartes methodological precepts, comparing it to the guidelines of a chemist: "take what you need, do what you should, and you will get what you want." (Jolley 2005, 415) Despite this, there is no denying that it was highly influential, becoming a landmark in the history of philosophical and scientific methodology.

Moreover, behind Descartes' methodological directions, there is a complex process of conceptualization, merging mathematics and an elaborate theory of human mind. Certainly, Descartes conception of method was couched in a mathematical language so characteristic of its era, but it also incorporated what is perhaps his most original and enduring legacy, that

is, his theory of mind, which highlights the role played by human cognitive capacities and subjectivity in the process of attaining knowledge.

With this in mind, for a proper comprehension of the conceptual framework underlying Descartes conception of method, we shall explore the way mathematics established the terminology shaping it and its relation to human subjectivity, more precisely, there can be found in Descartes philosophy a tendency towards the mathematization of human intellectual capability. Lastly, we shall examine how Descartes applied his precepts in his metaphysical investigations.

Mathematics, knowledge and method

Unquestionably, Descartes was a highly skilled mathematician. Some regard him as being one of the founders of analytical geometry, connecting algebra and geometry. It is no wonder then that mathematics served him as a model of knowledge. Actually, training in mathematics, for Descartes, was mandatory, since it makes one's mind to be "well equipped for the investigation of other truths, since reasoning is exactly the same in every subject." (1991, 352) Here there is a complete reduction of reasoning to a mathematical standard, which seems to provide the key to true and valid knowledge and a model to find proofs in the mathematical sense, in the realm of metaphysics.

Descartes' mathematization of knowledge led him to "recognize no matter in corporeal things apart from that which the geometers call quantity, and take as the object of their demonstrations, i.e. that to which every kind of division, shape and motion is applicable." (1985, 247) In other words, physical phenomena could be studied insofar as its objects are expressed in numbers or measures, that is, mathematically.

Likewise, geometry, according to Descartes, gave him "occasion to suppose that all the things which can fall under human knowledge are interconnected in the same way." (120) That is to say, the arrangement of components of mathematical formula led him to believe that order is what is needed in order to gain true understanding of different sort of truths in any field. Certainly, what Descartes borrowed from mathematics and geometry was mainly the idea of order (or measure), (15 - 20) which, as we shall see, is central to Cartesian methodology.

Moreover, it explains Descartes' interest in the construction of a body of knowledge containing the rules of knowing and learning, which he termed '*mathesis universalis*'. Such discipline, in turn, appears to be concerned with the organization of knowledge and, it is supposed to work equally as a base for any other branch of knowledge. (19)

Clearly, Descartes modeled his conception of knowledge on formal sciences, specifically mathematics (geometry, algebra, logic), to such extent that the sort of knowledge that Descartes is after, has the same features that the one allegedly obtained through mathematical procedures, namely: simplicity, self-evidence, certainty, and so on. In this case, we see here a philosopher driven by his conceptual framework (mathematics), which triggered him to see and find the same entities and its features everywhere, including, as we shall see, the workings of the mind.

Let us consider for a moment Descartes' defining characteristics of knowledge, namely, certainty, clarity and distinctness. On the one hand, it is known that Descartes declared that his interest in mathematics was most specifically "because of the certainty and self-evidence of its reasonings." (1985, 114) Descartes attention is directed to absolute certainty, which he contrasted with the certainty required for practical affairs (moral certainty) (290 – 291). It is essential to observe, however, that the certainty reached in mathematics is dependent on order. For example, the certainty of the rules of arithmetic developed, to Descartes' mind, from order and numeration. (121)

Descartes quest for certainty is also central to understand his so-called method of doubt, which is a fundamental element of Cartesian methodology. Indeed, Descartes chose to doubt his previous beliefs about his senses, imagination, memory, the existence of his body and God in order to achieve the much-cherished certainty. To put it simply, Cartesian mathematical framework explains the features that beliefs should possess to be regarded as true knowledge. In this sense, even the skeptical method of doubt grew out of Descartes' *more geometrico* ideal of knowledge and compelled by the impulse to replicate it in different domains.

Descartes' mathematical leanings caused him to postulate the existence of some entities, which are the object of knowledge whose main feature is simplicity, hence the name 'simple natures'. Naturally, such feature is proper to mathematical objects as Descartes himself

acknowledged. (20) Simple natures are seen as absolute and universal, being at the base of any process of deriving logical conclusions of any sort. (21)

By simple, Descartes means “only those things which we know so clearly and distinctly that they cannot be divided by the mind into others which are more distinctly known.” (44) Simple natures are, as Descartes recognized, purely intellectual, self-evident, cannot contain falsity and are the object of mental operations such as deduction and intuition. Regarding order, they are first objects in the chain of conjunctions. That is to say, simple natures are the fundamental building blocks of knowledge.

It is no secret, then, that Descartes, in his *Discourse on the method*, took great pride in having taken what is best from arithmetic and algebra to mold his method into those used by mathematicians. Explicitly, Descartes said for the purposes of learning and explaining things he “thought I had to seek some other method comprising the advantages of these three subjects - *logic, geometry and algebra* - but free from their defects.” (120).

However, it is important to emphasize that the central issue Descartes borrowed from mathematics was the idea of organization or order. Explicitly, the rule five of his *Rules* says, “the whole method consists entirely in the ordering and arranging of the objects on which we must concentrate, our mind’s eyes if we are to discover some truth.” (20) In other words, a method seems to provide an orderly organization to knowledge, which should help the mind’s eye see clearly or intuit simple objects, to then go on with the more complex ones, which is a presupposition clearly taken from mathematical discourse. Driven by his mathematical impulse, as we shall see, Descartes attributed to human intellectual capabilities certain characteristics in correspondence with mathematics.

A mathematical intellect

Descartes contributed greatly to the development of many areas of knowledge, notably mathematics, but also put forward some theories regarding the nature and psyche of human beings, some of which have had a long-lived influence in many areas such as psychology, linguistics or philosophy of mind. In particular, Descartes’ dualistic conceptualization of humans leading to the mind-body split, innateness of ideas, and the unity of consciousness are among his well-known contributions.

To be sure, Descartes conceived humans as equipped with an incorporeal soul making possible abstract reasoning and consciousness, which constitutes human beings essence, leading him to regard the body as extrinsic. Definitely, such conception of human mind shows a religious tendency, but most important, as will be discussed, a mathematical conception of the intellectual capacities. This point is best seen taking into consideration the notion of innateness, perception (clarity and distinctness), and the central operations of the mind to build knowledge (intuition / deduction).

Concerning innateness, it must be remembered that it is a feature Descartes ascribed to ideas. Indeed, Descartes believed that the essential feature of humans was thinking or thought, which was conceived broadly as to include some forms of perception, volitions, judgements, and most importantly ideas. The latter were defined as “the *images of things*, and it is only in these cases that the term 'idea' is strictly appropriate - for example, when I think of a man, or a chimera, or the sky, or an angel, or God.” (Descartes 1984, 25) In addition, ideas cannot be in any way false, since they are purely conceived. It is then when they are thought as corresponding to something outside that one can err.

It is known about that Descartes further distinguished three types of ideas, namely, innate, adventitious and invented. In the specific case of innate ideas such as the idea of God, of mathematical truths or of ourselves are self-evident. They do not depend on the body and are in no way acquired, meaning that they exist in the mind even in the absence of the body. (Descartes 1991, 190) Obviously, innate ideas' main features are also common to axiomatic truths, which need no demonstration and are rather assumed as a base to build arguments, as it is the case of *I think, therefore I am*.

Accordingly, given that the mind primary content are mathematical-like entities, the nature of its operations take on similarly mathematical dimensions. Descartes said that the mind can perform only two operations to acquire knowledge, namely, intuition and deduction. Both operations can provide unquestionable knowledge, but only the information acquired through intuition is self-evident. On the contrary, deduction implies being aware of its sequential movement and, in that sense, it requires the work of memory. (Descartes 1985, 14 – 15)

As Descartes admitted, we are endowed with ‘the natural light of reason’, which means that humans have an innate cognitive capacity, allowing the mind to carry out such ‘basic’

operations. However, it needs to do it in an orderly manner, and so the method becomes necessary. Indeed, Descartes stated explicitly that his method “cannot go so far as to teach us how to perform the actual operations of intuition and deduction, since these are the simplest of all and quite basic.”(16)

The important thing to consider regarding such operations is its mathematization. For example, intuition is a sort of perception, which is simple, immediate, clear, distinct, certain and self-evident, that is, the sort of features involved in the cognition of mathematical truths. It is not surprising that; therefore, Descartes said, “everyone can mentally intuit that he exists, that he is thinking, that a triangle is bounded by just three lines, and a sphere by a single surface, and the like.” (14) Here, we should not be misled by Descartes references to his existence or his thinking nature. The fundamental thing to note is that those features appears listed along with mathematical propositions as having common attributes in relation to mind.

Likewise, Descartes view of deduction is disentangled from its old dialectical bonds and it is geometrized instead. Deductions is equated with geometrical demonstration, emphasizing interconnectedness of propositions and the self-evidence of the starting points of the inferential process. Such process of reasoning is as well characterized for resulting in the acquisition of certain and evident truths. (120)

As can be noted, the Cartesian conception of human intellectual capabilities is modeled upon mathematics. In this sense, it is essential to observe, for example, the characteristic property of perceptions of the mind and the sort of objects involved in such process. In particular, Descartes’ criterion of clearness and distinctness of perceptions as a guarantee of certainty and truth of propositions. It is not an attribute of objects, but of perceptions of the mind. (1984, 28 – 29)

In the first place, clearness is defined as what “is present and accessible to the attentive mind - just as we say that we see something clearly when it is present to the eye's gaze and stimulates it with a sufficient degree of strength and accessibility.” On the other hand, distinctness of perceptions appears when “it is so sharply separated from all other perceptions that it contains within itself only what is clear.” (Descartes 1985, 207) Moreover, according to Descartes, our minds “have been so moulded by nature” to recognize and assent such features, so our intellectual faculties are confined by such criteria as well.

Given these points, it seems fair to say that mathematics is the conceptual framework shaping Descartes view of the mind. It is seen more clearly if we keep in mind that Descartes thought that mathematical objects and propositions possessed some qualities, namely, order, simplicity, certainty, and so on, which he went on to project on perceptions, ideas and mental operations. Descartes argumentative devices themselves constitute reasonable grounds for such claims.

It is essential to remember that Descartes did not find any ground to doubt about mathematical propositions in themselves, rather he resorted to the possibility of being deceived by God. What is more, tenaciously unwilling to concede any ground for doubting the certainty of mathematical propositions, Descartes declared; “let whoever can do so deceive me, he will never bring it about... that two and three added together are more or less than five, or anything of this kind in which I see a manifest contradiction.” (1984, 25) It is a case, as we see it, of an argumentation led by a preconceived opinion, which, in turn, makes his reasoning move in a particular direction, favoring his prejudices.

Such dispositions towards mathematics goes so far that it mathematizes the notion of existence making it a purely intellectual notion “whose self-evidence is the basis for all the rational inferences we make.” (Descartes 1985, 45) Under those circumstances, it can be said that mathematics, as a framework, made Descartes draw conclusions about the attributes of the human nature and mind. Namely, the intellect is a certain thing, since thinking is a mathematical-like certain thing, the mind not only operates, if properly, in an orderly geometrical fashion, besides it works based on mathematical-like objects.

The Cartesian method: doubting and order

The nature of Cartesian method has been an overly theorized topic; it would not be an exaggeration to say, since Descartes days. That said; it is important to admit at the outset that what we may have to say about it, most probably might have been pointed out before. However, following our line of argument, it is crucial to point out that Descartes’ conception of method and its application differ substantially.

As shown above, mathematics played a major role in forming Descartes’ notion of method, but, as we know, mathematics and metaphysics are very different domains of knowledge,

though rationalist-minded philosophers like Descartes believed it otherwise. Unsurprisingly, Descartes admitted never fully deploying his method in the *Meditations*.

To clarify, it is widely known that Descartes' *Meditations* aimed to put forward some arguments supporting the existence of God and showing the differences and relation between mind and body. Descartes confessedly intended to apply the method he devised to such task. Such method consisted of doubting until one reach some indubitable proposition, getting a clear dimension of the difficulties involved in the matter at stake by dividing it, keeping order and revision by specifying one by one the things considered.

Descartes acknowledged having presented the *Meditations*, following the style of geometers, keeping a logical arrangement (order) of the elements, from incontestable principles from which ones that are more complex are derived. However, Descartes also admitted having applied the method of analysis (or discovery) throughout the *Meditations*, but never employing the so-called method of synthesis there because it was not well suited for metaphysical matters. (1984, 111) Equally, Descartes made it clear that he applied “the highest level of doubt about everything” everywhere in the *Meditations*. (112)

In brief, taking Descartes own words seriously; we cannot find a complete deployment of the Cartesian method in the *Meditations*. For it rather consists in an exposition and analysis of the beliefs held by Descartes about metaphysical matters, which should be complemented by a distrustful attitude towards preconceived opinions coming from custom and example. It is convenient, having said this, to see that what is left of Descartes method is the skeptical attitude adopted or doubting and the order required by demonstration.

With respect to doubting, the standard narrative tells us that it is put to work as strategy for attaining true knowledge. In this way, some Descartes' readers have asserted that: “The method of doubting everything, until one reaches, if one can, something that cannot be doubted, is presented as a strategy, as a systematic way of achieving something which is Descartes's basic aim: this is to discover *the truth*.” (Williams 2015, 21) Such account is substantiated, since it is based on Descartes's words and his self-understanding of his method.

Definitely, Descartes made it clear that, unlike the sceptics, his doubting, generally speaking, has the main intention of achieving certainty (1985, 125), which, in turn, involves perceiving

clearly and distinctly what is incontestably true. (1984, 24) In this sense, doubting is the strategy Descartes chose to protect himself against falling prey to errors. Errors, on the other hand, seem to consist in the absence of some knowledge one may possess and it is caused by the imbalance of scope existing between the freedom of the will and faculty of knowledge. (40 – 41) Under such circumstances, Descartes argued that avoiding errors require that “the perception of the intellect should always precede the determination of the will.” (41)

It is equally important to say that doubting, given that it is ‘mode of willing’ (1985, 204), should be understood as a habit or rather attitude required when engaged in intellectual pursuits, which becomes methodical when put to work systematically as Descartes did, submitting his beliefs to the most severe criticism. To put it differently, errors could be prevented by using the power of the will correctly, resolutely and freely, abstaining itself from making judgements precipitately, that is, doubting on matters in which clearness and distinctness cannot be reached by the intellect.

As it is well known, Descartes deploys doubting at least in stages. The first meditation shows Descartes determined to set himself free from the influence of previously acquired ideas, so abstaining itself from assenting, that is doubting, on matters that seems doubtful “until the weight of preconceived opinion is counter-balanced and the distorting influence of habit no longer prevents my judgement from perceiving things correctly.” (1984, 15)

Indeed, Descartes adopted a skeptical stance towards the beliefs acquired through the senses, using the dreaming and the illusion argument. Likewise, he casts some doubts on the nature of the external things and his body, putting forward the argument of the malicious deceiving demon. Such attitude would not be abandoned until the last meditation, when the grounds for doubting are dismantled, once the existence of God is granted and some fundamental truths, such as the existence of the ‘I’, are reached. It is nevertheless important to say that the doubting is introduced by way of questions. Perhaps, one of the most striking points when doubting is put to work in the *Meditations* appears, once Descartes discovered his existence, when Descartes ask himself ‘what is a man?’, concluding, after an analysis, that he was a thinking thing, that is, “a thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions.” (19)

Moreover, reaching such conclusion allowed Descartes to use himself as the center of the argument. Thus, Descartes accepted the existence of the objects of sensory experience and imagination as mere ideas in his mind. God, on the other hand, suffered the same fate, for his existence seems to be justified as long as there is an idea of a perfect being in Descartes' mind. In this sense, Descartes' argument seems to proceed from the *causes through effects*, being his idea of a perfect being the effect of the final cause, God. There lies the methodological solipsism found in Descartes' proposal.

It is important to realize that the above said is just a sketch of how Descartes envisioned doubting. That is to say, it is the way Descartes pictured mentally the role played by doubting in the context of his philosophy and method. However, it would not be harmful if we look to Cartesian doubting from a different perspective, in the context of Descartes arguments, that is, how doubting enforce his arguments and what it is actually seeks as an argumentative device.

To understand the point we are trying to make, it is opportune to remember some of the objections made by Mersenne regarding doubting about the body. According to Mersenne, doubting about the body “was merely *a fiction of the mind*, enabling you to draw the conclusion that you were exclusively a thinking thing.” (87) On that point, Mersenne criticism is right to point the artificiality of doubting, which works only as a resource to help Descartes to make his point.

As we see it, bearing in mind Mersenne's criticism seems to provide ground for a different perspective on the purported aim of doubting: achieving certainty. Alternatively, following Mersenne's perspective, we think that doubting and certainty are brought up by Descartes to have an effect on the reader, making it ready to consent to his arguments.

To understand further the role of doubting suffices to examine Descartes replies to such objections. According to Descartes, one of the purposes of doubt is to help to those willing to follow his meditations to “concentrate and meditate and withdraw their minds from corporeal things.” (111) Simply put, doubting is supposed to allow the reader to follow the meditations and agree with the arguments. Descartes made is clear when saying:

“In so doing I wanted to make it clear that I would have nothing to do with anyone who was not willing to join me in meditating and giving the subject attentive

consideration. For the very fact that someone braces himself to attack the truth makes him less suited to perceive it, since he will be withdrawing his consideration from the convincing arguments which support the truth in order to find counterarguments against it.” (112)

The passage shows Descartes adopting an irrational position in respect with to those who are willing to debate the truth of his claims. Moreover, Descartes labeled as “not a just criticism”, if one is willing scrutinize and doubt his arguments, for, according to him:

“the arguments in respect of which I ask my readers to be attentive and not argumentative are not of a kind which could possibly divert their attention from any other arguments which have even the slightest chance of containing more truth than is to be found in mine. Now my exposition includes the *highest level of doubt about everything*, and I cannot recommend too strongly that each item should be scrutinized with the utmost care, so that absolutely nothing is accepted unless it has been so clearly and distinctly perceived that we cannot but assent to it. By contrast, the only opinions I want to steer my readers' minds away from are those which they have never properly examined - opinions which they have acquired not on the basis of any firm reasoning but from the senses alone. So in my view no one who restricts his consideration to my propositions can possibly think he runs a greater risk of error than he would incur by turning his mind away and directing it to other propositions which are in a sense opposed to mine and which reveal only darkness (i.e. the preconceived opinions of the senses).” (1984, 112)

In view of this, it is clear that Descartes think that doubting gives a special status to his propositions, and consequently, the criticism against them should be despised and rejected. Furthermore, doubting is intended to make the reader believe that the propositions examined in such way, are rid of errors and so there is no way to err in accepting them as valid. Clearly, doubting is planned as an immunizing argumentative strategy in the sense that it seems to seek shielding Descartes' arguments from the dangers of criticism.

The passages quoted also show Descartes coming to sustain a logically fallacious sort of argument, specifically a circumstantial sort of *ad hominem*. In particular, Descartes supposed that those attempting to criticize his arguments are predisposed to argue against them, rendering those counterarguments contemptible.

As said above, besides doubt, the notion of order is key to understand Descartes' methodology. Indeed, the so-called rules of analysis and synthesis are the mathematical imprint of Descartes methodology; however, such rules should be seen as pointing to the

need for order in the process of acquiring knowledge. Clearly, to Descartes mind, knowing requires a certain organization or arrangement, and where there seems to be no order, Descartes recommended ‘supposing’ it and assigning it to things artificially. (1985, 120)

Referring to order and method, Descartes argues that: “the whole method consists entirely in the *ordering and arranging* of the objects on which we must concentrate our mind's eye if we are to discover some truth. We shall be following this method exactly if we first reduce complicated and obscure propositions step by step to simpler ones, and then, starting with the intuition of the simplest ones of all, try to ascend through the same steps to a knowledge of all the rest.” (20)

Descartes claimed having adhered to order very carefully, which broadly consist in that “the items which are put forward first must be known entirely without the aid of what comes later; and the remaining items must be arranged in such a way that their demonstration depends solely on what has gone before.” (1984, 110) Clearly, order is important for demonstration and, in general, it makes possible the performance of intuition and deductions, which are the basic operations of the mind to attain knowledge.

Indeed, the order of the *Meditations* testifies Descartes adherence to such rule. According to Descartes, it explains why the distinctions between mind and body appears at the end of the *Meditations*, which was one of the key issues Descartes sought to resolve in the work. However, just as with doubt, order appears to be applied in order to have an effect on the reader. To quote from Descartes:

“Analysis shows the true way by means of which the thing in question was discovered methodically and as it were a priori, so that if the reader is willing to follow it and give sufficient attention to all points, he will make the thing his own and understand it just as perfectly as if he had discovered it for himself. But this method contains nothing to compel belief in an argumentative or inattentive reader; for if he fails to attend even to the smallest point, he will not see the necessity of the conclusion. Moreover there are many truths which - although it is vital to be aware of them - this method often scarcely mentions, since they are transparently clear to anyone who gives them his attention.” (110)

Decidedly, analysis presuppose order, but even if one stick to a logical order in argumentation, it might happen to be misunderstood by an ‘inattentive’ mind. In other words, Descartes is saying that his doubt and the order he follows is a way of validating and shielding

his arguments from criticism. Moreover, anyone 'failing' to acknowledge the validity of his arguments is just an opinionated and careless reader. Clearly, it is just another case of fallacious reasoning.

The above said is not intended to characterize Descartes as a dumb, cheater or not sharp thinker. In fact, Descartes was fully aware of the difficulties and differences of demonstration in geometry and metaphysics. In this sense, Descartes admitted that:

In metaphysics, by contrast there is nothing, which causes so much effort as making our perception of the primary notions clear and distinct. ***Admittedly, they are by their nature as evident as, or even more evident than, the primary notions which the geometers study***; but they conflict with many preconceived opinions derived from the senses which we have got into the habit of holding from our earliest years, and so only those who really concentrate and meditate and withdraw their minds from corporeal things, so far as is possible, will achieve perfect knowledge of them. (1984, 111)

The passage above shows Descartes admitting difficulties, however, resistant to lose the argument or driven by the mathematical conceptual framework, denies stubbornly the differences existing between geometrical and metaphysical notions. Rather, the problems with demonstration in metaphysics are blamed on the human tendency to remain intellectually attached to prejudices and the information coming from the senses as well as the unwillingness to meditate and doubt. Certainly, it is a great argumentative immunizing strategy, yet a clear example of *ad hoc* reason to rescue his argument.

It is essential to realize that the noted above points to the inconsistencies between the way philosophers envisage their practices and the actual ways philosophers do philosophy. In this case, Descartes saw himself as prescribing a new method, purportedly retaining the advantages of mathematical demonstration, helping him to prove formally the existence of God and the existence of mind-body split. However, in the first case, we know it ended up in a circular argument, and in the second, Descartes simply echoed a long-standing Orphic preconception.

Under those circumstances, one might wonder what is left of the Cartesian method. There a twofold and straightforward response to such query. In an ideological sense, Descartes's call for being suspicious of preconceived beliefs and biases and his demands for order in the

process of discovery, lay at the heart of the scientific discourse, its desire for objectivity and its demand for a methodical pursuit of knowledge.

On the other hand, in a more concrete sense, the Cartesian method stands out as an exemplar case of philosophy. To explain, although philosophers' self-image is that of truth seekers, the actual practice of philosophy is essentially argumentative, consisting of proposing hypothetical solution to all sort of problems. In this sense, Descartes project is a paradigm of argumentation.

Moreover, the novel introduction of doubting and the stress on order are best seen as an argumentative strategy, that is, performative in Austin's sense. That is to say, they are intended to have an effect on the reader. When Descartes says, "I apply the highest doubt in order to find certainty" or "I follow the order prescribed in geometry", he is making his readers believe that those arguments need to be considered seriously and even attempting to shield them in some way.

Overall, Descartes' mathematical conceptual framework provides not only the discursive base shaping his methodological proposal, but also confer his arguments an aura of credibility, force and authority, which is the ultimate purpose of an argument: having people believe it. It is, to my mind, an expression of Descartes' argumentative genius and a tentative reason explaining his enduring legacy.

Russell - The method of (logical) analysis

Bertrand Russell's conception of philosophy

Russell construed philosophy; on the one hand, as a human activity, having its own goal and value, on the other, philosophy, in a more technical sense, is a discipline requiring a specific contemplative attitude and having a characteristic method pertinent to analyzing linguistic expressions. It is important to say that both senses, as we shall see, are complementarily interrelated.

In the widely read *The problems of philosophy* (1912) endorsed a view of philosophy in sympathy with the Cartesian spirit, in which philosophy appears concerned with casting doubts on issues in which custom and prejudice have led us to assume a dogmatic and often biased stance. (Russell 1912, 40 – 41) Adopting such attitude, in turn, may lead one to feel that everything is uncertain, for philosophy may show us that there are no definite answers to the questions it poses. Russell, to be sure, admitted that one of the more salient features of philosophy is that it is a realm marked by uncertainties. It is, having said that, perplexing to think that, on Russell's account, philosophy *motto* has been the attainment of indubitable truths, stimulated, however, by the feeling of uncertainty it brings by the doubts it raises. (2009, 28) Uncertainty is, indeed, a compelling feature of Russell's conception of philosophy.

Surely, Russell asserted that philosophy is effective in “diminishing our feeling of certainty as to what things are...”, but recognized it has positive consequences in the sense that “it greatly increases our knowledge as to what they may be.” (1912, 243) In this way, it is a peculiarity of philosophy that, though it is a knowledge-seeking activity, it cannot attain any definite knowledge, moving in the sphere of conjecture.

More precisely, according to Russell, “philosophy tells us how to proceed when we want to find out what may be true, or is *most likely* to be true, where it is impossible to know with certainty what *is* true.” (1968, 1) Here, philosophy is understood as concerned with a kind of reasoning that, though may be rigorous, is based on tentative grounds. Philosophy's task, in this sense, seems to be proposing alternative hypothetical answers to problems about the nature of universe and ourselves.

Seen in this way, the benefits of philosophical reflection can be found in the doubts it can cast on issues seemingly uncontroverted, and the feeling of uncertainty arising from it, since it enlarge our understanding on the many possible solutions available to such problems, freeing us from the authority exerted by dogmas and prejudiced opinions. It is important to realize that such alleged effects of philosophy on the belief systems of individuals, are not the only one. In fact, Russell said that such doubts should be understood as “criticism of knowledge”, which, to Russell's mind, “constitutes philosophy”. This sort of criticism drawn by philosophical reflection, Russell stressed, “diminishes the risk of error” (1912, 233 – 236).

That is to say, philosophy, since it makes us aware of the fact that it is always possible to be mistaken, that it is completely possible to err; it reduces the chances of arrogantly assuming we possess the ultimate answers to human problems.

It is worth noting that the advantages philosophy can have, Russell insisted, is restricted to way of life of those who study it. It presupposes that the would-be philosopher should have some temperamental characteristics as well as specific skills and required knowledge to the practice of philosophy, that is, the potential philosopher should go into strict training of the emotions and intellect, if she is to develop a proper philosophical outlook. In this sense, Russell's conception of the ends and value of philosophy involves a certain view on what sort of abilities a person must possess to be a competent philosopher.

The training of the intellect, to Russell's mind, is supposed to make the philosopher capable of discriminating between beliefs to be accepted and rejected as groundless. (1968, 6) To this end, the embryonic philosopher must be acquainted with the principles of mathematics, logic as well as update information about scientific discovery, emphasizing its results, methods and history. The first both, do not provide any actual information about the world, however, they offer an insight on the sort of topics where error is least likely to appear and the sort of inference that can be accepted as a sound one. Finally, the study of science seems to bring the outlook needed to overcome narrow-minded dogmatism. (1968, 7 – 24)

On the other hand, the potential philosophers must possess some way of managing her emotions, which would bring the state of mind essential to the evaluation of different points of views. Such state of mind comes after seeing "human beings as product of circumstances." (24) It would help the philosopher develop the sort of fair-mindedness needed to address human problems. Such impartiality, along with ability to produce general hypothesis, carry tremendous benefits for the formation of philosophers. The latter seems to constitute the very essence of philosophical enterprise, that is, the production of general tentative solutions to human questions. The former is the attitude necessary to evaluate divergent arguments or opinions about a specific topic.

The above is a sketch of Russell's views on philosophy as a human activity, its goal and value. Likewise, we presented a short summary of the skills required, according to Russell, to be a qualified philosopher, and, as we saw, Russell's conception of philosophy and

philosopher seems to be mutually dependent. However, it must be realized that Russell's philosophy comes forth in a period of professionalization of philosophy, that is, there is a highly technical side of philosophy present in Russell's conception. It becomes manifest by the fact that Russell's view of philosophy exhibits a programmatic aspect. So, philosophy is construed as a discipline having its proper body of knowledge and vocabulary, a method and a group of central topics and problems, as well as a set of skills any competent philosopher should possess.

In this sense, in a more technical or disciplinary note, Russell insisted that the essential business of philosophy "consists in criticizing and clarifying notions which are apt to be regarded as fundamental and accepted uncritically. As instances I might mention: mind, matter, consciousness, knowledge, experience, causality, will, time." (2010, 147) That is to say, philosophy main chore seems to consist in elucidating, through logical analysis, notions that are an integral part of the vocabulary of sciences whose meaning are still indeterminate.

In this vein, Russell estimated that one of those aspects of human cognition that have been customarily taken for granted by traditional philosophy is language, and the ways it could misleadingly lead philosophers to uncritically assume the existence of objects that appear formulated in a given set of words. Likewise, language may fool philosophers into thinking that they possess the knowledge of those entities-which may not even exist- expressed in a given language. In this sense, Russell himself pointed out that "the influence of language on philosophy has, I believe, been profound and almost unrecognized. If we are not to be misled by this influence, it is necessary to become conscious of it, and to ask ourselves deliberately how far it is legitimate." (2010, 135) As a result, Russell's conception of philosophy is mainly concerned with language and the examination of its components, and such interest in language respond to its ambiguous character and the purportedly misleading epistemological and metaphysical consequences it can have on philosophies.

On the other hand, Russell's conception of philosophy has been rightly labeled scientifically inspired, meaning that methods, properly adapted, employed in scientific enquiry-not its results- "can be transferred with profit from the sphere of special sciences to the sphere of philosophy." (Russell 1959, 98) Such type of scientific philosophy that Russell advocated, however, involved the abandonment of great part of the key ethical and metaphysical notions

that have occupied philosophers' minds since the time of Plato, namely 'the good', 'the evil', 'the universe', and so on. Russell's point in favor of the abandonment of such notions is based on its anthropomorphic character, which, he estimated, were the by-product of a pre-Copernican era. (107)

In this sense, Russell stressed that such scientific philosophy, or rather the propositions concerning scientific philosophy, have two main characteristics, namely generality and apriority. To explain, philosophical propositions "must be applicable to everything that exists or may exist" and "must be such as can be neither be proved nor disproved by empirical science." (110 – 111) Here, according to Russell, is where logic can lend great service to philosophy, since it deals with the same kind of objects and could help philosophy to discover the logical form of such sort of propositions. Thus, philosophy, "by concentrating attention upon the investigation of logical forms, it becomes at last for philosophy to deal with its problems piecemeal, and to obtain, as the sciences do, such partial and probably not wholly correct results as subsequent investigation can utilize even while it supplements and improves them." (112 – 113) In other words, philosophy can become a science in the sense that it can propose tentative hypotheses that could form a cluster and base for further investigation, so it can make progress as well.

As can be see, the scientific philosophy Russell defended was, though different from science, supposed to imitate the procedures used in the sciences. It is convenient here to ask how far such act of imitation would go. Indeed, Russell's scientific philosophy go as far as to frame his whole philosophy using the conceptual framework of mathematics and logic, that is, Russell borrowed vocabulary from those domains of knowledge to promote a philosophy in which entities such as 'simples', 'atomic facts and propositions' or 'complexes' have a place. It commits Russell's philosophy with the existence of metaphysical entities, rising as well epistemological problems, which we would like to explore in the next section, where 'logical atomism', the scientifically inspired philosophy Russell advocated, shall be scrutinized.

Logical Atomism

It has been extensively pointed out the impact Neo-Hegelian idealism and the monist idealism it propounded, had upon Russell's philosophical project. (Griffin 2003) Surely, it is the

tradition shaping and informing Russell's philosophical concerns, against which it should be contrasted, if it is to be assessed evenly. However, it would deviate us from the focus of this work, his method, the problems it aims to resolve as well as its effectiveness in doing so. For such reason, we will be hereinafter outlining the main tenets of Logical Atomism, paying special attention to its theoretic commitments, and the kind of problems it purports to solve and the questions it raises.

Russell termed his novel conception 'the philosophy of logical atomism', outlined in the years of 1914 – 1924, which set the rhetorical and conceptual base, justifying his method of logical analysis. As the name logical atomism may suggest, such philosophy is conceptually modeled upon mathematical logic and the atomistic theories about the constitution of the world, found in Pre-Socratic philosophy as well as in the "Leibniz's monadism" (Griffin, 2013) Likewise, 'logical atomism' also indicates the sort of entities admitted as fundamental. Certainly, Russell termed his philosophy 'atomistic' or a sort of pluralism, which admits the existence of a multiplicity of interrelated entities, that is, particulars and its relations, which, in turn, are the 'logical atoms' whose discovery is the result of analysis. In this sense, Russell thought that the particular views he held somehow justified analysis.

Indeed, Russell assumed the existence of 'logical atoms', which could be reached through a process of analysis. Even though Russell offered no precise account of what 'logical atoms' might be, Russell included 'particulars' and 'predicates' or 'relations' as specific instances. As those instances show, 'logical atoms' are terms standing for individual elements of classes and their property or relations, that is, names, predicates and verbs. When such 'atoms' are put in proper systematic order, following the rules of syntax, it constitutes propositions, the main object of Russell's analysis.

Propositions, on the other hand, are the product of arranging symbols to express factual statements. The components of propositions must correspond to the components of the facts of which it is a symbol, and what makes them meaningful. So, Russell assumed that "there is an objective complexity in the world, and that it is mirrored by the complexity of propositions."(2010, 25), that is, the structure of propositions and the organization of the facts are being equated. It is in this sense that Russell thought that analysis of propositions could

give us some access to the knowledge of the form of the world, though the focus of analysis are propositions and its components.

As shown above, Russell's theories apply to very limited portion of our language, that is, the bits of language containing declarative sentences, expressing that something is actually the case or not. Notably, Russell defined 'propositions' as group of symbols standing for some facts. Russell, moreover, characterized 'facts' in a peculiar way as a set of structured simples that are actually the case, existing independent of human cognitive capabilities (not invented), which can be expressed in a sentence. As a result, Russell criterion of meaningfulness of propositions is simply reference, abandoning the twofold Fregean distinction of sense-reference. In this sense, it can be said that Russell's views on the nature of meaning echoes persistent folk intuitions about the nature of language, adopting the sort of naïve semantics existing since the beginning of philosophical reflection on language. Those are, indeed, the tenets of a sort of realism Russell advocated. However, it purports the existence of a sort of consubstantiality between the arrangement of particular things in the physical world and the logical form of expressions in language, which, despite of being appealing, has been found inadequate.

It seems important to us to point out that the realist ontology presupposed by Russell's philosophy, have its correlate theory of knowledge. To be sure, Russell's distinction of knowledge by acquaintance and description, to my mind, responds to the need of sustaining the direct contact with certain entities Russell called 'simple objects', which are the constitutive elements of atomic facts. To put it differently, given that the meaning of words and propositions consists in its reference to 'simple objects' and 'facts', it seems coherent to suppose there is some firsthand experiential information of some entities (simples), which provides a basis upon which we could build, through an inferential process, more complex knowledge.

Certainly, direct acquaintance with the thing designated by simple symbols, Russell maintained, is one of the fundamental premises on which the whole idea of analysis rests. (2010, 21) However, acquaintance is also a consequence of representationalist account of the meaning of words, that is, if meaning is reference to an external reality, it is natural to suppose we have immediate access to such reality in order to know the meaning of words, and by it,

the meaning of propositions. In fact, knowing the meaning of atomic propositions amounts to direct knowledge of the referents of the singular terms constituting a proposition, along with its properties and relations.

Undeniably, Russell had to suppose that language has an 'atomistic' structure, consisting of very few elements he called 'symbols', that is, words denoting 'particulars', 'qualities' and 'relations', which, when put together, can assert or deny facts. (2010, 111) As it is easily seen, such assumption is made on the base that, natural language is composed of very simple elements (symbols), which work following the rules of symbolic logic. Seen in this light, the problems arising in metaphysics are the result of 'bad grammar' or a poor understanding of language essential logical form and the distinctions to be made regarding its elements.

Overall, the philosophy of logical atomism, as J. O. Urmson observed, was introduced as "one of the most through-going metaphysical system yet elaborated." (1960, 4) Certainly, it introduced as a structured theory containing an abstract classification of the components of the world and language, along with some assumptions about the ways in which we get to know those entities. It was intended to solve some problems Russell found in the Neo-Hegelian metaphysical system, creating, however, new ones.

Then again, it should not be overlooked that Russell's logical atomism was advanced as a tentative insight about the nature of the world and language. Certainly, Russell repeatedly stressed that his philosophy had to be conceived as theoretical proposal, which could be either accepted or rejected as inadequate. It is undoubtedly in the line with Russell's view of philosophy as an 'art of rational conjecture' in which the theories suggested are provisional and certainty is not to be attained. It is in such spirit, I believe, that logical atomism should be examined and criticized.

Theory of definite descriptions and logical analysis

In *The principles of mathematics* (1903), Russell identified some problems with denoting, or rather, with denotational character of descriptions, which he estimated were worth discussing from a philosophical perspective, since descriptions are relevant to the theory of definition and identity. (1938, 62 – 65) Later, Russell exhibited in *On denoting* (1905) the epistemological consequences of having some portion of our knowledge, at which we arrive

by means of such denoting phrases. There Russell employed the distinction of knowledge by acquaintance and description to make a case in favor of the elimination of denoting phrases. Certainly, to Russell's mind, there are certain things, namely, physical objects or other people's mind, of which we can have no direct knowledge but by description or, to be precise, by the use of 'definite descriptions'. Subsequently, Russell's concern with definite descriptions reappeared in the context of the philosophy of logical atomism.

Actually, Russell's concern with descriptions or, rather, definite descriptions seems to reside in that although they have no meaning of its own, but in the context of a proposition, such phrases, depending on its place within a given proposition, may deceptively lead one to treat such symbols as representing an existing object or determining mistakenly the identity between others. Russell contrasted names and descriptions in order to show the essential features of the latter. Unlike names, descriptions of the form 'The P' are complex symbols whose component meanings are already fixed and descriptions are not referring expressions. (Russell 2010, 80 - 84) Since 'definite descriptions' are 'incomplete symbols' that do not refer to anything specifically, and therefore have no particular meaning, in short, are disposable, Russell thought that by 'breaking up' (analyzing) the propositions in which such phrases occur, they could disappear.(85)

Moreover, Russell evaluated the difficulties we would run into, accepting either Meinong or Frege's alternative theories dealing with denoting phrases. According to Russell, Meinong's alternative seems to open up the possibility to the existence of objects that would contradict the law of contradiction. On the other hand, Frege's solution suggest that denoting phrases have two sides, namely meaning and denotation, but, as Russell pointed out, "the cases where seems to be no denotation causes difficulties both on the assumption that there really is a denotation and on the assumption that there really is none." (1905, 484) Under those circumstances, Russell listed a series of problems an adequate theory of descriptions should attempt to tackle, namely problems regarding existence, identity and the problems definite descriptions raise regarding the *salva veritate* logical condition of some expressions. (485)

With such problems in mind, it is easier to unravel Russell's theory of descriptions' theoretical commitments; also, one is in a better position to assess the effectiveness of Russell's method of logical analysis applied to descriptions. Regarding the former, it

becomes plainly visible, as we shall discuss in more detail afterwards, that Russell underlying motivation is saving reference as ultimate criterion of meaningfulness of expressions, consonant with his realistic inclinations, as well as complying with the precepts of Logic. As for the latter, it is easier to see if it answers the questions it poses.

Logical analysis of propositions containing definite descriptions

Analysis is an old epistemological notion. It appears as part of the methodological tools of prominent philosophers such as Aristotle or Descartes. Such presence in those philosophies can be explained in part by the cognitive underpinnings of analysis. Certainly, since analysis, by definition, seems to consist in decomposing an unbroken aggregate (whole) into its constituents (parts), it is clear that our understanding of it relies heavily in some of the most primary mental patterns that provides organization to our understanding of the world, namely what Lakoff and Johnson termed the part-whole image schema.

As a result, it is no surprise that many philosophers have felt tempted to conceive the subject of their research as an undivided entity, of which we can know something by chopping it in small pieces, which, in turn, would purportedly give us some information about such whole. Of course, conceptions of analysis may vary between one philosopher and other. However, such metaphorical understanding is present in the philosophy of Bertrand Russell.

As it is known, Russell's analysis presuppose the support of symbolic logic. In this sense, analysis needs an artificial language purportedly in order to avoid the complications caused by natural language's ambiguous and misleading features, if it is to get started. Symbolic logic, in this way, is supposed to help us to determine the true logical structure of propositions, by setting it down in a different arrangement. Accordingly, Russell introduced the notion of variable, which is a clear indication of Russell's logic-mathematical inclinations. It is indeed a useful notion, since it has two properties relevant to the problems Russell tried to address, namely, (a.) it can take several values and, more importantly, (b.) it operates as a symbol representing quantities, which Russell interprets in connection with and relevant to deal with the philosophical issues of existence, identity and definition, that is, expressing quantity is equated with asserting the existence of certain entities.

With this in mind, operators such as all, some, every, are interpreted as potentially problematic in the sense that, though not having meaning by itself, they might be used to quantify, that is, attribute existence to objects. In the case of definite descriptions, or phrases containing the English article '*the*', Russell, for the sake of argument, assumed that '*the*', "when is strictly used, involves uniqueness". It is clear that the word '*the*' has more usages and it is problematic to speak of 'strict usage' non-contextually, but it is no less true that Russell predetermined the subject of his analysis, reducing it to just one possible meaning of '*the*'. In this way, the so-called theory of descriptions can be regarded as applying to an extremely limited linguistic phenomenon, that is, the word '*the*' indicating uniqueness.

In Russell's theory, sentences, such as 'The Panamanian strongman was a coward', in which '*the*' occur, are interpreted as a compound proposition, which, in analysis, is taken as asserting the following: there was an x who was a Panamanian strongman and was a coward. As can be noticed, the existential import of such proposition can be found in that it implies that the class E (cowards) is not empty and that there is at least one individual x who is part of it.

As shown above, the first move of Russell's analytical procedure seems to consist in rewording the original proposition containing definite descriptions in order to exhibit its existential import. In the second place, the focus of the analysis is centered on the description itself, which, in turn, is moved to a different position within a new proposition. In this way, the definite description is displaced and is no longer, what the proposition is about. Instead, the definite description (the Panamanian strongman) becomes what is said about an indeterminate individual x , and, as a result, the description is left destitute of its purported referential role. Thus, we get " x was *the* Panamanian strongman", indicating that only x , and nothing else, has such relation.

Moreover, the third stage of logical analysis involves the paraphrasing of -not the original proposition- the proposition obtained after changing the occurrence of descriptions. Thus, " x was *the* Panamanian strongman" becomes " x governed Panama tyrannically". In this way, Russell thought that the prior relation is expressed "without the assumption of uniqueness, and without any denoting phrases" (1905, 482). Indeed, the word '*the*' has no occurrence in the resultant proposition, however, the indication of uniqueness has also disappeared, which

Russell took to be the ‘strict usage’ of ‘*the*’, that is, the propositions mentioned are not equivalent.

Consequently, Russell introduced an *if-proposition*, as a uniqueness/identity clause, saying, whoever governed Panama tyrannically is identical with x . So, a proposition ‘ x was the Panamanian strongman’ is interpreted as amounting to a conjunction of two propositions, namely, ‘ x governed Panama tyrannically’ and ‘if y governed Panama tyrannically, y is identical with x ’. On that account, the original proposition ‘the Panamanian strongman was a coward’ is recast, as ‘It is not always false of x that x governed Panama tyrannically and that x was a coward and that if y governed Panama tyrannically, y is identical with x is always true of y ’. Formally expressed: $\exists \alpha [F\alpha \wedge G\alpha \wedge \forall \gamma (F\gamma \rightarrow \gamma = \alpha)]$

As has been noted, Russell’s theory of definite descriptions aimed to solve some ‘puzzles’ that were successfully addressed, namely the substitutivity of identicals, the excluded middle principle and the negative existential. Strikingly odd, Russell proposed the distinction between primary and secondary occurrences of definite descriptions. Russell never defined what such occurrences mean; rather, he was content to pick some examples to show the difference. However, it is true that examples can be very telling, but in this case is the opposite. If one takes Russell’s examples, it seems that such difference simply amounts to the occurrence of ‘*the*’ as part of a proposition (primary) and its final disappearance (secondary), which, to my mind, is a simplified way to condense the method of analysis presented before.

Russell and philosophical analysis

Some critics and commentators of Russell philosophy and method, has conceded that the idea of logical analysis and the theory of descriptions are coherent and partially justified by Russell’s views on language and its atomistic metaphysics. To illustrate, J. O. Urmson has pointed out that:

Russell theory of descriptions, which commended itself on general epistemological and logical grounds, is a rule for analysis of a general kind for which logical atomism can be seen as a partial justification. But in a way, obviously circular but no less persuasive on that account, the metaphysical theory in its turn suggested a method and programme of analysis. (1960, 25)

Similarly, Peter Hylton sometime afterwards, made a claim in the line with Urmsón's. According to Hylton, "the theory of descriptions (except for the worry about generality) was, by contrast, right in line with his basic views." (2003, 225) In the line with such observations, it seems fair to give an account on the relationship of Russell method and its correspondent views on language, and the sort of problems those commitments involve.

As we saw above, Russell's conceptual paradigm was that of mathematical logic. It surely contributed to Russell's views on natural languages, which were usually portrayed as deceptive and faulty. In addition, it drove Russell to adopt a stance about the configuration of the world, which was logical in essence and pictured, though imperfectly, by language. Consequently, such shortcomings of language to be surpassed demanded the aid of logic to reveal the essential metaphysical structure of it, so natural languages are clarified.

There are several problems with such a view, which have been underscored by many philosophers before. However, for the sake of the argument, it is important to observe how logic shapes Russell's view on language to the point that it is assumed languages have an underlying logic-like configuration. In this way, the method of logical analysis is defined by a metaphysical notion Russell took for granted.

Since the expression of a given language can be misleading, the clarifying hand of logic make us see that there are consequently free-from-error ways of using language, which also happen to conform appropriately to truth or reality. That is to say, logic triggers a series of assumptions found in Russell's philosophy of logical atomism, modeling at the same time the purpose of its method. However, it is essential to differentiate the imagined method from how it works in practice.

In practice, there is no way logic could tell us something about the world, since it is a system of formalizations of language and with no references to specific or concrete uses of language. In this sense, it is relevant to remember Hans-Johann Glock's words when saying; "the gulf between the truth functional connectives and their vernacular correlates is wider than commonly accepted. Similarly, by trying to paraphrase away singular referring expressions, Russell's theory of descriptions misconstrues their distinctive role, which is to pick out the things we talk about." (2008, 157) That is to say, it is a mistake to suppose that the connections found in logic represent the relations of objects in the world and even more

assume that logic extract the logical form and contextual relevant purposes of words and propositions of ordinary language.

Given the above, it is right to ask what Russell's method of logical analysis amounts to as displayed in *On denoting*. Indeed, it is equivalent to a rewording with aim of clarification with a logical coating. Such clarification, however, does not provide us with a new and better understanding or guide for use of expressions containing *the*, let alone it will stop us from using such purportedly misleading bit of language.

Overall, it could be said that Russell created the problems he purportedly resolved. Denoting phrases such as *the* does not leave us perplexed regarding the identity of the objects we refer to by means of it. Even less, it does not leave us mentally uncertain regarding its meaning when we hear them in an everyday conversation. Actually, such phrases do a good job. Certainly, language works more or less efficiently for the purposes of communication, still; it is no less true that, as Russell vehemently maintained, it is ordinarily taken for granted how it does it. In this sense, Russell's logical analysis must be seen, on the positive side, as an effort to reveal the workings of language.

From such perspective, what is remarkable of Russell's methodological proposal is the neat argumentation justifying the need for it. It was so convincing to the extent that philosophers such as Frank Ramsey found in Russell's theory of descriptions a "paradigm of philosophy" in the sense of clarifying notions and even fixing future meanings of expressions. (Ramsey 1950, 263) However, there are more assumptions than actual achievements of the method of logical analysis.

Commentary on the case studies

Probably, it is trite to highlight the dissimilarities of the exemplar cases of the methods deployed by philosophers from diverse generations, since each epoch imprints peculiarities on philosophies, and, likewise, they represent different styles of writing and purposes. In this sense, it is advisable to focus on what is comparable in nature and quality between them. In particular, in the line with assumptions of this work, it is relevant to concentrate on the conceptual frames shaping the way they formulated their philosophies, methodological

proposals, the problems addressed, the solutions, and generally, the entities postulated. In short, the direction of the arguments those conceptual frames allowed to advance.

In this regard, it is quite clear that it is mathematics or, perhaps more broadly, formal sciences, which serve as conceptual bedrock stabilising the context and terminology making up philosophers' arguments selected as case studies. Certainly, the representative cases of philosophizing shown, namely dialectical, doubt-order, and logical analysis are, to put it mildly, mathematically inspired. Plato, Descartes and Russell were well acquainted with and skilled at the mathematics of the day and generally contributed to the development formal sciences. For those reasons, it comes as no surprise that those philosophers took mathematical knowledge as a model.

To illustrate, the features of metaphysical entities, the procedures by which the knowledge of such objects can be reached, and the human capabilities required to it, composing Plato's philosophy were analogized to the abstract features of numbers, geometrical forms and mathematical operations in general, making geometry and deduction the point of origination of rationality.

In this regard, one only has to think of Plato's so-called theory of participation, that is to say, sensible objects-pure forms relation to see the analogy with a given number and the instantiation of it. In other words, it is fair to say that Plato's philosophy, including its innovations and appeal, is rendered comprehensible only having mathematics as a background knowledge. Otherwise, it would have appeared grossly eccentric even for his contemporaries.

Since geometrical relations could be ascertained by assigning numbers to it, Geometry seemed to provide a sort of reliable, exact, and reproducible knowledge enabling us to explain and be on top of reality, which, in turn, could be obtained using the powers of the intellect alone. Not surprisingly, Plato conceived a 'region above the heaven' where 'truly existing essences'- "with which all true knowledge is concerned"- are found, only 'visible' to the mind. Under those circumstances, it is easy to see why dialectics is modeled upon geometrical procedures as shown above.

Overall, geometry enabled Plato to draw some inferences about the nature of actual reality, which was portrayed as ever-changing, deceptive, and imperfect. Accordingly, the knowledge of such reality was cataloged as erroneous and illusory to say the least, in opposition to the mathematical-like knowledge of essences.

Since the Platonic epistemological *more geometrico* turn, a rationalist tradition was founded on the base that reason alone could discover procedures that could be devised aprioristically and help us attain a sort of fundamental and certain knowledge whose finest examples are the philosophy of Descartes and Russell.

Certainly, the Cartesian conception of method equates method with true and valid knowledge. It is essential to observe that although Descartes is well aware of the differences regarding the structure and organization of sciences and that his method had been designed having mathematics as a prototype, he thought it could be applied to various branch of knowledge, including philosophy. For such reason, the Cartesian method has often been thought as giving way to arguments over its universality. Of course, universality here should be understood as meaning simply replicability, that is, Descartes' procedure can be repeated in different places at different times, obtaining the same (desired) results.

Definitely, since Cartesian methodology mainly aims at acquiring certain and foundational knowledge regardless the field, it brings forth the obvious consequence that the method and the habits of pursuing an investigation it helps to develop, by itself, grants certainty in any circumstance it could be applied. Consequently, it is assumed that humans possess not only innate abilities, which need to be developed using a certain method, but also innate ideas that such method help to become manifest, underpinning any possibly acquired knowledge. As can be seen, it is the mathematics framing Descartes conception of knowledge and views on human intellectual capabilities, which drove him to suppose that an artificial doubt and geometrical-like arrangement of ideas could lead to knowledge.

Although Russell seemed less concerned with finding the sort of knowledge that captivated completely Plato's and Descartes' mind, the method of logical analysis presupposed that language and the reality it purportedly portrayed, had the same fundamental structure of formal (artificial) language. That is to say, despite not postulating the existence of an outer world of ideas or a place within humans where indubitable ideas are found, Russell thought

that the structure of the world was better captured by logic. Again, it is a risky assumption fostered by the frames lying behind his theories.

On the other hand, in none of the cases shown, as pointed out earlier, the proposed method worked to resolve the problems for which they were purportedly devised. In this sense, one might well wonder if there is any use in developing a certain method in philosophy. However, the purposes of those methodical proposals should be found in the role they play in the context of a given argument.

To explain, the procedures making up Plato's dialectic helped him, as an instance, to make a case for the unscrupulous, deceptive and corrupt nature of sophistry, for which it succeeded. Indeed, it accomplished its intended purpose to such an extent that such image persist as part of popular consciousness. Similarly, it served to distance, at least discursively, Plato's beloved master from sophistry, despite being so regarded by some of his contemporaries, creating, at the same time, the model of philosopher as seeker of truth and selfless teacher of wisdom.

The same is the case for Descartes method of doubt and order whose real value lies in ensuring the continued existence of a long-held idea of human beings as divided into two sections, namely, corporeal and non-material. Likewise, it paved the way for the arguments in favor of the innateness of human cognitive abilities as well as a mechanistic conception of mind. Such ideas are not only still present in the collective imagination, but also as the basis of scientific approaches to language.

On the other hand, Russell used logic for similar purposes, bestowing his arguments with a halo of rigorousness, favoring the view of language as tending to confuse or imperfect and requiring a completely new language to be studied, helping us to clarify and protecting our minds from being misled. Thus the creed of a new philosophical persuasion was set up, which survived for many decades.

On balance, it could be said that formal sciences worked well as frame for philosophers' arguments, which include methodical proposals acting as mechanism for the strengthening of it. It is not an overstatement to say that the conceptual frames adopted by those philosophers guided largely their conjectures about the constitution of the world, the sort of

entities they postulated, the means to get to know it and the nature of human beings. It is similarly probable that such frames ensured those theories were understood in the first place and make those arguments appealing to some alike-minded philosophers who were ready to buy it, which makes them a communicative success as arguments.

It is equally significant to observe, in that sense, that philosophical arguments are, from a cognitive perspective suggested by Lakoff and Johnson, attempts to ‘refine’ and ‘transform’, some folk intuitions and ways to conceptualize them ingrained in our culture, which also may explain their magnetic charm. In other words, philosophers’ arguments often incorporate, tap into and echo deeply rooted human cognitive inclinations.

As can be seen, the notion of method plays a fundamental role in philosophical argumentation, for the method a given philosopher put forward or defend is likely to feature as part of the argument itself functioning to reinforce it. When a philosopher tells us something in the line of ‘I am following these procedures to achieve an exhaustive definition of x ’, or ‘everything said was put to the severe test of doubt and arranged following certain order.’, or similarly, ‘I use logic to re-interpret propositions of natural languages F containing the word y ’, it should be seen as an argumentative immunizing strategy. Ultimately, such statements betrays a tradition of philosophy who sees in formal science, its *a priori* strict standards, the model of knowledge and rationality. It is perhaps the same tradition that found in the notion of method or the recognition that learning and building knowledge requires organization, a way to conceptualize the complex processes involved in undertaking a research or pursuing knowledge.

As expected, as a concept, method displays the features typically ascribed to it in field of Cognitive Linguistics, being one of them its metaphoricity. The idea of metaphor here is congruent with one of the fundamental tenets of the field, that is to say, concepts are interrelated to such an extent that it would be hard to understand one without another, they form a system of information enabling us to cope with the circumstances.

In that sense, we argue that in order to gain some insight into the convoluted debate over methods, we must evaluate and analyze the concept at stake, that is, the notion of methods. To this end, we believe it would be beneficial to rely on the conceptual metaphors theory (CMT) as a conceptual foundation for gaining a better perspective on the notion of method

and the role it has played in our understanding of inquiry. For this reason, the next chapter will be devoted to present an outline of CMT, exploring its basic concepts and drawing special attention to its philosophical commitments. Nevertheless, before we get into the topic, it might be necessary to give a brief account on the attention given to metaphors in philosophy as well as a brief overview of the conceptual metaphors theory.

Chapter IV- Metaphor and philosophy

The term metaphor comes from the Greek *μεταφορά*, which means literally a transference, especially the transference of meaning of a word to a different one. In this way was understood by Aristotle, for example, who thought that metaphors were 'strange words' applied to others depending on their gender or species (Poet. 1457b). Since then, like Aristotle, metaphors have been understood as a phenomenon related only to language or, at most, as an aspect of poetic and literary language.

There is no doubt that Aristotle gave greater importance to denotative language, which he thought concomitant with the search for truth and philosophical enterprise. Thus, as Marcel Danesi says, "Aristotle's 'literalist' view of meaning has remained a dominant one to this day in Western philosophical and linguistic traditions, with metaphor being either ignored or else condemned as a defect of human reasoning" (2004, 15). Undoubtedly, Aristotle initiates a certain philosophical inclination that emphasizes literality, with the consequence that figurative language is seen as a matter of literature, poetry, rhetoric or ornamental language.

The effect of this tendency can be found expressed in the vision around metaphors held by some representative philosophers in the analytic tradition. As an example, Donald Davidson defined metaphors based on the literal meaning of the words that compose them. Thus, metaphors, in Davidson's own words "mean what the words, in their most literal interpretation, mean and nothing more." (1978, 32) With this, Davidson denies the existence of a 'metaphorical meaning', for when we use metaphors the literal meanings of the words remain active.

Metaphors, according to Davidson, taken in their literal sense, are always false, so he believes that to understand metaphors it is necessary to make a distinction between the meaning of words in a literal sense, independent of their use and what can be done with the words in different contexts. Metaphors and their expressive force are linked to this last aspect of language. That is, Davidson emphasizes metaphors' pragmatic function, meaning that metaphors can affect the listener and make him see certain similarities, having an effect on how we perceive things, but this is not produced because they have a special meaning. For

this reason, Davidson will say that the problem of metaphors is “how the metaphor is related to what it makes us see.” (45)

Certainly, it can be said that this tendency has been dominant in the field of linguistics and philosophy, however, it should be noted that there have also been some efforts tending to highlight the cognitive importance of metaphors. Such is the case of the Italian philosopher Giambattista Vico (1668 -1744) who in his *Scienza nuova (1725-1744)* emphasized the primary role of imaginative or poetic language as an instrument of thought and as precedent to the language of denotative character.

One of the fundamental features of the *Scienza nuova* is its particular idea of the development of human history, which divides into three periods, namely: age of the gods, of heroes and of men (1948, 27). In the first, the age of the gods, appears, according to Vico, the figure of the poet theologian who used imaginative language (fables) to account for the origin of the world, shaping the first nations.

The use of such imaginative resources, for Vico, is rooted in “poverty of language and necessity to explain and make oneself understood” (19). Indeed, according to Vico, humans resort to the use of metaphors and imaginative language “because of the indefinite nature of the human mind” (54), to the extent that, “whenever men can form no idea of distant and unknown things, they judge them by what is familiar and at hand” (54). One of the components of this imaginative language are the metaphors which, in Vico's words, “the most necessary and frequent” (116), since “metaphors makes up the great body of the language among all nations” (132).

Another fundamental aspect of the Vichean view of metaphors is the connection that it establishes between metaphors and the body, which precedes CTM in that it emphasizes the bodily foundation of metaphors. Indeed, for Vico, human beings understand inanimate objects in terms of the parts of our body. For example, words as ‘handful’ is a term used to speak metaphorically about measures that are understood in terms of body parts (1948, 116).

Somewhat along the lines of Vico, Friedrich Nietzsche (1844 - 1900) in his *On truth and lying in an extra-moral sense (1873)* highlighted the limitations and vulnerability of the human intellect which cannot go beyond the human being itself in such a way that it will

always end up defining things according to itself, starting from itself as a center. This gives an arbitrary character to all human products including language, which, in turn, develops along with the inexplicable human tendency to the truth. Given its fragility and its pitiful character, the intellect, the only means available to humans to ensure their survival, resorts to fantasy, self-deception, illusion and metaphorical language insofar as these elements of the human intellect help to preserve them (1989, 246 – 247).

As we mentioned before, one of the central ideas of this text is that human beings have an enigmatic tendency towards truth (247). However, this tendency, paradoxically, impels humans to assume the bogus idea that language is an instrument that perspicuously designates things or essences (things in themselves or the truth). By assuming such a connection between words and things, the existence of 'the truth', man is self-deceived, but such deceit brings humans solace.

In this sense, when human beings, in Nietzsche's words, "speak of trees, colors, snow, and flowers, we believe we know something about things in themselves, although what we have are just metaphors of things, which do not correspond at all to the original entities." (249) In other words, our language has a different logic from that word-object illusion, since it depends largely on human imaginative capacities.

On the other hand, Nietzsche finds that one of the signs of the arbitrariness of the human intellect lies in the formation of concepts. According to Nietzsche, "every concept originates by the equation of the dissimilar." (249) That is, any representation or abstraction presupposes the existence of essential characteristics that things possess and that, in turn, allows us to classify thing as falling under certain categories or group of things. The problem that Nietzsche points out is that the things that are grouped in such process are, for the most part, unequal. For example, Nietzsche invites us to think about the concepts *leaf* and *honesty*. The first concept assumes that all the leaves are the same and allows us to group, arbitrarily, a set of things so dissimilar - a look at the morphology of the leaves allows us to realize their diversity - like the leaves. On the other hand, the way we judge a certain action to be honest, is done presuming that there is a fundamental characteristic that makes some actions honest, without understanding that what exists are unequal actions that we group in an arbitrary way and that lead us to "formulate out of them a *qualitas acculta* with the name: 'honesty'." (249)

Undoubtedly, the Nietzschean critique underlines the limitations and restraints of human capacities, revealing the arbitrariness of its products, namely, language, our concepts and the way they precipitate us to believe in the existence of entities that have no explanation, but precisely as products of the imaginative capacities of the human intellect. In the case of metaphors, they have a primordial role in the elaboration of our concepts, which, in turn, Nietzsche characterized as “the residue of a metaphor”, product of “the illusion of the artistic transference of a nerve stimulus into images” (250).

As has been noted, it is possible to understand Vico and Nietzsche’s criticism as a philosophical precedent of the current theory of conceptual metaphors. As we shall see, CTM assumes that reason is constrained by cognitive as well as institutional factors, of which we are not fully aware.

The conceptual metaphor theory

Accordingly, the degree of influence exerted by folk concepts and intuitions over philosophers’ theories has awakened a renewed interest over the last decades. Mention must be made of the research initiatives undertaken in this regard, coming from cognitive science, particularly from –to name a few- cognitive linguistics, cognitive psychology, developmental psychology, which have drawn our attention to the conscious and unconscious brain mechanism underlying our mental processes, including those involving careful and meditative contemplation. However, in accordance with the aims of this work, we will focus mainly on some of the findings in the area of cognitive linguistics, notably on the work advanced by George Lakoff and others over human conceptual systems.

The proponents of CMT, as part of cognitive linguistics community, defend the idea that language reflect and reveals patterns of thought or cognitive functions, which points our attention over the process of conceptualization. Concepts, from this perspective, compose the meaning of a given expression and therefore, the meaning of a linguistic item is defined by conceptual domains. To put it another way, semantic structures are rooted in and correspond to the conceptual structures we possess and so how and what we experience motivates our conceptual structures or systems, which explains why conceptual systems may vary from one culture to another. (Lakoff 1987, 310)

One of the fundamental premises of Lakoff and Johnson's work is the acceptance of the existence of neural structures and operations that function promptly and automatically, below the level of awareness, which draw on and direct our sensory-perceptual and motor apparatus, giving shape to our pre-conceptual experience and also acting as a 'hidden hand' governing our conscious behavior. It has been termed 'cognitive unconscious', characterizing "all unconscious mental operations concerned with conceptual systems, meaning, inference and language." (1999, 12)

It is important to mention that the cognitive unconscious is composed of some structures, namely basic-level concepts, conceptual frames, spatial-relation concepts and conceptual metaphors. (116) These cognitive mechanisms play a critical role in the process of categorization and conceptualization, shaping our conceptual systems and so the ways we evaluate and interact with the environment.

To explain, basic-level concepts, along image-schematic concepts, are "symbolic structures that correlate with *preconceptual* structures in our everyday experience." (Lakoff 1987, 281), which makes them directly meaningful. As mentioned, such structures are determined by physiological and psychological factors such as gestalt perception of part-whole organization, mental imagery, memory, motor activity organization, social function. (200) It should be observed that basic-level concepts structures of human conceptual systems, that is, basic-level concepts makes abstract concepts indirectly meaningful –via metaphor- by conceptual projection from one domain of experience to another. (267 – 268)

Conceptual frames, on the other hand, are 'propositional models', or in Lakoff's words, "they are all network structures with labeled branches that can code propositional information." (116) Frames contain the background-structured knowledge against which a word may be properly understood. Such knowledge, it must be said, comprises the knowledge steaming from bodily-based experience structures, also cultural and institutional knowledge. The former implies that frames may vary from one culture to another.

On the other hand, Lakoff and Johnson observed that there are some structures arising "from the commonalities of our visual systems and motor systems" (1999, 463), which they termed 'spatial-relation concepts'. Such concepts play an indispensable role in how humans represent space, determining not only the way we experience space and the relationship

among different kinds of entities, but also our inferences about space. Additionally, it must be said that the way we conceptualize space and spatial relations is clearly elaborate, for it presuppose an incredible amount of imaginative operations.

Indeed, as Lakoff and Johnson pointed out, “we use spatial-relation concepts unconsciously, and we impose them via our perceptual and conceptual system.” (31) It means that the relations expressed by words such as, in, on, across or expressions as in front of or in the back of, does not exists in the external world, rather such concepts “are imposed by us on space” (30). Nevertheless, spatial-relation concepts have an internal structure consisting of an image schema, a profile, and a trajector-landmark structure. (31 – 34)

On the other hand, another key point of the conceptual metaphor theory is that a fundamental feature of our conceptual systems is its experiential basis, that is, perception, body movement, physical and social experience in general, give its embodied character to our concepts. Besides, those concepts that seems to be not directly grounded in experience employ our imaginative capacities, that is, metaphor, metonymy and figurative language overall. It is indeed one of the tenets of the CMT that our conceptual systems are largely metaphorical.

The importance of metaphor, according to CMT’s defenders, is that it provides an understanding and experience of one thing in terms of another, allowing us to grasp, examine and evaluate abstract concepts in terms of much more concrete ones (Lakoff – Johnson 1980, 5 - 6). To put it more precisely, a metaphor could be also defined more technically as a ‘set of mappings’ in which a conceptual domain A (target domain) is defined in terms of a conceptual domain B (source domain). Thus, “the target domain is the domain that we try to understand through the use of the source domain.” (Kövecses 2010, 4) It is also critical to point out that “the source domains are typically more concrete or physical and more clearly delineated concepts than the targets, which tend to be fairly abstract and less-delineated ones.” (17)

A typical example of conceptual metaphor given by CMT’s defenders is the *argument is war* metaphor. In this case, arguments (target domain) may be characterized as indefensible, demolished, can be won, attacked or shut down, right on target and so on. In this way, the concept of war (source domain) serves as a framework giving shape to our understanding of arguments. It is important to mention that the *argument is war* differs from other metaphors

in relation to its level of generality. For metaphors can be classified in two groups, namely specific-level metaphors and general-level metaphors. So, given that the “schematic structures underlying them are filled in a detailed way” (Kövecses 2010, 45), the *argument is war* is amongst the first group of metaphors.

Moreover, proponent of CMT claim metaphors is not only a phenomenon of everyday communication, but it is spread widely throughout different technical areas of knowledge. Indeed, CMT’s theorists have investigated metaphors obtained from a variety of spheres, ranging from politics (Lakoff 1995) to mathematics (Lakoff & Núñez 2000). Certainly, given the abstract nature of the philosophical concepts, metaphor is particularly relevant to philosophy as well, which, it should be pointed out, run counter to the prevailing literalist tradition in philosophy that places greater emphasis on denotative language.

Philosophical foundations of CMT

The conceptual metaphor theory’s philosophical foundation lies on what Lakoff and Johnson have labeled as ‘experientialism’, ‘experiential realism’ or simply ‘experientialist philosophy’. Its first formulation can be found in the influential *Metaphors we live by* (1980), in which experientialism appears characterized as middle position between subjectivist and objectivist account of reason, language, meaning, truth, understanding and communication. (1980, 226 – 228) Viewed from an experientialist perspective, such cognitive phenomena need to be seen as inextricably related to concepts, its structure and its embodied nature. Being said this, let us present, though not detailed, the essential features of the experientialist philosophy.

1. Experientialists hold a commitment with a basic form of realism, which assumes the existence of an external world independent of human beings. In addition, it is acknowledged that such reality, including our bodies, constrains and structure our conceptual system. Likewise, there is a commitment with objectivity and the stability of scientific knowledge, besides a conception of truth that goes beyond mere coherence. (Lakoff 1987, 158)
2. Experientialists claim that the nature of reason is embodied, that is, reason “grows out of the nature of the organism and all that contributes to its individual and

collective experience: its genetic inheritance, the nature of the environment it lives in, the way it functions in that environment, the nature of its social functioning, and the like.” (Lakoff 1987, xv)

3. Consequently, it places greater emphasis on experience construed as everything that constitutes actual or potential individual and collective experiences, especially the organism’s genetic constitution, and the way it interacts with the environment. (266)
4. Besides, experientialism concentrates its attention on the imaginative capacities – v.gr. Metaphors- and the way humans uses them to make sense of what is experienced. (210)
5. When it comes to concepts, experientialism goes beyond the idea of concepts as symbols we manipulate, rather, it sees concepts as embodied, and that is, concepts are structured, constituted and meaningful because they are associated with our preconceptual structures of experience.
6. Experientialism reject the assumption that the mind is a sort of machine that interprets commands and operates algorithmically on the base of some inputs. In this sense, experientialism is a theory that, as Lakoff puts it, attempts to explain “why the human conceptual system is as it is”, in addition, it is “concerned with understanding-both with how we understand our own concepts and how we can learn and comprehend another conceptual system.” (344)
7. Experientialism is committed to a mild sort of relativism, which grows out of the research-based idea that human conceptual systems may vary significantly among culture, sometimes changing notably from the standards or norm (commensurability). Of course, as Lakoff put it, “conceptual systems that are commensurable by one criterion may be incommensurable by another.” (322)

In other words, cognitive phenomena such as meaning, for example, cannot be properly understood if attention is not paid to the fact that the meaning of a given lexical item is associated to its mental representation or concept that are the result of the complex process of conceptualization, in which intervenes different perceptual structures. Moreover, it must be highlighted that our experience of the world is not separated from concepts. The way we experience, say, colors, space, and time and so on is determined by how we conceptualize them, but concomitantly concepts are constrained by the structure and the workings of the

body, culture and the world. Thus, experientialism seems to shed new lights on the issue of meaning.

Metaphors in Philosophy

We shall start by saying that in the Western philosophical tradition the role played by metaphors in thinking has been largely downplayed. This is mainly due to conception of cognition that regards cognitive process as happening without the involvement extra-mental factors, that is, detached and independent from the context in which such processes occur. Consequently, knowledge, language, learning and such type of cognitive phenomenon have been thought as not related to the circumstances that works as a setting for such cognitive operations to happen.

Such theoretical leanings appear already critically evaluated in Lakoff's and others work, arguably included under the general rubric "objectivist paradigm" (Lakoff 1987, 157 -158). Such "paradigm" encompasses not only 'essentialism', but also a representationalist view of language, cognition and knowledge, which has been a matter of discussion since the time of Plato. However, for the purpose of this investigation, we believe it is important to emphasize on the intertwined objectivist view on knowledge and language, which, as Lakoff has pointed out, rest on 'the independence assumption' (164). That is to say, the facts and their existence does not depend on our cognitive capabilities, so what makes language meaningful is the external things and relations it faithfully represents. Likewise, knowledge goes always beyond the capabilities of the knower, and, if it is true knowledge, it represents impartially the facts that awaits somewhere out there. On such basis, it is no wonder that the function of metaphors and its relevance in the creation of philosophical theories had been belittled.

It must be recognized, however, that the landscape currently is characterized by a growing interest in how metaphor shapes philosophers' arguments. Sure enough, one of the greatest contributions in that regard is Lakoff and Johnson's *Philosophy in the flesh* (1999), which contains a large inventory of metaphors found in the works of prominent philosophers like Plato or Kant. This work is an invitation to think of philosophy as 'a conceptual human activity', which depends mainly on conceptualization, that is, the way philosophers posit,

address and answer philosophical questions relies decisively on how it is framed and conceptualized (1999, 136).

Similarly, it is important to bear in mind that one of the fundamental premises of CMT- and cognitive science in general- is that conceptual human systems are in great measure metaphorical. With this in mind, Lakoff and Johnson reminds us that philosophers “employ the very same conceptual resources and the same basic conceptual system shared by ordinary people in their culture” (338). In fact, according to Lakoff and Johnson, “philosophical theories are attempts to refine, extend, clarify, and make consistent certain common metaphors and folk theories shared within a culture. Philosophical theories, therefore, incorporate some collection (perhaps in more precise form) of the folk theories, models, and metaphors that define the culture that they emerge in.” (340 – 341)

It is striking the consequences of such idea for philosophy and even much more so, the fact that since its emergence, the results of such findings have not been further developed and rather left neglected by philosophers. Perhaps, one of the reasons why such idea has remained disregarded is its devastating effects over our understanding of philosophical enterprise. Seen in this light, the role attributed to philosophers seems to be much more modest than usually thought. For a philosophers’ role is confined to make systematic some folk intuitions –with the same conceptual resources- we all share about the constitution and classification of the world.

In addition, the recognition of the fact that philosophers, as well as everyone else, are prone to echo and fall pray of the same folk intuitions -sometimes groundless- about the world, cognition, morality and so on, does not seems to resemble the typical image of philosophy as mainly rational in the sense of abstracted from petty issues and conceptual imprecisions of the mundane everyday life.

In this sense, we firmly believe that the results of Lakoff and others work are relevant to the study of how philosophy is done and that it could shed some light on the topic of method and consequently our understanding of the quest for knowledge. Likewise, CMT might help to bring an empirically informed perspective on how satisfactory are the answers to the issue about the proper method to philosophy as well as how reasonable it is to keep searching for criteria to solve philosophical puzzles.

In the previous section, we attempted to outline the conceptual basis of this work, which rely on the conceptual metaphors theory advanced by Lakoff et al. Likewise; we showed how important it is the research on metaphors to philosophy. In this sense, we shall attempt to offer an examination of the concept of method based on its metaphoricity, relying on perspective CMT offers. To this end, we will start by presenting some ordinary metaphorical ways of construing methods as well as metaphors used by some representative philosophers, namely, Plato, Descartes and Kant. As we shall see, ordinary people and philosophers' metaphors often coincide.

The metaphoricity of concept of method

In the following discussion, we will begin by examining the conventional or ordinary metaphorical understanding of methods, which should not be thought as incidental to the philosophical one, but rather as correlative. For, it has been a point already be made; philosophers as well as ordinary people use the very same conceptual resources. While it is true, that philosopher's metaphorical understanding of method is related primarily to the process or activity of seeking knowledge, overall, 'method' refers to how we do something, the way we perform any activity or process. This being so, it should come as no surprise that there exist conceptual metaphors common to different sorts of activities or processes, which range from, to give two examples, the quest of knowledge to running a political campaign.

Sure enough, one of the sources of evidence we use in investigating this issue is *Macmillan Dictionary*⁸, in which appears identified two source domains, along with some example sentences, commonly employed to understand methods, namely tools / machines and roads. In addition, when we engage in any activity or a series of actions they are often construed as employing a machine or setting out on a journey. That is to say, the concept of methods is structured by different conceptual source domains, which point to its many aspects.

A METHOD IS A TOOL / MACHINE

- *It takes years to learn the **tools** of the trade.*
- *We need to move up a **gear**.*
- *In addition, new intellectual **tools** were exploited, especially from anthropology.*
- *Models and monitored performance are essential management **tools**.*

⁸ https://www.macmillandictionary.com/dictionary/british/method#method_9

- *Everything is running like **clockwork**.*
- *Some search **engines** are more **powerful** than others for retrieving information from the Web.*
- *We have a very efficient **mechanism/apparatus** for dealing with this.*

A METHOD IS A ROAD

- *What's the best **way** of doing it?*
- *He showed us what to do, **step by step**.*
- *We have explored several different **avenues**.*
- *Maybe we should try a different **approach**.*
- *Successive generations have adopted American **ways** for dealing with the medical community.*

The source domain of machines

The source domain of machines/tools seems to be one of the most frequently used to conceptualize things, activities, processes or organizations. Some examples follow:

- the government's propaganda *machine*
- the simple analytic *machinery*
- a research *tool*

Machines are artificial sort of objects that can be devised and employed to achieve a particular aim or help you to do something, which is closely linked and dependent on human activities. Humans make machines with a purpose. Moreover, our familiarity with simple machines, such as inclined planes, wedges, levers, and wheels can be traced back the origins of civilization, that is, we possess a bulk of cultural knowledge about machines, which may explain why we resort to our experience of designing and using machines to conceptualize abstract and complex processes. (Kövecses 2010, 161)

It is important to mention that machines are used as one typical source domain to conceptualize what Zoltán Kövecses calls, *abstract complex systems*, which are nothing other than “typically abstract complex configurations of entities, where the nature and relationships of the entities vary from case to case.” (155) Typical examples of such systems include governments, economic systems, political systems, society, social organizations, theory, worldviews and carriers. As suggested by Kövecses, when use machines as a source domain to conceptualize abstract complex systems what is being characterized is mainly its function.

Thus, for example, when we construe the world, minds or human beings as machines, our attention is drawn to its effective operation, capacity, intended purpose, parts or structure and power source. Notably, Lakoff and Johnson explored the general level metaphor **THE MIND IS A MACHINE**, which is a typical example of ontological metaphors. According to Lakoff and Johnson, “the machine metaphor gives us a conception of the mind as having an on-off state, a level of efficiency, a productive capacity, an internal mechanism, a source of energy, and an operating condition.” (1980, 28) Some examples follow:

- I'm *a little rusty* today.
- He *broke down*.
- My mind isn't *operating* today.
- We've been working on this problem all day and now we're *running out of steam*.
- We're still trying to *grind out* the solution to this equation.

Moreover, it is important recall here to that **THE MIND IS A MACHINE** as well as **A METHOD IS A MACHINE / TOOL** are examples of ontological metaphors, which allow us to understand our experience of abstract or non-material entities, activities, events, states, surfaces, undelineated physical objects in terms of discrete or bounded entities or substances. In this way, we are able to describe, quantify and identify specific features of such undelineated entities and events, which allows us to structure and comprehend them.

Accordingly, we suggest that conceptualizing methods in terms of machines draws on particular aspects of methods. To illustrate, machines/ tools and methods are instruments made with particular purposes, think for example of the expression *the government's propaganda machine*. It tells what is the machine's use or purpose (propaganda) and points to the machine's user (the government). It applies to methods as well. For example, the expression *effective teaching methods* tells us something about the instrument (methods), its use (teaching) and its functional status (effective). However, as we shall see, the artificiality of machines is an aspect that is not regularly mapped into methods, which are usually depicted as natural, especially in philosophy.

The source domain of roads/paths

Before we get into an examination of the source domain of roads/paths, we must make a few conceptual clarification on the idea of source domains. Source domains are concepts applied

metaphorically to other concepts, giving organization to our experience and understanding of a given concept. As Lakoff put it, a source domain “is assumed to be structured by a propositional or image-schematic model.” (1987, 288) The latter, image schemas are gestalt structures that shape our pre-conceptual experience, directly meaningful and associated to bodily experience. In the words of Johnson, an image schema “is a dynamic pattern that functions somewhat like the abstract structure of an image, and thereby connects up a vast range of different experiences that manifest this same recurring structure.” (1987, 2)

To put it differently, image schemas are abstractions of sensorimotor knowledge and spatial-temporal experience of movement, which are activated unconsciously when we engage in sensorimotor behavior. Additionally, they can serve as meaningful structures used to conceptualize abstract concepts in topographic terms. A fine example of image schemas is the path schema –also known as source-path-goal schema-, which involves moving from one place to another and whose structure consists of starting point, goal or destination, and intermediate points or contiguous locations. (1987, 113 – 117) The path schema acts as a base for other concepts like the concept of journey.

At this point, one may start wondering why those kind of unconscious structures are activated when trying to make sense of how we seek knowledge. A plausible answer may be found precisely in the primary character of body movement experience. Moving from a given place to another along a certain path is just as basic and recurring body experience as standing up, for example. As Raymond Gibbs rightly put it, image schemas such as containment, path or force “connect the domains of embodied action with the domain of linguistic action. Most generally, this examination of metaphor and linguistic action reveals how people use their intuitive phenomenological sense of their bodies to interpret, and better structure, more abstract conceptual domains.” (2008, 123 – 124)

In this way, the concept of method exhibits the road/path image schematic structure. That is, when we think of methods in terms of roads/paths, spatial-temporal experiences are placed over or mapped onto the concept of methods. To put it differently, adopting or using a method is understood as taking a certain road, as moving along a specific path. Such metaphorical understanding of methods is seen clearly in expressions as:

- They explored every *avenue* they could think of.

- We must think of a new *way to approach* the problem.
- It does not matter whose or what method you *follow*.
- We'll find a *way* to survey the property.
- Now in a *step by step* guide, I'll show you how I can achieve this.
- At a grassroots level, this is a *great step* towards *bridging the gap* of knowledge.

As these examples show, the path image schema is activated by terms like way, avenue approach, follow or step by step given that they indicate a direction of movement along a certain path. Lastly, it is important to keep in mind that image schemas-like path- as source domain do not offer a fully detailed knowledge of the target domain. It is rather sketchy or lacking in detail. For example, the path image schema just provides a simplified image of the structure of moving along a given road, that is, initial, ongoing and final profiled regions coupled with a trajectory.

Metaphorical coherence of the concept of method

These ways of conceptualizing methods are not consistent at all. Conceptualizing methods as objects we can manipulate, devise to perform a particular task seems to be incompatible with moving along a path. However, the metaphors listed above, namely a method is a machine/tool and a method is a path/road show the metaphorical organization of the concept of method, pointing, at the same time, to and providing understanding of different aspects of the same concept, that is to say, these two metaphors have different purposes. On the one hand, the metaphor a method is a machine/tool emphasizes functionality, goal or purposes, how it is organized or designed on the other, the metaphor a method is a road/path highlights directionality, progress, goal or purpose.

Indeed, we can get a single consistent image of that would make such metaphors compatible with each other. However, it is precisely the fact that they are metaphors that structure the same concept, namely, method what makes them coherent.

What does it all have to do with philosophy?

It has been one of the central claims of this work that through CMT we can gain deeper insights into the nature of philosophical theorizing. Besides, it is a central tenet of CMT that

philosophers use the same conceptual resources as common people does, that is, it would be no surprise if we find the metaphors common to philosophical theorizing and everyday people reasoning about the same objects, events, and so on. Indeed, the metaphors listed above are basic and common ways of conceptualizing methods. In this sense, we will conduct an analysis of metaphors used by some philosophers when thinking about methods. Some of them, as we shall see, are part of the common ways of conceptualizing methods.

Plato

In a suggestive analysis of Plato's concept of knowledge, the philosopher Jaakko Hintikka pointed out that one characteristic aspect of Ancient Greek thought is its teleology, which resulted in a conception of knowledge, thinking, belief and the relation to its objects as governed or ordered by 'aims', 'goals' or 'purposes'. Such tendency, Hintikka stressed, guided Greek inferences about the nature of knowledge and its objects, which was framed "with the help of concepts, images, and locutions drawn from the realm of goal-directed activities". (1991, 23)

It is not difficult to see why the observation made by Hintikka is relevant to the subject of this work. Hintikka's point is that philosophical theories are structured around a certain number of conceptual frameworks or assumptions, which simultaneously brings about some types of reasoning. Accordingly, paying attention of such conceptual frameworks often provides some clues as why a given philosophers chose a certain answer to a philosophical issue (9). Likewise, Hintikka seems to be drawing our attention to the role played by conceptualization and word choices in the sphere of philosophy.

On the other hand, it is particularly interesting that Hintikka used the idea of realm or sphere when talking about concepts, which is along the lines of the idea of 'conceptual domains' so characteristic of the field of Cognitive Linguistics. In the specific case of the lines quoted, it seems to suggest that Greeks inaugurated a certain way of construing knowledge as a purposeful sort of activity, which also involves action or movement. In this way, Hintikka's observation seems to be in the line with essentials CMT's tenets and with a group of metaphors identified by Lakoff and Johnson as fundamental in philosophy.

Furthermore, Hintikka's remarks are relevant to the issue at stake given that it tells us about a foundational philosophical way of theorizing. Indeed, Ancient Greeks' conceptual assumptions about knowledge gave shape to the subsequent debate over the nature of knowledge and the adequate ways of seeking and gaining it. It also occurs, as we shall see, in the case of the notion of method.

It might be of interest here to recall that although it is true that *ὁδός* (road, way) was used already by Hesiod (WD 277), Homer (Od. 17.196) and some pre-Socratic philosophers such as Heraclitus (Marcus Aurelius 2008, 56) and Parmenides, the available documentary evidence shows that the word *μέθοδος* seems to appear for the very first time in the works of Plato. It means literally 'following after' or 'pursuit', that is, even taken in its most basic sense, 'method' seems to be metaphorical, construed in terms of an activity or process that involves moving or running after something, a sort of chase. That is to say, the abstract concept of method is conceptualized in terms of more concrete ones, specifically, in terms of movement and action, underlying also its bodily bases.

In addition, in view of what was stated above, it is important to note that the idea of pursuit, as any other concept, should be understood in terms of its function in a whole system of concepts. Certainly, 'pursuit' or 'chase' are in a subtype relationship with 'motion', which, as a conceptual frame, is elaborated on other frames such as 'goal', 'source' and 'path', along with 'purpose'. Such frames are consistent with Plato's teleological inclinations as Hintikka exposed, which prompted Plato to define not only cognitive activities in terms of paths of purposeful motion, but also to see the cosmos as teleologically organized.

Indeed, Plato's notion of human intellectual capabilities and its objects is not only mathematically inspired, likewise, the mind (*νοῦς*), according to Plato, is always directed towards something. For this reason, Plato thought that true knowledge only comes when we get hold of those mathematical-like essential realities, so the quest of knowledge is going after something, a pursuit or give chase to forms. Hence, in the works of Plato, 'method' also appears to be meaning just investigation (Stat. 260e, Soph. 218d, Phaedo 79e, 97b) or mode of prosecuting an inquiry but sometimes also a theory, teaching, opinion or view (Theaet. 183c).

It is clear that the idea of a road or way takes on more significance here. Indeed, a method, for Plato, is a way we should go through to attain the objects we seek, that is, Plato employed the metaphor a method is being in motion along a road/path, an effort to reach a certain goal. There are numerous references extracted from dialogues such as Phaedrus, Republic, Sophist and Statesman, which show the recurring idea of roads or ways used to conceptualize methods.

In the Phaedrus, for example, Plato talks about the best way to master the art of rhetoric, and he concluded that if one is to become a good orator, one should not go “along the path of Lysias and Thrasymachus.” (Phaedrus 269d) The idea of paths is introduced here to talk about the methods used by Lysias and Thrasymachus, which Plato finds inadequate. Consequently, it will compare an unmethodical pursuit with the march or progression of a blind man. (270c-d) Here it becomes clear that the idea of going along a certain path serves as a basic activity to conceptualize methods.

Likewise, in the Republic introduced the idea of the “longer and harder way” that should be followed to enquire into the tripartite nature of the soul. (Rep. 4, 435d) Additionally, in the Sophist, Plato regarded methods as a road to be followed to catch the sophist (or a definition of), and used the idea of ‘hunting’ to refer to an investigation into the definition of sophist. (Soph. 218d) On the other hand, in the Statesman, Plato talks about the path that leads to the perfect truth. (Stat. 266d)

It is equally important to mention that when Plato talks about methods in terms of roads or paths, there is the explicit idea of the length of the road, which, in opposition with the modern sense of methods, might not be necessarily the shortest. Surely, it is quite at odds with our modern idea of methods as being economical. Here, it is important to realize that for philosophers such as Plato, becoming a skillful philosopher implies a lengthy process of training, which is perhaps different from the instrumentalistic modern view of method as something that can be ‘devised’, ‘designed’ or even ‘held’ in advance.

It might be interesting to find out the connection between ‘the chase’ and the geometrical-like dichotomous procedures Plato chose to ‘go after’ many different matters, but it would take us to a different direction. However, it seems fair to point out that dialectic is an art, not only in the sense that it imitates refuting or elenctic oral dialogue, but also in the sense that

the one who excels at the art of dialectics, exhibits a sort of conversational and argumentative competence acquired through practice. Certainly, Platonic dialogues are mainly aimed to reach definitions capturing the essential nature, what remains the same, of a peculiar instance of a group of things (*differentia + genus*).

It is not so clear, however, the programmatic motivations behind the conceptual definitions and clarifications sought in many of Plato's dialogues. As mentioned previously, rhetorical purposes cannot be discarded, as the driving force behind such conceptual explorations, which in turn makes Plato's exercise of philosophy be proximate to that current trend within philosophy named conceptual engineering, which some see as a promising subfield. It is primarily aimed at designing, evaluating and implementing changes –some would say 'improving', but such claim should be harnessed- in concepts. (Chalmers 2020)

Certainly, Plato's philosophical efforts were responsible for devising the conceptual frameworks and terminology on which much of the subsequent philosophical reflection with all its shortcomings. Think, for example, of the notion of sophistry. A close study of *sophistès* shows that neither the etymological nor the cluster of activities associated with such word (Kerferd 1981, 24 – 41) share the detrimental semantical values forged by Plato.

One look at the current uses of 'sophistry' will suffice to note that the way Plato reframed or reengineered it had a profound and so durable effect on the way we represent a former venerable activity. 'Invalid arguments', 'incorrect reasoning', 'deliberately deceiving', 'false belief' are some of the concepts conforming the new frame designed by Plato, which form part of the present common understanding of sophistry.

The process of engineering the concept of sophistry can be followed in many of Plato dialogues such as *Protagoras*, *Gorgias* or *Sophist*. The latter, particularly, features the assessment and introduction of changes regarding the concept of sophistry using an argumentative named division. It must be remembered that the dialogue explores seven plausible definitions, some of which are in line with the ancient common understanding of sophistry, but the tone Plato uses depicts it as reprehensible.

Moreover, the last definition of sophistry Plato gave, summarizes our current understanding of the sort of activity 'sophistry' evokes. In such way, sophistry is conceptualized as imitative

–not real or true in the Platonic sense-, ignorant, juggling, contradictory –in the logical sense- misleading, related to opinion, and so on. Then, there is no doubt Plato reengineered that concept, which, seen from the perspective of the adoption of the changes by the public, was a total success. However, it is debatable whether it was an improvement of the concept, as some conceptual engineers claim to be the aim of engineering a concept.

On the other hand, it is relevant here to notice that Plato’s engineering of the concept of sophistry was carried out by means of argumentation and, more precisely, using the argumentative device of dichotomous conceptual divisions. In this sense, it could be said that much of the philosophical work consists in shedding new lights on our understanding of old concepts, which in turn presuppose broadening the ways we construe and interact with the world. As a result, to employ Plato’s metaphor, having a method seems to involve the act of going after new ways of illuminating the world by introducing changes in human’s conceptualization of it.

Descartes

Unlike Plato, Descartes gave us a definition of what he meant by ‘method’. According to Descartes a method consist of “reliable rules which are easy to apply, and such that if one follows them exactly, one will never take what is false to be true or fruitlessly expend one’s mental efforts, but will gradually and constantly increase one’s knowledge till one arrives at a true understanding of everything within one’s capacity” (1985, 16). As this definition suggests, the concept of rules works as a conceptual domain, framing our understanding of methods. To put it in context, it would be necessary further examination on the notion of rules.

The term ‘Rule’ comes from Latin word *regula*, which was primarily used to refer to a measuring stick or rod used by carpenters, woodworkers and architects for measuring lengths and drawing lines⁹. On the other hand, the term *regula* was also metaphorically extended to the field of Law to refer to standards, patterns, models and precepts to judge, correct and

⁹ However, the English word ‘rule’ has become old-fashioned to refer to those straightedged strips and replaced by ‘ruler’.

determine what is true and false, just and unfair. (Gaffiot 1934, 1334) Equally, it should be noted that ‘rule’ currently has a wide variety of meanings, including procedure, control, regulation, authority, custom or habit, which are conventional as well.

As the first attested meaning suggests, a rule is an artifact (entity) made or designed with a particular purpose (measuring, fixing or drawing lines or limits), composed of some material. It is therefore not difficult to see that there are conceptual associations between the domains of artifacts or physical entities and rules, that is, the domain of artifacts is projected via metaphor on rules, even if rules are taken in the more abstract senses of regulations, principles or models. There are some ways of speaking of rules, reflecting such associations. For example, when we speak of rules as something made up (I didn't make that rule up), which can be in turn be broke (You *broke* the rule), stretched (His teacher *stretched* the rules for him) or bent (The rules are often *bent* to ensure a good show) or be composed of some material whose shape and material is non-flexible (It is not possible to lay down *rigid* rules).

In the case of Descartes, such understanding of rules in terms of devices is projected on methods. Descartes, unlike Plato, has a very instrumental view of methods, which, in the eyes of Descartes, were sort of instruments or tools made for acquiring knowledge. Philosophers in the past had devised different methods and ‘weapons’, but Descartes thought he designed a better one. Such device (method) is purported to help us to carry out some mental operations (intuition and deduction).

Furthermore, it is essential to mention that Descartes’s epistemology relies on a set of metaphors, a number of which were listed by Lakoff and Johnson, namely; knowing is seeing, thinking is moving and seeing is touching. (1999, 393 – 400) The first two are particularly relevant to understand the way Descartes construed methods. Indeed, as the title suggests (*Regulae ad Directionem Ingenii*) methods (rules) are the sort of device that guide, direct or indicate the way we must go through in order to attain knowledge, which is consistent with the metaphors just mentioned. Without such methods, Descartes said, “it is quite certain that such haphazard studies and obscure reflections blur the natural light and blind our intelligence.” (1985, 16)

Therefore, devising a method seems to be essential for the pursuit of the sort of knowledge in which Descartes was interested, since it not only provides order to such a pursuit, also, by

the same token, it seems to prevent us from falling prey of any element of chance and the poverty of human intellect. Certainly, the landmark of the philosophy of Descartes is its unrelenting quest for certainty. However, such epistemic feature, as rightly pointed out by Dewey, is unattainable in the realm of practical affairs, which makes understandable Descartes' modelling of its philosophy upon mathematics where indubitable truths are allegedly to be found.

Besides, the very idea of rules fits in the mathematical frame shaping Descartes' view of the pursuit of knowledge, which is seen as algorithmically organized. Many have pointed out the troubles surrounding such view before; however, it seems to us that the main issue resides in anticipation. Indeed, Descartes view of methods implies that it can be devised beforehand independently of its intended purpose or application. Such assumption is problematic in many ways, for it prompted Descartes to believe that his method could be applied to various branch of knowledge, including philosophy. (121 – 122)

For such reason, the Cartesian method has often been thought as giving way to arguments over its universality. Of course, universality here should be understood as meaning simply replicability, that is, Descartes' procedure can be repeated in different places at different times, obtaining the same (desired) results. Certainly, since Cartesian methodology mainly aims at acquiring certain and foundational knowledge regardless the field, it brings forth the obvious consequence that the method and the habits of pursuing an investigation it helps to develop, by itself, grants certainty in any circumstance it could be applied.

Seen from the perspective of epistemological pluralism, such assumption may be seen as untenable, given that it seems to overlook that there might exist other equally valid ways of understanding the world and acquiring knowledge, which, in turn, are circumscribed to the purpose it seeks to attain. In this respect, however, one should consider replicability to be precisely a test of the appropriateness of the method and not a sign of an 'dominant', 'privileged' and 'oppressive' sort of epistemology. To put the matter differently, the so-called universality (replicability) claim found in Descartes' methodology should be read as the recognition that there exist common patronized ways humans follow when seeking after knowledge, which on some occasions and for some purposes may work.

Kant

Philosophy, according to Kant, consist in knowing one's inherent limitations. Certainly, it could be argued that a large proportion of the transcendental philosophy enterprise resides in stablishing the conditions enabling human knowledge, whereby its foundations, purpose, scope and boundaries can be determined. In fact, Kant acknowledged that his Critique was largely a 'treatise on method' of metaphysics, which seeks to examine the validity of metaphysical claims by a critical exploration of reason's nature and limits. (1998, 113 – 114)

Such proposal is based on two main features of reason as mental faculty. First, it has a natural tendency to come up with questions whose answer lies far beyond the possible experience and consequently it needs a sort of regulation that only itself can provide. Second, reason is a human mental power that is subjected to certain rules. In fact, Kant maintained, "want of rule is want of reason." (1819, 94) Of course, rules, in the Kantian sense, are different from Descartes' conception of rules, for, as we shall see, they possess a sort of authority or regulative power, which makes them ineludible.

Being said this, it is important to bear in mind that Kant conceived the matter of method as being tied to Logic, given that it is 'the science of rules of understanding' (1998, 194). Specifically, Kant affirmed that 'the doctrine of method' was another side of Logic, which had 'to treat the form of a science' procuring 'the logical perfection of cognition', which has as essential features distinctness, profundity and systematical order. (1819, 96 -97) In this sense, method is associated with arranging and conjoining one's thoughts.

On the other hand, in CPR, Kant proposed the 'transcendental doctrine of method', which is nothing but 'the determination of the formal conditions of a complete system of pure reason.' (1998, 627) Now, we must note that the idea form, well-ordered structure or well-defined shape is again present as it was already stated in Kant's Logic. To put it differently, a method, seen in this light, seems to provide *structural organization* to our knowledge.

However, we must no ignore that the Kantian conception of method has many other facets. Indeed, Kant divided his 'transcendental doctrine of methods' in four parts, namely a discipline, canon, architectonic and history of pure reason. Furthermore, we must note that the first two, refers to set of rules or regulations, but in the first case those regulations are

restrictive and in the second normative, that is, it is concerned with the correct use of reason. The architectonic, on the other hand, seems to convey once again the idea of arrangement and organization. In short, a method, as Kant conceived it, seems to provide not only structural organization to our knowledge, also it functions to prevent errors controlling Reason's propensity to go beyond its limits and, lastly, it serves as authoritative guide for pursuing knowledge.

Furthermore, it is to be noted that the way Kant sees methods is in complete harmony with his conception of Reason. In that regard, Lakoff and Johnson have examined the web of metaphors shaping Kant's conception of morality, which is inevitably entangled with the way Kant sees reason. Additionally, Lakoff and Johnson have suggested that Kant conceptualize Reason as a Strict Father, which possess complete autonomy and authority, able to lay down norms and regulations to his child (will) in order to avoid evil (passions). (1999, 417 – 419)

It is nonetheless worth noting that the same applies to how Kant conceives knowledge. In fact, since reason is an autonomous and self-regulating entity, that is, it dictates norms to itself, knowledge comes when Reason provides itself rules and restrains itself from going beyond its limits, that is, it establishes its own boundaries. This being so, it presents few difficulties to see why the products of Reason, its norms and regulations acquire this sort of mandatory character. Naturally, from our point of view, it might help to explain why a method appears to involve obligation, impelling our efforts towards the acquisition of knowledge.

For all that said so far, we are enabled to identify some metaphors Kant used to conceptualize methods. First, it is appropriate to examine some of the metaphors actually used by Kant. For example, in the 'transcendental doctrine of method', Kant gets us to thinking of 'the sum total of all cognition of pure and speculative reason' in terms of an edifice or building, which needs a plan (a method) in order to be strongly and solidly built. (1998, 627) In other words, the activity of building serves as a domain to frame the activity of pursuing knowledge and so an investigation is conceptualized as a project that needs a plan to be carried out properly. In this sense, one of the metaphors Kant uses regarding methods is **A METHOD IS A PLAN**.

With attention to the target domain of plans, it seems to us that it is coherent with Kant's idea of knowledge as having a structure or systematical organization and the long-held idea that

the pursuit of knowledge is a purposeful or goal-oriented activity. A plan is not only a detailed proposal for attaining certain goals; also, it is an arrangement scheme or the design of a structure.

On the other hand, Kant also regarded methods as coercive rules (1819, 94), that is, methods are sort of impelling or hindering forces. Certainly, methods appears to be conceptualized in terms of control, or to put it another way, a method is an entity that exercises controlling force or power over Reason's propensity to go off track from possible experience. Seen in this light, it might be said that one of the aspects of methods is that it acts as a force, that is, Kant seems to be conceptualizing methods in terms of what Leonard Talmy calls 'force-dynamics framework'. Such framework, according to Talmy, "is able to capture the concept not only of the causing of a result, but also of the prevention of a tendency." (1988, 68) Equally, it is important to emphasize that in Kantian sense such controlling force seems to be exerted by Reason itself, which is understood, in this case, as an authority acting over itself. Thus, **HAVING A METHOD IS EXERTING A FORCE OVER ONESELF.**

It must be remembered, as Lakoff pointed out, those concepts such as force, control or limit are superordinate concepts, that is, they are so abstract that are not directly grounded on experience. (1987, 406) Unlike the concept of plan, which directs our attention to structures, giving us some ideas of what sort of thing a method is, the concept of force or exerting it, seems to point to the experience of employing a method, how it works.

It is essential to remember again that Reason, in Kant's view, is its own lawgiver, its own master, that is, it prescribes itself *a priori* principles or rules. Hence, Kant's conception of philosophy is a critique in the sense that it is proposed as an examination of reason and the principles governing it, as well as an assessment of the scope of such principles. A method, in this sense, is concerned with the examination of the nature and the value of the material upon which we build knowledge in order to determine its appropriate uses. Equally, it is related to choosing the use, which rightly fits and satisfy our intellectual needs.

There seems to be a solipsistic theory of methods in the sense that Reason establishes not only its principles, but also the appropriate ways for the investigation and evaluation of such principles and the materials upon which it builds knowledge as well as its limitations. That

is to say, reason is the legitimate point of departure of a research on itself. It is a circular and so ill-fated exploration.

Concluding remarks

So far, we have been echoing the claim that metaphors plays an important role in our process of conceptualization, providing not only a way of experiencing and understanding of the world around us, but a efficacious way of communicating complex ideas. However, conceptualizing one thing, process or activity in terms of another, means putting greater emphasis on some aspects of our experiences, while glossing over others. If we think of specific contexts such as politics, as warned by Lakoff and Johnson, it could lead to concealment of degrading and even dehumanizing realities. (1980, 236 – 237) Similarly, we think that CMT may provide the theoretical framework needed to examine and unveil those so-called hidden realities that philosophers' epistemological and methodological assumptions de-emphasize, as well as the consequences of such conceptions.

On balance, we have identified four metaphors employed by philosophers, some of which are tuned perfectly to the way we ordinarily think about methods. In such common understanding of methods, concepts such as tools/machines or roads serve as frames, setting how methods are typically construed. Also, we saw some novel and creative metaphors employed by Kant to conceptualize methods, which are in perfect harmony with how we currently believe methods works within specific context.

As pointed out before, the Platonic idea of method is framed in terms of roads/paths, which is an abstract or non-lexicalized frame, that is, the path frame is a pre-conceptual (pre-linguistic) and meaningful structures based on body experience, more specifically bodily motion. It is extended through metaphor to other sorts of experience, giving organization to them. Thus, the recurring experience of moving from one point to another organize our experience of having a method, which, in turn, is understood as being located somewhere between our point of departure and the destination. Of course, such frame does not tell us whether we are going to be successful in reaching our desired goal or it is an easy, pleasant and short road, neither does it says the opposite.

On the other hand, when it comes to Descartes' conception of method, it is worth noting that it is also in the line with our typical experience of methods. Descartes' conceptualization of methods as a device, tool or instrument made for a particular purpose, seems to presuppose an instrumentalist view of methods very much so in the line with current epistemological demands.

The problem with Cartesian conception of methods lies in that it presupposes the existence of a machine-like mind, which performs some tasks or operations (intuition / deduction) that can be executed only with the aid of a tool (method). It makes methods appear as an indispensable prerequisite for the acquisition of knowledge, which comes out as a product of carrying out such operations. In the light of our current knowledge, intuition and deduction demand training more than a tool to be performed.

The situation is somewhat similar with Kant. Kant's concept of reason makes methods appear as mere products of reason, that is, a method is the product of reason exerting its autonomy and power over itself. Therefore, as a product of reason, it acquires a universal and authoritative character, for the products of reason are universal in the Kantian sense. Seen in this light, a method appears to be absolutely necessary, which is an idea one may debate.

In general, the metaphors listed above may lead us to think of methods as actual existing entities endowed with authority, internal constitution, shape and actual functions, downplaying the fact that we are here dealing with mere idealizations.

Conclusion

A response to a metaphilosophical question is a tricky business, for it involves inevitably a certain evaluative philosophical perspective. It seems clear that we are faced with Aristotle's observations found in *Protrepticus* regarding the elusiveness talking about philosophy carries, in the sense that even in an effort to deny it, philosophizing is required for such task. In other words, metaphilosophical questions are always the consequence of having arrived at some conclusions regarding the sort of activity philosophy is.

It applies consequently to questions such as: how philosophy should be done? Alternatively, to put differently, what is the method proper to it? Those are strict prescriptive or normative questions; their answers should express a standard way of doing philosophy. There have been many unsuccessful attempts, since failed to acquire the acquiescence among philosophers, leaving us with such a strange feeling and wondering if there is any use in asking such questions.

Definitely, as suggested above, an answer involves certain philosophical assumptions harbored after some time in the field of philosophy, that is, it is likely to exhibit idiosyncratic preconceived judgments. Then it seems to be unwise being busied by such queries. Instead, we should be accept the pluralist idea that there are many ways of philosophizing and stop seeking an illusion.

However, such apparently wise way out of the problem presents practical challenges for philosophy as an academic discipline. For example, how a given student is supposed to be introduced to philosophy without a clear idea of how she is expected to perform it. There are reasons to suspect it would not really help telling a student that there are many ways. Clearly, the problem of philosophical method is directly related to philosophy susceptibility of being taught.

Naturally, from our point of view, a positive answer would require a clear idea of what philosophers do and equally a re-evaluation of philosophers' self-image. Many representative philosophers such as Nietzsche have spoken on the latter, emphasizing that philosophers' self-understanding as seekers of basic truths is a misconception precisely because philosophy is nothing more than an argumentative practice. Nothing better illustrates this

than the lack of agreement regarding many topics in philosophy, a field in which everything is subject to discussion, including the sort of activity it is and its method.

In that sense, the debate presented above on the proper method to philosophy over the past decades testifies its argumentative character. While there were some positions clearly identified, they shared some common features namely; the method proposed reflected philosophers' inclination towards science, in brief, the debate was influenced by the success of the science, making philosophers prone to delimit philosophy according to scientific standards.

There are two aspect in such debate that I would stress in particular. On the one hand, it is astonishing to see a philosopher advocating a particular way of philosophizing, say bracketing, which is in striking contrast to what the philosopher were actually doing (arguing) or even beyond human capabilities. On the other hand, the anti-foundationalist suggestion that no research is non-contextual, given that the knowledge a given context provides suffice to know our way around a given problem, also implies that there is no need for a method.

With regard to the former, a likely explanation for such cases of partial or biased views may be found in the formulation of such proposals and theories in general, or rather the conceptual frames underlying such formulations account for the direction of the arguments as well as the sort of entities postulated and the way to know them. Certainly, the representative cases of philosophizing evaluated have shown that the conceptual frame adopted –consciously or not, by a given philosopher, drives the inferences made in the process of building its arguments, including methodological choices.

Moreover, it might even be thought that the problems and the alleged solutions philosophers put forward are already suggested within the confines of such frames. This leads me to believe philosophers' methodological proposals should be seen as argumentative devices, working to strength the case presented. They are no real research method in the sense that neither they provide insight into, nor help discover new information about the matter at stake.

Russell's rewording, for instance, did not tell us anything new about the word *the*. In fact, Russell fabricated a case against it on the assumption it could fool us into believing about the existence of nonexistent entities. The problem here is the assumption of the imperfection of

natural language or its components. The emergence of such assumption already presuppose one has a standard, which in the case of Russell is formal languages. In brief, such inferences are made possible by conceptual frames adopted in which logic is the standard and part of the solution.

It would appear that I am assuming that a method is disposable after all as the postmodernists claimed. It is not in line with our claims, however. Rather, granted that philosophy is argumentative, relying heavily on languages, the method a philosopher claims to be employing should be understood as part of the argument with a specific discursive role in it. This does not mean that the notion of method, as a concept, needs to be neglected.

It leads us to consider once again the argument of anti-foundationalist philosophers' argument against the notion of method. Anti-foundationalists are quite right pointing to the influence of contextual factors on the work done by a given individual of any field. Certainly, an institutional setting, sufficient exposure to specialized literature and education suffice to find her way into any field. Granted, no research is non-situational. However, it does not imply the notion of method is disposable.

It has been precisely my point that despite the lack of agreement among philosophers over the proper method to philosophizing, there is a specific way a person is expected to do philosophy, acknowledging, of course, philosophy is an argumentative activity. That is to say, there is a standard way of doing philosophy; there are patterns and procedures followed by philosophers when putting forward a theory or argument. It is true; however, that a philosopher' methodological bid does not often keep with what it actually does. Nevertheless, it does not mean, in any sense, that there is no order followed by philosophers while arguing, that is, philosophical research is methodical.

One likely explanation for the cogency of the notion of method may be found in one cognitive aspect of human mind and its need for detection and classification of patterns. To be sure, the examination of the metaphoricity of the concept of method showed it is used to characterize and highlight a required purposeful organization of learning and research in general, that is to say, discovery is understood as pattern governed behavior.

Now, is there a standard way philosophers pursue research? Alternatively, to put it differently, is there a pattern followed by philosophers when building up a theory (argument)? Based on the cases considered above, I truly believe that there is an existing pattern in philosophizing.

To advance this line of inquiry, the first to consider is what pioneers of Western philosophical tradition esteemed as the beginning of philosophy: human sense of wonder. However, in a technical sense, the idea of wonder points to the circumstances leading a given object, property or relation to become problematic, when the world is rarified to the point that all, even the seemingly clear, evident, quotidian experiences we mundanely have, become unfamiliar.

Russell dared to problematize one of the things human take for granted more often: language, in particular one of the words (*the*) most commonly used. Plato, similarly, sought to define sophistry, which was a common practice of his time. Nor should we forget Descartes who went on to cast doubt on sensual perception, and so on. Such problems, it has to be pointed out, arise as by-product of the assumptions contained in the conceptual frames adopted.

As a second aspect of philosophizing, conjecture is central to philosophical enterprise, hypothesizing a tentative solution to the problems encountered, which establishes starting points of heuristic value, guiding the argument. The conceptual frames equally guide conjectures. This is followed by the process of construction of an argument in favor of the proposed hypothesis, weighing up equally some reasons against it. A philosophical argument is never conclusive, rather should be seen as plausible, persuasive or more insightful than others could. As a part of the process of building up theory, philosophers engage in the examination of concept and the introduction of new ones for arguments sake. Certainly, the cases studied showed philosophers engaging in the exercise of conceptual examination and definition. Plato was famously for coining words –method, for example-, so did Descartes and Russell.

There are other aspects of the philosophical enterprise and that is its open character, that is, any philosophical argument can be rectified, revised or rejected as plain wrong by other members of the philosophical community. In other words, philosophical theories changes

because of the action of other members of the academic community by evaluating its assumptions or reframe them

Now someone may ask; what are the features of a philosophical argument? So far, two of them have been highlighted, namely, conceptual frames guide them and they are reinforced by the methodological proposal. Of course, it would take more research to classify the twists and turns of philosophical argumentation, which falls out of our purposes here.

Given these points, I would like to emphasize that a key point revealed by this research has been precisely the insistence on the existence of a proper way of doing philosophy, which is related traditionally and unmistakably to argumentation. Certainly, philosophers' job over the centuries has been seeking understanding of the world by casting new light upon an immense variety of issues by argumentation.

It is true that the word argumentation may give one the impression of futility and superficiality; however, it is precisely what has provided humanity with great number of genius ideas, some of which have become consolidated by factual research or public acceptance. It is also true that philosophers may not have provided conclusive solutions to the problems they sought to address. Nevertheless, the answers have stimulated conversation, which is not meant to be completed. It is this aspect of philosophy, its openness, which makes it a paradigm of rationality.

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