

Generative Anthropology's Scene of Origin in Cognitive and Axiological Contexts

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“the ethical is the supreme human dimension, and what makes it human is its dependence on self-reflective thought” (Eric Gans) [\[1\]](#)

Eric Gans's *originary hypothesis* explaining language and the appearance of culture continues to develop. This article will offer an interpretation of the *scene of origin*, the core idea of Generative Anthropology (GA), in the context of cognitive studies, where “interest centers on the mind” and where language is one of the “goodies” upon which cognitive research focuses.[\[2\]](#) The objective of the argument that follows is to demonstrate that human cognitive abilities can be understood using the heuristic of the *scene*, a procedure which simultaneously offers new axiological meanings.

The idea initiated and presented in *The Origin of Language* (1981),[\[3\]](#) confirmed and extended in *The End of Culture* (1985)[\[4\]](#), and developed in *Science and Faith* (1990)[\[5\]](#), *Originary Thinking* (1993)[\[6\]](#) and *The Scenic Imagination* (2008)[\[7\]](#) asserts basic and universal distinctions of human identity. In the first of the books mentioned, Gans formulated the hypothesis that human language and the species that uses it, originated in a singular event he designates as a *scene of origin*. Gans drew attention to the contemporary rebirth of the subject of human origin and emphasized the special position of this issue in the *siècle des lumières*, stressing its negation, even flat rejection in the eras that followed, until more modern times. However, despite radical progress in research in all the fields of human knowledge, beginning with neuroscience and human physiology, through philosophy, anthropology, sociology, literary studies, up to psychoanalysis, we still don't possess an unambiguous and empirically verifiable understanding of the appearance of language in human life. The heuristic proposed by Gans offers us many possible paths of inquiry into this universal human peculiarity, our ability to express our humanity through the *sign*, that which we might call, in Shakespeare's phrase, our “brightest heaven of invention”[\[8\]](#).

In the Introduction to *The Origin of Language*, Gans notes that in *siècle des lumières*, a discussion of the subject of language origin was located in the metaphysical dimension. Modern thought, however, has long discarded the “meta” component, confining itself to mere physicality. Despite or perhaps because of this reduction, contemporary intellectual fashions do not provide us with sufficient explanations of what is fundamentally human.

Gans’s theory^[9] imagines a *scene* consisting of a gathering of a group of proto-humans around an object of appetitive attraction, in which cognition is evidenced in the form of a linguistic *sign*, henceforth “one of the cognitive abilities of a human being.”^[10] This is also an ontic and semantic event that represents the “state of the human condition.”^[11] Man can express himself by a “double anchoring of language, in cognitive processes and in social interactions,” which is “intuitively natural and psychologically reliable and effective in practical applications.”^[12] In the center of the *scene*, one can recognize the *central object* (likely something edible) and two or more humans,^[13] where one of them is indicating the object and thus representing human appetite, or what in the scenic context will ultimately be called “desire.” The central element of the scene is a human gesture, a pointing at the object, which is understood as an initial *sign*, an “effect” of designation. The gesture itself is made through a human body, thanks to the corporeal, mechanical, physical abilities of man, but at the same time, is triggered by intellectual abilities of the human mind. As a consequence, both dimensions, carnal and mental, combine into one, where designation “might open the door that will enable cognitive scientists to explore the human mind,”^[14] in the context of behavior that is of basic and fundamental importance to man.

Let’s ponder more deeply and ask why and how it happens that man, being hungry, that is, remaining in a state of unmet primary need, in a state of food craving, in a state, as expressed by Gans of “appetite,” is able to deter, to stop in its natural, instinctive power, a mechanism of satisfying hunger, and make the first characteristic gesture—to create a sign? To answer this question, we have to admit that the gesture appears because man finds himself in the presence of other human beings, and only because of the others, he indicates the *central object of appetite* and creates a *sign*. We may assume that if he were alone, he wouldn’t need any other gestures than the act of consuming the object to satisfy his natural appetite. A sense of belonging to a nascent community, which appears in the presence of others, enables and inspires a human being to create a *sign*, which can even be justified by the psychological research of Leon Kenemans and Nick Ramsey, who claim that watching somebody else perform “a specific act . . . activates our own motor cortex.”^[15] For us, this motor cortex produces the pointing that is the first *sign*.

Moreover, pointing at an object instead of killing a rival (the other human, who would like to consume the object just as we do), or consuming a tasty animal’s meat alone, means that the other is as important to him as he is to himself, or even more, because he is engaged in the act of invention of the *sign*, demanding creative effort and transgressing the natural relation of the human to its prey, which is the spontaneous consumption of the latter by the

former. Transgression of the law of the natural world by an act of cognitive designation represents the basic human skill which differentiates us from the animals, an ability which already belongs to the world of culture.^[16]

Cognition, as we understand it, also implies an active ability to choose, thus implying that the human is possessed of free will. In the “pre-scenic moment,” before the appearance of the sign, proto-man has two options: 1) to fight for the *central object* and initiate violence (or for that matter flee and abandon the object to the more-violent rival), or 2) to remain on the scene and create a *sign* to *defer* or eliminate violence. Making this decision devolves upon and helps create man. The final choice whether to “produce” a *sign* which “defers” the danger of possible intra-human violence, can only be made by a being who comes to the world equipped with circuits for social interaction—social abilities which constitute a standard resource of our brain. We don’t have to learn those skills, unlike all the other skills for survival that we have to master.^[17] They just exist.^[18]

In the *scene*, the issuing of a *sign* in the presence of other humans also means consciousness of the presence of those others, and signifies an elementary perception of the social world. Thanks to human consciousness, with its unlimited number of potentials, registration of the presence of coexisting humans becomes a process of re-cognition, an appreciation and identification of society. It also means that man creates the *sign* for the others; he wouldn’t produce it if there were nobody around him, if there would be no one to whom he could demonstrate the *central object* and the *gesture-sign* itself. We can presume that this registration of others underlies Saussure’s understanding of language as “the social production of speech ability.”^[19]

Intentionality is one of the most significant features of cognition that form the basis for social interactions. Anna and David Premack conducted research on intuitive social skills, while trying to determine what young people, including children, can understand of them. The findings revealed that human beings at an early stage of development could already read intentional actions of presented and pointed-to objects, and attribute desires and intentions to them.^[20] If we refer this to the pointing at a *central object*, we might suppose that intentionality is included in the designation and is read and understood there by the others. We may also indicate that the appearance of the *sign* is a response to intentionality and expresses the final goal of the *scene of origin*—that *deferral of violence* as a means of human survival mentioned above, which undoubtedly falls within the scope of ethics. We should thus always look for the universal ethics that “arises from being human,” implying that the *scene of origin*, the originary core of human language and culture, is “designed to increase our survival.”^[21]

So far, we have argued that the *scene of origin* is based on an implicit intentionality of deferral and survival as effects of its occurrence, but we shouldn’t forget that the appearance of the *sign* starts with a cognition of the needs of the others. Such cognition

results in a possible sharing of the *central object of appetite*, which may be thought of as representing altruistic values. Besides, the appearance of the sign as a demonstration of knowledge about the human condition, as well as a demonstration of having information about the human condition, both lead to *deferral* or avoiding potential violence, which I would also call a value. The studies of Felix Warneken and Michael Tomasello have shown the existence of altruistic behaviors, which had already been noticed in the early stages of human development. The ability to understand this kind of behavior refers equally to relatives and non-relatives, and also applies to sharing information, which is in contrast to other species. According to these scholars, twelve-month-old children can already share information with the others, especially when they know where an object is that another person is looking for, and they can easily point to it, just like a new human being on Gans's *scene of origin*. There are good grounds to believe that the *gesture of designation* has an altruistic character. Last, but not least, altruistic behaviors, which are presumed by cognitive science to be innate among humans, are also influenced by social experience and cultural transmission.[22] In this way, the *scene of origin* reveals its axiological dimension.

Now, let us turn our attention to some concepts of cognitive neuroscience or rather neuroethics, including that of the brain as a source of mind and consciousness,[23] and thus also "an interpreter of understood thought." [24] There is a view that the history of the mind should "run next to the body's history." [25] This view can help us to widen the cognitive contexts of our understanding of the *scene*. Since the time of Hippocrates, we have known that "the brain has the greatest power in man," and is a "forerunner of the mind's ability," and that a process of "understanding" takes place in "the whole body." [26] The brain also constitutes the *locus* of our sense of morality. [27] While keeping that in mind, [28] we can now focus our attention on one contemporary theory, which like Gans's GA, tries to build a coherent vision of man, but which refers mainly to the abilities of the human brain. I mean here the work of Michael Gazzaniga, the general character of which is aptly enough suggested by the title of his book, *The Ethical Brain*. [29] Gazzaniga's study gives the brain its special property by concentrating on "lifespan neuroethics." He theorizes how the brain defines human life and what kind of role it plays in determining values. For Gazzaniga, understanding that the brain works automatically and simply follows the laws of the natural world is insufficient. He also claims that we can have confidence in the decision-making device that is our human brain, because it is specially equipped to make decisions for taking actions, driven by existing systems of values. It is crucial to point out that such values may be defined as comprising all our human conceptual elements, which, in combination, result in a *deferral of violence*.

In his next book, continuing the topic of ethics, Gazzaniga elaborated concepts of "ethical modules" of the brain, saying that they are important components of human nature. These too might support our understanding of Gans's *scene of origin*. [30] However, according to Gazzaniga, scientists have had problems understanding "how the brain works in morally challenging situations." [31] He quotes from James Q. Wilson's *The Moral Sense*: "However

much the scientific method is thought to be the enemy of morality, scientific findings provide substantial support for its existence and power.”[32] Gazzaniga emphasizes that Wilson has reviewed many areas, such as history of philosophy, evolutionary theory, anthropology, criminology, psychology, sociology, and finally stated that “no matter what intellectuals argue, there are certain universal, guiding moral instincts,” while adding that “they are so instinctual that they often get overlooked.”[33] It is worth stressing how Wilson speaks about morality not purely in terms of a social construction. The crucial component is a “willingness to obey” contracts, that is, the existence of “non-construal elements of contract,” as Emile Durkheim’s translator puts it, that presuppose the contract’s binding nature.[34]

According to Gazzaniga, “moral reasoning is good for human survival.” This in fact refers to the ability to recognize a certain norm for behaving in society and to apply it to others and oneself.[35] In the same sense, the *scene of origin* through the creation of the *sign* is also dealing with moral reasoning, and implies the formation of an ethics, which for Gans “is the supreme human dimension.”[36] Gans’s *deferral of violence*, an essential objective of the *scene*, contributes to human survival as an expression of human values. Both human survival and the *deferral of violence* constitute very complex issues, but beyond reasonable doubt, they do belong to the axiological dimension.

According to Gazzaniga’s mentor Roger Sperry, in his work on science and moral priorities,[37] new concepts of brain and consciousness bring a revised outlook to science with respect to human values, laying new foundations for mutual relations. Sperry argues that science and values are not separate realms, so it is not necessary to insist that one must not be applied to the other. He also claims that the merging and even fusion of the two is urgently needed as well as “a frame of references for value priorities that will act to secure and enhance our world instead of destroying it.”[38]

Sperry’s concept of a “causal potency in consciousness capable of holding influence downward over all component orders of cerebral function,” along with the linked theory that “values inherent in the patterns of the mind are the key determinants in all decision making,”[39] in fact support our efforts to present a *scene of origin* in an axiological dimension. Sperry’s findings of the cohabitation of two different consciousness in “the same skull in harmony,”[40] actually opened a new territory of inquiry in the humanities and also became useful for us. Based on this view, we may suppose that Sperry’s so-called “self-regulated motives for consciously controlled actions”[41] together with the creative force of consciousness, do guide a human being from the *scene of origin* to designation and the creation of the *sign*.

GA inquires into the beginnings of human language and cultural unity and the process of their constant appearance in different texts as human self-expression, which takes the form of a *scene of origin*. The axiological discourse is not only present implicitly in the *scenes* but

also explicitly—which we find in innumerable instances in mythological transfers.^[42] These texts may be considered as *propositional mental representations*,^[43] expressing and transmitting “higher knowledge” as axiological systems, where the *scenes of origin* are mainly framed as debates over violence and its deferral. The mythical texts are their *locus* and constitute transformations of human experience by the mind in order to expose, separate, and irrevocably name particularly important parts of reality.^[44] As a result, we receive the so-called *ideational image*, which occurs in all mythical texts and contains a cognitive configuration that is passed on in the process of verbalization, or is recovered in the process of textual interpretation.^[45]

Let me cite an example from the Hindu epic, *Mahabharata*, which may help illustrate our ideas here. In the *Bhagavad-Gita*, as in many other parts of the *Mahabharata* (or *Ramayana*, as well), we may find many *scenes of origin* in the shape of repetitive discourses forming a “substitutional speech stimulus.”^[46] These constitute a kind of multiplication of the “primal” *scene of origin*, which develop meaningful speech based on the *scene*, where the establishment and development of language make possible joint human activities.^[47]

In the traditional view, the *Mahabharata* is a report of tribal fights in the region of Delhi-Mirat-Mathura, stylized as a war of humans, gods, and demons over the domination of the world. It contains a description of the Hindu cultural system, which is “highly self-conscious of its genesis and functioning”^[48] and a moral and universal treaty, whose objective is to create and prevent the collapse of an authority of Law (*dharma*), as well as a system of higher values and human obligations, which remain to help balance the universe.^[49]

A huge part of the poem is devoted to a description of the battle, which takes place on several levels, mainly in the shape of cataclysms and destruction. The center of the *Mahabharata*: the *Bhagavad-Gita*, and the center of the *Bhagavad-Gita*: the *Kurukshetra* Battle, appears to have its analogue in the bloody events that occurred in the oldest mythical past at the turn of the Tretā-yuga and the Dvāpara-yuga, and constitutes a locus for “an idea of tragic consciousness.” The *Kurukshetra* event-based complex, including an “eighteen-day-long battle of the Bharatas,” spans overall decades of the warring families and constitutes a cognitive message as a war narrative. This material forms more than a quarter of the epic, suggesting its relative importance as it constitutes the *principium compositionis*^[50] around which the great poem is organized. It is simultaneously subjected to the *principium generationis* which we recognize as Gans’s *scene of origin*.

Discourse about the war that precedes the battle itself and describes all its aspects amazes us with its long duration. It remains a possible reconstruction of the oldest *Vedic* structures (i.e. *The Battle of the Ten Kings* from *Rigveda*). This discourse constitutes a textual registration of the existence of one of the oldest human cognitive activities, with the *scene of origin* as its most basic and useful conceptualization. It would be hard to believe that only simple coincidence, not an existing rule, may explain the fact that in the description of the

battle of *Kurukshetra* we find descriptions of “retardation techniques, which delay the duel between the two most fierce warriors, . . . Arjuna and Karna.”^[51] GA offers by far the most plausible conceptualization of the underlying principle. In this poem, as in many others, we can find cumulative sequences of delays transformed into a form of omnipotent retardation—in short, a continuum of consecutive *scenes of origin*.

The intense experiences of the *Kurukshetra Battle* in the personal as well as the social dimension, largely influenced by the powerful force of the human brains and shaped minds of authors of the poem, thus became the source of conscious reality contained in the text.^[52] From the sixth to the tenth chapters of the *Bhagavad Gita*, we experience the war and find many crucial dialogues among such higher entities as Krishna and the associated fighter Arjuna, two of the most famous mythological figures from the epic, who discuss the eternal dilemma “to fight or not to fight.” Their dialogue concentrates on the issue of an expected attitude, in the face of incoming war, and a choice that must be made. We find there two formulae of reality, two different concepts, pro- and anti-war. Krishna represents the first concept and Arjuna the second. The divinity that makes Arjuna a hero, his firm purposefulness, also gives him the power to teach on the battlefield. The text introduces him as “lamenting” the consequences of the war, while trying in parallel to escape from coercion into violence, which he is particularly afraid of, especially the potential violence against relatives. Whatever the imminent risk, his statements are still a reflection on the use of violence, a reflection in which he speaks of values and enters an axiological dimension. Here are the examples of Arjuna’s “lamentations”:

“O Krishna, I do not desire the victory, kingdom, or the happiness accruing it. Of what avail will be a kingdom, pleasures, or even life itself, when the very persons for whom we covet them, are standing before us for battle?”

(Bhagavad Gita, Chapter 1, Arjun Vishad Yog, l. 32-33)

“O Maintainer of all living entities, what pleasure will we derive from killing the sons of Dhritarashtra? Even though they may be aggressors, sin will certainly come upon us if we slay them. Hence, it does not behoove us to kill our own cousins, the sons of Dhritarashtra, and friends. O Madhav (Krishna), how can we hope to be happy by killing our own kinsmen?”

(Bhagavad Gita, Chapter 1, Arjun Vishad Yog, l. 36-37)

“Their thoughts are overpowered by greed and they see no wrong in annihilating their relatives or wreaking treachery upon friends. Yet, O Janardan (Krishna), why should we, who can clearly see the crime in killing our kindred, not turn away from this sin?”

(Bhagavad Gita, Chapter 1, Arjun Vishad Yog, l. 38-39).^[53]

There are many other dialogues that could serve as examples of discussions over fights, battles, wars, and all kinds of conflicts, present in human *systems of representation*, where

deferral of violence is the most significant issue. Gans's theory searches for wisdom, and its *scene of origin* can be defined as a metaphor for a particular type of value located in a *gesture of designation*, a specific way of creating and evaluating reality. Our objective was to offer some further reflections that might open up a discussion about the axiological contexts of the *scene of origin* resultant from the huge potential of the human brain, and equally and at the same time of the human mind. The existence of a higher value system in the *scene of origin*, reflects the inherent wisdom and power of the human and its necessary suitability to the task of understanding the complexity of existence.

Indeed, in this way, an axiology inscribed in the essence of GA might help guide humanity to a higher path of survival than uncertain course the world presently follows.

Notes

[1] Eric Gans, *Originary Thinking. Elements of Generative Anthropology*, Stanford University Press, Stanford California, 1993, p. vii.

[2] Fred A. Keijzer, *The Generation of Behavior. On the function of representation in organism-environment dynamics*, Utrecht 1997, p. 1.

[3] Eric Gans, *The Origin of Language. A Formal Theory of Representation*, University of California Press, Berkeley, Los Angeles, London, 1981.

[4] Eric Gans, *The End of Culture. Toward a Generative Anthropology*, University of California Press, Berkeley, Los Angeles, London, 1985.

[5] Eric Gans, *Science and Faith. The Anthropology of revelation*, Rowman&Littlefield Publishers, Savage 1990.

[6] Eric Gans, *Originary Thinking. Elements of Generative Anthropology*, Stanford University Press, Stanford California, 1993.

[7] Eric Gans, *The Scenic Imagination, Originary Thinking from Hobbes to the Present Day*, Stanford University Press, Stanford 2008.

[8] William Shakespeare, *Henry V*, Penguin Books, London 1993.

[9] See, first of all, Eric Gans's *The Origin of Language. A Formal Theory of Representation*, University of California Press, Berkeley, Los Angeles, London, 1981.

[10] Stanisław Gajda, „Lingwistyka wobec rzeczywistości językowej i neuropsychologicznej” [in]: *Neuropsychologia, neurologopedia i neurolingwistyka in honorem Maria Pąchalska*, ed.by. Grażyna Jastrzębowska, Jolanta Góral-Półrola, Artur Kozołub, Uniwersytet Opolski,

Opole 2017, p. 517.

[11] *Język a komunikacja 9. Kognitywizm a komunikatywizm-dwa bieguny współczesnego językoznawstwa. Dyskusja przy okrągłym stole*, Krakowskie Towarzystwo Popularyzowania Wiedzy o Komunikacji Językowej "Tertium", Kraków 2006, p. 118.

[12] Ibidem.

[13] It means that culture is created collectively and should be placed on the above-individual level. Mateusz Stępień, „Sposoby rozumienia kultury przez prymatologów”, [in]: *Studia Socjologiczne*, no.2/2017 (225), p. 33.

[14] Fred A. Keijzer, *The Generation of Behavior. On the function of representation in organism-environment dynamics*, Op.Cit., p. 1.

[15] Leon Kenemans, Nick Ramsey, *Psychology in the Brain*, Palgrave Macmillan, Hampshire, New York, 2013, p. 256.

[16] A subject of understanding and of a definitions of culture in primatology, in transmissional and nontransmissional contexts, see: Mateusz Stępień, „Sposoby rozumienia kultury przez prymatologów”, [in]: *Studia Socjologiczne*, no.2/2017 (225), p. 32-33.

[17] Michael S. Gazzaniga, *Kto tu rządzi - ja czy mój mózg ? Neuronauka a istnienie wolnej woli*, przekład Agnieszka Nowak, Smak Słowa, Sopot 2013, p. 124.

[18] It is also worth adding here that, as Merlin Donald claims, only a human is characterized by the ability to repeat actions in order to improve their skills and this is the basis of all human culture and language (Michael Gazzaniga, *Istota Człowieczeństwa. Co sprawia, że jesteśmy wyjątkowi?* Transl. Agnieszka Nowak, Smak Słowa, Sopot 2011, p. 352).

[19] Ibidem, p. 22.

[20] Ibidem. See also: Anna Premack, David Premack, “Infants attribute value to the goal-directed actions of self-propelled objects”, *Journal of Cognitive Neuroscience*, 9(6), 848-856.

[21] Michael S. Gazzaniga, *The Ethical Brain*, Dana Press, New York , 2005 s. 177.

[22] Ibidem., p. 125.

[23] Adam Zemełka, *Jak Grecy odkryli mózg? Wielki transfer myśli w świetle (neuro)nauki współczesnej*, Wydawnictwo Napoleon V, Oświęcim 2016, p. 204.

[24] Ibidem, p. 203.

[25] Alwyn Scott, *Schody do umysłu*, Wydawnictwo Naukowo-Techniczne, Warszawa 1999, p. 113.

[26] Adam Zemełka, *Jak Grecy odkryli mózg? Wielki transfer myśli w świetle (neuro)nauki współczesnej*, Op. Cit., p. 202.

[27] Ibidem, p. 204.

[28] I mean here my previous attempts to introduce discourse on language and cognition, which may be found in articles in *Anthropoetics. Journal of Generative Anthropology*, XXI, XXII (www.anthropoetics.ucla.edu).

[29] Michael S. Gazzaniga, *The Ethical Brain*, Dana Press, New York, Washington, D.C, 2005.

[30] Michael S. Gazzaniga, *Istota człowieczeństwa, Co czyni nas wyjątkowymi?* Trans. Agnieszka Nowak, Smak Słowa, Sopot, 2011, p.139-147. Gazzaniga enumerates five different modules: "reciprocity module" (reciprocated altruism), "sensitivity module for suffering," "hierarchy module" (social), "coalition module" (group membership), and a "purity module" (reaction of disgust)[30]; two of those modules could be useful for us: the "reciprocity module" (reciprocated altruism) and the "coalition module" (group membership), we might recognize as good points of reference in Gans's theory. See also: Mateusz Hohol, *Wyjaśnić umysł*, Copernicus Center Press, Kraków 2013, p.120 following: Michael S. Gazzaniga, *The Ethical Brain. The Science of Our Moral Dilemmas*, Harper Perennial, New York- London 2006, p. 147-148.

[31] Michael S. Gazzaniga, *The Ethical Brain*, Op. Cit., p. 166.

[32] Ibidem.

[33] Ibidem.

[34] Ibidem., p. 167.

[35] Ibidem., p. 168.

[36] Eric Gans, *Originary Thinking. Elements of Generative Anthropology*, Stanford University Press, Stanford California, 1993, p. vii.

[37] Roger Sperry, *Science and Moral Priority. Merging Mind, Brain, and Human Values*, Columbia University Press, New York, 1983.

[38] Ibidem., p. 64.

[39] Colwyn Trevarthen, *Foreword*, [in]: Roger Sperry, *Science and Moral Priority. Merging Mind, Brain, and Human Values*, Columbia University Press, New York, 1983, p. xii.

[40] Ibidem., p. Xiii.

[41] Ibidem.

[42] See, for example, my "Generative Anthropology and the Mahabarata: Cognition, Narrative, Culture." <http://anthropoetics.ucla.edu/ap2301/2301mzd/>

[43] Philip Goff, "Conscious Thought and the Cognitive Fine-Tuning Problem", [in] *The Philosophical Quarterly*, Vo. 68, No.270, p. 98.

[44] See: *Kognitywizm a komunikatywizm-dwa bieguny współczesnego językoznawstwa. Dyskusja przy okrągłym stole*, Op.Cit., p. 118.

[45] See: Ward H. Goodenough, *Culture, Language and Society*, Benjamin/Cummings Pub. Co., University of Michigan, 1981.

[46] Aleksander Kiklewicz, „Komunikatywizm i kognitywizm-dwa bieguny współczesnego językoznawstwa funkcjonalnego” [in]: *Kognitywizm i komunikatywizm-dwa bieguny współczesnego językoznawstwa. Dyskusja przy okrągłym stole*, Krakowskie Towarzystwo Popularyzowania Wiedzy o Komunikacji Językowej „Tertium”, Kraków 2006, p. 34.

[47] „Dyskusja okrągłego stołu” [in]: *Kognitywizm i komunikacja- dwa bieguny współczesnego językoznawstwa. Dyskusja przy okrągłym stole*, Krakowskie Towarzystwo Popularyzowania Wiedzy o Komunikacji Językowej „Tertium”, Kraków 2006, p. 97-98.

[48] Ibidem.

[49] Ibidem.

[50] Joanna Sachse, "Some Words on the Battle at Kuruksetra (Retardations and Replacement)" [in]: *Rocznik Orientalistyczny*, T. LX, z.2, Warszawa 2007, p. 90.

[51] Ibidem.

[52] See: Michael S. Gazzaniga, *Kto tu rządzi - ja czy mój mózg? Neuronauka a istnienie wolnej woli*, Op.Cit., p. 186.

[53] Bhagavad Gita, Chapter 1, Arjun Vishad Yog;
<https://www.holy-bhagavad-gita.org/chapter/1>, Open Access : 05.03.2019.