Who is Tesauro? The man, words and things

Abstract
The purpose of this article is to discuss certain social and epistemic questions that seek to understand the role played by Emanuele Tesauro in knowledge organization (KO). The methodological approach taken is based on historical and epistemological reflection, aimed at understanding the elaboration and repercussions of concepts in KO. The analysis combines a diachronic historical-epistemological background with a synchronic theoretical-critical approach. It is, therefore, not a remote, historical conjecture, but a study that discusses relevant theoretical approaches to KO in historical time. Specifically, this study demarcates the relevance of Tesauro’s theory in KO. Recognizing his thinking as fundamentally a critique of language in all its distinct precepts, from logic to rhetoric, this paper indicates that Tesauro constructs a theory of discourse and a methodological process to substantiate the application of this theory, namely an index of categories and their relations. In turn, the future instrument known as the "thesaurus" responds, in part, to Tesauro’s proposition, but subverting the combinatorial range of his discursive-rhetorical influence.

1. Introduction: the shadow of a name
The purpose of this article is to discuss certain social and epistemic questions that seek to understand the role played by Emanuele Tesauro in knowledge organization (KO). The methodological approach taken is based on historical and epistemological reflection, aimed at understanding the elaboration and repercussions of concepts in KO.

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It is in this context that we first pose the following research question: what “killed” Tesauro? In the 17th century, Emanuele Tesauro, author of the Aristotelian Luneta (Il Cannocchiale Aristotelico), presupposed a theory for KO in an age when critical-discourse was first emerging in a state of constant progress.

Little research in the field of information science has yet been conducted into Tesauro’s work and theory. His work has thus managed to escape the historical process anchoring the basis of KO to a whole lineage of contextual foundations. The pragmatic approach as a theoretical basis and as a theory of meaning grounded in a theory of discourse are excluded from the historical path of thought and applied practices of knowledge organization and representation.

When we enter the databases dedicated to KO, the presence of Emanuele Tesauro is practically nil. According to Saldanha and Silveira (2016), there are negligible results concerning his theories (and the apparently "curious" relation between his surname and...
the revolutionary theoretical instrument that is the "thesaurus"; the instrument, not the historical person). Accordingly, there is an absence of direct and critical reflection on Emanuele Tesauro’s theory in all the bibliographic production in the context of the International Society of Knowledge Organization (ISKO).

Where, then, are there any signs within the KO field recognizing the "existence" of Tesauro? Traces of him can, in fact, be found within two main areas: firstly, within an epistemological-historical context, foreseeing certain theoretical proposals central to classification theory, but without any direct analysis of Tesauro himself or his specific approach; secondly, within an epistemological context proper, occurring at the interface between a theory of knowledge based on linguistic reflection and its unfolding into such areas as semiotics, which, in turn, are visualized at the borders between KO and linguistics (Saldanha and Silveira 2016). We can, respectively, point out the works of Almeida and Crippa (2009) and Monteiro & Giraldes (2008) as representatives of these occurrences.

However, as stated, all these are occasional and never vertical arguments, never directly dedicated to any repercussions Tesauro’s work may have had on KO. Recognizing his thinking as fundamentally a critique of language in its distinct precepts, from logic to rhetoric, we can see that the way in which Tesaurian ideas have been appropriated first overturns the notion of subject, name, and thing. Tesauro constructs a theory of discourse and a methodological process to substantiate the application of this theory, namely an index of categories and their relations. In turn, the future instrument known as the "thesaurus" responds, in part, to Tesauro’s proposition, but subverting the combinatorial range of his discursive-rhetorical influence.

2. Historical and political context: Baroque, metaphor and the 17th century

In the 17th century, an age of crises, Emanuele Tesauro formulated his theory of metaphor, the central part of his 1665 treatise on rhetoric *Il cannocchiale aristotelico*. It was a century characterized by religious wars, by the last great wave of the Black Plague, by the insurgency of absolutism and mercantile capitalism, and Baroque thought.

The Baroque, perceived through the prism of emerging Modernity, with its new condition of spiritual and cultural openness, contains an element that allows us to analyze a century which, at the same time, saw the birth of strong national models and international cultural thought. The element thus identified is metaphor.

Metaphor is the instrument that allows us to consider and represent the metamorphoses of the universe. It is designed to correspond to a scientific machine capable of performing a continuous transformation of culture.

It is interesting to note that the two great branches of baroque science, namely astronomy and anatomy, both share metaphorical language. Anatomy, understood as dissection and analysis, was the center of a constellation in which was found medicine,
cosmography, geography, astronomy, astrology, theology, moral philosophy, epistemology, anthropology, aesthetics, rhetoric and the fine arts.

Baroque anatomy was particularly important in the war on knowledge. Although tolerated by the Church, it was strictly controlled and limited. It was admitted only to the extent that anatomists pointed to a truth superior to scientific pursuit, recognizing an authority of spiritual power and the Truth of Christian doctrine. It spoke, therefore, of a moralized, or spiritualized anatomy.

Within the metaphorical complexity of the Baroque, there are innumerable representations of the body (or its parts), which become vehicles of moral or spiritual lessons, and anatomy becomes emblematic of the precariousness, the forfeiture, or even of the nothingness of the human condition.

Being strictly related to death, anatomy is thus the perfect emblem of our mortality (memento mori) and, at the same time, the vanity of earthly things (omnia vanitas). In all its representations, baroque anatomy becomes a spectacle, through a rich use of visual rhetoric. Such representations were to be objectively present in the construction of Tesauro’s theory of KO.

3. Rhetorical and “Semiotic” basis for a foundational theory of KO epistemology

The structure of Baroque thought has been met with different interpretations. One way of recognizing it lies in the notion of decay, as Carpeaux (1990) indicates. Its primary conception and application (in the field of art, mainly, but also in politics and in the theory of knowledge) indicates something strange, irregular, and out of the ordinary. At the same time, we find the notion of an accumulation of meanings and objects, of an overflowing of words and things. It is within this epistemological scenario that Emanuele Tesauro's "categorical index" and the relevance of metaphor for the classification of ideas are conceived.

According to Eco (1984), what Tesauro sought was a semantic order, based on Aristotelian categories. He focused not only on the conceptual mirror of truth behind a term, but its verisimilitude. Construction of the index involves attaching as much value to rhetoric as to logic. For Eco (1984), Tesauro’s theory constitutes one of the foundations of semiotics.

In presenting the "applied stage" of his work on organization (of knowledge, ideas and language), that is, his Categorical Index, Tesauro (1670) opens by addressing the search for a certain boundless metaphor. Here is the fundamental extremity of Tesauro’s semiotic revolution: metaphor, the aporetic limit of KO, or its complete impossibility, included as a tool and a means of considering/applying the index.

Metaphor is not, however, beyond syllogism, or beyond logic. Like Aristotle, Emanuele Tesauro (1670), integrates discursive approaches with constructs of the intellect. Thus, for him, classification includes Category (itself, in the sense of categorize, or categoria, that is, the meeting of all categories), Substance (sostanza, or
category that is above all), Quantity (quantità), Quality (qualità), Relation (relazione), Action (azione), Passion (passione), Place (sito), Time (tempo), as well as luogo (that is, the notion of space according to elements that demarcate movement) and habito (which can be interpreted as a category of contents).

Figure 1: Presentation of the Categorical Index in Emanuele Tesauro

![Figure 1: Presentation of the Categorical Index in Emanuele Tesauro](image)


Tesauro’s conception takes a figurative approach, including the relations between feeling, emotion and intelligence (Proctor 1973). It deals not only with the isolation and relationship between terms, but also the search to understand their effects, thus combining meanings and ideas to represent, discover and create knowledge.

After presenting the “Categorical Index”, Tesauro (1670) expands one of the central arguments of the work, the notion of sharpness or acuteness. According to Almeida & Parodi (1996), with this notion, Tesauro points to a divine property whose nature is to gather what is normally incompatible, that is, a tool uniting what is in opposition (effectively, the most “baroque” aspect of his proposition). Rhetorical figures would be the central sources for this mechanism. Tesauro, however, approaches them all through the "sharp & shrewd" figure of metaphor, which represents words themselves as concepts.

As Proctor (1973) shows, Tesauro establishes a theory of "conceit", where metaphor is central. It is a system built to classify discourse in its living, open dynamics. Therefore, its essential structure is rhetoric. Beyond theory, what we find here is a guide, a method to be applied in the development of such a system of classification by index.

4. What “killed” Tesauro? Mechanicism, Neopositivism and Political Economy

Although the name “Tesauro” resembles the Latin-derived notion (instrument) of
“thesaurus”, the historical epistemology of KO seems to conceal the theoretical and critical heritage of Emanuele Tesauro, the man.

Some potential evidence of Tesauro’s “erasure” can be historically related to social, political and epistemological issues. Various hypotheses as to why virtually all traces of him have been removed are offered here as a basis for reflection. We can thus ponder the following hypothetical-critical scenarios:

a) the "victory" of the systemic mechanicism of the Baconian method as a basis for the development of documentary languages (in view of New Organon, that is, an applied rationale based on Aristotelian logic);

b) the overriding manifestation of neopositivism in the knowledge field, fundamental both in the technical sense (the new support to mechanicism from the post-1930s electronic world) and in the theoretical sense (the support for a unity of meaning based on the syntactic-semantic dyad). The latter speaks to the "truth" behind neopositivism in terms of its autonomy. It is a way of "teaching the machine to think". We find here the essential basis of an analytical theory for the representation of concepts, that goes from Dahlberg's theory to the processes involved in conceptualizing "ontologies";

c) the political economics of science, establishing a central direction for theoretical perspectives from the most diverse fields in the 20th century, linked to industry and the market. In our context, KO is constructed as a theory applied to support developments in science and technology, responsible for allowing communication and access to hard-science products. Thus, the semantic opening offered by the theoretical-baroque position of Emanuele Tesauro is clearly a radical epistemological stance overtly at odds with the scientific-technological practices of the last century.

In summary, the historical process of the formation of ideas in KO constituted a model structured in positivist thinking and, especially, in neopositivism. This epistemological model was greatly aided by the technological and economic-political transformations which, to a large extent, removed preoccupation with the discursive (cultural) dynamics of the relations between terms, things and social groups.

5. Silent repercussions: Emanuele Tesauro in contemporary KO theory and practices

Seeking to understand Tesauro's role for KO is not a simple task, especially if we take into account the way his thought has effectively been “forgotten”. According to Saldanha & Silveira (2016), studies on Tesauro’s method in KO are rare and superficial.

In critical-historical works, such as Dahlberg (1993) and Hjorland (2008), Tesauro's point of view is not considered. It is not even mentioned in recent reviews, such as Clarke (2017).

Historically, the main references for classification studies within this context have touched on the questions contained in Tesauro’s theory. An example of this are the categorization, factioning, and indexing processes popularized at the heart of KO by
such names as Ranganathan (1967), Vickery (1980), Dahlberg (1978) and Lancaster (1993), as well as members of the Classification Research Group (CRG).

When we analyze the influence of Aristotle on the 20th century authors of KO, in the notion of concept and the facet analysis method, for example, we can find clear traces of Tesauro. We can see that his notion of the "categorical index" is present nowadays. The main evidence, however, comes not only from Aristotelian thinking. It is also possible to perceive a specific way of analyzing language in the ordering of words and things.

In other words, even in the neopositivist tradition, the influence of Aristotle can also be seen in Emanuele Tesauro. On the other hand, when we understand the urgent culturalist approaches focusing on the contextual languages of each community (that is, contemporary approaches that focus on the social and cultural issues of knowledge representation), we sense the force of a theory of metaphor for KO. In this way, Tesauro's point of view has now been objectively reinstated. His metaphor theory places the dynamics of language at its heart. Therefore, the social and cultural transformations manifested in language can be identified, discovered and created from their “categorical index”.

6 Final remarks: who is Tesauro?

The term "thesaurus", with reference to Emanuel Tesauro’s name, can be interpreted in different ways. In epistemological terms, we can call the "thesaurus" a "discourse theory for knowledge organization". In a methodological and artefactual approach, "thesaurus" means "discursive index". The two ways of delineating the meanings of "thesaurus" based on the historical personage of Tesauro are already of sufficient complexity as to allow for a broad analysis in the field.

In the first case, we are arguing that Tesauro presupposes an epistemological-historical premise rooted in the philosophy of language; a radical context, capable of perceiving both the logical and rhetorical dynamics of knowledge representation. The notion does not, therefore, exclude even part of the neopositivist advances made after the 1930s, but it demonstrates their limitations for solving problems in KO.

In the second case, we are highlighting the fact that the "thesaurus" instrument (the same one currently being developed for direct and local solutions, such as languages for a given library or documentation center, or for complex and intersubjective solutions, such as a thesaurus of education, or a thesaurus of Afro-descendant cultures) is already present in the theoretical and applied argumentation of Emanuele Tesauro's "categorical index", and, therefore, it can also be seen as being nominally linked to Tesauro, the man.

Tesauro’s theory, under the influence of Aristotle, seeks to investigate the meaning dilemmas at the lexical frontiers between knowledge domains. We can thus conclude that Tesauro is one of the most important founders of KO theories.
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References