Natural Language as an Intellectual System, or Quasi-Mind

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***Abstract*— Drawing from Kant's idea of various "Minds" with different abilities and limitations, we aim to consider the interaction between humans and AI as a complementary cooperation, where AI may function as an autonomous system. A relevant analogy can be made to the fundamental "Man – Language" interaction, which has significantly shaped human civilization. The theoretical foundation for this perspective can be found in Charles Peirce's unfinished semiotic project, where a sign is regarded as a quasi-mind. The development of artificial intelligence systems allows us to reassess the functioning of existing semantic mega-systems, such as culture, language, the noosphere, and the semiosphere. A complexly organized semiotic system acquires the characteristics of both an organism and an intellectual device.**

***Keywords*—Quasi-Mind, Kant's notion of the Divine Mind, Ch. Peirce, sign system, natural language.**

I. Introduction

Immanuel Kant, in his seminal "Critique of Pure Reason" (1781), revealed both the possibilities and limitations of human perception, mind, and reason. It also addresses the misconceptions he had about human cognitive abilities, which he calls "transcendental illusions." In addition to discussing the human mind, Kant introduces the concept of a Divine mind: *the categories would have no significance at all regarding such Mind, because objects themselves were simultaneously given or produced*.[1] This Divine mind is incomprehensible to humans, not due to its higher hierarchical position but because the limitations and illusions inherent in the human mind do not apply to the Divine mind. However, this theme did not receive any further development in Kant. Meanwhile, the creation and functioning of intelligence other than human intelligence currently again makes the question of the conditions and possibilities of various types of intelligence relevant. This distinction between two fundamentally different types of Minds allows us to reconsider the interaction between two intellectual systems: "human – AI". Since AI operates not with objects, but with signs and texts, its peculiarity in line with Kant's formulation, probably, can be articulated as follows: for systems of AI, *objects would have no significance at all regarding such Mind, because signs and texts themselves were simultaneously given or produced.* This necessitates the need to utilize the principles of linguistics and semiotics, which not only identify human experience of interacting with texts and signs, but also the internal characteristics of sign systems, allowing them to operate as autonomous mega-systems endowed with cognitive agency.

II. Sign as a Quasi-mind

When discussing the potential interaction between humans and AI, it is essential to consider the significance of "human being - language" interaction, which is fundamental to our civilization. In Kant's theory, a dilemma arises: either a person thinks using categories, which act as tools for their thought processes, or the categories themselves dictate how a person thinks, reducing them to mere instruments for carrying out mental operations. For instance, in the realm of mathematical knowledge, an individual follows predetermined rules and, as a result, reveals truths that already exist. The development of AI allows us to approach the problem of *Language and Mind* in an innovative way, reframing it as the issue of *Language as a Quasi-Mind*. This shift is justified by the emergence of AI-related issues, but it requires us to move beyond viewing AI merely as a tool for solving practical problems. Drawing from Kant's idea of various "Minds" with different abilities and limitations, we aim to suggest some preliminary ideas to consider the interaction between humans and AI as a complementary cooperation, where AI functions as an

[1] Kant addresses the possibility of the divine understanding, the *understanding of God*, in the second edition of *The Critique of Pure Reason*, *the Kritik der reinen Vernunft*, in Paragraph 21, the "Remark" to the Transcendental Aesthetic [1].

autonomous system. A relevant analogy can be made to the fundamental "Man – Language" interaction, which has significantly shaped human civilization. The theoretical foundation for this perspective can be found in Charles Peirce's unfinished semiotic project, where a sign is regarded as a quasi-mind (and vice versa):

> "…. as every thinking requires a mind, so every sign even if external to all minds a determination of a quasi-mind must be a determination of a quasi-mind. The quasi-mind is itself a sign, a determinable sign" [2, 195].

If we redefine intelligence as a highly complex information system capable of independent operation, we can look back to the early twentieth century when Charles Peirce introduced the idea of a "quasi-mind." This concept is not connected to the human brain; rather, it is a semantic system that functions as an infinite chain of interpretative operations (referred to as *semeiosis)*[2] and is able to generate new signs and meanings through what he called *transcendental rhetoric* [4], concerned about potential misunderstandings, chose to leave these ideas mainly in his manuscripts:

> Admitting that connected Signs must have a Quasi-mind, it may further be declared that there can be no isolated sign. Moreover, signs require at least two Quasi-minds: a Quasi-utterer and a Quasi-interpreter; and although these two are at one (i.e., are one mind) in the sign itself, they must, nevertheless, be distinct. In the Sign they are, so to say, welded" [3, 523].

Further development of semiosis appears as a sequentially carried out personified interaction of structural components (quasi-minds) of the same semiosis. The key to understanding this recursion can be found in another handwritten note:

> "Before the sign was uttered, it already was virtually present to the consciousness of the utterer, in the form of a thought. But, as already remarked, a thought is itself a sign, and should itself have an utterer ... and so back" [6, 403].

A quasi-utterer is associated with an object, and a quasi-interpreter is associated with an interpreter.

III. Natural Language as a Natural Quasi-Mind and Intellect

In addition to that understanding of *a determinable sign,* the notion of a sign system (a language) should be considered. It is a system that, as discovered in the 19th century, can develop in ways that are neither controlled nor consciously understood by its speakers: as *an organism eternally generating itself* (Humboldt) [3] . The interaction between humans and language can be seen as an analogy and a prototype for the interaction between humans and AI. One of the mysteries that perplexes not only linguists but also neurophysiologists is how individuals can automatically and unconsciously activate a complex system of multi-level interactions. No amount of training can fully teach this, especially since many of these interactions are not well described. Remarkably, children begin to absorb this system rapidly after the age of three. The principle **"***Die Sprache spricht***:** *the language (speech) speak*s" (Heidegger) illustrates why proficiency in a language, excluding stylistic elements, does not fundamentally depend on education or intelligence.

The development of artificial intelligence systems allows us to reassess the functioning of existing semantic mega-systems, such as culture, language, the noosphere, and the semiosphere. According to Yuri Lotman, complexly organized semiotic objects (i.e., text, culture, semiosphere) acquire the characteristics of both an organism and an intellectual device and are capable of autonomous activity. Pierce's concept of the sign as a quasi-mind aligns with Lotman's ideas about the sign system and the semiosphere as entities capable of performing intellectual operations:

> The individual human intellect does not have a monopoly on the work of thinking. Semiotic systems, both separately and together as the integrated unity of the semiosphere, both synchronically and in all the depths of historical memory, carry out intellectual operations, preserve, rework, and increase the store of information [7, 385].

Similar ideas have been highlighted multiple times in the fields of philosophy, semiotics, and cultural theory (for more details, see: [8], [9]). The theoretical foundation for this reassessment can be found in Kant's analytics and dialectics of what he terms "pure" reasoning —thought considered independently of its material carrier, the brain and mind. The above-mentioned Charles Peirce's conception of the semiotics of sign may be extrapolated onto sign systems, and this makes it possible to set the problem of language as a form of a natural quasi-mind and intellect.

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[2] For Peirce, thinking can be reduced to semiotic interpretative operations: "Thought is not necessarily connected with a brain. It appears in the work of bees, of crystals, and throughout the purely physical world… there cannot be thought without Signs. Admitting that connected Signs must have a Quasi-mind, it may further be declared that there can be no isolated sign." [3,523].

[3] Cf.:" In language one must see an organism eternally generating itself, in which the laws of generation are definite, but the volume and, to a certain extent, also the mode of generation remains completely arbitrary." [6, 78].

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