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Archaeology of Concepts' as research method

Abstract: Deely's book is concerned with the history of logic as seen from the point of view of semiotics (part 1) and with cornerstones of semiotic philosophy, such as 'language', 'knowledge' and 'experience' (part 2). The first part of the book clearly strengthens the Peircean heritage of semiotics by contextualizing it within the broader history of logic and relating it to the work of other key thinkers who, like Peirce, ended up 'doing' semiotics while developing logic. On the other hand, part 2 of the book appears to lay out the foundations for a number of key later developments in semiotics, both in Deely's own work and in the work of other semiotic scholars. Overall, this review suggests that part 1 is the key part of the book since the 'archaeology of concepts' whose workings it demonstrates appears to be an aspect of Deely's writing that remains largely unacknowledged in the literature, hence underexploited. 'Deely's method', I argue, is relevant to any kind of interdisciplinary research, including but not limited to semiotics research, and its potential as a mainstream qualitative research method for the humanities is one that should be tested further in interdisciplinary research projects.

Keywords: history; interdisciplinary research; logic

1 Introduction

Among Deely's 'introductory' books on semiotics (e.g. Basics of Semiotics), Deely's Introducing Semiotic (1982) is the book that I find the most revealing, due to its ambitious scope and broad historical underpinnings. As its title suggests, this book is divided into two main parts 'Historical sections' and

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'Doctrinal perspectives'. The first part of the book is concerned with the history of logic as seen from the point of view of semiotics, and as Sebeok in the foreword (ix-xvi) notes, with how "one [discipline] invents and keep reformulating the other in many imaginative if reticular ways" (ix). The second part of the book treats cornerstone topics of semiotic philosophy, such as 'language', 'knowledge', and 'experience', which appear as precursors to a number of contemporary developments we can see in semiotics today (more on this below).

2 The relation of logic to semiotics

Part 1 of the book is based largely on the 1981 seminal essay "The relation of logic to semiotics", published in Semiotica 35-3/4, reprinted in 1982 in Introducing Semiotic and then reprinted in Realism for the 21st Century: A John Deely Reader (2009). In part 1 of the book, Deely performs an 'Archaeology of Concepts' (1982: 2), that is, the reading of key developments in the history of logic from the point of view of semiotics, or as he poetically put it, "the uncovering of the layers by which concepts ultimately taken for granted in some specific population acquired their illuminative power for human culture" (2). The expression "Archaeology of Concepts" is borrowed, Deely says, from an Umberto Eco lecture at the First International Summer Institute for Semiotic and Structural studies in Toronto (1980), but it is likely that Eco's expression was in turn inspired by Michel Foucault's 1969 'archaeology of knowledge'. Beside this note, Deely's objective with this 'archaeological' approach is to indicate "from the point of view of a philosopher a general sketch of the place and circumstances in Western culture where semiotic consciousness was first thematically achieved" (1982: 1). The reason for looking for semiotics ideas within the history of logic is that the proponents of logic "have wrestled since ancient times with foundational questions of knowledge, experience, and interpretation" (1-2), which are obviously crucial concerns for semiotics.

Overall, in this first part of the book, as in the original *Semiotica* essay, the semiotics-through-the history-of-logic timeline allows Deely to identify several nodal (conceptual-historical) points in which the history of logic yields relevance to semiotics, through the work of Aristotle, the Stoics, and particularly Augustine, Locke, Poinsot, and Peirce.

In 'Exploratory: The ancient world (Greek and Latin)' (section 2), Deely opens his interdisciplinary historical account by identifying the beginning of logic in Aristotle's *Organon*. Aristotle (384–322) was the first to discover logic,

since he regarded it as "the common or general instrument for the development of science" (14) but did not include it in its own classifications of the sciences. Other relevant developments in logic were Stoic logic (which was mostly lost except for the work of St. Thomas Aquinas) and Porphyry's *Isagoge*. Then, Augustine (354–430) becomes central to the general history of semiotics since, in his intent to narrowly identify the specific case of conventional signs of God, i.e. the word of scriptures and the sacraments of the church, he comes up with a series of distinctions that sweep "over the horizon of prelinguistic, linguistic, and post-linguistic semiotic phenomena" (17). Finally Boethius (480–524), in translating Aristotle's work into Latin and in providing his own commentary to Aristotle's *categories*, set the terms for the discussion of relative beings (*ens relativum*) of which signs are but a special case, hence interfacing the Greek logic tradition with further development in logic in the Latin West and approaching semiotics too.

In section 3, 'Exploratory: The indigenous Latin development', Deely reflects on how Aristotelian logic permeates the Latin West. As he explains, in the Middle Ages, logic bore the category of ens (being, or the first thing that the human mind grasps), which is further characterized as ens reale and ens rationis, amounting respectively to mind-independent being and mind-dependent being. Ens rationis includes, among the others, the category of second intentions, on which the scholastics focused because they thought this was the subject matter of logic, or "the order that the mind in its own workings introduces into things in order to know reality" (26). A further division in logic that was applied by the Latins at this stage consists in formal logic and material logic, the former (based on Aristotle's Prior Analytics, from the Organon) being concerned with the consistency of thought, regardless of its content, whereas the latter (based on Aristotle's *Posterior Analytics*) amounts to the application of consistent thought to experience in order to show why the world is the way it is. The idea of material logic, Deely concludes, is effectively the first treatise of scientific methodology in the West and underlines how material logic frames the curriculum of Latin Universities (36).

In 'Exploratory: Cognition theory among the Latins' (section 4), Deely explores how, for the Latins, the relationship between logic and the understanding of the real world of experience, plays out in language. The Latins in fact called the language-shaped, cognitive or intentional forms of logic *species aespressae*, which relate to the form expressed in the mind in response to an environmental stimulus (45). The key aspect relevant to a general semiotics in this development is that the extensions of the notion of signs to these forms happened by analogy to the signs of both oral communication (speech) and of nature (clouds signifying rain) (46).

Subsequently, section 5 'Exploratory: The drift towards semiotic consciousness' contains a nodal development for the history of semiotics, that is, the advent of the work of John Poinsot who, Deely argues, is the first thinker who debates the possibility of a general theory of signs. John Poinsot, publishes an introductory logic text called *Summulae* as part of the course in material logic, a treatise on signs or *perihermenias*, where he

- operates an explicit critique of the definition of the sign through the (Augustinian) insight that a sign brings something other than itself into awareness of an organism;
- 2) clarifies how representation and signification differ, that is, all signs involve representations but not all representations are signs; and
- 3) operates an analysis of the sign that transcends the traditional division of being into *ens reale* and *ens rationis*, because in the sign both mindindependent and mind-dependent reality are found.

It is however with John Locke, Deely argues, that semiotics is given its proper name as he adds 'semiotic', or "the means whereby speculative and practical knowledge alike is acquired, elaborated and shared" (63) as a mediating element between speculative and practical knowledge. However, despite the unifying efforts of Poinsot and Locke, formal logic becomes even more separated from material logic; as formal logic it becomes strictly language-related and evolves into mathematics, whereas material logic broadens and includes concepts, ideas, signs and hence "psychology".

In section 6, 'Exploratory, modern times' Deely argues that after the seventeenth century, the most fertile development on the topic of induction (a topic that becomes popular due to Stuart Mill's publication of *A System of Logic*, 1843) is Peirce's discovery that induction consists of two types of argument "the movement of the mind whereby we form a hypothesis on the basis of sensory experience ... and the movement back whereby we confirm or inform hypothesis with reference to the sensory" (241), the former 'reasoning' being *abduction*. Abductions is central to a number of experiences in which 'intuition' plays a crucial part: such as right-guessing the culprit of a crime, picking at random an object that later reveals itself to have archaeological value, or even falling in love; the latter reasoning being induction proper, the procedure that underlines medical 'proof' e.g. collecting enough evidence to prove the effectiveness of a medicine.

Finally, in the *Summation* to part 1 of the book, Deely makes a final remark on the complex relation of logic to semiotics, and argues, against the most proper conception of logic in its formal, language-related mathematical

conception, that if logic can be specified as an interpretative activity, as it was for the Greeks and Latins, then its name could also be expanded as the self-reflective use of signs in the way suggested by Peirce, Locke, Poinsot (83). Pursued in this way, Deely concludes, logic becomes one with a unified doctrine of signs, coextensive with semiotics itself and synonymous with it. So the acknowledgment of the historical and conceptual link between logic and semiotics could be seen, for contemporary logic, as a push to go "back" to material logic, where issues of form, content, and function are interrelated and envisaged as a whole, a unity.

3 Language, knowledge, and experience

Part 2 of the book consists of sections on *language*, *knowledge*, and *experience*. While treating language, Deely argues that the distinction between natural and artificial language, the former an almost unwelcome, ambiguous phenomenon, the latter its cure, is problematic, and proposes to bridge the gap between these two polarized views by remarking how it is a mistake to ignore that the linguistic system "ultimately depends in its functioning on channels of communication with what is not linguistic" (91) that is, zoö and phytosemiotic communicative channels. In relation to knowledge, Deely outlines how knowledge in the sense of judgment, and a derivative phenomenon of awareness or cognition is organized around 3 levels:

sensation, the cognitive response to a stimulus that achieves an initial awareness, which cannot be 'subjective' or 'objective' as it is indistinctively both (this point is the precursor to Deely's later notion of 'purely objective reality' [2009]);

perception which happens "at the level of things to be sought and things to be avoided, offspring and enemy, insider and outsider, and the like" (98); and

understanding, which adds to the perception of an objective world (or the world as experienced, cf. Deely's distinction between thing and object [2006]) the revelation that these same objects possess a dimension of existence independent of the knower.

Lastly, concerning experience, Deely reflects on the relation between prelinguistic and post-linguistic dimension of experience, concluding that "what 'comes out on the other side' ... is not language ... [but] society as a potential cultural system" (121). Here Deely's reasoning clearly resonates with what later becomes fully known as Modeling Systems Theory (Sebeok and Danesi, 2000),

which posits a three-fold model of meaning arranged on pre-linguistic (primary), linguistic (secondary), and cultural (tertiary) modeling.

4 The 'Deely method' and its significance for interdisciplinary research

Overall, part 2 of the book appears to lay out the foundations of a number of key future semiotics developments, both in Deely's own work and in the work of other semiotic scholars. On the other hand, part 1 of the book clearly strengthens the Peircean heritage of semiotics by contextualizing it within the broader history of logic and relating it to the work of other key thinkers who, like Peirce, ended up 'doing' semiotics while developing logic.

However, in my view, part 1 is the key part of the book as its benefits are not sufficiently acknowledged within semiotics, and the sciences in general, hence it is sadly underexploited. In fact, Deely's reading of logic through semiotics is not just another historical account of semiotics, but a rich recollection of the history of two seemingly separate fields, as they cross and develop each other. I find that this approach bears significant methodological implications for the sciences, particularly for those enquiries that position themselves as interdisciplinary. For example, Deely's 'archaeology of concepts' has been crucial for my own work when I needed a philosophical method to grant cohesion to my interdisciplinary argument. At that time, I wrote:

Following the 'Deely Method', this thesis will explore the extent to which concepts that are taken for granted in biosemiotics, such as *information*, *communication*, *systems* and *constraints* to name a few, can be related to a systemic and cybernetic heritage. As Deely states, "the history of logic provides a privileged access to the understanding of semiotics" (2009 [1981]: 210); hence it is hoped that outlining the development of systemic concepts in cybernetics will provide the key for a privileged understanding of biosemiotics. (Cannizzaro, 2012: 14)

Thanks to the methodological framing provided by Deely's historical account of logic from the point of view of semiotics, I was able to show, among other things, that cybernetics has crossed the history of biosemiotics at two nodal points, that is, at the beginning of the twentieth century with the work of the ethologist Jakob von Uexküll (acknowledged as a protocybernetician by Lagerspetz (2001), but also between the 1970s and 1980s, with Sebeok's work on zoösemiotics (1963) and early biosemiotics (1991). This last nodal point of overlap between biosemiotics and cybernetics, I argued, has not been

sufficiently acknowledged in the literature. More about the details of this argument, which has only been very simply and broadly outlined here, can be found elsewhere (Cannizzaro, 2014); but the key point is that the effectiveness of Deely's fundamentally historical method lies in the fact that when the conceptual timelines of two disciplines are juxtaposed, one can figure out in which moment the principle of one discipline becomes the principle of another, thus uncovering the theoretical heritage that has become invisible, or tacitly established, in the former discipline, and put it to a good use. In the case of my work, this tacit knowledge enabled me to put forward a proposal for a renewed semiotic analysis of culture, framed by both biosemiotics and systems theory.

In general, then, Deely's 'archaeology of concepts' promises to open an avenue for exploration in the area of qualitative research methods within the humanities and the theoretical sciences, and in this respect, I will anticipate seeing whether or not its effectiveness may be further tested by means of application to more interdisciplinary research projects.

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Bionote

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