Lorhard, Ramus, and Timpler and "The Birth of Ontology"

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Abstract

This review article offers a discussion of some aspects of the historical and conceptual context when the term "ontology" (Lat. *ontologia*) was first introduced in the scholarly circles of the early 17th century. In particular, Barry Smith's (2022) analysis of the birth of ontology provides a springboard for some further remarks on the author of the work with the first known occurrence of the word "ontologia", Jacob Lorhard, including an analysis of his relationship with earlier philosophers Petrus Ramus and Clemens Timpler.

Key words: Diagraph; Jacob Lorhard; Ontology; Petrus Ramus; Clemens Timpler

1 Introduction

Barry Smith's (2022) "The Birth of Ontology" is a contribution to the study of the history of ontology during the first decades of the 17th century. This period is important because it is when the term itself originates. In his paper, Barry Smith offers an interesting analysis of Jacob Lorhard's *Ogdoas scholastica* (1606), where term "ontology" (Latin *ontologia*) is used for the first time as a single term to cover the study of being. Furthermore, Lorhard presented a new approach to the topic in the book.

During 2004-2010, the authors of the present commentary were part of a small group of researchers studying Lorhard's ideas; this collaboration led to five publications (Øhrstrøm et al., 2005; Øhrstrøm et al., 2007; Øhrstrøm et al., 2008; Sandborg-Petersen & Øhrstrøm, 2010; Uckelman, 2008 [1]). The present comments draw on

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the findings presented in these publications with the addition of some later considerations. (Some of the formulations in the following are even paraphrases of extracts from these cited works.)

What tricked the group into studying the origin of the word "*ontologia*" was in fact another paper by Smith, "Ontology and information systems" (Smith, 2004). It is a very fine paper, from which at lot can be learned. However, in the historical introduction of the paper Smith mistakenly states:

> The term "ontology" (or *ontologia*) was itself coined in 1613, independently, by two philosophers, Rudolf Göckel (Goclenius), in his *Lexicon philosophicum* and Jacob Lorhard (Lorhardus), in his *Theatrum philosophicum*. (Smith, 2004)

This passage is surprising, since it seems rather unlikely that two persons independently, the same year, came up with an idea like this. In fact, it turned out to be completely impossible in this case, since Lorhard died in 1609. There is no point in here criticizing Barry Smith's mistake, which was in fact a rather bold assumption made on the basis of the few sources that he had available when he wrote the paper. It was obviously a "useful" error in that it initiated new studies in the field. Furthermore, the two books mentioned by Smith were in fact published in 1613, and they both dealt with ontology and related topics. However, already in 1606 Jacob Lorhard had published his book *Ogdoas scholastica* in which he introduced the term "*ontologia*" for the very first time, and Smith's paper confirms the impression based on the Lorhard studies during 2004-2010 that there are a number of interesting aspects to explore in *Ogdoas scholastica*.

2 Lorhard's *Ogdoas scholastica*

Jacob Lorhard was born in 1561 in Münsingen in South Germany. We know little of his life, but it does appear that he met Johannes Kepler at Tubingen University, where Kepler is known to have studied in the period 1587-1591. Lorhard was deeply interested in metaphysics, conceived as the study of the conceptual structure of the world. He came to St. Gallen in 1602, where he worked as a teacher and a preacher. In 1603 he became "Rektor des Gymnasiums" in the protestant city of St. Gallen. He was accused of alchemy and a heretical view on baptism. He was, however, able to defend himself rather convincingly, and his statements of belief were in general accepted by the church of St. Gallen. He found great inspiration on the thoughts of Clemens Timpler (1563-1624), whose *Metaphysicae systema methodium* was published in Steinfurt in 1604. In 1606 Lorhard published his *Ogdoas scholastica*, a volume consisting of eight books dealing with Latin and Greek grammar, logic, rhetoric, astronomy, ethics, physics, and metaphysics (or ontology), respectively. Apparently, the publication of *Ogdoas scholastica* was seen as a very important event at Marburg University which was at the time the centre of Protestant and German academia. In 1607, i.e., the year after the publication of *Ogdoas scholastica*, Lorhard moved from St. Gallen to Marburg to become professor of theology in Marburg. At that time Rudolf Göckel (1547-1628) was also professor in Marburg in logic, ethics, and mathematics. He was a key person in German and Protestant academia; it is likely that Lorhard and Göckel met during 1607 and that they shared some of their findings with each

other. For some reason, however, his stay in Marburg became very short and after less than one year he returned to his former position in St. Gallen. Lorhard died 19 May, 1609. (See the cited literature.)

In 1613, Lorhard's book was printed in a second edition under the title *Theatrum philosophicum*. In this new edition the word "*ontologia*" has disappeared from the front cover but is maintained inside the book. In the same year Göckel included the word in his *Lexicon philosophicum*. It is only mentioned briefly in the margin on page 16 as follows: "*ontologia, philosophia de ente*" (i.e. "ontology, the philosophy of being").

Smith does not mention Rudolf Göckel in his recent paper. But although Göckel did not coin the term "*ontologia*", but got it from Lorhard, he was probably rather important in the spread of the new approach to ontology in German and Protestant academia. It is in fact remarkable that most of the scholars who worked with ontology were Protestants (and under German influence). It is very likely that Lorhard's ontology should be seen in the light of the Reformation. In particular, the religious ideas apparently challenged philosophers to rethink everything in the world. In the beginning of the part on metaphysics/ontology Lorhard offers the following definition:

> Metaphysics is knowledge of the intelligible by which it is intelligible since it is intelligible by man with (the help of) the natural light of reasoning without conception of anything material. (*Ogdoas scholastica*, Book 8, p. 1; translated in Uckelman, 2008)

It should be noted that Lorhard in this way presents metaphysics/ontology as related to the process of gaining new "knowledge". From a traditional point of view, one might expect that *Ogdoas Scholastica* as a schoolbook should deal with reality as the most learned scholars would like to present it. Instead, Lorhard offers his metaphysics/ontology as a framework of basic conceptual relations from which the student can obtain new knowledge using "the natural light of reasoning". As Smith discusses, in case of a difficult term Lorhard could even add a note (λόγος) to the diagram, in order to support the reasoning to which the diagram should give rise.

Lorhard's approach to ontology is obviously based on the view that the world is rational – established as such by God. If we as humans understand some of the basic structure in the divine rationality built into the world, we may be able to move on led by the natural light of reasoning in order to learn even more. In other words, ontology captures this fundamental understanding of the basic features of the world. Based on this knowledge everything else – to the extent that it is intelligible at all – becomes conceivable. This approach presupposes that there is in fact only one true ontology – the one that reflects the world as it truly is. The belief in this basic rational structure was in fact crucial for the rise of modern science in the early 17th century. According to Needham (1970), the confidence that an order or code of nature can in fact be read and understood by human beings was one of the important cornerstones for the rise of modern science in Europe. The belief in this kind of built-in rationality was apparently significantly weaker in several Eastern civilizations in the early 17th century (see Øhrstrøm et al., 2008).

With his ontology Lorhard wanted to represent the logical structure of reality using diagrams. In doing so, Smith argues he was inspired by Peter Ramus (1515-72), who had argued that scientific knowledge, at least for pedagogical reasons, should

be simplified using diagrams mainly organised in dichotomies. In 1562 Ramus had converted to Calvinism, and he was murdered in Paris in the St. Bartholomew's Massacre on August 26, 1572. The fact that he was considered to be a Protestant martyr made many intellectual Protestants interested in his ideas. In fact, his religious and scientific ideas became very influential in the Protestant world during the 16th and 17th century.

Like Ramus, Lorhard wanted to transform dialectical reasoning into a single method of pedagogical logic partly by using diagrammatical tools. It might be fair to characterize Smith as saying that Lorhard's main achievement is that he took ideas mainly from Timpler and presented them as a logical structure in terms of diagrams – mainly of the type suggested by Ramus. We can see an example of how in his ontology Lorhard integrated philosophical and scientific ideas with theological and ethical ideas in terms of diagrams in Figure 1, presenting some classical problems regarding time and eternity.
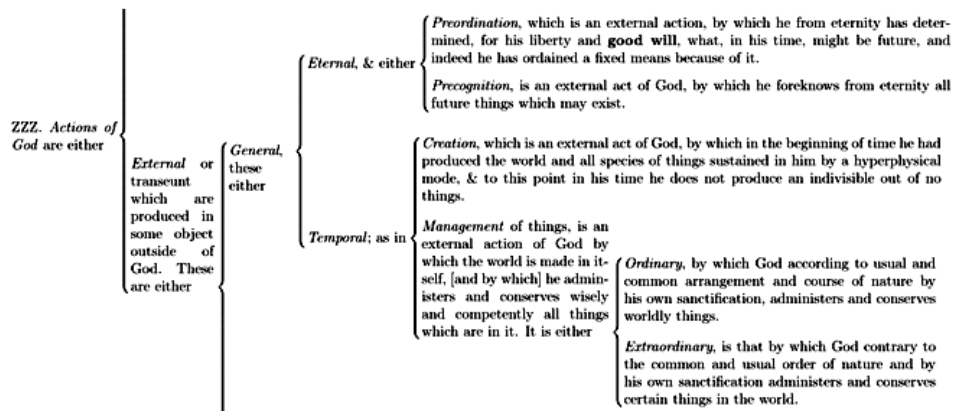

Figure 1: "Actions of God" in Lorhard's *Ogdoas scholastica*. (Source: Uckelman, 2008)

It is at least easy to see how a student, once he has understood a diagram of this kind, may ask questions on this basis and thereby obtain new knowledge using his natural light of reasoning. In this way, it becomes clear how diagrams can support the process of learning and deeper understanding. We can even say that diagrams for conceptual structures in the 16th and 17th centuries played the role of formalization that was in the 19th century given to symbolic logic.

Modern ontology clearly includes several of the components that can be found in Lorhard's ontology. However, there is one important difference: Whereas an ontological structure in a modern context may be seen as a model or a tool fit for certain purposes and unfit for others, an ontological structure would according to Lorhard be much more than a tool. It would, in fact, be an attempted description of reality, which is true or false. (See Øhrstrøm et al., 2008.)

3   Smith's "The Birth of Ontology"

So much for the historical and philosophical context of Lorhard and his work. We now have some brief comments on Smith's analysis. In the second section of his article, Smith draws connections between the work of Lorhard and that of his predecessors Petrus Ramus and Clemens Timpler. He connects Lorhard's diagraphical approach to Ramus, and the specific content to Timpler. We have shown before how Lorhard's approach was likely inspired by Timpler (so not only Ramus), and may also be seen as an interesting parallel to the ancient Greek view according to which the ontological realities must come to us through our thoughts and not through our senses (see Øhrstrøm et al., 2005). The relationship between Timpler and Lorhard is clear given Marco Lamanna's work (see Lamanna, 2006) showing a correspondence between the two; but we would like to comment now on the relationship between Lorhard and Ramus.

Smith says that Lorhard "took the idea [of diagraphs], and the model of their use as pedagogical tool, from Peter Ramus (1515-1572), whose writings, and whose diagram-driven approach to pedagogy were of considerable influence in Lorhard's day" (Smith, 2022, p. 63). But the fact that Ramus was interested in binary classification as a pedagogical tool does not by itself mean that we can draw a straight line from him to Lorhard's graphical representations.

First, there is the nature of the divisions that are found in Lorhard's work. One could be forgiven from taking away from Smith's article the impression that the divisions in Lorhard's treatise are binary in nature – for instance, when he says that their structure "makes the diagram in some ways comparable to a decision tree ordered through the dichotomy between 'yes' and 'no'." (*ibid.*, p. 58), which implies a binary resolution – considering that most of the illustrative examples in the paper are binary in nature. However, while indeed many of the divisions are into two exclusive categories, the structure of the diagraphs is quite a bit more flexible; in some cases, the division is into multiple categories, or pairs of categories. An example of this richer structure can be found in the division of Absolute Conjunctive Attributes (E.), the species of which can be distributed across 9 different classes, one of which, Composition (g.) eventually branches into four further pairs of species. In other examples, the number of terminal nodes is left indefinite, such as when Real Multiplicity (h.) is divided into multiplicity in Essence, Cause, Effect, Subject, Adjunct, Parts, and "in some other manner", or when Real Time, both Momentary and Successive (D.) is divided into Hour, Day, Month, Year, 5 Years, Age, "etc."

But this binary division of categories that is sometimes lacking in Lorhard is much more prominent in Ramus's *Dialecticae libri duo*; Ramus goes out of his way to ensure that he is only ever dividing by two. A clear case of contrast between the two can be seen in how the two authors handle causes. Traditionally, following Aristotle, causes are divided into four types: Efficient, Material, Formal, and Final (another way to translate the word that Lorhard uses is "Limiting" or "Bounded"). The first appearance of these four types of causes in Lorhard's ontology is found in the discussion of Unity (H.; see Figure 2), where causal unities are lumped together into a single category, inclusive of the four different types.

The four types of causes next turn up in the discussion of Necessity (L.), which can be either Absolute or Hypothetical (Absolute itself being divided into four types),
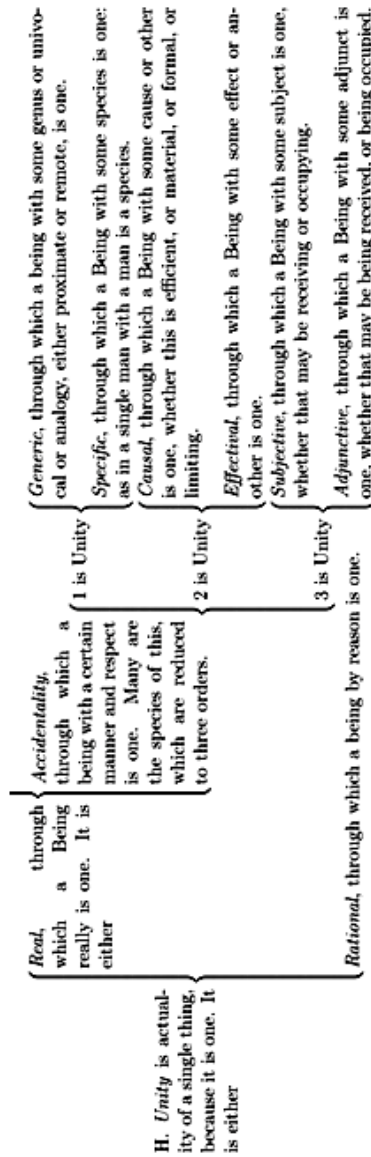
H. *Unity* is actuality of a single thing, because it is one. It is either

Real, through a Being which really is one. It is either

Accidentality, through which a being with a certain manner and respect is one. Many are the species of this, which are reduced to three orders.

1 is Unity
- *Generic*, through which a being with some genus or univocal or analogy, either proximate or remote, is one.
- *Specific*, through which a Being with some species is one: as in a single man with a man is a species.

2 is Unity
- *Causal*, through which a Being with some cause or other is one, whether this is efficient, or material, or formal, or limiting.
- *Effectival*, through which a Being with some effect or another is one.

3 is Unity
- *Subjective*, through which a Being with some subject is one, whether that may be receiving or occupying.
- *Adjunctive*, through which a Being with some adjunct is one, whether that may be being received, or being occupied.

Rational, through which a being by reason is one.

Figure 2: "Unity" in Lorhard's *Ogdoas scholastica*. (Source: Uckelman, 2008)

δδ. Moreover it is either

{
Matter, which is an intrinsic cause from which a material embodiment exists. It is either

Form is an intrinsic cause, through which a formation is. It is either.
}
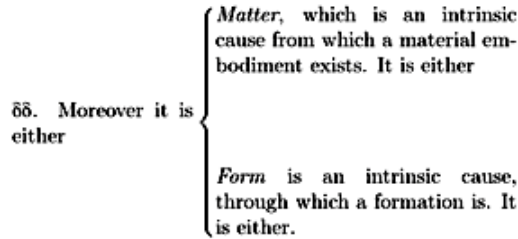
Figure 3: "Intrinsic Causes" in Lorhard's *Ogdoas scholastica*. (Source: Uckelman, 2008)

ωω. *Species.* Indeed it is some cause

{
Extrinsic, which exists beyond the essence of its own causing. It is either

{
A *limit* is an extrinsic cause, of which, for example, something is finite. It is either

An *efficient cause* is an extrinsic cause, from which an effect is. It is either
}

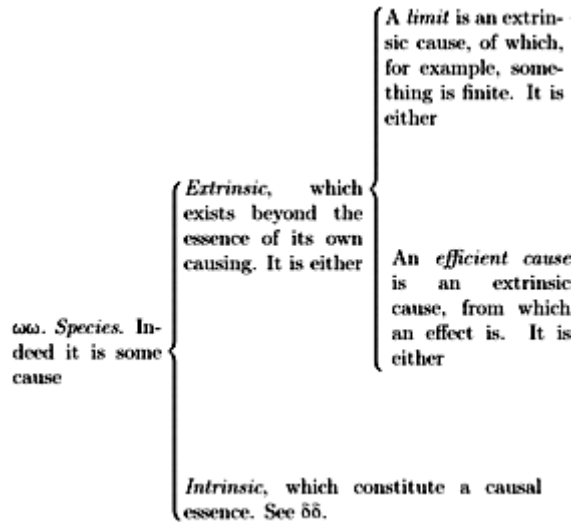*Intrinsic*, which constitute a causal essence. See δδ.
}

Figure 4: "Species of Causes" in Lorhard's *Ogdoas scholastica*. (Source: Uckelman, 2008)

with intrinsic causes, that is, Matter and Form, falling under the header of Absolute Necessity, and extrinsic causes, that is, Efficient and Bounded causes, falling under the header of Hypothetical Necessity. This pairing, of material and formal causes and efficient and final causes, is repeated in the Species of Causes (ωω.; δδ.; see Figures 3 and 4).

But this is in contrast with Ramus's handling of the types of causes; in his chapter on causes, he says that causes are either "efficient and material" or "formal and final", on p. 27 of the Paris 1566 edition of the *Dialecticae*, creating an opposite pairing. We are thus left with a question as to what, exactly Lorhard took from Ramus: For it cannot be the pedagogical tool of binary classification given that his classifications are often not binary; and it seems unlikely to be the content of what he is classifying, considering that we have clear evidence he took his content from Timpler, as well as evidence that his content differs from Ramus's. All this to say: There still remains a wealth of unanswered questions about Lorhard and his work awaiting the scholarship of future generations.

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Online Resources

[1]   https://eprints.illc.uva.nl/id/eprint/668/1/X-2008-04.text.pdf

[2]   http://www.formalontology.it/essays/correspondences_timpler-lorhard.pdf

[3]   http://ontology.buffalo.edu/ontology%28PIC%29.pdf

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