

Metaphysics of Language and its Relationship with Communication Models¹

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ABSTRACT The aim of this paper is not to explore the relationship between language, communication models, and metaphysics. A quick survey on the field of communication easily shows that on the way to 'become an academic discipline', communication studies 'borrows research paradigms from other disciplines' and 'used' communication models to establish itself as a separate discipline. However, it does not mean that communication models 'reflect' reality in the sense that they are 'transparent' and explain how communication functions. Since the beginning, while explaining how communication functions, communication models are based on the notion that communication is a 'transmission of message' but none of the models could be able to explain how communication functions.

INTRODUCTION

"However the topic is considered, the *problem of language* has never been simply one problem among others" (Derrida 1976: 6, emphasis in the original) states Derrida in the beginning of *Of Grammatology*. The problem of language, according to Derrida (1976), is one of the most significant issues in 20th century philosophy, especially after Ferdinand de Saussure who 'created a new discipline' called semiology (semiotics).¹ While deconstructing Saussure, Derrida (1976) begins from the notion of signifier and signified that are the bases of Saussure's semiotics. While 'inverting' Saussurean notion, Derrida (1976) demonstrates how Saussure belongs to logocentric view-speech/writing dichotomy as well as signifier as the representative of 'truth'-that is metaphysical.

Nevertheless, the aim of this paper is not to give an outline of how Derrida (1976) 'effaces' Saussurean notion but to explore the relationship between language, communication models, and metaphysics. A quick survey on the field of communication easily shows that on the way to 'become an academic discipline', communication studies 'borrows research paradigms from other disciplines' (Craig 1999: 123; Delia 1987) and 'used' communication models to establish itself as a separate discipline (Shannon 1948/1963).

However, it does not mean that communication models 'reflect' reality in the sense that they are 'transparent' and explain how communication functions (Iltter 2008). Since the beginning, while explaining how communication functions, communication models are based on the notion that communication is a 'transmission of message' but none of the models could be able to explain how communication functions (Mutlu 1998; Iltter 2008). The common point of communication models can be summarized as follows: *none of them questioned language* but try to explain 'failures' (or misunderstandings) as a result of either 'outside' or 'cross-cultural' factors (Cf. Shannon 1949/1963; Eco 1968, 1989; Gensini 2006; Iltter 2008; McQuail and Windahl 1993; Tzanne 1999; Volli 2010; Weaver 1963). Yet, it is not the problem of 'outside factors' that 'creates problems in communication always but language (Iltter 2008). To put it differently, all communication models considered language as *a priori* and 'transparent' that 'reflects reality' (Iltter 2008). In Iltter's (2008) words, "What I find most remarkable about these models [S-M-C-R models] that purport to explain what communication is, is that *they completely ignore language* or at most reduce it, to the extent that it is implied, into a neutral carrier of communication. For these models, *language seems to be a transparent vehicle* of transport without any effectivity of its own on communication and what is communicated by communication" (p. 263, emphases added).

As stated by Iltter (2008), the issue of considering language as transparent is an example of

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metaphysical and communication models are the examples for that. This notion is in question throughout the paper by showing some examples from metaphysics and its relation with the field—using Shannon's (1948) model as a starting point, since most S-M-C-R models based on this model—and argue that the very idea of modelling communication as well as seeing language as transparent are metaphysical—since science itself is metaphysical (Derrida 1989, 1982, 1996; Feyerabend 1975, 1987; Kuhn 1970; Stocker 2006). Same as science that has metaphysical grounds, inevitably, communication models that 'established/created' communication studies has metaphysical grounds because: a) considering language as one-to-one correspondent and transparent is problematic (Ilter 2008 b) since science itself has metaphysical aspects, inevitably, models that 'represent' communication are metaphysical.

A Mathematical Theory of Communication

Shannon's (1948) "A Mathematical Theory of Communication" can be considered as the 'foundations' of S-M-C-R (Sender-Message-Channel-Receiver) models.² In that sense, "A Mathematical Theory of Communication" (Shannon 1948/1963) can be seen as an example for all S-M-C-R models, although, later on many S-M-C-R models become much more complicated than that however, still, S-M-C-R models 'share' the basic notion that communication as linear process that aims to transmit a message. The reason why Shannon's (1948) model in particular but S-M-C-R models too are in question because although criticized by many, still in many academic disciplines (including communication studies, especially for the undergraduates), S-M-C-R models are still being taught as the solely way to define what communication is.

The 'foundations' of communication studies can be considered as metaphysical. Shannon's (1948/1963) and Lasswell's (1948) models are considered as the 'foundations' of communication models as well as communication studies (Delia 1987; Craig 1999). Although as a model Shannon's (1948/1963) model has nothing to do with what communication scholars mean when they talk about communication and adapted from a purely mathematical model, it is considered as a useful model, metaphor that can be used in communication studies.³ Other models that can

be considered as S-M-C-R models, also share the same problem. However, through time, communication models have 'evolved' in a way that communication scholars 'created' 'their own' communication models but this does not change the metaphysical aspects of communication models and/or studies.⁴ An example for this can be given from Shannon (1948), where he talks about communication and meaning. In his essay, Shannon (1948/1963) deals with communication in terms of engineering, not in the way that communication studies argue. As Shannon (1963) claims,

The fundamental problem of communication is that of reproducing at one point either exactly or approximately a message selected at another point. Frequently the messages have *meaning*; that is they refer to or are correlated according to some system with certain physical or conceptual entities. *These semantic aspects of communication are irrelevant to the engineering problem.* The significant aspect is that the actual message is one *selected from a set* of possible messages. The system must be designed to operate for each possible selection, not just the one which will actually be chosen since this is unknown at the time of design (p. 31, emphasis in the original).

As can be seen, Shannon (1948/1963) had no interest in the semantic aspect of communication at all and preferred to focus on engineering. In communication studies, this model is being 'perceived' as a model that explains how communication functions, even though it was not the 'intention' of the model itself.

Nevertheless, in "Introductory Note on the General Setting of the Analytical Communication Studies", Warren Weaver (1963) argues that although Shannon's (1948/1963) model is technical in the sense that it deals with communication as an engineering problem, 'the model is much more than a simple mathematical model' (p. 6). In the beginning of his 'note' on Shannon's (1948/1963) mathematical theory Weaver (1963) categorizes the model into three aspects: a) technical b) semantic c) effectiveness problem and states that "...there is in fact overlap between all of the suggested categories of problems" (1963: 6). While exploring entropy (the technical level), both Shannon (1948/1963) and Weaver (1963) realize the complexities of communication but neither Shannon—since it is not his intention at all—nor Weaver do not question the issue of

complexity regarding the problem of language but engineering (Weaver 1963: 12). That is why, while explaining Shannon's (1948/1963) model, Weaver (1963) uses mathematical language because it is inevitable to use mathematical language to express the model, since the model is mathematical. As Weaver (1963) states, "Although it is not at all the purpose of this paper to be concerned with mathematical details, it nevertheless seems essential to have as good an understanding as possible of the entropy-like expression which measures information" (p. 14).⁵ Weaver (1963) states that Shannon's (1948) theory is useful and applicable to communication in general. According to Weaver (1963),

Very roughly, one may say that the extended theory is somewhat more difficult and complicated mathematically, but not essentially different. Many of the above statements for the discrete case require no modification, and others require only minor change (p. 22).

In that sense, one can see that even Weaver (1963) is aware of the fact that Shannon's (1948/1963) theory is not a theory that 'explains' communication in the sense that he is interested but still, he supports it through using mathematical language. After explaining Level A (technical level) in 18 pages, towards the conclusion of the paper, Weaver (1963) finally talks about Level B (semantic) and Level C (effectiveness) as a part of Level A. According to Weaver (1963), even people use/choose the 'right words', still there could be some problems in communication. For Weaver (1963) it can happen so we have to think about the capacity of audience (p. 26-27).⁶ The main problem here lies on the fact that this saying goes with the notion that 'language is transparent' and 'reflects' what it says but without questioning language, no matter how detailed one explains how communication functions, a gap will always remain and that is the reason why none of the models could be able to explain how communication functions (Ilter 2008).

In addition, communication, as a field, used communication models and/or 'other theories of communication' from different disciplines, such as engineering, psychology, literature etc. to "create" communication as a 'different academic discipline.'

Since most of their theories [of communication] and research paradigms were borrowed from other disciplines, this means, in effect, initiating communication research programs closely based upon research programs in those other disciplines, so that much political communication re-

search, for example, was little more than 'political science practiced in the field of communication' (Peters 1986: 548). Similarly, much interpersonal communication research was, and continues to be, little more than experimental psychology as practiced in the field of communication... This condition further explains why communication theory has not yet emerged as a coherent field (Craig 1999: 123).

Although Craig (1999) points out 'the problems' of the field and states that researches in communication are based on 'other programmes' and that leads communication 'depending on' other disciplines, he too falls into the logocentric notion that, communication can establish itself as a separate discipline. However, as Feyerabend (1975, 1981), Kuhn (1970), Beck (2010) argue, every scientific discipline has metaphysical grounds and that none of the research programmes questioned language as a problem for the field of communication studies. Nevertheless, while talking about Shannon's (1948/1963) model and how it is being used in the field, Craig (1999) claims that:

Perhaps the most egregious case involved Shannon's mathematical theory of information (Shannon and Weaver 1948), which communication scholars touted as evidence of their field's potential scientific status even though they had nothing whatever to do with creating it, often poorly understood it, and seldom found any real use for it in their research (p. 122).

What Craig (1999) points out here is the problem in the field is *logocentrism*. In other words, communication scholars legitimize the field as a science by using Shannon's (1948) model, although it is quite different than the scholars' point of view (Although it is quite different than the communication scholars' point of view, the field is legitimized by scholars as a science by using Shannon' (1948) model).

Yet, as Koyré (2004), Kuhn (1970), Feyerabend (1975, 1987), and Beck (2010) show in their works, one can argue that it is possible to question the notion of science too because science includes metaphysics and that communication studies that used communication models are problematic too.

Science and Metaphysics: Searching for a "Truth"?

As aforementioned, one of the main problems 'reside' in communication studies is the logocentric view that communication models sub-

scribe. However, since the logocentric notion cannot be separated from the idea of science, a study on the 'foundations' on communication studies inevitably deal with the notion of science and how it is metaphysical.

Lots of works have been published regarding the problem of scientific method and how it developed, whether in natural sciences, social sciences, or in humanities.⁷ Regarding the philosophy of science and the scientific method, Feyerabend (1975, 1987) criticizes the common view in science that excludes ideas, beliefs, dogmas, metaphysics as well as history. In other words, for Feyerabend (1975), one must take into account history and the heterogeneous character of science while talking about the history of science. For him,

...the procedure [of science] overlooks that science is a complex and heterogeneous historical process which contains vague and incoherent anticipations of future ideologies side by side with highly sophisticated theoretical systems and ancient and petrified forms of thought. Some of its elements are available in the form of neatly written statements while others are submerged and become known by contrast, by comparison with new and unusual views... Many of the conflicts and contradictions which occur in science are due to this heterogeneity of the material, to this 'unevenness' of the historical development, as a Marxist would say, and they have no immediate theoretical significance (p. 146).

As Feyerabend (1975) argues, the procedure of science, although it can be based on falsification or any logic of confirmation (Cf. Lakatos 1978; Hempel 1966; Popper 2002), it is also significant to note the fact that while talking about the 'development' of science, one should bear in mind that science is a 'product of a historical process'.⁸ In other words, science 'includes' ideologies or beliefs that are considered as 'not scientific.' For example, Kuhn (1970) argues that the texts that talk about science or history of science are unhistorical because they lie on the idea of progress, however, when one studies the history of science, one can see that science includes beliefs, myths, and superstitions. As Thomas Kuhn (1970) claims,

Perhaps science does not develop by the accumulation of individual discoveries and inventions. Simultaneously, these same historians [historians of science] confront growing diffi-

culties in distinguishing the "scientific" component of past observation and belief from what their predecessors had readily labelled "error" and "superstition." The more carefully they study, say, Aristotelian dynamics, phlogistic chemistry, or caloric thermodynamics, the more certain feel that those once current views of nature were, as a whole, neither less scientific nor more the product of human idiosyncrasy than those today. If these out-of-date beliefs are to be called myths, then myths can be produced by the same sorts of methods and held for the same sorts of reasons that now lead to scientific knowledge. If, on the other hand, they are to be called science, then science has included bodies of belief quite incompatible with the ones we hold today. Given these alternatives, the historian must choose the latter. Out-of-date theories are not in principle unscientific because they have been discarded. That choice, however, makes it difficult to see scientific development as a process of accretion. The same historical research that displays the difficulties in isolating individual inventions and discoveries gives ground for profound doubts about the cumulative process through which these individual contributions to science were thought to have been compounded (p. 2-3).

As can be seen from Kuhn (1970), while talking about science and the history of science, one should take into account not only the discoveries but also the historical process behind—that could be beliefs, ideas etc.—the scientific process, which shows 'the heterogeneous character of science' (Feyerabend 1975).

Another criticism on the notion of science and progress is given by Ulrich Beck. On the radio programme entitled *Ideas with Paul Kennedy*, a CBC Radio Programme on "How to think about science: Episode 5," Ulrich Beck (2010) claims that:

From a sociological point of view, science was the institution which took the position of the church and the priest. In earlier times, it was the church and the priest who tried to create security. And when religions were not anymore in the centre of society, then science took over. And our belief in progress is some kind of religious belief where the actors are the scientists. And of course, this is still very powerful image, which people have in mind but the more science began to reflect upon on its own role, in all kind of different disciplines, they themselves

actually produce thoughts doubts about this claim for rationality and security and truth.⁹

Here, one can argue that what Beck (2010) says is not so different from Feyerabend (1975, 1981) and Kuhn (1970). In other words, what Beck (2010) points out the fact that although science is considered as an opposition to beliefs and/or religion, it became another kind of belief and/or idea.

Another example from the history of science can be given from Galileo. As Hawking (1988) gives Galileo's Pisa Tower experiment as an example:

Our present ideas about the motion of bodies date back to Galileo and Newton. Before them people believed Aristotle, who said that the natural state of a body was to be at rest and that it moved only if driven by a force or impulse. It followed that a heavy body should fall faster than a light one, because it would have a greater pull toward the earth... The Aristotelian tradition also held that one could work out all the laws that govern the universe by pure thought: it was not necessary to check by observation. So no one until Galileo bothered to see whether bodies of different weight did in fact fall at different speeds (p. 15).

Although Hawking (1988) claims that the story of Galileo's Pisa Tower experiment is almost true—that is he dropped weights from 'the leaning tower of Pisa'—it is not 'completely true' because instead of dropping balls from the leaning tower of Pisa, "he rolled balls of different weights down a smooth slope" (Hawking 1988: 15). This, in a way, shows how even science has 'unscientific laws' and that scientists (most scientist since the time of Aristotle) had the dominant view that Aristotle's views are unquestionable just because Aristotle argued in that way. This, in that sense is a good example that shows that there is a relationship between science and ideas and/or beliefs and that "...rationality is one tradition among many rather than a standard to which traditions must conform" (Feyerabend 1987: 7). Nonetheless, according to Alexandre Koyré (2004), Galileo's famous Pisa Tower experiment has never taken place. With a little bit knowledge on history and physics, one can easily 'understand' that it has never taken place, however, it is still a powerful 'myth' that shows how scientific way of thinking includes metaphysics (Koyré 2004: 220). According to Koyré (2004), historians 'developed' Viviani's narration,

since he was the first one who told the story, however, in none of his works, Galileo talked about his 'Pisa Experiment' and this is also another thing that show how science 'uses' (hi)story(ies) to legitimize itself.

According to Feyerabend (1975), myths or beliefs are significant because new theories in science are *ad hoc* in the sense that it is impossible to separate science from innovative or creative (even artist) ways, since the development of science actually based upon these creativeness.¹⁰ As Feyerabend (1975) shows through the example of Galileo and Copernicus, it is through accepting *ad hoc* hypotheses that science 'improves' itself and in that sense, excluding metaphysics or beliefs in science can be called as 'blind rationalism'.¹¹ For Feyerabend (1975) the way how science is being developed depends upon many aspects, such as beliefs, ideologies, dogmas, metaphysics etc. Since science is not a holy thing or sacred, there is no problem, for Feyerabend (1975), if science includes metaphysics in order to have a coherent explanation of the world.

Now we must remember that this conclusion has been drawn *on condition* that science as we know it today remains unchanged and that the procedures it uses be permitted to determine its future development as well. *Given* science, reason cannot be universal and unreason cannot be excluded. This peculiar feature of the development of science strongly supports anarchistic epistemology. But science is not sacrosanct. The restrictions it imposes (and there are many such restrictions though it is not easy to spell them out) are not necessary in order to have a general coherent and successful views about the world. There are myths, there are the dogmas of theology, there is metaphysics, and there are many other ways of constructing a world-view (Feyerabend 1975: 180, emphases in the original).

As Feyerabend (1975) argues, science includes ideologies, beliefs, dogmas, metaphysics etc. As Feyerabend (1975) shows with the examples of Copernicus and Galileo, while 'discovering' a new theory, the scientist is the first one who 'transgresses the rules of science.' Whereas, Hempel (1966: 16) argues that the scientist can use creative thinking, imagination, or guess in order to find a new theory, still it trustworthy since something can be accepted as a scientific theory only if it passes the scientific examination that is based on scientific methods. According to Hempel (1966),

Kepler's study of planetary motion, for example, was inspired by his interest in a mystical doctrine about numbers and a passion to demonstrate the music of the spheres. Yet, scientific objectivity is safe-guarded by the principle that while hypotheses and theories may be freely invented and *proposed* in science, they can be *accepted* into the body of scientific knowledge only if they pass critical scrutiny, which includes in particular the checking of suitable test implications by careful observation or experiment (p. 16, emphases in the original).

Although Hempel (1966) argues that 'science is safe-guarded' by the principles, methods, and its careful examinations, as Kuhn (1970), Feyerabend (1975, 1987), Koyré (2004), and Beck (2010) argue, science is not only based on rationality but also metaphysics. Another example can be given from James D. Watson, the biologist, who got the Nobel Prize with Francis Crick for discovering the structure of the DNA. In *The Double Helix*, Watson (1968) claims that "Science seldom proceeds in the straightforward logical manner imagined by outsiders. Instead, its steps forward (and sometimes backward) are often very human events in which personalities and cultural traditions play major roles" (p. 11). As it can be seen from Watson (1968), science includes traditions, personal choices, and unreason, although the methodology of science argues the opposite (Cf. Hempel 1966).

Another example about the metaphysical aspect of science can be given from the natural sciences. As Hempel (1966) argues, in natural sciences, hypotheses are not obtained through observation but 'invented'. As Hempel (1966) claims,

Scientific hypotheses and theories are not derived from observed facts, but invented in order to account for them. They constitute guesses at the connections that might obtain between the phenomena under study, at uniformities and patterns that might underlie their occurrence (p. 15, emphases in the original).

In other words, 'scientific hypotheses are invented' and tested through scientific methods and accepted only if they pass the tests. However, interestingly, even the starting point of a scientific hypothesis has 'unscientific grounds.'

As previous examples show, the term of science is problematic itself, if one considers science as a 'pure rational entity' that has specific methods. Regarding these, same as science that

has metaphysical grounds, communication studies that are using communication models to 'create communication studies' without questioning the 'origins' of science are metaphysical too.

METHODOLOGY

The Relationship between Metaphysics and Communication Models

The notion of reducing communication into communication models are metaphysical because how is it possible to reduce communication into communication models that explain the function of communication? Is not it more complicated than basic models that explain communication? If models are adequate to explain communication, then, how and why we still have some problems about explaining how communication functions? Before talking about the metaphysical aspects of communication models, it is useful to have a look at Derrida's notion on the metaphysics of language because Derrida criticizes the notion that considers language as a transparent, abstract medium. As Stocker (2006) claims,

Derrida does not really apply the Nietzschean condemnation of metaphysical nihilism; he refers more to an awareness of the inescapable contradiction between transcendental force and empirical force. The transcendental here refers to anything that is universal, abstract, conceptual or general in meaning, including the metaphysical. From that point of view, anything universal abstract, conceptual or general is metaphysical, since it assumes something beyond the immediacy of material force. In that case, the metaphysical is in all use of language since every word, and every rule of grammar or linguistics, is an abstraction of some kind in relation to empirical reality (p. 44).

As Stocker (2006) claims, same as Derrida, who argues that 'anything that is universal abstract, conceptual or general is metaphysical,' communication models and/or theories are metaphysical too because by modelling, communication models reduce and simplify communication into an abstract, universal, conceptual term, and this makes communication studies metaphysical. Considering communication as 'universal, abstract, conceptual or general' lead to an assumption that is 'something beyond the immediacy of material force' (Stocker 2006: 44). Another reason for calling communication theories and

models as metaphysical depend on the fact that since language is inadequate to explain what it signifies,¹² reducing communication into communication models, inevitably, become metaphysical because models are “an abstraction of some kind in relation to empirical reality” (Stocker 2006: 44).

Another criticism/critique for metaphysics, which is related with the idea of abstraction, is the notion of reduction. Reduction, inevitably creates dichotomy and communication models too are ‘reduction to oppositions,’ such as understanding and non-understanding. In Stocker’s terms, “Derrida defines metaphysics, and criticizes it, to a large degree on the basis that it is a reduction to oppositions” (Stocker 2006: 44). In that sense, there is no difference between what Derrida calls metaphysics and communication studies because communication models are a kind of ‘reduction to oppositions.’ According to communication models, one either understands the message or not and this depends on the assumption that communication is a transmission of message and language as a transparent medium.

Regarding the metaphysics of language, Stocker (2006) continues to talk about how meaning in language is seen as a fixed entity. “The object of perception is changeable and contingent; it is the object as a meaning in language that has fixity and necessity” (Stocker 2006: 42-43). Same as language that is seen as fixed and ‘transparent’ in the sense that language is the carrier of ‘reality,’ in communication models, communication is seen as fixed and that is the reason why communication models ‘fail’ to recognize the dynamic aspects of communication because, same as language, communication is ‘changeable and contingent’.¹³

Metaphysics, Centre, Logos: Logocentrism in Communication Models

The reason why language is seen as fixed and transparent is related with the idea of logocentrism that Derrida (1976, 1982, 1989, 1996, 2007) argues in his works. While explaining how logocentric structure is deeply ‘rooted’ within Western philosophy, in “Structure, Sign and Play in the Discourse of the Human Sciences,” Derrida (2007) talks about a centre; a centre that can be considered as *logos*, the base and structure of Western philosophy. Derrida (2007) claims that

It would be easy enough to show that the concept of structure and even the word “struc-

ture” itself are as old as the epistēmē -that is to say, as old as Western science and Western philosophy and that their roots thrust deep into the soil of ordinary language, into whose deepest recesses epistēmē plunges in order to gather them up and to make them part of itself in a metaphorical displacement. Nevertheless, up to the event which I wish to mark out and define, structure—or rather the structurality of structure—although it has always been at work, has always been neutralized or reduced, and this by a process of giving it a center or of referring it to a presence, a fixed origin. The function of this center was not only to orient, balance, and organize the structure—one cannot in fact conceive of an organized structure—but above all to make sure that the organizing principle of the structure would limit what we might call the play of the structure. By orienting and organizing the coherence of the system, the center of a structure permits the play of its elements inside the total form. And even today the notion of a structure lacking any center represents the unthinkable itself (p. 351-352, emphases in the original).

What Derrida (2007) mentions as structure, the structure of structure, or communication models one might argue can be seen as *epistēmē*, which can be translated as knowledge. In other words, what makes communication models as “scientific” is the very structure that Derrida (2007) mentions and the roots can be found in Western philosophy. The centre of this structure, which can be seen as science, points to ‘a fixed origin.’ To put it differently, the very idea of ‘a fixed origin’ is metaphysical in the first place as Derrida (2007) asserts. In order to be coherent, “science” is used to neutralize or reduce the issue. In communication studies, the very idea of thinking communication as fixed and communication models as the examples of the ‘structurality of structure,’ hence centre, is metaphysical. Nevertheless, regarding Derrida (2007), one can argue that if centre functions as *logos*, then, communication models are at the heart of the centre because what is considered as ‘scientific’ are the models itself and that is the substitution of signs that can be considered as supplement. In other words, for Derrida (2007), there is no such a thing called supplement because it existed before it. It is not so different in the field. Communication models that are supplementing communication cannot substitute communication *per se* because it existed already before models substitute communication.

OBSERVATIONS AND DISCUSSION

Nevertheless, in communication studies, communication studies are metaphysical in the sense that:

- ♦ language itself is metaphysical in the first place, since it is an abstraction of empirical reality,
- ♦ communication models *never questioned language* and considered language as a transparent medium,
- ♦ the ‘origins’ of communication studies is metaphysical in the sense that communication studies became a separate academic discipline through using communication models as well as science—that are metaphysical,
- ♦ the very idea of ‘science’, reducing communication into communication models is metaphysical.

In Derrida’s (1982) terms, “Everything that has always linked *logos* to *phonē* has been limited by mathematics, whose progress is in absolute solidarity with the practice of a nonphonetic inscription” (p. 34). As Derrida (1989) argues, the very logic of the scientific thought which resides in Western philosophy is related with the structure of the centre (Derrida 1982, 1989, 1996, 2007). In *Edmund Husserl’s Origin of Geometry: An Introduction*, Derrida (1989) criticizes Husserl as metaphysical, without considering the fact that what Husserl thinks as ‘ideal’ is metaphysical. For Derrida (1989),

The mathematical object seems to be the privileged example and most permanent thread guiding Husserl’s reflection. This is because the mathematical object is ideal. Its being thoroughly transparent and exhausted by phenomenality. Absolute objective, i.e., totally rid of empirical subjectivity, it nevertheless is only what it appears to be. Therefore, it is always reduced to its phenomenal sense, and its being, from the outset, to be an object (être-object) for a pure consciousness (p. 27).

Same as Derrida (1989) mentions Husserl’s notion on a mathematical object, modelling in science depends on the same notion: that is, ‘modelling is ideal.’ ‘It is seen as “transparent” and reduced to its phenomenal sense, its being, to be an object.’ In other words, just like mathematics seen as transparent and ‘absolute objective,’ communication models are seen neutral and cannot ‘exhausted by phenomenality.’ Considering this, how is it possible to reduce communi-

cation into basic communication models that explain the act of communication? How communication model can be *ideal* in the sense that we have many different communication models? Can/shall one consider communication models as ‘supplement’ to communication?

The notion of supplement is significant in the sense that it is through supplement one ‘replaces’ the concept or the thing that one wants to explain. Language is an important medium that is seen as supplement. Supplement ‘replaces’ the absence of what is being spoken, through an abstraction due to economy of signs. Regarding the question on supplement, Derrida (1976) gives Rousseau’s notion on supplement as an example that shows the ‘double meaning’ of a supplement. According to Rousseau, writing is a supplement to speech in the sense that writing is a “mediated representation of thought” (Derrida 1976: 144). However, Derrida (1976) criticizes Rousseau’s notion and argue that supplement is a supplement of its own. Before studying how supplement supplements itself, for the moment, it would be better to give a brief information on the relationship between communication models and supplements because when one talk about communication models, one can argue that communication models are seen as supplement too in the sense that they are supplementing the act of communication, the presence, and as McQuail and Windahl (1993) put it, communication models are “a simplified description in a graphic form of a piece of reality (quoted from Ilter 2008: 263). In that sense, communication models ‘substitute a piece of reality’, and communication, because it is through the graphic representation explains how communication functions. However, since supplement supplements itself (Derrida 1976) and in the example of communication models, each model ‘that re-produces communication into a graphic form’ loses its ‘originality’, ‘supplements’ the ‘original’ through abstracting it. In the example of supplement, then, one can argue that every supplement is a supplement of its own that there is no ‘origin’ but a supplement. The gap between the ‘original’ and the ‘supplement’ will not be filled at all since every time a supplement supplements itself to fill the gap, either through reducing it ‘as a graphic form’, a model, or generalising, which are metaphysical, it is impossible to ‘fill’ it because how is it possible to reduce communication into basic communication models or generalize it since sup-

plement has the “status of unmediated representation, full of purity and presence” (Lucy 2004: 138).

The paper explored Derrida’s (1976) notions on language in order to show how language itself is metaphysical through abstracting or generalising because as Stocker (2006) claims by doing this “...it assumes something beyond the immediacy of material force” (p. 44). If anyone asks ‘what’s wrong with this?’ then the answer could be as follows: any kind of abstraction or generalisation is a reduction and yet, by doing so, inevitably, one can see that both the meaning as well as the notion of ‘universality’ are in question. As later shown by Derrida (1976), although language is seen as a supplement, it is not a supplement of something but ‘supplement is the supplement if its own.’ This, in turn, leads one to think in terms of communication models and the way how communication studies consider communication models. In that sense, since any model is an abstraction of some kind, inevitably, it is a reduction—in the case of communication models, it is either understanding or not understanding—and this leads one to see communication models as metaphysical since ‘they are an abstraction of some kind.’ For McQuail and Windahl (1993: 2) communication models are “a consciously *simplified description in graphic form* of a piece of reality” and the notion that considers reality can be expressed in terms of models or with language is exactly what Derrida (1976, 1982, 1989, 1996, 2007) argues in his works as logocentrism.

Then, Shannon’s (1948) “A Mathematical Theory of Communication” was given as an example for S-M-C-R models to show even the ‘origins’ of communication models is problematic in the first place. Although it is a useful metaphor (Eco 1968, 1976, 1989; Fiske 2004; Gensini 2006; Volli 2010; Weaver 1963), still, one can see the ‘incompatibility’ of Shannon’s and S-M-C-R models and the act of communication. That is why, in his note on Shannon’s “A Mathematical Theory of Communication”, even for Weaver (1963) it is significant to explain the model through using mathematical language because it is a mathematical model. Even this is so, one notion has not changed since the ‘beginning’ in communication studies: that is, none of the models question language but consider it as *a priori*, a tool that represent reality in a transparent way (Cf. Ilter 2008). This point reminds the criti-

cisms of Derrida (1976, 1982, 1989, 1996, 2007) as logocentrism.

After that the relationship between ‘science and metaphysics’ is explained to show how science itself is metaphysical, although it is seen quite opposite. The works of Koyré (1955, 2004), Kuhn (1970), Feyerabend (1975, 1987), Beck (2010), and Watson (1968) exemplify the fact that science also affected by ideas, beliefs, dogmas, political atmosphere etc. In that sense, although there are ways to ‘check scientific knowledge’ like falsification or other methods (Hempel 1966; Lakatos 1978), still, when one reads the history of science, one can see that it is the scientist himself/herself that ‘transgresses the boundaries’ and proposes *ad hoc* hypotheses in order to ‘prove’ his/her theory (Feyerabend 1975, 1987). As demonstrated by Feyerabend (1975, 1987) clearly how Galileo followed Copernicus’ theory and ‘built his own theory’ although regarding the scientific knowledge during that time, if Galileo would have followed the ‘facts,’ then, he should be the first one who gave up. However, on the way to discovery or ‘paradigm shift as Kuhn (1970) argues, scientists transgress the boundaries of science for the sake of developing science. In other words, science is a kind of knowledge that can be influenced from different ideas, as well as beliefs (Koyré 1955, 2004; Kuhn 1970; Feyerabend 1975, 1987; Beck 2010; Watson 1968).

When it comes to communication models and its relation with metaphysics, the paper shows that communication models are metaphysical in the sense that through modelling communication, inevitably, communication is simplified, reduced into basic models and that ‘ignores’ to see the complexity of communication—that is, polysemy (Derrida 1986; Ilter 2008)—as well as consider language as a transparent medium (Ilter 2008). Derrida’s (1976, 1986, 2007) and Ilter’s (2008) works were used to show how the relationship is ‘rooted’ within the scientific knowledge, or structure (Derrida 1982, 1989, 2007).

CONCLUSION

Nevertheless, as it is shown, the idea of supplement is being used in communication studies in order to represent the act of communication. It is problematic because, communication models are seen as supplement of communication and it reduces the complexity of communication. It cre-

ates issues since how a model ‘replaces’ the act of communication although ‘supplement is the supplement of its own’? It is related with the notion of a centre, a structure that is ‘void’ and can be filled through supplement, and each supplement is the supplement of its own and considered as substituting the absence of what is ‘represents,’ one can argue that the notion of representing the absence through a model or language is metaphysical itself because it is an abstraction of some kind. Since the beginning, the field of communication follows this path but interestingly, it is a subject that has been left out by the scholars for such a long time. This paper would like to contribute/intervene by discussing this possibility and let them to realise that there is a philosophical problem here that needed to be addressed.

NOTES

- 1 Shannon’s (1948/1963) model is being used by many scholars to explain communication and how it functions. To define what communication is, Shannon’s (1948) models is one of the first model that is taught (almost) to undergraduate students. For more information on information theory and the works that ‘use’ information theory as the ‘base’ of communication, see Eco (1968, 1976, 1989, 1994), Fiske (2004), Gensini (2006), McQuail and Windahl (1993), Mutlu (1998), Volli (2010).
- 2 A quick survey on the ‘introduction to communication studies’ books show this. For more information about the introductory books on communication and communication models, see: Denis McQuail and Sven Windahl, *Communication Models for the Study of Mass Communications*. 2nd Edition. London and New York: Longman, 1993. John Fiske, *Introduction to Communication Studies*. 2nd Edition. London and New York: Routledge. Denis McQuail, *Mass Communication Theory: An Introduction*. London and New York: Sage, 1994. Ünsal Oskay. *Oletimin ABC’si* [ABC of Communication]. Ankara: Der Yayinlari 1997; Severin W and Tanskanen J 2001. *Communication Theories: Origins, Methods, and Uses in the Mass Media*. New York: Longman. Volli U 2010. *Il nuovo libro della comunicazione*. Milano: ilSaggiatore Tascabili. Also, for a critique of linear communication models, Shannon’s mathematical theory in particular, and its relation with miscommunication, see Ilter T 2008. *Miscommunication: The other of communication or the otherness of communication?* T Ilter et al. *Communication in peace/Conflict in communication*. Famagusta: Eastern Mediterranean University Press, pp. 261-269. In his works, Eco (1968, 1976, 1989) considers information theory as useful to understand what communication is and how it functions, although information theory deals information in terms of numeric.
- 3 George Gerbner’s (1956) model in the mid-50s were one of the few communication models from the ‘field’, whereas, most communication models that are being taught in communication studies now are ‘outside’ from the field. For more information on Gerbner’s model, see: George Gerbner, “Toward a General Model of Communication,” *Audio Visual Communication Review*, 4(3) 1956, 171-199. However, as it can be seen, although Gerbner realized the complexity of communication, still even Gerbner himself was trapped into logocentric notion that will be explained later on. In “Communication Theory as a Field”, Robert Craig (1999) criticizes communication scholars as ‘borrowing theories from outside the field’ (P. 123).
- 4 One can argue, the reason why mathematical language is being used because as Derrida (1989) says, “...because the mathematical object is *ideal*” (P. 27).
- 5 For another interpretation on misunderstanding, see Tzanne A 1999. *Talking at Cross-purposes: The Dynamics of Miscommunication*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- 6 For a critique of scientific method, see: Feyerabend P 1975. *Against Method: Outline of an anarchistic theory of knowledge*. London: Humanities Press; Feyerabend P 1987. *Science in a Free Society*. London: Verso; Feyerabend P 1981. *Realism, Rationalism and Scientific Method – Philosophical Papers, Volume 1*. Cambridge: Cambridge University Press. Lakatos I 1978. *The Methodology of Scientific Research Programmes: Philosophical Papers Volume 1*. Cambridge: Cambridge University Press. For the development of science and its philosophy, see: Kuhn T S 1970. *The Structure of Scientific Revolutions*; Hempel CG 1966. *Philosophy of Natural Science*. NJ: Prentice-Hall.
- 7 Cf. Koyré A 2004. Galileo ve Pisa Deneyi: Bir Söylence Üzerine. *Bilim Tarihi Yazilari*. Ankara: TÜBİTAK Yayinlari. Especially, pp. 220-222; Koyré A 1955. Influence on philosophical trends on the formulation of scientific theories. *The Scientific Monthly*. Vol. 80, No. 2, February, pp. 107-111; Kuhn TS 1970. *The Structure of Scientific Revolutions*; Feyerabend P 1975. *Against Method: Outline of an Anarchistic Theory of Knowledge*. London: NLB; Feyerabend P 1987. *Science in a Free Society*. London: Verso; Beck U, Latour B 2010. How to think about science: Episode 5. *Ideas. with Paul Kennedy*. CBC Radio Programme. 12 December. For an online version of the programme, see: <http://www.cbc.ca/video/news/audioplayer.html?clipid=1479857026> (Retrieved from the World Wide Web 11/4/2013).
- 8 Beck U, Latour B 2010. How to think about science: Episode 5. *Ideas. with Paul Kennedy*. CBC Radio Programme. 12 December. <http://www.cbc.ca/video/news/audioplayer.html?clipid=1479857026> (Retrieved from the World Wide Web, 11/4/2013).
- 9 For more information on Galileo and the Copernican revolution, especially see: Feyerabend P 1975. *Against Method: Outline of an Anarchistic Theory of knowledge*. London: NLB, pp. 69-143. For a discussion on the language of Galileo and his interpretation of the Copernican view, see Feyerabend

- (1975), pp. 81-92. While talking about Galileo's support to Copernicus's views, Feyerabend 1975 gives *Dialogues* of Galileo as an example that praises metaphysics, pp. 96-97 fn.
- 10 For more information regarding the significance of *ad hoc* hypotheses in science, see: Feyerabend P 1975. *Against Method: Outline of an Anarchistic Theory of Knowledge*. London: NLB, pp. 93-139 and pp. 171-180.
 - 11 Wittgenstein L 1994. *The Blue and Brown Books: Preliminary Studies for the 'Philosophical Investigations'*. Oxford UK and Cambridge USA, Blackwell; On *Certainty*; Derrida J 1976. *Of Grammatology*. (Gayatri C. Spivak, Trans; Derrida J 1982. *Positions*, (A. Bass, Trans). Chicago: University of Chicago Press Derrida, J. 1996. *Margins of Philosophy* (A. Bass, Trans). Chicago: University of Chicago Press; Derrida J 2007. *Writing and Difference*. (A. Bass, Trans). London and New York: Routledge; Hadot P 2009. *Wittgenstein ve dilin sinirlari* [Wittgenstein and the Limits of Language]. (M. Erten, Trans.). Istanbul: Dogu Bati.
 - 12 Tzanne 1999 argues that communication can be 'changeable and contingent' depending on cross-cultural situations. However, cross-cultural situations are not the only situations that make communication changeable and contingent. Language itself can be the reason for that as well as interpretation and perception. Although in her work Tzanne 1999 recognizes the fact that even within the 'same culture' or language communication might change, she is not dealing the subject as a problem of language.
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