Recurrent Misunderstandings Eroding the Field of Communication Studies

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ABSTRACT
More than recognized, misunderstandings are a constant concomitant of human activities in industry and academia. This truism traces back to ancient writers, and communication studies is no exception. (Re)assessment of misunderstandings has the potential to refurbish skills and awareness needed to accomplish better, keener research. However, as literatures and fragmentations of communication studies build up, discussions on and/or critical accounts of ensuing misunderstandings tend to lag behind. One reason behind this shortage is a popular aversion for theory or verbiage. Another reason resides in the hype for new media and uptake thereof. Still another reason centers around the attractive dominance of big data or large-scale quantitative research. The present paper unbundled deep-seated and taken-for-granted misunderstandings crippling communication research. To this effect, the paper proposed paths forward with a refocus/rethink of central concepts, models, and definitions underpinning communication research.

Keywords: Science, person, message, verbal communication, written communication, Shannon model, theory, empirical work, Ancient Egypt.

INTRODUCTION

The flaw with the thinking of humans emerges abundantly in the work of Greek ancient writer Parmenides (circa 6th-5th BC) alluding to "*ἠδὲ βροτῶν δόξας, ταῖς οὐκ ἔνι πίστις ἀληθής* [also opinions of mortals, in which no real confidence resides] (Diels, 1897, p. 30). One of the driving factors of misunderstandings surrounding communication studies seems to be set with the most relevant concepts such as science, empirical work, and written communication, among others (details below) on which the identity/validity of communication studies tends to depend. The interpretation of science and empirical work, to mention just these two examples for the purpose of illustration, are best encapsulated by French anthropologist Claude Lévi-Strauss (1908-2009) statement, saying,

> *I am extremely eager to be as informed as possible of everything that takes place in modern science and its new developments... I think there are some things we have lost, and we should try perhaps to regain them, because I am not sure that in the kind of world in which we are living and with the kind of scientific thinking we are bound to follow, we can regain these things exactly as if they had never been lost... modern science is not at all moving away from these lost things, but that more and more it is attempting to reintegrate them in the field of scientific explanation. The real gap, the real separation between science and what we might as well call mythical [subjective/non-empirical] thought for the sake of finding a convenient*

name… occurred in the seventeenth and eighteenth centuries. At that time, with Bacon, Descartes, Newton, and the others… it was thought that science could only exist by turning its back upon the world of senses, the world we see, smell, taste, and perceive; the sensory was a delusive world, whereas the real world was a world of mathematical properties which could only be grasped by the intellect and which was entirely at odds with the false testimony of the senses. (Lévi-Strauss, 1978/1995, pp. 5-6; see also Popper, 1994/1996, pp. 72-73)

As seen above, modern science in the sense of contemporary science, indeed science itself, is not a fixed matter, rather something agreed upon and/or hammered out over time.

The concept empirical work --- that which is believed to be somewhat non-mythical --- can very well be explained in the same way. What differentiates scientific knowledge, more precisely science (details below) from other types of knowledge is theory. As Babbie (2021) expounded,

The two pillars of science are logic and observation. A scientific understanding of the world must (1) make sense and (2) correspond with what we observe. Both elements are essential to science and relate to the three major aspects of the overall scientific enterprise: theory, data collection, and data analysis. (p. 8)

As detailed in the above remark, theoretical characterization of collected data and analyzed data distinguishes scientific, empirical from non-scientific, non-empirical work (details below).

While communication means, the core subject matter of communication studies, are prevalent in society since immemorial times, reflections on foundational concepts of communication studies tend to be scarce mainly because of popular disinterest in research on theory and method. As Hansen and Machin (2019) asserted,

Research methods do not, never should, exist in isolation from theory. Media and communication research methods are no exception, but the point is possibly more important to make for the field of media and communication research than for some other and longer-established fields or disciplines. The simple reason for this is that media and communication research, rather than being a well-defined discipline, is sprawling and multidisciplinary field of research approaches and theories, drawing inspiration from a wide range of disciplines across the humanities, the social sciences and even the sciences. (p. 1, see similar point made by Schulz & Cobley, 2021, p. vi, and Waisbord, 2019)

As Hansen and Machin (2019) emphasized,

Far from being a weakness, this has in fact proved to be one of its major strengths: a productive impetus to continuous development adaptation to what have historically been rapid changes in the nature and application of media technologies as well as political and social concerns with communications media. (p. 1, see also Waisbord, 2019)

Much more pressing than shown supra, the challenge of communication research is aggravated by the fact that just like any technology, communication means are by definition designed and imagined by others to be used by others (see Hollnagel, 2017, p. 53). Individuals employ communication technologies designed and imagined by others (i.e., researchers) for those individuals. The hope is that communication means or information technologies crafted by researchers for others (i.e., the researched) are done so in the best interest of those concerned. The challenge is also compounded by the fact that individuals in a given, researched context tend to be faced with conditions of which they have little to no control. Thus, theoretical, critical stakes of communication research and any research can hardly be disputed. Just like reflections on theories, reassessment of foundational concepts enables continual refinement of inquiry initiated, tools selected, methods followed, topics focused on, and/or individuals engaged with. Useful recalling here is the idea that the English term theory is a transliteration of the Greek word θεωρία [theôria], which carries the meaning of viewing, looking at, beholding, a show, sight, spectacle, contemplation, being a spectator of games, etc. It comes from the verb θεωρέω [theôreô], which in turn denotes meanings such as to observe, look at, consider, view, behold, inspect or review soldiers, contemplate, view public games, etc. (Liddell & Scott, 1843/1996). The fundamental and often bypassed meaning of the word theory proves to be much more empirical, effect-loaded, and reality-engaging than popularly believed. Similarly, the English term science is a derivation of the Latin word "*scientia, ae*... [which stands for] *A knowing* or *being skilled in* any thing, *knowledge*, *science*, *skill*, *expertness*" (Andrews, 1851, p. 1368). Further, science is transcribed from the Latin verb "*scire, scio, ivi* or *ii, itum*... [meaning] *To know*, in the widest signification of the word; *to understand, perceive*; *to have knowledge of* or *skill in any thing*, etc." (Andrews, 1851, p. 1369). The noun science stems specifically from the present participle of the Latin verb *scire*, "*Sciens, scientis*... i.e. *knowingly*, *wittingly*, *purposely*, *intentionally*, etc. ... *knowing*, *understanding*, *acquainted with*, *skilled*, *versed*, or *expert in* any thing" (Andrews, 1851, p. 1370). Also akin to the Latin verb *scire* proves to be the Latin verb "*scisco, scivi, scitum*... *To seek to know*; *to search, inquire*... *To accept, approve, assent to* something proposed ... *To approve, assent to, vote for* any thing... *To learn, ascertain, know*" (Andrews, 1851, pp. 1370-1371). From this analysis it follows that the notion absolute certainty/objectivity with which positivism tends to associate the word science is barely encountered in the Latin word *scientia*.

Also inspirational is the Greek word for science or scientific knowledge, that is: ἐπιστήμη [epistêmê], out of which springs the English word epistemology, and which comes from the Greek verb ἐπίσταμαι [epistamai], standing for to feel sure, be versed in, be assured, know for certain, know as a fact etc. (Liddell & Scott, 1843/1996). The verb ἐπίσταμαι is comprised of the Greek prefix ἐπι [epi] which means on, according to, in the presence of, behind, upon, after, over, toward, etc., and the Greek noun στάσις, εως, ἡ, signifying condition, standing, placing, posture, stature, etc. The noun στάσις derives from the verb ἵστημι [histêmi] which means to weigh, to bring about, to set up, to place in the balance, to stand, to make to stand, set, place of things or persons, to establish, institute etc. (Liddell & Scott, 1843/1996). Therefore, the term ἐπιστήμη [epistêmê] denotes the notion that one places one's knowledge/mind about something. The prime meaning of science refers to knowledge or attitude weighed or erected about something.

Even more useful recalling is the observation by Creswell and Poth (2018) that

> *Whether we are aware of it or not, we always bring certain beliefs and philosophical assumptions [emphasis in original] to our research. Sometimes these are deeply ingrained views about the types of problems we need to study, what research question to ask, and how we go about gathering data. The difficulty lies first in becoming aware of these assumptions and beliefs. (p. 15)*

As recalled above, reassessment of deeply cherished or adopted concepts has the potential to make (communication) research more seamless.

Communication studies is one of the fields graced with explosive scholarly production, bringing to light several challenges or paradoxes, the three most pressing of which being: shapelessness, fragmentation, and definitions. The first paradox comes with the idea that as areas of research expand the field's boundaries dissipate. While communication scholarship can be seen as shapeless (Hansen & Machin, 2019; Waisbord, 2019), it also betrays a range of common moves or shared pointers, out of which richer, fresher information can be drawn. The second paradox is that although fragmentation can evoke the disintegration of a field, it rather serves to fortify that field. Indeed, biological processes show that fragmentation can help strengthen a species rather than disintegrating it. The third and last pressing paradox that comes with scholarly production concerns definition(s). All too often definitions emerge to be one of the most feared topics in research community because they tend to be less than exhaustive, missing out on essential characteristics of the concept being determined. At the same time, however, definitions are valuable revelations of works done, goals gone after, areas anchored in, moves taken, and gaps left in a given field. As demonstrated in the present paper, ways in which communication studies is regarded impact ways in which its emerging subfields are undertaken. To add to the quandary, expansive materials have unveiled paucity of theoretical and methodological conversations within communication studies. This paper seeks to make a contribution in refocusing the works of communication studies.

The English word definition derives from the Latin verb *definire*, *definio*, *definivi*, *definitum*, which means to limit, to bound off, to set bounds, to terminate, to define, (Andrews, 1851, p. 429). The verb *definire* is comprised of two particles: the preposition *de*, meaning, away, from, off of, away from, etc., and the verb *finio*, *finivi*, *finitum*, to limit, to bound, to enclose within boundaries, to set bounds to, to restrain, etc. The Latin verb *finio* stems in turn from the Latin noun *finis*, *finis*, which signifies: boundary, limit, border, bound, purpose, intention, design, etc. (Andrews, 1851, pp. 623-624). Note here the idea boundary and purpose. Thus, it can be said that definition is that which displays a field's boundaries and purposes. Just like any work, scholarly work presupposes a set of boundaries/fences/purposes to facilitate a greater, deeper, and clearer implementation of objectives stated, projects proposed, and research launched. This is why, to make the point much stronger, any work done in a given field is designed to yield a contribution to or additional light on that field. In this respect, a look at the definition(s) of communication studies causes involved researchers to place a greater focus on the works being done. As noted earlier, definitions are not to be dreaded, but rather to be seen as genuine indications of the work undertaken and the areas selected. This does not mean that definitions are easy to craft. Beside a conclusion and limitation sections, the present paper is structured around eight steps: (1) three major models of definitions for communication studies, (2) origins

of communication studies in ancient Egypt, (3) aspects/characteristics of communication, and (4) most recurring misconceptions about communication.

THREE MAJOR MODELS OF COMMUNICATION STUDIES

Models of definitions are usually found dispersed and/or completed throughout the body of works pertaining to communication studies. For ease of analysis, this paper examines models proposed or followed by influential authors/venues. There exist three leading models or most influential references/frames along the lines of which literatures of communication studies develop. First, the channel-based model or, alternatively termed, technical definition of communication is inherited from American mathematicians and computer engineers Claude Elwood (1916-2001) and Warren Weaver (1894-1978) during research conducted in laboratories at the American Telephone and Telegraph Company, now branded as AT&T, in New Jersey, NJ, USA in the 1940s (Shannon, 1949/1964; Shannon, 1948a, b; Weaver, 1949). The second model or most influential reference/frame of communication research, generally called human-based definition of communication, results from a work undertaken in the 1960s at the Mental Research Institute in Palo Alto, CA, USA by Austrian-born American psychotherapist Paul Watzlawick (1921-2007), Canadian psychotherapist Janet Beavin Bavelas (1940-2022), and American psychiatrist Donald deAvila Jackson (1920-1968). This work dealt with human behavior when processing information (Watzlawick, Bavelas, & Jackson, 1967/2011). Finally, the third model or most influential reference of communication field can be found with Canadian media expert Herbert Marshall McLuhan (1911-1980) works, which foregrounded the effects of new modern communication on human behavior in the era of electricity and electronics (McLuhan, 1962/2011; 1964). The three models, not necessarily exclusive to each other, have come to serve as a panorama of works unfolding in communication studies.

The channel-based model/definition of communication, also popularly called Shannon and Weaver model of communication, implies the idea of having a sender of message on one side and a receiver on the other (see Figure 1).
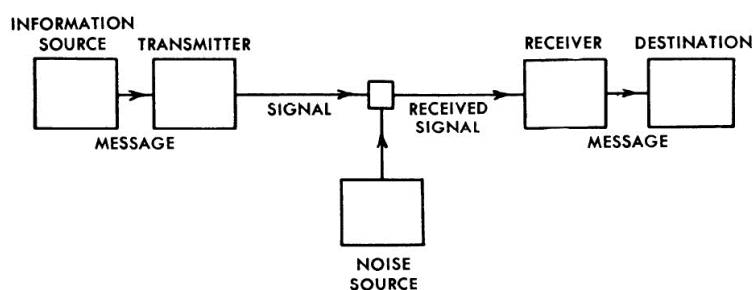
Figure 1: Shannon and Weaver model (source: Weaver, 1949/1964, p. 7, 1949, pp. 12-13; Shannon, 1948a, p. 381, 1949/1964, p. 34)

For greater transmission of message from the sender to the receiver, the model requires clearance from noise/disturbance of the channel. The model itself is identified by Shannon as communication system (Shannon, 1948a, p. 381, 1949/1964, p. 34; Weaver, 1949/1964, p. 6, 1949, p. 11). While Shannon and Weaver model represents one of, if not, the most cited and known models in communication literature, it is also one of the most mischaracterized models

among communication researchers. The most common idea associated with Shannon and Weaver model is that of linear transmission of information involving a sender and a receiver. The idea linear transference of information can be inferred from the diagram proposed by Shannon (1948a, p. 381, 1949/1964, p. 34; see also Weaver, 1949/1964, p. 7, 1949, pp. 12-13). Notwithstanding, while linear transfer of information figures preeminently in Shannon characterization of communication system, it is not the only feature thereof. Indeed, Shannon (1948a, p. 409) provided a corrective diagram of proposed communication system --- often forgotten or unknown in communication materials --- whereby a third party called observer intervenes with data and device to optimize the sending and receiving of messages. The diagram consists of allowing better effects of communication (see Figure 2).
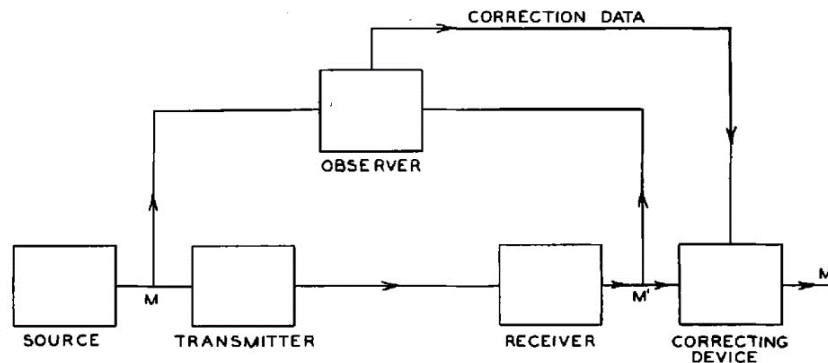
Figure 2: Shannon and Weaver correction model
(source: Shannon, 1948a, p. 409, 1949/1964, p. 68)

The fault for overlooking/sidestepping the corrective system is in part Shannon's and Weaver's themselves. Weaver (1949/1964) did not mention nor comment on the corrective system in his contributions to the mathematical theory of communication as well as in his presentation of Shannon work to a wider audience (Weaver, 1949), let alone Shannon did not expand much on the topic.

Still, Weaver (1949/1964) prolonged explanation of mathematical theory of communication sheds greater and perhaps lesser-known light on Shannon statements, not least because Shannon (1948b) acknowledged from the outset that

> *Communication theory is heavily indebted to Wiener for much of its basic philosophy and theory. His classic NDRC report "The Interpolation, Extrapolation, and Smoothing of Stationary Time Series," to appear soon in book form, contains the first clear-cut formulation of communication theory as a statistical problem, the study of operations on time series. This work, although chiefly concerned with the linear prediction and filtering problem, is an important collateral reference in connection with the present paper. (pp. 626-627, footnote 4, see also Shannon, 1949/1964, p. 85, footnote 4)*

Shannon (1948b) went on to say, "Credit should also be given to Professor N. Wiener, whose elegant solution of the problems of filtering and prediction of stationary ensembles has considerably influenced the writer's thinking in this field" (p. 652, see also Shannon, 1949/1964, p. 115)

What is most notable here is the extended comments that Weaver (1949/1964) made on Shannon statements regarding communication theory. The comments lend additional credit and meaning to the so-called Shannon and Weaver channel --- the widespread use of which in communication outlets is almost unstoppable. Weaver (1949/1964) elaborated, "The word *communication* will be used here in a very broad sense to include all of the procedures by which one mind may affect another" (p. 3). The statement sets the tone for an unusually clearer understanding of Shannon theory, so to speak.

Weaver (1949/1964) clarified,
In the first section of this paper it was suggested that there are three levels at which one may consider the general communication problem. Namely, one may ask:
- LEVEL A. How accurately can the symbols of communication be transmitted?
- LEVEL B. How precisely do the transmitted symbols convey the desired meaning?
- LEVEL C. How effectively does the received meaning affect conduct in the desired way?

It was suggested that the mathematical theory of communication, as developed by Shannon, Wiener, and others, and particularly the more definitely engineering theory treated by Shannon, although ostensibly applicable only to Level A problems, actually is helpful and suggestive for the level B and C problems. (p. 24)

As can be seen, although popularly associated with the technical aspect of communication, Shannon and Weaver channel does apply to levels regarding meaning and effectiveness of sending as well as receiving messages.

Weaver (1949/1964) concluded,

> *It is the purpose of this concluding section to review the situation, and see… that the interrelation of the three levels is so considerable that one's final conclusion may be that the separation into the three levels is really artificial and undesirable. (p. 25)*

The same year, in a different venue with wider publication, as recalled supra, Weaver (1949) elicited,

> *The work which will be here reported is that of Claude Shannon of the Bell Telephone Laboratories, which was preceded by that of H. Nyquist and R. V. L. Hartley in the same organization. This work applies in the first instance only to the technical problem, but the theory has broader significance. To begin with, meaning and effectiveness are inevitably restricted by the theoretical limits of accuracy in symbol transmission. Even more significant, a theoretical analysis of the technical problem reveals that it overlaps the semantic and the effectiveness problems more than one might suspect [emphasis added]. (p. 11)*

As delineated above, communication phenomena/processes cannot be attended to properly and effectively when being reduced to one level of investigation --- be it technical (i.e., engineering, design, technology, etc.), semantic (i.e., meaning, purpose, content, etc.), or practical (i.e., efficiency, ease, smartness, etc.). Shannon model amounts to a holistic model of communication featuring corrective/auditing components in message creation. The proposed

corrective components can have wider ramifications than asserted and believed in most research method materials. This is in part because Shannon tends to be most known for nothing but a linear transfer of information.

One of the most informative definitions of communication derived from Shannon and Weaver model of communication was outlined not long ago by Donges and Jarren (2022) when they wrote,

> *Vereinfacht lassen sich zwei grundlegende Vorstellungen von Kommunikation unterschieden: Transport- und Vermittlungsmodelle… Transportmodelle betrachten Kommunikation als eine einseitige Übertragung von Botschaften und Informationen… Die Kommunikationswissenschaft betrachtet Kommunikation mehrheitlich jedoch als einen Vermittlungsprozess [Simply put, there exist two fundamental characterizations of communication: transmission and negotiation models… Transmission model regards communication as a unilateral transfer of messages and information… However, much of communication studies views communication to be a negotiation/mediation process]. (p. 6, use of Shannon and Weaver can also be seen in DeVito, 2020, pp. 4-5)*

To explain, the view distilled from the above definition is one which envisages communication as a content delivered through a selected channel by a given agent to a targeted recipient, or as a process of mediation in which at least two partners are involved. Communication is understood as transfer and mediation/negotiation process.

While the channel-based definition of communication involves the technical/channel of communication, it delineates important, fundamental aspects of communication that most communication literature tends to overlook. The linguistic turn, at the start of the 20th century, has brought the mediation/negotiation process of communication in sharper relief than ever before. This has led to the idea of communication as social action and language-centric process. Social action might include themes such as social change, development, governance, democracy, etc. Language-centric process relates concepts such as shared meaning, everyday life, real world, etc. Thus, a move was made past the idea of communication as a mere product/outcome in and by itself to the idea of communication as partner-to-partner endeavor. In other words, with the linguistic turn in the first half of the 20th century, communication studies has seen a greater emphasis being placed not on process but rather on language and related concepts such as shared meaning, meaning creation, social skill, or social interaction as the lynchpin of communication (DeVito, 2023; Hargie, 2019a, b, c; Wood, 2016). Communication as social action and language process holds important implications for communication research. Such an emphasis has opened a researcher's eyes to the broader context of social setting in which communication unfolds.

Consequently, the most basic definition of communication is the one that regards communication as "(1) The process or act of communicating; (2) the actual message or messages sent and received; (3) the study of the processes involved in the sending and receiving of messages" (DeVito, 2016, p. 351). When it comes to research as well as human experience, sending and receiving messages are not as straightforward as they seem. Sending messages may very well be met with numerous factors that interfere with the outcome, content,

or nature of the messages. Besides defining the concept communication, researchers have to deal with the characteristics of the concept communication.

The second model or most influential reference of communication, also called behavioral effects of communication, is believed to have been put forth, as introduced earlier, by psychotherapists Watzlawick, Bavelas, and Jackson (1967/2011) who, started by offering two pieces of clarification: one being that they "deal mainly with the pragmatics, that is, the behavioral effects of communication" (p. 4) and the other lies in the fact that "In this connection it should be made clear from the outset that the two terms communication and behavior are used virtually synonymously" (p. 4). Communication is demonstrated to be part of, and *not away from*, human behavior. In other words, action and communication amount to the same thing. Action can take on the dimension of interaction or interactivity.

> *First of all, there is a property of behavior that could hardly be more basic and is, therefore, often overlooked: behavior has no opposite. In other words, there is no such thing as nonbehavior, or to put it even more simply: one cannot not behave. Now, if it is accepted that in an interactional situation… has message value, i.e., is communication, it follows that no matter how we may try, one cannot not communicate. (Watzlawick, Bavelas, & Jackson, 1967/2011, p. 29).*

Inability, impossibility, or willingness not to communicate is in and by itself a full message. Watzlawick, Bavelas, and Jackson human communication model is a model showcasing what can be called communicational responsivity, by the lack of a right term, this is the idea that one cannot not respond to and therefore communicate with that which is around us. Such a qualification is very important to be mindful of because losing sight of this central dimension of communication has significant repercussions on the types of work being done in communication studies (details below). The word responsivity received starker clarity in advanced methodological research explained infra. Thus, Watzlawick, Bavelas, and Jackson went on to say that "all behavior, not only speech, is communication, and all communication --- even the communicational clues in an impersonal context --- affects behavior" (1967/2011, p. 4). The ubiquity of communication throughout action presupposes both inactive and active aspects of human behavior. Watzlawick, Bavelas, and Jackson (1967/2011) specified, "Activity or inactivity, words or silence all have message value: they influence others and these others, in turn, cannot *not* respond to these communications, and are thus themselves communicating" (p. 30). While the above definition of communication seems to trigger controversy, it showcases and indeed warns researchers as to what communication studies and its fundamental concept communication entail.

One detailed exemplification of Watzlawick, Bavelas, and Jackson (1967/2011) model was provided by Beck (2020). As Beck (2020) stressed, saying,

> *Die Humankommunikation zeichnet sich dadurch aus, dass nicht nur natürliche Anzeichen interpretiert werden, sondern auch künstliche Zeichen (Symbole). Es gibt: Jeder Kummunikationsprozess ist ein Zeichenprozess, aber: Nicht jeder Zeichenprozess ist ein Kommunikationsprozess [Human communication is characterized by the fact that not only natural but cultural signs (symbols) are*

> *interpreted. It follows that every communication process is a sign process, but not every sign process is a (human) communication process]. (p. 32)*

As emphasized above, despite the notion human action to describe communication, the challenge of linearity did not go away. In fact, the frequent challenge with the concept communication is that knowingly or unknowingly communication tends to be understood as a linear rather than interactive endeavor. Watzlawick, Bavelas, and Jackson (1967/2011) provided one useful explanation of the phenomenon communication, often bypassed in most research on communication, saying, "As long as science was concerned with the study of linear, unidirectional, and progressive cause-effect relations, a number of highly important phenomena remained outside the immense territory conquered by science during the last four centuries" (pp. 11-12). To be precise, Watzlawick, Bavelas, and Jackson (1967/2011) continued,

> *Our emphasis on the discontinuity of systems theory and traditional monadic or linear theories is not to be construed as a statement of despair… new avenues of approach have to be found, simply because the traditional frames of reference are clearly inadequate. (p. 14)*

New avenues of approach for communication process and as well as research on communication ought to be espoused in order for researchers to capture the dynamics involved in communication and research thereof. This implies that a definition, namely the setting of boundaries and purposes, of communication and its inquiry is the function of how science work is believed to be implemented, more precisely, bounded or determined.

The third model or most influential reference of communication research, which can be referred to as global village model, is with McLuhan (1962/2011) insistence on the notion global village or global interdependence, emphatically stating: "The new electronic interdependence recreates the world in the image of a global village" (p. 36). The advancement of human civilization from print to electronic communication has brought into greater focus the reality of network or global connection, inviting researchers to look into social phenomenon from an interrelated or holistic angle. Owing to the technical aspect of network or global interaction, the third model tends to be taken over by the first model or Shannon and Weaver channel seen supra (Shannon, 1948a, p. 381, 1949/1964, p. 34; see also Weaver, 1949/1964, p. 7, 1949, pp. 12-13). Apathy toward or disinterest in Shannon and Weaver corrective model (Shannon, 1948a, p. 409, 1949/1964, p. 68; see also Weaver, 1949/1964, pp. 24-25, 1949, p. 11), and to a lesser extent in Watzlawick, Bavelas, and Jackson human communication model (Watzlawick, Bavelas, & Jackson, 1967/2011, p. 29) as well as McLuhan global village model (McLuhan, 1962/2011; 1964) has done little to nothing in squelching misconceptions with respect to communication phenomena and research thereof (details below).

COMMUNICATION STUDIES AND THE CONCEPT SCIENCE

Communication studies is a field with a long, rich history. One leading trend among scholars holds that communication studies and modern science are primarily products of Western civilization, with ancient Greece being the starting point. The argument is tantamount to regarding science as a post-Copernican, post-Newtonian, or post-1800 era/product (see Shank,

2000, p. 7). The discussion of communication studies tends to be determined by the way in which the origins of modern science are understood. For example, science is characterized as an enterprise that technically started at the turn of the 19th century, with the Industrial Revolution. Therefore, communication studies is presented to be a modern science, in the post-19th-century sense (Schiller, 2001). Along the same lines, most research has determined the origins of communication studies to be situated in ancient Greece with the rise of rhetoric and highly skilled, public orators. As Ruben (2002) wrote, "the first scholars to study and write about communication in a systematic manner lived in Ancient Greece" (p. 155). The Greek or Western origin of communication studies enjoyed great acceptance. Equally, Craig (1989) argued,

> *The art of rhetoric, which was invented in the Greek world in the fifth century B.C… has been at the heart of a continuous, enormously rich scholarly tradition… The art of rhetoric is, however, uniquely a product of the Greco-Roman classical tradition. (p. 98)*

Nevertheless, conceiving of communication studies and modern science as emanations of the 19th century and more broadly of Ancient Greece, Western civilization raises skepticism.

ORIGINS OF COMMUNICATION STUDIES IN ANCIENT EGYPT

Earliest recorded materials reveal the origins of communication in ancient Egypt. More to the point, Bernal (2000) indicated,

> *Oratory, persuasion, and justice are highly valued in nearly all cultures, but, interestingly they received particular emphasis in Egypt…One of the most popular Egyptian texts was that of The Eloquent Peasant, which… Lichtheim describes as both a disquisition on the need for justice and a parable on the utility of fine speech. (p. 74)*

The *Eloquent Peasant* text was composed roughly in 1850 BC. As Lichtheim (2019) wrote,

> *Egypt's high regard for the art of using words, a valuation of rhetoric comparable to that which was to prevail in Greece and Rome, found conscious expression in the composition known as the Eloquent Peasant. Here the art of fine speaking was made to serve the defense of justice… Egyptians eloquence came from straight thinking… In its display of fine speech, this work, more than any other, made extensive and successful use of metaphors and other poetic imagery. (p. 40)*

Fine speaking to the effect of justice was key in ancient Egypt. The *Eloquent Peasant* narrated, "You do not repay my good speech which comes from the mouth of Re himself. Speak justice, do justice. For it is mighty; it is great, it endures, its worth is tried… It leads one to reveredness" (Lichtheim, 2019, p. 227). Rendered in the interest of society, not for profit or greed, justice was presented to be with mighty effect in society at large. Justice was shown to be more a reality, life than a mere word, speech (details below). The *Eloquent Peasant* text is shown to be "integrating phraseology from genres like discourses, laments, teachings, eulogies, lists, and the king's novel, as well as folklore and oral elements" (Lichtheim, 2019, p. 301). Quite characteristically, the genres of fine speech in ancient Egypt included areas as diverse as

teachings, lists (i.e., check lists), laments (i.e., denunciations), popular celebrations, oral expressions, obituaries, fictions, etc., all of which display the broader realm of communication studies.

Furthermore, communication studies is known to be preoccupied with journalism (i.e., oratory, storytelling, news breaking, etc.) as one of its driving components. The point was well made by Ruben (2002) that "journalistic practice dates at least to the times of the early Egyptians" (p. 156). The place of papyrus, an undoubtedly journalistic or communication technology that sparked the spectacular development of ancient Egypt for more than three millennia, was best described by Egyptian scribe Amenemhat around 1400 BC when he recounted,

> *They [scribes] did not build pyramids in bronze with gravestones of iron from heaven; they did not think to leave a patrimony made of children who would give them names distinction. Rather, they formed a progeny by means of writings and in the books of wisdom which they left. The papyrus roll became their lector-priest, the writing-board their loving son; books of wisdom their pyramids, the reed-pen was their child, smoothed stone their spouse. In this way great and small became their inheritors; and the writer was the father of them all. (Foster, 2001, p. 226)*

As depicted above, the work of writers/communicators in ancient Egypt was given far greater weight and status than in modern day societies. Indeed, scribes played a diverse and prevalent role in ancient Egypt (Allon & Navratilova, 2017), all of which being reflective of communication practice across all areas of society. Apparently, in that setting, it can be said that the work of writers/journalists was being accorded more value than (having) children, spouses, priests, and pyramids, serving both the lowest and highest members of society. This is significantly important for any strategy in communication studies and beyond. The profession of communicators was one of service rendered to all members of society. The prevalent role of scribes in ancient Egypt has greater application to existing communication studies in particular and scholarly research in general. The god of messengers, Thoth (Lichtheim, 2019) --- whom Greeks identified with the Greek god Ἑρμῆς [Hermes] --- was also the god of writing (hence scribes), science, and mathematics. In this context, the connotation science lends communication studies a scientific dimension.

Perhaps the most comprehensive, instructive material of communication practice and research in ancient Egypt is with the text of the official Nefer-Seshem-Re called Sheshi or Neferseshem in ancient Egypt, composed in the course of the sixth dynasty (2345-2181 BC). In fact, Sheshi (24th-22th centuries BC) narrated,

> *I have come from my town*
>
> *I have descended from my nome [province]*
>
> *I have done justice for its lord*
>
> *I have satisfied him with what he loves [needs]*
>
> *I spoke truly, I did right*
>
> *I spoke fairly, I repeated fairly*
>
> *I seized the right moment*

So as to stand well with people

I judged between two [complainant and defendant] so as to content them,

I rescued the weak from one stronger than he

As much as was in my power

I gave bread to the hungry, clothes <to the naked>,

I brought the boatless to land

I buried him who had no son [to bury him]

I made a boat for him who lacked one

I respected my father, I pleased my mother

I raised their children

So says he … whose nickname is Sheshi (Lichtheim, 2019, p. 49)

The above text dating from somewhere between the 24th and 22nd centuries BC stands as a blueprint for communication studies, covering a variety of human/social themes germane to communication phenomenon. Beyond reasonable doubt, as James (2003) described, Sheshi text epitomizes "a high point of human civilization" (p. 88). Considering the wealth of ancient Egypt during that period, a world's superpower by all means for entire three millennia, known for its "fabled wealth," (Foster, 2001, p. 14), and the position of Sheshi (i.e., a minister/state official), Sheshi text proves to be quite inspirational and provocative.

For our discussion, however, only three most important points need mention. First, a minister's or state official's duties consisting of attending to the nation's neediest person would appear to be a far cry from modern day democracies. For example, duties such as those of providing a boat to a person who has none, offering a land/house to one who has none, satisfying both the complainant and the defendant in court, rescuing the weak from one stronger than him, supplying the poorest individual with what they need/love, standing/connecting well with people, leaving one's town/province to attend to the neediest persons living in the most remote/poorest areas, etc. are jarringly uncommon in current societies. Second, the extremely detailed knowledge displayed about the nation's neediest person by a state official living miles away from that person, without phone, internet, or fax, is highly unlikely without an effective, sophisticated democratic system that would enable the marginalized individual not only to voice their concerns but to be directly or first-hand attended to by the concerned authorities. This is by all means unusual in contemporary societies. Third and last, perhaps the most important point for the present paper, is the fact that the minister/state official did not defend or justify their boss's or government's agendas (i.e., the pharaoh), in contrast to the tendency/protocol of modern-day state officials, much more so in dictatorial regimes.

Another central and lesser acknowledged point in relation to the origins of communication studies in ancient Egypt might be with the city of Khmun (Lichtheim, 2019) --- presently called Al Ashmunin or El Ashmunein, and formerly Akhmim (Hornung, 1999/2001; Vrettos, 2001) or or Shmun (Bull, 2018, p. 36) --- in the center of Egypt, approximately 290 km (180 miles) south of Cairo. In recorded history, Khmun represents the city wherein communication studies,

among others, proves to have first started insofar as Khmun was remarkably abuzz with journalistic, writing, scribe, and publication activity. The Egyptian god Thoth for the cult of whom the city of Khmun was designated (Lichtheim, 2019) was the god of scribes, writers, and interpreters to the extent that Greeks likened him to Greek god Hermes, and thus named the city as Hermopolis, literally meaning Hermes city, in lieu of Khmun.

For our purpose, however, it is most appropriate to note that deity Thoth was considered to be the source/guardian of all knowledge, namely: science, astronomy, mathematics, architecture, law, chemistry, medicine, magic, measurement, order, justice, etc. This characteristic of Thoth, not always asserted, is also most strongly associated with the city of Khmun as the origin or bedrock of all sciences. Materials evidencing communication studies in early ancient Egypt can be found with Budge (1901/2007) alleging, "in addition to their skill as handicraftsmen and artisans the Egyptians were skilled in literary composition, and in the production of books" (pp. 20-21). Skills of craftsmanship and artisanship speak to chemistry or physics whereas those of literary composition and production of books provide good indications of communication studies.

LATIN MEANINGS OF COMMUNICATION AND RELATED TERMS

Latin meanings of communication and related terms hold great merit for communication body of works. Three English terms are helpful in this section: (1) communication, (2) message, and (3) sign. The English term communication comes from the Latin verb *communicare*, *communico*, *communicavi*, *communicatum* (Andrews, 1851, p. 316-317), which means to divide something with somebody, whether in giving or receiving, to communicate, impart something, to share together, to unite, to join to an equal part, to share something with one, to take or receive a part, to partake, participate in it. The English term *communicator, oris*, *em*, means one who takes part in something, or one who makes someone a participant in something. As can be seen, the predominant meaning often forgotten is that of partaking or participating in.

The English word message or messenger derives from the Latin word *mittere*, *mitto*, *missi*, *missum* (Andrews, 1851, pp. 955-956), which means: to cause to go, send off, dispatch, send away, let go, to hurl, cast, throw, release, to send word, announce, send greeting to, to bring out, put forth, emit, etc. From the Latin verb *mittere* comes a set of English verbs such as to admit, emit, commit, omit, permit, promise, transmit, remit, etc., or nouns such as admission, commitment, commission, emission, mission, omission, permission, premise, promise, transmission, remission, etc. From the Latin verb *mittere* is derived the Latin adjective *missilis*, meaning that which can be thrown, sent, launched, released, shot, etc. It is worth underlining that the term message appears to be minimized among the meanings ascribed to the Latin verb *mittere*, which is more about the emission, release, manifestation, or sending off of something than anything else.

The English word sign comes from the Latin verb *signare*, *signo*, *signavi*, *signatum* (Andrews, 1851, pp. 1415-1416), which stands for: to mark, mark out, designate, press, seal, stamp, distinguish, point out, express, indicate, signify, remark, observe, etc. The Latin word *signum* means a token, mark, military standard, signal, watchword, password, image, picture, work of art, statue, etc. From the Latin word *signum* originates a number of English verbs such as to assign, consign, design, designate, resign, signal, signify, etc., or nouns such as assignment,

consignment, designation, design, resignation, significance, etc. Most notably, the idea meaning, word, or message appears to be minimal in the definition of the Latin word *signum*.

In sum, it bears noting that although important, the notion meaning when communicating, proves to be only a fraction of the definitions given to the word *communicare*, with the idea sharing together, partaking, or participating in a thing being the most salient meaning. Thus, communication primarily entails participation in reality or phenomenon. To a great extent, this understanding of participation in selected reality is reinforced by, on the one hand, the notion liberation or release -- arising from the Latin verb *mittere*, and, on the other, by the notion mark or standard deriving from the Latin word *signum*. The etymology of communication presupposes the idea participation, liberation, or release as opposed to manipulation, repression, or concealment. The etymology of communication gives a glimpse of how communication can be defined and/or elaborated on.

ASPECTS/CHARACTERISTICS OF COMMUNICATION

A few words are of the essence concerning the aspects/characteristics of communication to allow for a focused discussion of communication research. These characteristics relate to the participants and the phenomenon of communication itself.

Communication is fundamentally and inevitably interactional, dialogical, transactional, or interpersonal. The interactional feature of communication cannot be emphasized enough. As Patterson, Fridlund, and Crivelli (2023) noted, "communication is fundamentally interactive, not unilateral" (pp. 17-18). Not without merit, Watzlawick, Bavelas, and Jackson (1967/2011) offered a detailed description about the interactional patterns of communication. Communication research ought to be consistent with and conducive to the interactional patterns of communication. One modern-day definition most consistent with or most focused on this description of the concept communication or communication studies can be found with Peters (1999) when he claimed, "Communication is a registry of modern longings... where nothing is misunderstood, hearts are open, and expression is uninhibited" (p. 2). Uninhibited expression indicates fuller participation in reality, more precisely, better actualization of life. Uninhibited expression means unmanipulated, unrepressed manifestation/realization of life. That is why communication is fundamentally and inevitably interactional, dialogical, transactional, or interpersonal inasmuch as communication that is not so is simply manipulative, repressive, disruptive, and destructive. To emphasize, as S.A. Beebe, S.J. Beebe, and Redmond (2020) wrote, "Interpersonal communication occurs when you treat the other person as a unique human being... *Impersonal communication* occurs when you treat others as objects or respond to their roles rather than to who they are as unique persons" (p. 3). Impersonal communication is communication that is linear, object-focused, and not human-centered. It is essential for researchers with an interest in communication and related phenomena (e.g., relationship, meaning, intention, community, behavior, meditation, etc.) to keep in mind the characteristics of communication, namely: linear vs. transactional endeavors, when defining or working on communication and inquiry thereof.

Humans are Interactional

Consideration of communication as interactional or transactional stems from nothing but the fact that humans are interactional by nature. This confirms the long-held wisdom of ancient

philosophers about human nature. In ancient Greece, Aristotle (c. 350 BC/1960) devoted expansive attention to the fundamental nature of interaction among humans, arguing,

> *From these things therefore, it is clear that the city-state [i.e., community bond] is a natural growth, and that man is by nature a political animal... And why man is a political animal in a greater measure than any bee or any gregarious animal is clear... Therefore, the impulse to form a partnership of this kind is present in all men by nature; but the man who first united people in such a partnership was the greatest of benefactors. (Politics, 1, 1253a; see pp. 9-10)*

The Greek word ζῷον [zôon] encountered in Aristotle statement presented above, traditionally rendered into English as *animal*, simply indicated living being in ancient culture, more than it does in contemporary societies. Equally, the English word *political* generally transliterated from the Greek adjective πολιτικὸν [politikon] signifies that which is sociable, social, community-building, etc. (Bailly, 1895/1935; Liddell & Scott, 1843/1996). On more ways than one, the interactional dimension of humans lies unmatched in the kingdom of living beings. Unlike other species, humans interact with individuals well beyond their species. For example, Seneca, Jr, commonly called Seneca the Younger (Seneca, c. 55 CE/1928), a 1rst-century-CE Roman thinker, wrote that "man is a social creature" (*De Clementia*, 1.3.2, see p. 365). To be precise, the Latin words used by Seneca (c. 55 CE/1928, see p. 364), namely: "*hominem sociale animal*," standing basically for man a social animal, had no negative connation in the context of ancient society, and signified more or less any living being. With an insistence on the concept context, awareness of the social dimensions when dealing with communication has emerged in several venues of modern-day communication research.

With no less relevance, Donges and Jarren (2022) affirmed,

> ***Kommunikation ist Teil des sozialen Handelns***... *In den Sozialwissenschaften wird der Begriff "soziales Handeln" verwendet, wenn Menschen das Verhalten anderer in irgendeiner Art und Weise berücksichtigen müssen [**Communication is integral to social action**... In social sciences, the concept social action is used when people should by all means take into account the behavior of others (emphasis in original)]. (p. 7)*

Communication is understood to be inescapably part of social reality/action. This understanding of communication is a testimony to the history of communication studies wherein a focus used to be sensibly laid on communication as a mere exchange of messages with the goal of improving the channel used in the exchange. The point here is that social action shall not be barren/empty of life, rather communicative, dialogical in order for people to be able to (inter-)act or live. The interactional characteristic of human communication translates the nature of humans, and more importantly so nature itself.

Nature is Inextricably Interactional
We live in an era outstandingly concerned with or sensitized to climate change and the debate thereof. This debate underscores the idea that nature is inextricably interactional. Climate change is a topic that has risen to the fore following an awareness of human interaction with and role in environment. Awareness of our place in environment springs in large part from

discoveries made in quantum physics, whose key idea lies in the ineffably interactional essence of nature (Freire Jr et al., 2022; Hacking, 2012; Palmer, 2022). While quantum physics tends to be seen as reserved for or limited to sophisticated jargon and knowledge of specialized fields in physics and philosophy, it has engendered tremendous insights across various areas of industry and academia. The word quantum is an English transliteration of the Latin adjective *quantus, a, um*, which stands for how great, how many (Andrews, 1851, p. 1251). The adjective *quantus* refers to how much (of a) quality or quantity, or simply put; density, intensity, quantity, greatness, depth, etc. The central point behind the notion quantum is an understanding of matter, energy, time, light, etc. conceived/composed of discrete quantities, entities, chunks, bundles, etc. Quantum mechanics has led to the realization that nature comes in the form of quantities or bundles operating as waves and particles at the same time. With quantum mechanics, there is no such a thing as a single, stand-alone, or isolated phenomenon. Quantum theory or theory behind quantum mechanics is a theory of multiplicity, plurality, complexity, polyvocality, openness, unlimitedness, etc. in which object and subject ceaselessly and inextricably intertwine. Quantum theory can be said to be a (re)fresher version of hermeneutic circle, considering the openness/interaction between wave and particle, or object and subject.

As Hacking (2012) depicted,

> *there was the quantum revolution… a two-stage affair, with Max Planck's introduction of quanta around 1900 and then the full quantum theory 1926-1927, complete with Heisenberg's uncertainty principle. Combined, relativity and quantum physics overthrew not only old science, but basic metaphysics. Kant had taught that absolute Newtonian space and the principle of uniform causality are a priori principles of thought, necessary conditions on how human beings comprehend the world in which they live. Physics [i.e., quantum] proved him totally mistaken. Cause and effect were appearance, and indeterminacy was at the root of reality. (p. xiv)*

The widespread linear causality or the straight-line cause-effect explanation of reality was repelled, and indeterminacy was brought to the forefront of scientific method. Polyvocality, openness, unlimitedness, or indeterminacy reverses a separation between object and subject, inherited from Cartesian doctrine. As contemporary quantum physicist Palmer (2022) asserted,

> *Uncertainty is an essential part of the human condition… Apparently, it's not just our lives that are uncertain. According to our most successful theory of physics --- quantum mechanics --- uncertainty is also an essential part of the life of the elementary particles from which both we and the world around us are made of. (p. 1)*

The argument was echoed in Orlikowski and Baroudi (1990) remark on positivism suggesting, *There exist real, uni-directional cause-effect relationships that are capable of being identified and tested via hypothetic-deductive logic and analysis...positivist … researchers assume an objective physical and social world that exists independently of humans, and whose nature can be unproblematically apprehended, characterized, and measured It is assumed, explicitly or implicitly, that there is a one-to-one correspondence between the constructs of a researcher's*

model and the "objects" or "features" of interest in the world. Understanding phenomena is a problem of measurement, of constructing an appropriate and accurate set of instruments to capture the essence of the phenomenon. The researcher herself is seen to play a passive, neutral role in this investigation, and does not intervene in the phenomenon of interest. (pp. 10-11)

As seen above, while the shortfalls emerging from positivistic teachings of science are nearly self-explanatory, misconceptions about science have persisted time and time again. Yet, indeterminacy or openness has remained a central characteristic of science. One most widely asserted key teaching of quantum physics is the teaching that nature is comprised of waves or wave-bound particles (Freire Jr et al., 2022; Palmer, 2022). Interestingly for our discussion, waves, which come in the form of water, air, sound, etc., are forces noted for their distinctive ability to interact with any action/shock from within and outside their realm. Quantum physics reminds us that nature is inextricably interactional, waves-bouncing and moving such that any action posed anywhere causes a web of effects, incessantly interacting with each other. Interactivity, interactional multiplicity, or mutual responsivity is that which characterizes nature and the phenomena therefrom. One of the methodological concepts best highlighting interactional multiplicity/complexity might be "*Standortsgebundenheit* [situational responsivity/bondedness]" (Mannheim, 1929, p. 33) proposed by Hungarian-born German sociologist Karl Mannheim (1893-1947). Complexity/multiplicity requires that bondedness or responsivity be set between a researcher and those researched or the researched. The wave-driven and particle-located context of nature is the context in and out of which communication takes place, as is obvious from the three definitional models of communication, namely: Shannon and Weaver traditional model ((Shannon, 1948a, p. 381, 1949/1964, p. 34; see also Weaver, 1949/1964, p. 7, 1949, pp. 12-13), Shannon and Weaver corrective model (Shannon, 1948a, p. 409, 1949/1964, p. 68; Weaver, 1949/1964, pp. 24-25, 1949, p. 11), Watzlawick, Bavelas, and Jackson human communication model (Watzlawick, Bavelas, & Jackson, 1967/2011, p. 29), and McLuhan global village model (McLuhan, 1962/2011; 1964). Watzlawick, Bavelas, and Jackson human communication model is a model based on communicational responsivity, the idea that one cannot not respond to (hence communicate with) surrounding reality.

One of the reasons why most innovative work of quantum physics has flown beneath the public and academic radar might be because of a coincidence (or association?) between the emergence of quantum physics and that of Nazism in Germany, in the first half of the 1900s. While association can to some extent be drawn between quantum physics and Nazism mainly because famous names such as Jordan and Heisenberg were arguably found to be involved in or somehow members of Nazism, diversity has been by far a marker and driver of quantum physics since its origins. As a pertinent illustration, among the founding figures of quantum physics are French physicist Louis de Broglie (1892-1987), Swiss physicist Paul Adrien Maurice Dirac (1902-1984); born and raised in Bristol, UK, Austrian physicist Erwin Schrödinger (1887-1961), Danish physicist Niels Bohr (1885-1962), and Polish-born British physicist Max Born (1882-1970), born in Breslau, now Wrocław, Poland, to name just a few (Carson, 2000). Quantum physics emerged from a remarkably and irrevocably diverse background/rationale.

Caveats About Human Interaction
While the idea communication being interactional echoes the key feature of humans, and indeed that of nature itself, it implies a number of caveats that warrant attention, of which two

most consequential were spelled out by Aristotle (c. 350 BC/1960). Caveats about human interaction ought to be kept in mind in order for communication and research thereof to best perform. On the one hand, Aristotle (c. 350 BC/1960) recognized that "man alone of the animals possesses speech" (*Politics*, 1, 1253a, see p. 11). This means that humans are characterized by speech, among other things. On the other hand, Aristotle (c. 350 BC/1960) cautioned, "but speech is designed to indicate the advantageous and the harmful, and therefore also the right and the wrong" (*Politics*, 1, 1253a, see p. 11). Such a statement confirms that speech can be harmful and perhaps most importantly unfair or wrong. The caution about speech (i.e., verbal communication) being harmful and unfair is of great significance considering the buzz about communication. The second caveat, as Aristotle (c. 350 BC/1960) underlined, reads as follows:

> *For as man is the best of the animals when perfected, so he is the worst of all when sundered from law and justice… Hence when devoid of virtue man is the most unscrupulous and savage of animals, and the worst in regard to sexual indulgence and gluttony. (Politics, 1, 1253a, p. 13)*

The above statement is a stark reminder that without justice humans prove to be the worst and most harmful species. Without ethical/basic standards or moral excellence, represented by the Greek word ἀρετῆς [aretês], humans are nothing short of the fiercest and most unrepenting species. The caveats exposed supra lead to a comprehensive or more (re)focused definition of communication studies and research thereof. However, communication studies has met with numerous misconceptions.

Communication as Fuller Participation in, Actualization of Life

Fundamentally, human communication portrays communication as fuller participation in, actualization of, and/or release of life. Confusion can arise and has indeed arisen when researchers somewhat lose sight of these fundamental characteristics of (human) communication, by considering and perhaps idealizing the area/domain of communication in which they work as the sole benchmark/area of communication itself. Areas of communication include, and are not limited to, health communication, organizational communication, interpersonal communication, intrapersonal communication, intercultural communication, business communication, public communication, political communication, communication for development, and strategic communication. One result of this oversight is that the characteristics of communication are conflated with those of a given area of communication. A key reason behind this oversight might be solo research. To illustrate, in describing the characteristics of communication, DeVito (2020) indicated, "Communication is inevitable, irreversible, and unrepeatable" (p. 12). To be more exact, all areas of communication field arise from and are anchored in the characteristics of communication described above (i.e., dialogical vs. linear, monadic, or manipulative). Remember that communication, however it may be described, pervades all aspects of human experience. No domain/area of human experience is untouched, unaffected, or un-shaped, so to speak, whether intentionally or unintentionally by communication. For example, in describing the characteristics of interpersonal communication, DeVito (2023) proposed, "Interpersonal communication is inevitable, irreversible, and unrepeatable" (p. 42). One interpretation of this statement can result in interpersonal communication being understood as the one and only area of communication that is inevitable, irresistible, and unrepeatable. Thus, it becomes essential to situate the definition and/or work of a given area of communication within the broader, fuller realm of communication.

Communication is about a fuller realization of the (other) person. Hence, the continuum from being treated as the least to the fullest person ought to be borne in mind when communication occurs.

As is apparent from above discussions, communication studies is a field of participation in human fuller realization. In other words, people communicate via technology (i.e., art, paintings, drum, song, storytelling, papyrus, print, telegraph, picture, jewel, phone, internet, etc.) and/or behavior (i.e., relationship, gesture, silence, fragrance, look, tattoo, insight, intuition, distance, etc.) with the goal of experiencing better, fuller life. Any barrier interfering with human greater fulfilment ought to be dealt with and eradicated for communication to best run its course. Whenever there is impingement on or obstruction of life, no communication has occurred.

MOST RECURRING MISCONCEPTIONS ABOUT COMMUNICATION

Due to various developments associated with the history of communication studies and the concept science, a number of most recurring misconceptions about communication tend to surface in ways in which communication research is implemented. To this effect, four concepts warrant consideration.

Interpersonal Communication

Because the centrality of interaction pervades all communication, misconceptions about interpersonal communication are not unusual, of which three most recurring are discussed here. Interpersonal communication is the area of communication research that has interaction as its hallmark. The first most recurring misconception about interpersonal communication lies in the belief that areas/types of communication different from those of interpersonal communication are not interpersonal (e.g., mass communication, public communication, business communication, etc.). The misconception is compounded by the idea that "interpersonal communication is… this unique form of communication" (DeVito, 2023, p. 20). The key reason for this misconception is in large part because interpersonal communication is generally defined as communication that unfolds primarily between two people. As DeVito (2020) explained, "Interpersonal communication occurs when you interact with a person with whom you have some kind of relationship" (p. 2). Nonetheless, in taking into account the fact that communication is interactional or transactional by nature, it becomes evident that there is no such a thing as communication that is not inter-personal or inter-actional. There might be some exception with the field of communication called intrapersonal communication, which involves only one person --- doing introspection, self-mindfulness, meditation etc. Even then, more often than not, a dialogue or internal conversation during the activity of mindfulness or meditation presupposes a variety of roles, scenarios, experiences, and individuals with which the meditating person interacts.

The history of communication field clearly shows a steady rejection of and contrast with the idea/model of linear or non-interactional communication (Peters, 1999; Beck, 2020; Berger, 2020; DeVito, 2020; Donges & Jarren, 2022) wherein communication can be manipulative, channel-centered, corporate-driven, monadic, repressive, and passive. Linear model of communication implies communication that is antithetical to personhood because humans are being conceived of as nothing more than recipients, consumers, workers, or employees (if not employed). Even areas of communication traditionally called or known as mass communication

(see an example with S.A. Beebe, S.J. Beebe, & Redmond, 2020, p. 4) or mass media --- although the term *mass* communication or *mass* media is increasingly avoided in today industries and universities around the globe --- various processes of interactions (i.e., TV shows, mobile apps, premium memberships, etc.) abound, making listeners/players participatory rather than passive recipients of news outlets. Most news reports on mainstream TV networks are nowadays presented with on-site or life materials (i.e., clips, videos, pictures, accounts, etc.) provided not by journalists in newsrooms but rather by average listeners/witnesses who happened to be or have been at the scene of the selected event. Thus, TV networks are no longer mass-communication companies/industries, but rather interactive, online communities of communication wherein listeners, using their smart phones; for example, are both producers and receivers of news reports.

It is time, as noted above (see Watzlawick, Bavelas, & Jackson, 1967/2011), to abandon the idea of communication envisaged as linear both in the approach toward and the method about communication and research thereof. Communication without interaction is like a river without water. Still, the caveats sketched above, illustrating the harmful dimensions of speech/verbal communication as well as the worst and fiercest species on earth that humans can be when devoid of justice and moral standards, can help refurbish the work and definition of communication and attendant research.

The Concept Person
The second most recurring misconception about interpersonal communication regards the concept person already touched upon earlier. On this note, a remark was rightfully made by S.A. Beebe, S.J. Beebe, and Redmond (2020), saying,

> *Interpersonal communication occurs when you treat the other person as a unique human being... Impersonal communication occurs when you treat others as objects or respond to their roles rather than to who they are as unique persons. Think of all human communication, whether mediated or face-to-face, as ranging on a continuum from impersonal to interpersonal communication. (pp. 3-4)*

Thinking of all human communication as a continuum from impersonal to interpersonal communication constitutes an excellent illustration of what *all* communication entails. For example, just because a mayor of a given city sends a piece of communication to all city's members (e.g., decree, announcement, letter, etc.) -- which without doubt is a typical instance of mass, or to use a more accurate phrase, large-scale communication --- does not mean that the addressees of that communication are less than unique persons. Quite conversely, the mayor in the example given above treats each and every one of all ten or more million constituents of their city as a full, unique person. People are fully human regardless of whether they are in a small group or big community; so is communication. The number/rate of addressees in interactions or actions involved in communicating with one another does not diminish nor eliminate the humanity/personhood of concerned participants.

True/full Interpersonal Communication Implies Closer Intimacy
The third most recurring misconception about interpersonal communication sits in the widespread belief that true/full interpersonal communication implies closer intimacy or sex. The belief is based on the idea of interpersonal communication as one of a long-term

relationship. While the belief might have some merit, it defeats the gist of interpersonal communication discussed supra. The point is, any act initiated in communication such as conversation, relationship, correspondence, intimacy, sex, etc. ought to respect the other party as a unique, full person rather than an object or slave of the act posed. Hence, as noted above, there is no such a thing as communication wherein humans are treated as objects or less than persons. As McLuhan (1964), an influential and often forgotten theorist of communication, asserted, "The medium is the message" (p. 7). The idea implies that message conveys the mechanics, arrangements, and processes of the carrier, all of which being commonly unsuitable to and/or irreflective of human agency. Human agency is further threatened by the phenomenon that "The medium is the massage" (McLuhan & Fiore, 1967, p. 26). Massaging social spaces conflicts with the notion global village, seen supra. The notion global village (McLuhan, 1962/2011) presupposes interdependence or a community bond whereby everyone cares about and knows everyone. The idea interaction as communication and vice versa rests on an understanding that nobody ought to be treated as an object or less than a person. This is why in light of ancient texts analyzed above such as ancient Egypt, Aristotle (c. 350BC/1960) writings, Latin derivations of communication and related terms, etc., the ultimate goal of communication is for every person to live/participate in fuller, better life. A global village is a community of shared better, fresher, quieter, healthier, safer, and fuller life or enjoyment. A village is a place of peace and rest, away from the brutalities, stresses, and hardships of human/urban congestions. Communication research was also called to the betterment of society beyond mere academic achievements (Waisbord, 2020). A communication phenomenon fits in well with people's fuller realization, leaving academic outcome as a tool rather than an end in and of itself.

The Binary Nonverbal and Verbal Communication
The fourth and last most recurring misconception revolves around the binary nonverbal and verbal communication. While the binary nonverbal and verbal communication has come to be somewhat of a truism in communication textbooks, it needs a thorough discussion. This is because misconceptions about the binary nonverbal and verbal communication can undermine research on communication and the understanding thereof. For focus purposes, however, only two most common misconceptions about the binary nonverbal and verbal communication warrant scrutiny.

The first most common misconception about the binary nonverbal and verbal communication derives from the confusion surrounding the concept written communication also called script or written language. In this sense, written language tends to be taken to mean the Latin alphabet. Besides the Latin alphabet, however, there exist a variety of writing systems/scripts as diverse as Geez (Eritrea and Ethiopia), Amharic (Ethiopia), Chinese, Vietnamese, Korean, Persian, Russian, etc. India is the country with the most diverse scripts on earth. As one can see, written communication of a specific script is only a limitation of, if not a diversion from, the complexity/mystery of human communication. The widespread insistence on and limitation to the Latin alphabet causes authors to camouflage and indeed disregard the complexity and richness of communication.

It bears stating that the English adjective verbal stands for "spoken, not written," whereas its synonym oral means "[usually before noun] spoken rather than written" (*Oxford Advanced Learner's Dictionary*, https://www.oxfordlearnersdictionaries.com). To this effect, it is most

helpful for communication research to take into account language or text studies. The biggest confusion about written language can be encountered in the word language or linguistics, all of which (details below) stems from the Latin word *lingua, ae*, meaning tongue (Andrews, 1851, p. 888). Part of the confusion is that, and most importantly for our discussion, written language signifies nothing but an attempt to represent the movements, gestures, sounds, and clues produced by the tongue or mouth (hence linguistics from the Latin *lingua, ae*). Thus, verbal communication being identified with and defined as tongue- and mouth-related gestures is unwarrantedly misleading insofar as these and similar words concern primarily the mouth and its organs or functions.

From the tongue/mouth-related functions or organs come several English terms, of which the four most common are listed here: (1) language or linguistic, as noted earlier, which results from the Latin word *lingua*, *ae*, meaning tongue (Andrews, 1851, p. 888); (2) oral, orality, orator, etc. which comes from the Latin verb *orare, oro, oravi, oratum*, meaning to speak, to talk, to argue, to pray (Andrews, 1851, pp. 1060-1061), which also comes from the Latin noun *os, oris*, meaning the mouth, the face, the front (Andrews, 1851, pp. pp. 1061-1062); (3) vocal, voice, vocality, which originates in the Latin word *vox, vocis*, meaning voice, speech, and finally (4) label, which stems from the Latin word *labia, ae*, meaning lips, etc. (Andrews, 1851, p. 853). More precisely, as demonstrated in this paper, written language is a representation of the nonverbal/nonwritten gestures, movements, and sounds seen/identified with the tongue or mouth.

Put differently, written language is nothing but (a description of the) visual, gestural, and auditory clues found in the tongue or mouth. By way of illustration, the letter *n* and *l* represent the guttural shape of the tongue, the letter *z* represents the tongue trying to stick to teeth, the letter *o* represents the sound of the tongue closed backward in the mouth whereas the letter *a* represents the sound of the tongue turned outward in the mouth, etc. None of these moves is a perfect, accurate representation of the sounds implied or alluded to. To explain, with the letter *a*, to cite just this instance among others, no language/sign can fully replicate the world of sounds referred to by the letter *a*, and the use of accents or symbols attached to the letter *a* don't help, either. Noteworthy in passing here are Polish, Vietnamese, and, to a lesser degree Scandinavian writings/languages, which while using the Latin alphabet, comprise distinct diacritics attached to different letters, with a view to better representing concerned sounds. Yet, the tendency among authors is one that excludes altogether visual, gestural, and auditory clues/moves found well beyond and independently from the tongue or mouth. It follows from the above analysis that verbal communication as traditionally defined represents only a fraction of and a diversion from the myriad facets of communication. Thus, there is no exaggeration in stating that written communication is in and by itself nonverbal or gestural communication. All communication is made of moves that are gestural, auditory, visual, etc. The point was also made by Beck (2020) when he elaborated,

> *Umgekehrt können wir, wenn wir es denn wollen and wagen, nahezu alles verbalisieren, was wir auch nonverbal zum Ausdruck bringen [express]. Man, kann daher davon ausgehen, dass es sich in den meisten Fällen um redundante Botschaften handelt, die verbal und nonverbal vermittelt werden [Conversely we can, when we wish so, verbalize almost everything that is expressed nonverbally.*

> *Thus, one can reasonably conclude that more often than not when communication occurs verbally and nonverbally it yields the same messages]. (p. 47)*

As noted in the above remark, verbalization involves just about everything, and interestingly nonverbal and verbal communication are shown to be producing the same message.

Perhaps most confusion, as also observed earlier, arises from communication researchers' insistence and focus on the gestures, movements, and sounds of the tongue or mouth, hence the word verbal, with the gestures, movements, and sounds found beyond the tongue being seen and excluded as an inferior and subpar type of communication process. One reason for this insistence can be found in the attractive, exceptional nature of human language. As Beck (2020) noted,

> *Mit Sprache steht uns im Unterschied zu Tieren eine hoch abstrakte, enorm leistungsfähige Verständigunsmöglichkeit zur Verfügung, mit der wir auch über Abwesendes und Nicht-Existentes, Gefühle, Vorstellungen und Ideen genauso kommunizieren können, wie über konkrete Objekte der Dingwelt… Dass Menschen als einsige Lebewesen über diese Kommunikationspotenziale verfügen, bedeutet aber im umkehrschluss keineswegs dass sie sich ausschließlich der Sprache zur Kommunikation bedienen würden [With language, we, unlike animals, are provided with a highly abstract and immensely efficient possibility of understanding, which enables us to communicate about that which is absent or non-existent, feelings, descriptions, thoughts as well as concrete topics of the material world… The fact that humans are the only species that has these communication potentials does not mean in any way that they would use solely language in order to communicate]. (p. 44)*

As apparent from the above statement, language constitutes one of the greatest assets of humans. At the same time, it needs to be argued that the abstract and efficient abilities of humans have more to do with human brain than human language. Communication is shown to develop well beyond mere language or speech. Nevertheless, with the primacy and superiority ascribed to the word *lingua* (i.e., language or speech) and related phenomena such as meaning, word, pronunciation, punctuation, etc. nonverbal communication is being sidelined as a sub-class citizen in the land of communication (details below).

In essence, all human communication occurs nonverbally in that communication embodies gestures, movements, visuals, sounds, etc. produced by or encountered with a given organ. This means that the tongue, or to a larger degree the mouth, represents only one of the myriad elements that convey gestures, movements, visuals, sounds, etc. One outcome of the misconception about nonverbal communication is the tendency among communication researchers to overlook the fact that nonverbal communication entails actions well past gestures, visuals, audios, etc. One of the most important observations on this topic was made by Mehrabian (1971), declaring, "Our speech-oriented culture is just beginning to take note of the profound and overlooked contribution of nonverbal behavior to the process of communication. This contribution of *our actions rather than our speech* is especially important [emphasis added]" (p. iii). Rather than looking at and insisting on the actions (i.e., gestures,

sounds, movements, visuals, etc.) of the tongue as the sole canon of communication process, communication researchers are encouraged to probe actions to the broadest extent of the term to capture the fuller spectrum of communication.

Mehrabian (1971) pursued the matter, specifying,

> *Indeed... others... rely almost completely on what we do. People who have a greater awareness of the communicative significance of actions not only can insure accurate communication of their own feelings but also can be more successful in their intimate relationships, in artistic endeavors such as acting, or work that involves the persuasion, leadership, and organization of others... Most can benefit considerably from a greater awareness of their social style, the effect it has on casual and brief interactions with others, or its more general effect on their social life. (p. iii)*

Human communication is nonverbal by nature because it entails actions, or to use a clearer terminology social style or life, far beyond and indeed not limited to the tongue/mouth. Another more suggestive terminology is that of unspoken messages or unspoken communication. Unspoken communication or message is message that emerges from and/or creeps into all forms of communication such as verbal/spoken, nonverbal, written, recorded, online, etc. The best illustration of nonverbal character of human communication can be found with games/sports. Games are specifically nonverbal events or processes, and represent one of, if not, the most effective and representative forms of expression among humans and animals. Games are the genre of communication whose operability lies primarily with nonverbal behavior. Games exist across cultures, societies, and times. As such, games contribute to fuller development/actualization of humans as well as animals.

Although some games require a certain education, technology, and set of skills in order to operate, the genre game as a form of communication, namely nonverbal communication, is not dependent on or reduced to education, technology, or people's status. This is also typical of language. Language does not require written skills/education for its proficiency. Individuals living in peoples without writing systems display full if not unparalleled language proficiency, with vocabulary, conjugation, phraseology, pronunciation, etc. beyond understanding and often impossible to put in written form. One distinctive and powerful aspect of games is located in focus being placed on nonverbal interactions or actions vs written words/symbols of concerned participants and ensuing outcomes. Most understandably, due to the lack of a focus on language or written abstraction, games are readily, massively simulated and marketed on computers and phone apps. Another best illustration showcasing the power/nature of nonverbal communication is with movies. Although movies contain a considerable verbal component, they are most powerfully enjoyed and watched when muted or played nonverbally. Both games and movies accord the least value to verbal communication of involved players. For example, watching a movie translated from one language into another is a typical indication of how verbal communication namely the gestures, movements, sounds, visuals, etc. of the tongue or mouth can be little short of negligeable.

Even most confusingly, much of what is believed to be verbal communication is nothing but written communication. This idea is best encapsulated by Bavelas (1990) when delineating traditional communication research inherited from information theory, claiming,

> *Information theory seemed good for handling communication that was: mediated (e.g., electronic) but not face-to-face; goal-oriented (e.g., exposition or narrative) but not phatic (e.g., small talk); organized (e.g., debate) but not naturally occurring (e.g., conversation); formal (e.g., speeches) but not informal (e.g., gossip or slang); deliberate (e.g., planned) but not spontaneous (ad libs or joking); logical and clear but not illogical and ambiguous (e.g., equivocation); explicit but not implicit (e.g., indirect speech acts); successful but never unsuccessful or frustrating; and most of all, verbal and not nonverbal. (p. 594)*

It is important to note, in light of the above characterization, what is suggested to distinguish verbal communication from nonverbal communication. To this end, verbal communication is described to consist of written communication, which is linear, logical, organized, mediated, in opposition to nonverbal communication thought to be spontaneous, disorganized, and illogical, etc.

Perhaps the most compelling explanation for equating at least associating verbal communication with written communication resides in the nature of written communication itself. The point being that written communication cannot take place without verbal communication, more precisely the process of verbalization or *oralization*. As Cibangu (2009) elucidated,

> *When we read a text, we are trying to understand it. Comprehending a text consists of turning written words into spoken words by silently vocalizing them to ourselves, which echoes the meaning. In other words, it is only when converted to the world of sounds, loud or silent, thus oralized, that written documents yield their meanings... One would say with confidence that without orality, writing could not convey meaning. In reading, we internalize written words by translating them into spoken words, and the meaning ensues... Written words wait for sounds (i.e., spoken words) in order to deliver their meaning. It is no surprise that another term for the spoken word is delivery. Spoken words allow written words to deliver meaning. Written words cannot deliver without spoken words. (p. 81)*

The dependency of written communication on oral communication or internal verbalization serves to situate written communication within its proper context, all of which calls into question any attempt to advocate Western ethnocentrism/civilization behind the façade of writing. In other words, written communication cannot be understood as a feature of superiority, excellence, or civilization that other cultures do not have or have to emulate (see details in Cibangu, 2009). This is in part because, as described above, written communication or written language tends to be limited to the Latin alphabet, now widely used across the globe. The second most common misconception about the binary nonverbal and verbal communication, related to the first, regards the low esteem accorded to nonverbal communication, more particularly its place with respect to research. One of the key concerns raised about nonverbal communication is that nonverbal communication lacks scientific

empirical research. Still, the centrality of nonverbal communication in carrying messages in human interactions remains irrevocable. As S.A. Beebe, S.J. Beebe, and Redmond (2020) maintained, "Nonverbal messages are the primary way we communicate our feelings and attitudes" (p. 181). Nonverbal communication proves to be the primary tool of human interaction. Most specifically, "Nonverbal messages are usually more believable than verbal messages" (Beebe, S.A., Beebe, S.J., & Redmond, 2020, p. 182). While the centrality of nonverbal communication is obvious, its research lags behind the research done on written communication in particular and communication in general.

As Beck (2020) bemoaned,

> *Jedenfalls entbehren Berechnungen, nach denen Zwei Drittel oder mehr der Informationen in einem Gespräch nonverbal kommuniziert werden, einer soliden empirischen Grundlage [Still, the claim that two thirds or most information in a conversation is nonverbally communicated lacks compelling empirical foundation]. (p. 47)*

The lack of empirical evidence behind the widely reported statistics of nonverbal communication is believed to be one of the challenges threatening nonverbal communication research. To explain further, Beck (2020) claimed,

> *Zum einen dürfte es, zumal im pyshologischen Labor, schwer fallen, valide Messungen durchzuführen, die ambivalente Bedeutungen und die wahrscheinliche Redundanzen mit der verbalen Kommunikation hinreichend genau berücksichtigen. Zum anderen handelt es sich bei Information, wie wir bereits festgestellt haben, um einen subjektrelationalen Prozess und nicht um messbare Einheiten [On the one hand, one would hardly conduct reliable measurement especially in a psychological lab, which reflects the identical meaning and potential redundancy of verbal and nonverbal communication. On the other, information [in a conversation], as we stated earlier, constitutes a relational process, and not a set of measurable units]. (p. 47)*

Measurability is claimed to be the key reason and perhaps the stumbling block as to why nonverbal communication is hardly researched in communication studies. Upon closer examination, suffice it to state that measurability or number (which is nothing but a symbol like any other) does not amount to a theory-proven/tested criterion of scholarly knowledge, much less communication research.

Nevertheless, one of the most influential and empirical studies on verbal communication, often bypassed in recent literatures of communication research, was undertaken by Mehrabian (1971), with extensive and various experimental research showing how most human communication is nonverbal. Sure enough, recent, most informative accounts and explanations of research done on nonverbal communication in communication studies can be seen with Gordon and Druckman (2019) review. For a good reason, Gordon and Druckman (2019) poignantly cautioned,

> *One of the major problems in focusing on the interpretation of nonverbal behavior is to treat it as a separate, independent, and absolute form of communication. This view of the topic is much too simplistic. The meaning of nonverbal behaviour must be considered in the context in which it occurs. (p. 89, the statement was similarly made by Patterson, Fridlund, & Crivelli, 2023, p. 17; Vrij, Hartwig, & Granhag, 2019, pp. 309-310)*

Context-insensitive and lab-restricted approaches toward communication phenomena have obscured the nature of nonverbal processes. As Gordon and Druckman (2019) warned, "Many communication models as applied to nonverbal behaviour have concentrated on the interpersonal level and have not elaborated to the same degree the role and situational levels of communication" (p. 90). This is primarily because "nonverbal behaviour, as a communication skill, is most usefully understood when discussed in role- and setting-defined contexts" (Gordon & Druckman, 2019, p. 90). The point is not so much about a lack of empirical research backing nonverbal communication as it is about the methods adopted in approaching nonverbal communication. Defective approaches are in no way unique to nonverbal communication, as demonstrated below in methodologies section.

In fact, nonverbal communication boasts an immense scientific base that serves industry and academia, whether in lab or outside lab. Examples in the area of nonverbal communication are as diverse as massage and mumification which involve tactile communication, swimming and running sports which are based on proxemics or body distance between players, essential oil therapeutics which revolves around olfactory and tactile communication, boxing which exploits gestural and body language communication, ultrasound medicine which attends to auditory communication, anesthetic medicine which explores tactile communication, music and its industry which have nothing but auditory communication as their hallmarks, etc. One case of note is that humans profit enormously from olfactory communication to sell/purchase colognes, or to distinguish on the market sound foods from rotten/bad ones. To confirm, Roberts, Havlíček, and Schaal (2020) stated that

> *we should remember that humans strongly depended on olfaction throughout their evolutionary history, and still do today... Odours are universally involved in practices to optimize the balance between nutritional, toxic and sensory/hedonic properties in the preparation and preservation of numerous foods and beverages. (p. 2)*

Furthermore, tactile communication aids humans in selling or purchasing apparels, towels, bed sheets, fabrics, carpets, mats, furniture, etc. Humans resort to gustatory communication to sell or purchase beverages such as wines, beers, liquors, juices, teas, coffees, etc. All martial arts are centered around gestural communication. Humans have recourse to gestural communication in training people for manual labor. Visual communication is perhaps the most utilized form of communication among living beings, from the youngest to the oldest ones. Odors are used by humans to keep their living and public spaces safer/healthier.

More pertinently, the scientific status of nonverbal communication can be best understood in light of Lévi-Strauss (1978/1995) remark, alleging,

> *Now… contemporary science is tending to overcome this gap [between senses vs science] and that more and more the sense [subjective] data are being reintegrated into scientific explanation… Take, for instance, the world of smells. We were accustomed to think that this was entirely subjective, outside the world of science. Now the chemists are able to tell us that each smell or each taste has a certain chemical composition and to give us the reasons why subjectively some smells or some tastes feel to us as having something in common and some others seem widely different. (pp. 6-7, see also Popper, 1994/1996, pp. 72-73)*

It is proven that the world of sensory phenomena displays features that are irreversibly scientific and can be expressed in the form of scientific formulas or scores. The 17th and 18th centuries are discussed infra in the section on methodologies, but one direct consequence of note here is that nonverbal communication is not incompatible with lab experiment or real-world environment.

The key for communication researchers is to attend to the real context in which nonverbal communication unfolds, which does not necessarily match the lab-like context of traditional communication. Disregarding the technical context of nonverbal communication seen above can be detrimental to research concerned with nonverbal communication. Nonverbal communication is not alone in being enmeshed with an outstandingly technical/engineering context while also involving a context of the humanities and social sciences. A great many fields are characterized by a steady technical/engineering context along with the humanities and social sciences context, such as economics, computer science, business, archeology, biology, film studies, arts, cosmetics, urbanism, etc.

Because of emphasis set on and engagement made with human behavior, it is quite understandable that nonverbal communication and in fact human communication research is heavily shaped by and dependent on psychological research. As Camic (2021) remarked not long ago,

> *Yet in most of psychological research, the psychologist-scientist controls the definition of reality… For example, what happens in a laboratory where a controlled social experiment takes place has had more value in psychological research than speaking with people in their own environments. (pp. 7-8)*

When dealing with the social or technical context of communication phenomena, an awareness of the lab-manipulated reality would enable researchers to explore a broader spectrum of topic researched and method selected. Similarly, Roberts, Havlíček, and Schaal (2020) determined that

> *Much of our understanding of human psychology, in general, is based on studies in Western, educated, industrialized, rich and democratic … societies… these studies are most commonly based in North America or Europe, using easily accessible local samples (e.g. of university undergraduates). Although they can be highly informative, it is problematic when findings from these samples are injudiciously extrapolated and adjudged to be representative of humans as a species. (p. 2)*

A researcher's awareness about the larger context of the topics addressed in nonverbal communication can open up the avenues toward diversity of societies in which nonverbal communication in particular and communication in general occur. To give a typical example, Roberts, Havlíček, and Schaal (2020) explained, "Western scholars have historically considered the sense of smell [olfactory communication] as minimally involved in human communication" (p. 1). The context in which communication research operates is not entirely neutral when it comes to the subfields of communication studies. In other words, nonverbal communication more particularly interpersonal communication was/is used in this paper because of its widespread and all too often unnoticed conflation with the key characteristics of communication phenomena. As discussed supra, the Western bias is also quite common among authors versed in written communication vs nonverbal communication, with the concept writing being usually if not exclusively taken to be a Western thing/product.

The third most common misconception about the binary nonverbal and verbal communication emerges from the nature of writing. By definition, script or writing is neither fixed, nor unilateral, nor Western. Even in Western civilization, namely, literature purporting to Western Europe and North America, with English being the preeminent language, the place of writing has come under fire from various fronts. For example, the linguistic turn in the first half of the 20th century has spawned a move from language being regarded as a mere negotiation about and understanding of text/writing and the content/meaning of it to language taken to be the world or space within, from, around, for, and by which writing was generated. Language has come to be viewed as multifaceted reality and its implications behind and within text, as opposed to mere text and its meaning.

Of tremendous merit here are the works of French authors Roland Gérard Barthes (1915-1980) and of Jean Paul Gustave Ricœur (1913-2005), among others: the former highlighting the idea multiple authorships or multiple voices lingering behind any written text/document (Barthes, 1973/2014) and the later insisting on text as an independent entity (Ricœur, 1971). The idea multiple authorships is widely known as the death of the author, meaning the plurality of voices instead of the sole or one-way voice that created the text in question. Text as independent entity assumes a variety of worlds out of which text has arisen, well beyond a single writer/symbol. As Ricœur (1971) specified,

> *action itself, action as meaningful, may become an object of science, without losing its character… through a kind of objectification similar to the fixation which occurs in writing… It constitutes a delineated pattern which has to be interpreted according to its inner connections. (p. 538)*

As seen in the above description, science can very well deal with human action. One of the objectives of hermeneutics is to elicit/unfold action or event relayed by text.

In either sense, written text/document, more so written communication is in no way limited to or representative of Western civilization. The death of the author implies the end of one author, source, or voice being the only voice to be heard and to express or represent life. Therefore, written communication cannot and should not be supplanted by one writing, civilization, culture, etc. It is like saying that phenomena such as life, energy, heat, light, experience, love, truth, etc. can in no way be Western, although Western civilization/writing might have

provided significant written contributions to these phenomena. With writing/text being multivocal, the idea of written communication as linear, mono-vocal, monadic, single-sourced, rational, measurable, etc. loses ground. Although the idea polyvocality seems to make most sense, it does not easily receive needed acceptance across areas of research and their methods in communication scholarship and beyond. Nonverbal communication is not an exception.

Clarification is needed regarding most criticisms directed at the practices/policies of the West (i.e., North America and Western Europe) and colonies thereof. The collapse of colonies in successive years of the second half of the 20th century in Africa particularly and the ensuing need for self-determination of newly proclaimed nations occasioned a movement broadly dubbed postcolonialism. Although traceable to the French and American Revolutions in the late 1700s, the movement of postcolonialism has thrown into sharper relief the criticisms against the West. To this end, most virtues or principles have come to roughly mean or be disguised as ones mounted against the West. For example, liberation, freedom, independence, justice, etc. have tended to be thought of as liberation, freedom, independence, justice, etc. from the West, leaving locally erupting social ills/forces unchecked, if not romanticized. It is absolutely essential to keep in mind this background when criticisms leveled against the West enter the conversations of communication scholarship and beyond. The reverse is also true. Most virtues and principles tend to be described as those pertaining to or epitomized by the West. This is partly due to the popularity of the West in establishing colonies around the globe for more than five centuries from roughly the 15th to 20th centuries. Examples include, among others, democracy, science, communication studies, development, modernization, justice, human rights, etc. As claimed supra, democracy and science, to name just these two, date back to ancient Egypt.

With the movement of postcolonialism markedly galvanizing the 1960s and 1970s by seminal writings such as those of Martiniquais-born French psychoanalyst and social thinker Frantz Omar Fanon (1928-1961), among others, criticisms against the West under the banner of colonialism led to a thorough rethink of not only colonialism, the colonizer, and the colonized, but of imperialisms or lack of freedoms arising from and/or resulting in any form of dehumanization (Fanon, 1952/2007; 1961/2002). This shows that imperialism is not a uniquely Western form of evil/thing, but a shortcoming/imperfection indicative of all human existence. To clarify, criticism against the West ought to be criticism against any form of slavery/dehumanization/domination, denying the fundamental freedoms of people anywhere and anytime. It is most helpful to remember that the reason for decolonization or any postcolonial discourse is rather one of fuller human freedom/actualization than one of falling back into loss of freedom/life, whether Western or non-Western/local. One of the most worn-out clichés needing to be corrected among activists or postcolonial academics is the idea that loss of freedom/life can only happen with and from the West. Colonial objectivation is only a fraction of if not a diversion from the world of objectivation. Humans are objectified/possessed daily more than they would recognize. In short, communication or participation in fuller human actualization "is not quintessentially synonymous with the West [i.e., North America or Western Europe], nor is locality [i.e., nationality or nationalism] exempt from the structures of oppression and repression" (Cibangu, 2016, p.14). This is where reflections against any threat to the fuller realization of individuals bear great merit in communication research circles and beyond. As Barnes and Siswana (2018) warned authors with an interest in postcolonial research: "There was also a risk that we adopt a single narrative for what a decolonized... might

look like and that we forget the rich and complex history of colonisation, decolonization… and criticality" (p. 297). Although the remark shown above was aimed at psychology researchers, it merits considerable attention of all researchers involved in postcolonial or freedom-pursuing scholarly discussions.

The goal is, as proposed earlier, for a critique against Western imperialism or threat to human freedoms not to be deployed as a complacent, if not complicit, justification or disguise of domination by and unaccountability of local elite/power, be it military or civil. In a nutshell, communication studies is a discipline that values total personhood also phrased as holistic human dignity in all areas of interest, using writing or written symbols in their full multivocality or plurality.

LIMITATIONS

While the paper examined recurrent misunderstandings bedeviling communication research, it suffers from three major limitations. Firstly, the paper addressed communication studies at a generic level, conflating several separate subfields. Secondly, the paper fell short of supplying an exhaustive list of concepts used in communication studies. Thirdly and finally, the paper did not single out quantitative vs qualitative research, holding a myopic view on research sensitivities/preferences. Notwithstanding these and similar limitations, the paper alerted communication researchers to most deeply ingrained and commonly shared misconceptions chipping away at research practice.

CONCLUSION

Erroneous uses of central concepts such as science, personhood, verbal behavior, written communication, and postcolonial discourse have been redressed. Definitions of communication have been broadened to include lesser advertised/known Shannon corrective channel, McLuhan global village, and Watzlawick, Bavelas, and Jackson human communication. Communication research was found to be one with the goal of enabling a person's fuller participation into reality/life. In an increasingly globally interconnected world, origins of communication studies as well as science have been located well past traditional Western society (i.e., Greece) in earliest recorded materials of ancient Egypt. The paper did all the above in the hope of allowing for better informed space and practice for communication studies.

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