

J.M. Bocheński's theory of signs

Korneliusz Policki

Abstract: The article concerns Bocheński's thus far unpublished considerations pertaining to signs that are among the materials in my archive. Of particular interest are Bocheński's reflections on the ontological, psychological, and epistemological foundations of the theory of signs. In his semiotics the concept of the sign is broadened to include application to the logic of authority, the concept of bi-directionality of human phenomena as well the theory of 'philosophical superstitions'.

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1. Introduction

In the domain of semiotics Bocheński succeeded in rendering a number of basic concepts more precise. My task in this paper is to present some of the results from within this domain of research found among thus far unpublished materials of Bocheński's archive. In constructing his sign theory Bocheński relies on Thomism as well as the work of 'Lwow-Warsaw School' (the concept of the functor).

2. Ontological assumptions

The world consists of things (*substantiae*). We name as 'thing' any object that exists self-sufficiently, is not determined by some other object, and undergoes change. Things include, e.g. people, planets, tables and chairs, etc. These things bear certain properties. In contrast with a thing, a property does not exist self-sufficiently (it is an accident), it appears on the basis of and is determined by the thing. Certain properties differ ontically (phenomenologically) from the thing in relation to which they emerge. Independently of the cognizing subject there exists a difference between a given property and the thing whose property it is. These properties include, for example, a man's anger, his knowledge, the shape of piece of turf, an electron's spin. Other properties are but certain aspects of the thing, ontically indistinguishable from the latter, even though the human intellect separates them fictively (abstractly) from their basis. An example would be, for example, a man's humanity: humanity is abstractable in a man as his property. In the thing itself humanity is a constitutive component of the man. It is a characteristic property and the sign of being human.

A property of specific kind is existence. We name as “existence” that which accounts for the existence of a given object. Existence is a very specific property in that it does not change the makeup of the object in any way, but only transfers it from the sphere of possibility to that of reality. What remains in an object when we exclude its existence we name its ‘makeup’ (content, or *essentia* in the ontological sense of the term). For that reason let us speak of the content of the sign as well as of its existence. A sign is characterized by its phenomenological, ontic, metaphysical, subjective and objective foundations. ([1], p. 55).

However, existence is multifarious. First of all, there is real existence, designated empirical. This is how, for example, living people, galaxies, street signs, and railway semaphores, etc. exist. Secondly, there is the mode of existence of merely possible objects; were possible objects to be deprived of a mode of existence it would be difficult even to think about them. However, it is fact that we do think about such objects, for instance when we create new signs. Thirdly, another mode of existence characterizes objects that cannot exist empirically but which we can, so to speak, “allow ourselves” in creating fictional entities, e.g. the square circle, the Sphinx, the wooden stone, etc. The upshot is that we need to distinguish at least four modes of existence: actual, potential, possible, and purely putative existence.

Ontological assumptions are essential for understanding the objectively real and ideal content of a sign. A sign refers to an objective content that can be material, real, and ideal. A theory of signs will vary as the ontology varies. Thus Tadeusz Kotarbiński’s theory of signs differs from that of Bocheński.

Whatever has a mode of existence (actual, potential, putative, possible, real) we traditionally call a ‘being’. Mt Blanc is a being as is the as yet non-existent but possible railway line and the square circle; but whereas as Mt Blanc is an actual being, the future railway line is a potential being (though both Mt Blanc and the railway line are real beings) and the square circle is an purely intentional being (*ens rationis*).

3. Psychological assumptions

According to Bocheński the course of the cognitional process begins with a simple perception (*simplex apprehensio*) that is followed secondly by the judgment. The perception is a certain sort of intellectual assimilation of the cognized object; it differs from a material assimilation in that there arises in the psyche of knower a mental picture of the object of knowledge which is a subjective concept (*conceptus subiectivus*). But the simple perception never grasps the object as a whole; it is always the grasp of only

one aspect of the object. What the simple perception grasps is a property or properties of the object. These are called the 'ideal' concept (*conceptus obiectivus*). Thus in the course of the cognitional process we attain the extra-mental object thanks to the operation of two intermediate factors: first by means of the "subjective concept" and then by means of what is immediately conceived in the "ideal concept".

The subjective concept as well as the objective and ideal concepts play important roles in our practices. For example, a road sign that has been willfully displaced or knocked down by vandals retains its normative force as an ideal concept acquired during the driver-training course despite the absence of an actual perception and a subjective concept.

The ideal concept is always an abstraction from actual existence; quite simply, it is eternal. We can construct subjective and ideal concepts, that is to say, come to know objects that do not exist in a given moment, and that even cannot exist in the external world. Even when the object of knowledge is existence itself we construct the concept of existence in thought.

The construction of judgments proceeds analogously. In a judgment the counterpart of the subjective concept is the subjective, intended sentence. This sentence should not be confused with a spoken or written sentence. The counterpart of the objective concept is the objective sentence, the so-called "ideal sentence" (*enuntiabile*). It is by way of these sentences that the judgment attains its object, the fact. The ideal sentence has the same characteristics as the ideal concept: it is objective but is abstracted from real existence ([2], pp. 1-4)

Tadeusz Kotarbiński did not agree with Bocheński's theory: according to Kotarbinski, concepts and ideal sentences are hypostases. He held that only nouns exist with designata in the world of persons and material things. ([3], p. 15) These nouns are material signs. For Bocheński, on the contrary, there exist (non-material) psychological constructs such as concepts and subjective sentences. They are, in other words, so-called mental signs.

4. The concept of the sign

For Bocheński, a sign has three aspects: a material, fundamental, and formal aspect. The material sign is the thing that serves as the means to know something. The fundamental sign is some property (typically a certain shape) or the motion of the thing that is directly significant. For example, in the cavalry whereas the raising of the sabre three times by the commander means "gallop", the sabre itself is a material sign, and its motion and rest is the fundamental sign. Finally, the formal sign is the relation that holds between the fundamental sign and what the sign expresses, means, and denotes. This relation is

called the 'formal sign' for the reason that the form determining that the material sign becomes a sign in the first place is the precisely the relation: pragmatic, semantic and connotative.

We distinguish between natural and conventional signs. The smoke from Bocheński's pipe is the natural sign that Bocheński is smoking a pipe. The aforementioned raising of the sabre is a conventional sign in the cavalry. Whereas smoke leads anyone familiar with the use of tobacco to conclude, without recourse to any convention, to the fact of Bocheński's pipe-smoking, the raising of the sabre by Bocheński's cavalryman would lead no one to the thought that major Bocheński wishes to transit to the gallop were there no convention to this effect among the troopers. For Bocheński conventional signs are especially interesting.

A conventional sign in the fundamental sense is a characteristic that, thanks to an agreement between at least two persons, allows one of them (the recipient) to recognize something distinct from the characteristic as a natural sign, and this on the basis of an agreement between the recipient and another person who is the emitter of the sign.

5. The theory of signs and authority

Bocheński created the logic of authority [4]. He distinguished two kinds of authority. One kind is epistemic authority (based on knowledge), the other is deontic authority (based on power). Bocheński divides deontic authority into the authority of solidarity and punishment (sanction). All of these kinds of authority are applicable to the theory of signs, in particular to the theory of conventional signs. Of the many emitters of conventional signs authorities are an important case. Authorities ascribe the intentional as well as the associative meaning to various objects that thereby become signs. However, this alone does not suffice. In order for conventional signs to become effective deontic authority is required; in order to institute the sign, there needs to be a power. Deontic authority motivates, sanctions, and regulates the signs defined by epistemic authority. This deontic power acts functionally to ensure solidarity among those who respect road signs and to apply sanctions (mandates).

How are signs received by the user? Bocheński writes about the bi-directionality of cognitive phenomena ([6], pp. 141-145) that is present at all levels of man's cognitive activities. It is called the law of action and reaction. In the epistemology of signs bi-directionality is especially evident. On one hand, we have the centripetal direction; the sign is the stimulus, the call, it 'imposes' itself, as it were 'calls to', 'enters into' the knower. On the other hand, there is the centrifugal reaction of the receiver of the sign

ranging over not only imagination, judgment, and emotions, but likewise external behavior and reactions, that is, centrifugal endeavors.

6. The theory of signs and 'philosophical superstitions'

Bocheński created as well the theory of 'philosophical superstitions'. A philosophical superstition is a minor false world view though regarded by some as true. An absolute philosophical superstition is a view that is at odds with logic, methodology, science as well as common sense. A relative philosophical superstition is a view that is relative to some belief system, e.g. for Christians the pagan Roman religion is a superstition and conversely; for Tadeusz Kotarbiński Bocheński's theory of signs is a superstition since it resorts to hypostases, mental signs, whereas for Bocheński Kotarbiński's reism and concretism are "philosophical errors".

Bocheński's 'One hundred superstitions' has so appeared only in Polish [8], though a German translation is in preparation. Bocheński's philosophical and logical theories can be applied likewise to the theory of signs. An example of superstitions related to the theory of signs is astrology (the theory of zodiac signs), numerology (the theory of numerical signs exerting effects on human life), and semantic anthropocentrism (only humans employ signs), the confusion of sign-constitutive functors and arguments, extreme positivism, nominalism in the theory of signs.

7. Conclusion

Bocheński's studies in the theory of signs testify to the growth and development of the philosophy of signs and semiotics. Progress in this domain of philosophy consists less in attaining non-ambiguous and unquestionable results and more in discovering new conditions and associations. For example, Bocheński's theory of signs can be broadened to include not only the logic of authority but also the logic of religion ("sacred signs") [7], something that Bocheński did in fact attempt in his unpublished "Was ich glaube?" in my archive.

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Korneliusz Policki
University of Fribourg,
Switzerland
E-mail: korpol@bluewin.ch