

Review of Copenhagen Gathering: Reading and foundations

Daniel C. Mayer-Foulkes¹

A year ago, I attended the 23rd Gatherings in Biosemiotics in Copenhagen,² held in honour of Jesper Hoffmeyer (1942–2019), co-founder of the Gatherings. It was wonderfully organized, and we were in the very room where the first Gathering had taken place in 2001. Kalevi Kull kindly invited me to write a review. I was reluctant. How to review such an event – 40 papers, the celebration of a life, and five days of wonderful spontaneous conversation? Write about your experience, he suggested. So, I started on a draft. But life got complicated.

Time distills things down to their essence. Two ideas remain with me: the nature of reading and the need for biosemiotics to get beyond Kant. These two ideas, which are one, about foundations, hit me the morning of the second day, when Paul Cobley looked up from his paper, paused, and stated gravely: we need a theory of reading.

During the break I approached him. Most of my graduate students do not know how to read a book. Like children who read letters but not words, or words but not sentences, they were never taught to read a chapter, let alone a book. Paradoxically, to read a book you must know what it says before you start, in order to have a conversation. You must not be a passive recipient but an active partner. Paul and I agreed that we forget most of what we read. However, I pointed out, recalling words and sentences is not what reading is, nor what it is for, nor what it is about. We read for insight. What is memorable about a novel is the impact of the insights it gives us into situations. These insights are not recalled, they become part of the furniture of our minds. This is a theory of reading. Moreover, fully grasped, it gets us beyond Kant.

This idea of reading extends to any and all signs. This is because a sign does not point to an object but to an intelligibility. Would you agree? I asked Paul. Of course, it was impossible to take this up during a ten-minute coffee break when there were others who also wanted a word with him. But our discussion continued in my head. Like any such discussion, it is far longer to write. Arguments, like books, are made

¹ E-mail: danielcmayer@gmail.com.

² 31 July – 4 August 2023, at the University of Copenhagen, Denmark.

up of preassembled chunks – insights – that furnish our minds, derived from previous readings, discussions, and so on, and we take these for granted.

What is an intelligibility? What is an insight? An insight is both a pattern of signs and a way of patterning signs; both patterns and the process of arriving at them. Often, they are transmitted by means of injunctions: a recipe, a score, a set of directions.

So, consider this injunction: think of reading in terms of affordances. The environment, and particular items, present affordances according to for whom they are. A stick, or a piece of cloth, afford different possibilities to us than to a dog. Affordances, not objects, best account for a cat's exploration of the environment. We may think of a box as an object into which other objects can be placed. For a cat, however, a box is a rise to sit on, a platform to leap from, a chamber to snuggle in, a surface to sharpen nails with, a site to stalk from (Mayer-Foulkes 2023: 153, slightly altered). So we read the environment in terms of affordances, not objects. But affordances are intelligibilities, ways in which we make sense of the environment, just as we make sense of a book.

Our relation to the environment is conversational. In a conversation with a book the underlying question is: what does this reading afford me? This is primarily determined by what the reader brings to the reading, to the conversation. The reader is anything but a passive recipient. How we conceive of readers underlies the question whether signs point to bodies or to intelligibilities. Signs pointing to objects lets us conceive of readers as passive recipients; if they point to intelligibilities, readers must actively make sense.

This brings us to Kant. There is a fundamental difference between two notions of knowing: Kant's notion of knowing as taking a good look, and knowing as understanding, as upheld by Bernard Lonergan (1958). To side-step what is a massive discussion with vast consequences, the point may be illustrated by contrasting two notions of an automobile: automobile as an object (or "body") and automobile as a *thing*:

On the one hand, think of images used in marketing: a slick shiny red object with doors, beautifully clean windshields, mirrors, handles and fittings, gliding on four slick black rubber wheels. On the other hand, an automobile intellectually understood and rationally affirmed is an object extended in space with duration in time and subject to change that is a synthesis of possibilities for driving, riding, carrying loads, maintenance, and so on, that, thereby, involves laws of traffic, norms of civility, principles of mechanics, design, engineering, along with the underlying laws and probabilities of physics and chemistry. The first is an automobile as a 'body;' the second is an automobile as a thing intellectually understood and rationally affirmed. One entry point to the fullness and complexity of automobile

as thing rather than as 'body' is the injunction: think about your driving. Access your intimate knowledge of what an automobile affords you, the vast Umwelt it allows you to inhabit. What is 'real' about an automobile is only initially and very partially apprehended through the senses. Accessing your experience and understanding of what can be done with it, transposes automobile from 'body' to thing. (Mayer-Foulkes 2023: 153, slightly altered)³

In short, while common sense takes the sign 'automobile' to point to a 'body' already out there now, in the Kantian conception of knowing as taking a good look, for explanatory purposes, 'automobile' points to an intelligibility: a thing intelligently understood and rationally affirmed. This is the notion that signs do not point to objects but to intelligibilities. And this too is why we read for insight.

Back in Copenhagen, having released Paul, I approached Tommi Vehkavaara, resident critic of biosemiotics, who had spoken in the same session as Paul. Would you agree that a sign does not point to an object – to a 'body' – but to an intelligibility? I asked. He paused, gave it some thought, and said he must get back to me on this. Tommi's paper identified a key difficulty in biosemiotics – integrating conceptual and empirical studies:

Often, in empirical studies, the phenomena are dealt with [in] standard biological manners, and the semiotic concepts either play a rather thin and decorative role, or are referred only in some vague intuitive sense. Theoretical studies, in turn, easily stuck [*sic*] into debates between competing abstract definitions without criteria specific enough to control their applicability. Some of the theoreticians start from a kind of foundational and universalistic semiotic metaphysics or transcendental philosophy (seemingly e.g. Søren Brier, John Deely, Kalevi Kull, and Thure von Uexküll) that is supposed to replace more standard non-semiotic naturalism. Others take the opposite strategy and start from standard physical theory but aim to end up showing how semiotic concepts emerge or become possible as the complexity of physico-chemical systems increases (e.g. Deacon 2013, Short 2007, Bickhard 1980, and to some extent Hoffmeyer 1993). (Vehkavaara 2023: 51)

The divide detected by Tommi can be traced back to Kant's notion of knowing as taking a good look. From this notion follows the differentiation between the thing-in-itself and the thing-for-us. We can look at a thing but not know what it looks like when we are not looking at it. In contrast, a *thing*, in Lonergan's sense, is real when it is intellectually understood and rationally affirmed. Such a thing

³ This alone is a vast topic with numerous consequences. It is the heart of Lonergan's *Insight*, over 800 pages. I take up this discussion in my own book in terms of distinctions. 'Body' is isomorphic to how we tend to think of distinctions, the noun, and *thing* much closer to distinguishing, the process or verb involving a subject, which shows that the nature of distinctions is very different to what we tend to assume.

is necessarily a synthesis of what Tommi refers to as the empirical and the theoretical. This is so all the way down, as I explain below. Recall the automobile. Its intelligibility (theory) requires, yet goes well beyond, (empirical) experience. Experience itself calls for intelligibility. Affordances are this kind of synthesis. So, the real is the intelligible.

This is why – and how – biosemiotics must get beyond Kant. The problem detected by Tommi is dissolved by overcoming the notion of knowing as taking a good look. During the session after the break, following my conversations with Paul and Tommi, I made a comment to this effect. Claudio Rodríguez looked up and in his good-humoured way asked, “Is there anything beyond Kant?” He has a point: Kantianism is our common sense. This raises the question: is Kantianism inherent to semiotics, and specifically to Peirce’s semiotics? Peirce studied Kant from a young age, knew long sections of the *Critique* by heart, and never ceased to admire him.

Before going any further, let us state directly the heart of the problem – which also underlies Tommi’s discussion: Is realist objective knowledge possible? Can we get beyond phenomenalism? Kant denied this was possible, as did Hegel and many thinkers since. Is this Claudio’s point? Is this the widely held assumption in biosemiotics, upheld by the phenomenal notion of *umwelt*? Given his outsize influence on biosemiotics it is worth asking: What is Peirce’s stance on this? In other words, what is his stance regarding realism?

Peirce wrote: “The present writer was a pure Kantist until he was forced by successive steps into Pragmaticism. The Kantist has only to abjure from the bottom of his heart the proposition that a thing-in-itself can, however indirectly, be conceived [...]” (CP 5.525); “The Ding an sich, [...] can neither be indicated nor found. Consequently, no proposition can refer to it, and nothing true or false can be predicated of it. Therefore, all reference to it must be thrown out as meaningless surplusage.” (CP 5.525); “I show just how far Kant was right. [...] It is perfectly true that we can never attain knowledge of things as they are. We can only know their human aspect. But that is all the universe is for us.”⁴

Does Peirce accept Kant’s phenomenalism and the underlying notion of knowing as taking a good look? This is for Peirce scholars to decide. As for realism, Peirce wrote: “I am myself a scholastic realist of a somewhat extreme stripe.” (CP 5.470) In his mature years he thought of himself a purer realist than Duns Scotus, that he had gone not only beyond Scotus, as Hegel had, but that he was more of a realist than Hegel.⁵

⁴ Quoted in “Peirce’s view of the relationship between his own work and German Idealism”, *Stanford Encyclopedia of Philosophy*, 26 July 2024.

⁵ For an excellent discussion of Hegel’s realism in contrast to Lonergan’s, see Morelli 2020.

So, what do we mean by realism? How is biosemiotics to be realist and objective? This brings us back to the two notions of the real. Consider Kant's problem with realism, given that his phenomenalism results from a notion of knowing as taking a good look, in contrast to a realism for which the real is the intelligently understood and rationally affirmed. This brings us back to reading for insight.

You may look at a triangle as long as you like, even one with the value of its angles indicated, but you will not thereby grasp the insights of trigonometry. Yes, images do aid us. So, we may soon grasp that the larger an angle is, the larger is the side opposite. But only through insights do we grasp the theorems of trigonometry such as the Pythagorean Theorem. Such insights are grasped with effort by asking questions, obtaining answers, and then asking further questions, until we reach ah-ha! moments. This understanding is built gradually, one insight at a time, with verification following verification, as a network of insights is built. Once something is understood, it cannot not be understood. These insights are part of our culture and our legacy, and, through diligent teaching and learning, they become the furniture of our minds. And this is the point: it is highly unlikely that even a mathematical prodigy would arrive on his own at this network of insights. Certainly, she would not arrive at them by staring at triangles.

When I play with my cat, it is not by looking at me that she knows her stringy toy is about to pass from one hand to the other behind my back and come out on the other side. She has grasped this over many hours playing together. It is one possible move, part of what the game is about.

Likewise with chess. A non-player can take a very long look at a set of miniature light and dark wooden sculptures carefully arranged on a checkered board, but he will not grasp chess positions. A good player may look with immense discernment at the board, and still only have but the faintest idea of what is going on in a match between grandmasters. The board looks the same to everyone. What is grasped by players of different skill is not phenomena or noumena. It is sets of relations, possibilities, anticipations, affordances, networks of insights at various depths. One must know how to *read* the board. Well beyond knowing how each piece moves, it involves developing ever deeper skills into how they can be combined. To use reading as a metaphor, one learns by transitioning from letters to words to sentences. And once one can, one cannot help but read sentences.

Consider sight reading music. The score looks the same to everyone. What will always look like oval shapes with slight variations in colour, with vertical upward or downward staffs placed in between or on lines, will slowly and gradually be identified as specific notes with specific time values. But this is only the merest beginning. To read fluently, one must learn to discern chords and build up to ever bigger patterns. So, for instance, listeners can recognize the recurrent theme of a

fugue. Simply by noting its author, date of composition, key signature, and how a piece ends, an experienced musician can already anticipate the overall structure of a piece and the types of sequences likely to occur. Like with triangles and chess, anyone can look at a musical score as long as they like, but only through much practice can musicians read scores at first sight with the proficiency that actors read the librettos of plays. Again, this is not to gain deeper access to phenomena, let alone noumena. This is the arduous accumulation of body/mind/instrument insights. That is: development of a skill through habit. Or, stated in physiological terms: neurons that fire together wire together. The more you practise well, the better you read. And, from each level of reading you reach, you keep moving forward. Needless to say, the foregoing holds for any and all organisms at all levels: recurrent processes build systems recurrently.

Reading is not about ‘bodies’, it is about intelligibilities. If knowing is about building networks of insights, and not about taking a good look, any organism’s grasp of its environment is about building networks of skills, and not merely about sense organs. In this notion of knowing, there is no duality of phenomena/noumena. Rather, there is a conversation, a degree of co-penetration between organisms and their environment. Umwelt is about affordances, not about the senses. Signs point to intelligibilities, not to ‘bodies’. Thus, intelligibilities are not signs, but their ongoing patterning.

Let us delve further into reading. To read is to anticipate, to ask questions. Like chess players at any level, it is to bring skills to attend to what is presented. This is *experiencing*. It is done by chunks: associating them, summarizing them, lumping them together, nesting them, and so on. Call this *summing and lumping*. This is how we transition from reading letters to reading words to sentences to paragraphs, and so on. Experiencing, the spontaneous process of summing and lumping, is already to reach for *understanding*. Patterns elicit further questions and further patterns. Moreover, a pattern that cannot be verified is soon dismissed because it fails to be understanding. This is how, and why, questions about understanding reach for the further rational question for judgment: Is this so, yes or no? To verify our understanding is to arrive at provisional judgments. These remain provisional so long as further questions come up. Thus, from questions about experience we transition to questions for understanding, then to questions for judgment, and then to the further self-reflective question: Are there any further questions? If the answer is yes, these are formulated and answered. They may be questions for experience or for understanding seeking to verify patterns. The process-structure continues until the answer to the self-reflective question is: No, there are no further pertinent questions. An understanding, verified by a rational judgement this way, constitutes a *virtually unconditioned judgement*. Such

virtually unconditioned judgements form part of the truth as intelligently understood and rationally affirmed.

Just as we can verify for ourselves understandings based on data of sense, so we can verify for ourselves understandings based on data of consciousness, such as the foregoing account. We do so by adverting to the process-structure of our own knowing. Call this *self-appropriation* of our own *cognitional process-structure*. We can self-appropriate and verify this process-structure even now, during our reading. If verified, it too is virtually unconditioned. So, we can arrive at a virtual unconditioned judgement, intelligently understood and rationally affirmed, that experiencing-understanding-judging is the process-structure of our own knowing.⁶

By self-appropriation then, we can verify the process-structure of our knowing as it has always been. This is to advert to an *a-priori*, what has always already been the foundation of our knowing. There is every reason to think that others, people and other organisms, follow this, or a rudimentary version of this process-structure. So, it transcends us.

To verify this *a-priori* is to make explicit what has always already been our immanent metaphysics: how we know (epistemology), and what we know (ontology). Regarding the latter consider the isomorphism between the following:

- a system of signs such as this essay or a musical score (languages generally);
- a device such as a chess set or a musical instrument (all devices);
- an environment, or, more precisely, the *umwelt* of an actual individual organism;
- the constitution of organisms as process-structures nesting process-structures.

These are all isomorphic to:

- the process structure of summing and lumping of a limited set of elements which, through associations, combinations, permutations and nestings, produces an infinite number and variety of layered forms, all with a family resemblance, and which, through experience-understanding-judging, is *how* we know, and therefore, in broad outline, *what* we know.

The isomorphism between the first four items – *what* we understand – and *how* we understand, is the reason why all five can be understood in terms of each other, why analogies between them are valid and helpful. This essay, its writing and reading are a case in point: the texture in the author's mind, its topic, its composition, what is formed in the reader's mind – all are isomorphic.

⁶ The two foregoing paragraphs outline the key argument in Bernard Lonergan's *Insight*.

Since organisms are formed for sense-making, can it be surprising that the form of their sense-making converges with the form of the world? This is the intelligibility that patterns our prime concerns: on the side of the subject, the true; on the side of the object, the real; as such, these patterns are the beautiful; and, since intelligibility is born in collectives, it springs from the good.

Elsewhere I have shown human cognitional activity is a specialized instance of the “distinctional” activity inherent to aliveness (Mayer-Foulkes 2023). Organisms maintain themselves distinct by distinguishing. Judgements, as discussed above, are a kind of distinction. In explanatory science these distinctions involve the self-reflective question: Have all pertinent questions been asked? Aside from this highly specialized kind of distinguishing, for human common sense, and for all organisms, verification is by repetition – with survival often being at stake. Distinctions require a living subject, and a necessary feature of them is their contingency. This is why I said above that the empirical and the theoretical are in synthesis “all the way down”. Distinguishing, indispensable to aliveness, is the foundation of signs and, through them, of the unfolding of intelligibility. Relationships between semi-autonomous entities are a condition for this possibility. Thus, the condition for the possibility of knowing is the *qua* ethical (Mayer-Foulkes 2023, Ch. 9–10).

This metaphysics founded on intelligibility – what does it imply for biosemiotics? How does this serve to understand living being – indeed, to understand the understanding of living beings? And, to state what can no longer be taken for granted in the age of AI: how does our own aliveness aid us to understand the understanding of organisms? And how does a discipline organize, given the tensions inherent to collectives? Any discipline that seeks intelligibility reaches for it through summing and lumping, and this involves Functional Specialties (Fig. 1).

Functional Specialties

<i>Knowing</i>	<i>Implementation</i>
Dialectics	Foundations
History/Scholarship	Ruling Principles
Interpretation	Systematics
Research	Communications

Figure 1. Functional specialties. The notion is due to Bernard Lonergan, in *Method in Theology* (1971).

Recall the names mentioned by Tommi Vehkavaara in the quote above. His essay is a good example of work in the functional specialty *Dialectics*. His essay is not in *Research*, data about semiotic activity of organisms; nor is it *Interpretation* of such data; nor is it limited to *History/Scholarship* about studies and interpretations in bio-semiotics. His intent is *Dialectics*, comparison and contrast between interpretations. Among other things, such an exercise raises questions about *Foundations*: What is the notion of the real? What notion of the real obtains in biosemiotics? In the diagram above, notice that *Dialectics* culminates with questions raised in the upward column of *Knowing* while *Foundations* raises questions that initiate the column of *Implementation*: What is our starting point? Is realist objective knowledge possible? Is there a concrete, naturalistic, universal, transcendental metaphysics?

As I hope to have shown, self-appropriation of the process-structure of our cognitional activity yields foundations: *how* we know and, in broad outline, *what* we know. Disciplines that reach for the explanatory mimic human cognitional activity as they collectively seek understanding. A discipline matures by refining these specialties.

This brings us back to our starting point. A review of a Gathering could be an assessment in terms of the Functional Specialties of the state of biosemiotics. What Data is being researched? How are we Interpreting? This is already to engage in Scholarship and in Dialectics. What are our Foundations, our Ruling Principles, how are we Systematizing and what are we Communicating? Ideally, such a review is carried out collectively.

Such a review is collective reading of our discipline.

We can collectively advert to the immanent structure-process of our knowing, the better to read and write about life.

References

- Lonergan, Bernard J. F. 1958. *Insight: A Study of Human Understanding*. New York: Philosophical Library.
- Lonergan, Bernard J. F. 1971. *Method in Theology*. Toronto: University of Toronto Press.
- Mayer-Foulkes, Daniel Carlos 2023. *The Nature of Living Being: From Distinguishing Distinctions to Ethics*. (Biosemiotics 26.) Cham: Springer. <https://doi.org/10.1007/978-3-031-24789-7>
- Morelli, Mark D. 2020. *Hegel Inside Out: Essays on Lonergan's Debt to Hegel*. Los Angeles: Encanto Editions.
- Peirce, Charles Sanders (1931–1958). *Collected Papers of Charles Sanders Peirce*. (Vols 1–6, Hartshorne, Charles; Weiss, Paul, eds.; vols. 7–8, Burks, Arthur W., ed.) Cambridge: Harvard University Press. [In-text references are to CP, followed by volume and paragraph numbers.]

Vehkavaara, Tommi 2023. Meaningfulness and applicability of semiotic concepts in bio-semiotics. In: *XXIII Gatherings in Biosemiotics: Copenhagen, Denmark, 31 July – 4 August: Celebrating the Life and Work of Jesper Hoffmeyer, Biologist, Biosemiotician and Friend*. Copenhagen: International Society for Biosemiotic Studies, University of Copenhagen, 51–52.