What Lies Beyond Language?

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> Abstract • Gasparyan shows the relationship of eigenform with semiosis. In agreement with her, I discuss these ideas from my own viewpoint.

Handling Editor • Alexander Riegler

« 1 » In her target article, Diana Gasparyan eloquently discusses the closure of language, consciousness and world in the context of semiosis and eigenform. In my commentary, I wish to comment on the themes of this discussion.

« 2 » Human beings are embedded in language. We cannot take our own language as an object and extract ourselves from it, for we are the performers and participants of that language. A subsidiary theme for the mathematician, logician or linguist is the observation that we can invent, discover or otherwise enable fragments of language (called formal systems or mathematical systems or games) that can be handled as objects and treated in an apparently objective manner. By the same token, individual words and texts of any given human language can become objects transferable and then reconstituted into the living language by the performance of another reader or speaker. Gasparyan points out that the process of semiosis, the process of each sign being seen as the representamen of another sign and the way that each sign will engender further signs, is fundamentally recursive. This is a recursion that includes the person or persons involved in the process. This fundamental circularity can be described by equations for objects that are part of a process of circular re-entry, objects that are tokens for fixed-point or eigen-behaviour. Thus, Gasparyan discusses the essential role of eigenform in the process of semiosis and in the circularity of language and human worlds.

« 3 » Some examples of eigenform are useful to state here. In *Laws of Form* by George Spencer Brown there is the concept and instantiation of a mark of distinction ⌐. The mark is a sign that stands for a distinction and the mark can be seen to stand for itself, since it is of a shape that can be interpreted as a distinction. Thus, the mark is a sign for itself. Indeed Spencer Brown, at the end of his book, states "We see now that the first distinction, the mark, and the observer are not only interchangeable, but, in the form, identical" (Spencer Brown 1969: 76). In this way, he indicates the semiotic closure of his mark of distinction and brings it forth as a sign-for-itself in the sense of Charles Sanders Peirce. Here the mark has been identified in its space of meaning as an eigenform and it is that eigenform that is identical with the cybernetic observer. What is most remarkable about Spencer Brown's work is that he shows how this semiotic closure can be effected in a language whose only sign is the one mark, standing for itself and inseparable from the one who reads or writes that sign.

« 4 » Another example of eigenform relevant to this discussion is Heinz von Foerster's sentence: "I am the observed relation between myself and observing myself" (Foerster 2003: 257). The semiotic closure is established in the performance and understanding of this sentence by an observer (who cannot separate herself from the sentence itself). As Gasparyan says in §9, a world is created in the saying and the saying creates a world: "[T]he interpreter creates the world of objects (through interpretation), but in turn is created by the world of objects."

« 5 » In the presence of such eigenforms, such indications of closure that must include us, the performers of the language, we, with Gasparyan, come to see that world and language are inseparable and that they create each other and the observer along with them. We come to understand that it is futile to imagine that there is a way to be removed from this creative circle of world and language. And yet there are counter-arguments. How do they appear?

« 6 » Vast new worlds come out of language itself. This is the experience of the creativity of mathematics and indeed of all language. We investigate these worlds and they seem to be quite independent of us, as though existing forever, waiting for our discovery. This is the Platonic view of mathematical knowledge. The insight that these mathematical worlds evolve does not contradict the semiotic observation that they come forth in language and that language both gives rise to them and they give rise to that language. I agree with Gasparyan who points out in §36 that in this circularity there is no temporal sequence. "Language" first "creates" the world and then recognizes it. It is possible to say that it creates it in the first cycle and recognizes it in the second. However, this sequence is meaningful and not chronological. These two stages are always simultaneous. The world, the sign and the observer arise together and each can be regarded as the creator of the others. It can remain a mystery and a surprise what we find in the cleft of sign, signifier and representamen. These same remarks apply to the empirical world, but the range of actions and their description (experiment and empiricism) can seem very great. Nevertheless, paraphrasing Wittgenstein, the world is everything that is the case. And what is the case are facts. And what is a "fact"? In §34 Gaparayan says,

> "Facts and sentences have the same *structure*. To illustrate this, we can think of a sheet with two sides. 'It is raining' is simultaneously a fact and a proposition describing the fact. Using the structure of an eigenform to understand this structure, it is possible that 'it is raining' is a sentence that describes the fact that 'it is raining,' which is constructed by the sentence 'it is raining,' which describes the fact that 'it is raining'." (Emphasis in original)

What must be understood here is that the two sides of the sheet refer to the combination of the sentences as a string of signs and the sentence as a meaningful utterance by an observer in a world. In that world, the raining is the case. In that world, the expression of the raining is also the case. There is no consciousness of the raining without the entire circular eigenform arrangement of sentence, observation, sign and observer. The circle is closed and yet open, open to the possibility of observation, closed in its essential round of language that can encompass that observation.

« 7 » In §48 Gasparyan writes,

> "My results support the idea that we are unable to understand the world beyond language. In a certain sense, I have also tried to show that research into the 'world external to language' is unproductive and pointless. We are by nature the inventors of ourselves; we construct *our* world and *our* meaningful surroundings, which, principally,

are always already ours (Glasersfeld 1990). There is nothing 'external' to language, or, more correctly, what is external to language is the other side of the internal […].” (Emphasis in original)

« 8 » What Gasparyan is saying is that there is no world beyond language in the sense that I have described above. Worlds arise for observers and create the observers, just as the observers create those worlds. The mystery of what can appear in those creations remains. It is a beautiful metaphor to imagine a world that exists beyond language, self and consciousness, but what we genuinely mean by this is a world of possibility for us and for our relationships. We have never separated from that world and made it objective. We indicate the unity of our own experience. With this point of view, the objections to the circularity vanish and the world becomes an eigenform for itself. The world becomes a sign for itself by the very language that creates and is created by that world.

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Breaking Out of the Recursive Loop with Cognitive Semiotics

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> Abstract • Gasparyan sketches a semiotic theory where world, mind and language – the latter a stand-in for all semiosis – collapse into one “recursive” whole. In contrast, cognitive semiotics differentiates life-world from subject and perception from signification, as well as between different semiotic systems, of which language is only one.

Handling Editor • Alexander Riegler

« 1 » I find Diana Gasparyan's opening sentence to be much too flattering for semiotics, since, as suggested in the first line in the abstract, there are literally dozens of semiotic “branches,” most of which are incompatible concerning fundamentals like the definition of semiosis, its main level (from cells to culture), and its ontology (realist, conceptualist, constructivist, etc.). The basic divide is between those who trace their ancestry back to Ferdinand de Saussure's language-based “semiology” and those who identify with Charles Sanders Peirce's much more general “unlimited semiosis” (§33). However, even within these schools there are such strong disagreements that one could be excused for thinking that semiotics as a whole resembles the Tower of Babel (Zlatev 2003). The situation has not been helped by semioticians' exaggerated claims and frequent disregard for empirical evidence (Sonesson 2007).

« 2 » Cognitive semiotics emerged out of a need to redress this state of affairs, placing *empirical* constraints on semiotic speculations with the help of cognitive science (Daddesio 1995), and *philosophical* and *methodological* constraints with the help of phenomenology (Thompson 2007; Sonesson 2009; Konderak 2018). Researchers typically triangulate first-person, intuition-based methods, with third-person, detached observation and quantification, combining these with second-person, intersubjective methods (Zlatev 2015). There are various theories within cognitive semiotics, but a common feature is to interpret semiosis as *meaning making* at large, corresponding to the phenomenological concept of *intentionality*, and just like the latter, to distinguish various kinds: from pre-conscious operative, through perceptual, to signitive and linguistic, with only the latter two involving sign use proper (Zlatev 2018).

« 3 » Gasparyan sketches an attempt at synthesizing yet another semiotic theory, starting from Peirce (§§3–5), adding a Saussurean element of inter-sign relations (§8), and ideas on the “circular” relation between sign and object from Alexander Kravchenko (§33) and Humberto Maturana (§36), with too much emphasis on *language*, from the perspective of cognitive semiotics. Gasparyan relates her semiotic theory to the mathematical concept of eigenforms, i.e., the recursive application of a function to its own output, in part based on the work of Louis Kauffman, who summarizes the main idea as follows:

> “In this view, the observer does not stand outside the world and 'see' it. Rather, what is seen is a token, an eigenform, of the recursive participation of the observer in a world where there is no separation of the observer and the observed.” (Kauffman 2005: 149)

« 4 » There are elements in this theory that cohere with cognitive semiotics, such as emphasizing the role of the *interpreter* – beyond the Peircian “intepretant” – in signification (§19), the highly dynamic nature of semiosis (§24) and the reciprocal relation between subject and world (§45), rendering the embodied subject a *being-in-the-world* (Merleau-Ponty 1962). However, radical claims like the following are untenable for cognitive semiotics:

- “Linguistic semiosis and the multiple meanings generated by it are the very world that human beings can cognize” (§36);
- “'Inner objects' also arise as forms possessed by the operators of signification: our thoughts, feelings, conditions of consciousness, and lastly, our own 'I'-thoughts” (§38);
- “[S]emiosis is an eigenform that creates the world in itself and through itself” (§52).