

# ISSA Proceedings 2006 - Argumentation, Keywords And Worldviews



The aim of this paper is to show how the semantics of natural languages implies some consequences which are basic to the very definition of argumentation and to the analysis of the structure of arguments. I am particularly interested in emphasizing how the persuasiveness of any discourse, observed in its concrete effectiveness, relies for the most part on the semantic flexibility of keywords, that is, of those concepts which articulate the main structural components of the argumentation: the analytical question and the thesis (Dell'Aversano & Grilli 2005, pp. 555-564; 169-211). My work has developed as an effort to pin down some implications of the theory of argumentation set out by Chaïm Perelman and Lucie Olbrechts-Tyteca in their *Traité de l'argumentation*. Theirs is an avowedly asystematic model: in delineating dichotomy between argumentation and demonstration they are well aware of the complex interplay of linguistic and pragmatic factors which contribute to the functioning of an effective argumentation. Demonstration is not open to dispute, while an argumentation cannot achieve its persuasive aim without the voluntary engagement of its audience. This is because, from the semantic viewpoint, a demonstration links concepts whose definition is completely explicit, unambiguous and context-independent, while argumentation not only allows for the semantic variability of its keywords but is actually, as I will show, dependent on it for its efficacy. Not surprisingly, the *Traité* keeps itself clear of any prescriptive ambitions: its authors do not look for rules but are interested in explaining the way individual argumentations work with reference to the objects of prior agreement which their audiences share with their authors. Their method is based not on a general reflection on abstract models but on hundreds of enlightening and painstaking analyses of real argumentative texts which are examined against the background of their cultural contexts. Following their example, my own reflections will not take the shape of a systematic classification, but will simply put forward a description of some peculiarities of the structure of argumentative texts starting from some concrete examples.

The most important theoretical element which I derive from the *Traité de l'argumentation* is the notion of prior agreement. As the *Traité* repeatedly emphasizes (Perelman & Olbrechts-Tyteca 1958, pp. 65-66), no argumentation is possible unless the speaker be able to rely on some shared foundation on which he can build his relationship with the audience. More specifically, this notion can be used to define an effective argumentation as a discourse which modifies the boundaries of the prior agreement by extending them: the result of an effective argumentation is that an element which was external to those boundaries (the thesis which the speaker upholds) will eventually be included within them, as a part of the notions speaker and audience share.

As a first step towards a better definition of the role of keywords in argumentative dynamics it will be useful to introduce a distinction according to where keywords are situated in relation to the *boundaries* of the prior agreement connecting the speaker to the argumentative community before which he is arguing. Keywords may accordingly be divided into *conventional* and *original concepts*: the first category will include all concepts which, because they belong to the vocabulary the speaker shares with his audience, can be used to refer in a recognizable way to any element included within the boundaries of the prior agreement. The category of original concepts includes concepts which are absent from that shared vocabulary, and which are therefore not included among the objects of prior agreement, and cannot be assimilated to them. This distinction can be made clearer by quoting an example from a historical monograph by Philippe Ariès:

In medieval society the feel for childhood did not exist; which does not mean that children were neglected, abandoned or despised. The feel for childhood is not identical with the affection for childhood: it entails the awareness of the peculiarities of childhood, peculiarities which essentially distinguish children from adults, however young. This awareness did not exist. Accordingly, as soon as children were able to survive without the constant care of their mothers or nannies, they belonged to adult society and were no longer distinct from it. This adult society often appears childish to us: this is no doubt a consequence of its mental age, but also of its biological age, because it was in part composed of children and youngsters. The language did not give the word "child" the specific sense I now attribute to it: "child" was the equivalent of our "boy". This indeterminacy with respect to age extended to the whole of social activity: games, trades, weapons. There is no collective representation where children, younger or

older, do not have their place, huddled, sometimes, two at a time, in the trousse which hangs from the women's neck, or portrayed while they urinate in a corner, or while they play their part in a traditional pageant; as apprentices in shops, as pages waiting on knights and so on.(Ariès 1962, p. 145)

The thesis of this excerpt, as it appears in the text is, "In medieval society the feel for childhood did not exist". This statement can easily be reduced to the predicative structure which is normal for a thesis by outlining it as:

(I) Medieval society (II) is (III) without feel for childhood

The origin and relevance of this thesis are only too clear: the author of the text is a specialist of the social history of the European Middle Ages; not surprisingly, his object of enquiry is directly connected with that historical period and, more specifically, with the abstract entity commonly referred to as "society". The keyword "medieval society" is therefore not specific to the speaker's argumentation but derives from the disciplinary framework to which the text refers to, and connects it to a well-structured environment of shared notions and codified issues. Thanks to its use, shared by the community of specialists, the thesis of the speaker can be correctly framed as the statement of a new element which aims to refer to, and to pinpoint more exactly the meaning of, an existing and familiar entity, even though this entity (like any word belonging to a natural language) is not known through an exhaustive analytical definition of its properties. A complex and unmanageable mass of facts, data, phenomena of various kinds (economic, political, social, anthropological, religious...) which came about in various places and during a time embracing several centuries of the common era (from the fourth to the fifteenth), has been labeled by an already standard convention as "medieval society". The task of knowing, understanding and describing synthetically this huge mass of objects can therefore be transformed by the discipline we call historiography into the much simpler one of understanding the specific traits of the concept "medieval society".

The very existence of this sort of keywords may appear to be an oversimplification, but it is a necessary prerequisite to the formulation of reasonable discourses in all disciplines: without such generalizing categories our thought would disperse in the painstaking enumeration of an infinite variety of individual phenomena among which it would be very difficult to discern any link.

The case of the other keyword is very different. Unlike "medieval society" "feel for childhood" is not a current term in the disciplinary vocabulary of medieval

history. Of course Ariès did not invent the words “feel” and “childhood”; however he does not assume the resulting term to be universally and immediately intelligible: this is shown by the fact that he feels himself compelled to explain its precise meaning, by opposing it to an apparently contiguous concept, “affection for childhood”. The very precision and caution with which this second keyword is introduced are enough to confirm both its novelty and its crucial importance for the whole discourse. In order to define this new conceptual category the speaker used words which are commonly used in contemporary language, but bended them to express a meaning which does not belong in a commonly accepted inventory of shared notions.

Logically and semantically original and conventional concepts are not separated by an intrinsic qualitative difference. Their distinction is only perceptible with reference to a frame of reference, that is, to the boundaries of the prior agreement between speaker and audience: conventional concepts are currently used in a given argumentative community and are no longer problematized; this makes it possible to use them to introduce new and ever more precise original concepts, which in their turn will be discussed and refined, and will maybe eventually become part of the shared store of concepts of a disciplinary community, or which will maybe always remain outside the boundaries of the prior agreement and never become conventional concepts. The reception of Ariès’ books about medieval history leads us to believe that the concept of “feel for childhood” may well have become, or be on its way to becoming, a conventional concept, used as a reference point for the formulation of more and more novel and more and more refined theses.

With reference to this distinction we may now attempt to delineate the role of keywords in the definition and transformation of worldviews, that is of the different sets of objects of agreement of different argumentative communities. One assumption of my work is that a worldview may be modeled as a set of concepts and propositions. From this set every speaker derives the keywords of his argumentations, that is his conventional concepts, and with reference to this set original concepts are defined.

The semantic modifications operated on a common store of concepts (by the introduction of new concepts or by variation on existing ones) are the ultimate way in which a given worldview turns into a different one. For instance, if our worldview includes the Copernican model of the solar system, and is therefore different from the worldview of Copernicus’ times, it is ultimately only because

the keyword “heliocentrism”, which started out as a highly problematical original concept, over the centuries became (together with several other original concepts) a conventional concept, contributing to the definition of the framework of normalcy and reasonableness which our reflections and argumentations inevitably start out from.

Within the framework of argumentation theory I believe that two main mechanisms of semantic transformation may be singled out: updating and resemantization. They are closely connected, and only differ because of the different path followed by the discourse in the definition of the new keyword. Updating is intimately and necessarily connected to the predicative structure of theses; in this case the semantic transformation is triggered by the very functioning of the predicative proposition which, without apparently taking issue with the base meaning of the subject of the proposition, updates it through a subtle variation just as it introduces new specific elements through the predicate: if we go back to the previous example, our idea of medieval society, which before Ariès’ argumentation did not contain the notion “lacking the feel for childhood” after the persuasive action of his argumentation will end up being different, insofar as its meaning will have been updated in the sense suggested by predicative part of the thesis. The transformation of knowledge which follows from any successful argumentation is thus revealed to be dependent on the semantic updating of conventional concepts; this highlights the fundamental contribution of argumentation to the ongoing process of change in which worldviews are involved: by slow additions and small alterations, the meaning of the keywords we are used to employing shifts, and ultimately changes. Little by little all these changes add up, and transform the words we use, the ideas they express, and ultimately the very world we live in.

In addition to semantic updating, which is a consequence of the predicative structure of argumentative texts, the meaning of keywords changes through a process of resemantization, which plays a major role in argumentative dynamics. Its exact functioning and its role in argumentative structure can be illustrated by another example, drawn from a paper by the great computer science theorist Donald Knuth:

The title of my talk this morning is *Theory and Practice* [...]. Both of these English words come from the Greek language, and their root meanings are instructive. [...] The Greek *qewrei'n* means seeing or viewing, while *pravssein* means doing,

performing. The English word 'and' has several meanings, one of which corresponds to the mathematical notion of 'plus'. When many people talk about theory and practice, they are thinking about the sum of two disjoint things. In a similar way, when we refer to 'apples and oranges', we're talking about two separate kinds of fruit. But I wish to use a stronger meaning of the word 'and', namely the logician's notion of 'both and', which corresponds to the intersection of sets rather than a sum. The main point I want to emphasize this morning is that both theory and practice can and should be present simultaneously. Theory and practice are not mutually exclusive; they are intimately connected. They live together and support each other.

This has always been the main credo of my professional life. I have always tried to develop theories that shed light on the practical things I do, and I've always tried to do a variety of practical things so that I have a better chance of discovering rich and interesting theories. It seems to me that my chosen field, computer science - information processing - is a field where theory and practice come together more than in any other discipline, because of the nature of computing machines (Knuth 1991, pp. 1-2).

The crucial part of Knuth's analysis of his title does not deal with either "theory" or "practice", which are conventional concepts, but aims to transform a concept which starts out as conventional, the conjunction "and" into an original one. As shown by the first paragraph of the example, the speaker states his thesis by analyzing the keyword "and" in such a way as to draw out an idea of conjunction which goes beyond the mere juxtaposition of independent factors. The semantics of the word "and", which is structured, like that of any other word, as a series of distinct, more or less contiguous and overlapping, meanings, gives the speaker the opportunity to transform a statement ("Theory and practice" in its first meaning: "there exist two distinct realities called theory and practice") into a statement which has the same form ("Theory and practice") but whose meaning is: "There must exist an intellectual experience which is defined as the intersection of two concepts normally considered to be separate such as theory and practice." Semantic transformation is the deepest core of argumentative dynamics; in this case we can observe another very important feature of its functioning, which we consider to be one of the main objects of this communication: the argumentative effectiveness of a thesis is increased by the possibility to operate a transformation which acts on the meaning of the keywords while keeping their form intact. It is as though Knuth's thesis were so much more

credible, more acceptable, more true for its audience because the thesis “theory and practice must be connected” is *implicit* in the very form of the statement “theory and practice”, which apparently means something else entirely.

The mechanism I am analyzing may appear to be nothing more than a “rhetorical artifice”, that is, a mode of meaning organization which has to do essentially with the expressive dimension of the text rather than with the logical connection of the arguments. But the whole point is exactly that it is impossible to conduct an analysis of the “logical structure” of argumentative texts which does not take into account their concrete and individual verbal form, because in argumentative texts, just as in literary ones, the form is the content. The success of an argumentation is defined by the end of persuading the audience, and the achievement of this end depends on a synergy of extremely different factors, from aesthetic to intellectual ones, from emotional to factual ones. If it were necessary to justify my interest for this mode of textual structuring, I could point to its ubiquitousness, which affects in equal measure all genres of argumentation, from texts belonging to mass culture to the most original works of earnest and rigorous thinkers, and above all to its central role in the dynamics of persuasive communication. The formal identity between the thesis to be argued (“theory and practice” in the second sense) and the assumption shared by speaker and audience (“theory and practice” in the first sense) works as an irrefutable argument which makes the thesis natural on the linguistic plane, and thus aproblematic on the argumentative one. The reason for this is one of the most widespread general assumptions both of our and of other cultures: that words are a faithful mirror of reality. In this framework everything that happens on the level of words must have a parallel in reality: if a word is split into two different meanings, an exactly parallel split is thought to rend the reality which corresponds to it. This mechanism is one of the most basic foundations of argumentative dynamics, which thus reveal, notwithstanding the rational basis of argumentative principles, an uncanny relation to the world of magic, which is also defined by the assumption of an unseverable sympathetic link between words and things.

The exact functioning of this mechanism may be better illustrated by a passage by Günther Anders, where we can observe a process of resemantization analogous to the one we observed in Knuth:

Suspekt sind die Science-Fiction-Autoren nicht deshalb, weil sie zu hemmungslos

ins Blaue des Utopischen hineinphantasierten (das tun nur die Unbegabtesten), oder weil sie sich zuweilen irrten (das tun sie nur selten), sondern umgekehrt deshalb, weil ihre Reportagen aus dem Übermorgen gewöhnlich recht behalten; weil dieses ihr Rechtbehalten beweist, wie hemmungslos sie sich dem Realismus verschrieben haben.

Jawohl, dem 'Realismus'. Denn primär bezeichnet dieses Wort nicht die getreue Darstellung des Wirklichen, sondern eine bestimmte *Stellungnahme gegenüber dem Wirklichen*: nämlich die Stellungnahme derer, die die Welt, unbekümmert um deren moralische Qualität, einfach deshalb, weil sie ist wie sie ist, d.h.: weil sie *Macht* ist, bejahen und fördern. Also die Stellungnahme der Opportunisten und der Komplizen, deren Maxime lautet: 'Seien wir realistisch'. In diesem wenig ehrenvollen Sinne sind die Science-Fiction-Autoren Realisten, und das auch dann, wenn sie sich surrealistisch zurechtschminken, oder wenn die Kluft zwischen den von ihnen geschilderten Superwelten und dem jeweils heutigen Weltzustand phantastisch breit bleibt (Anders 1980, pp. 133-134).

The thesis of the excerpt is "science fiction authors [...] are suspect because [...] they surrendered [...] to realism". It is easy to understand that the original concept here is "realism". This notwithstanding the fact that the word "realism" (just like "and" in Knuth's text) belongs to the common vocabulary, where its main sense is the one Anders quotes in order to reject it, "representation of reality". The sense "taking a stand towards reality" is not present in the basic meaning of the term but can only be inferred from it. This kind of inference, which works on the meaning of a word transforming it into an almost-equivalent from the semantic viewpoint, is one of the moments of the argumentative process where the intelligence and the creativity of a speaker can best be displayed. The originality of a thesis, and the strength of a whole argumentation, often derive from the cleverness with which the novel and counterintuitive ideas around which the argumentation is built are led back to a semantic analysis which "normalizes" them, making them appear already implicit in the keywords which build the starting point of the argumentation, and therefore ultimately in the objects of prior agreement. When the most original concepts in an argumentation are connected to those which at first sight would appear to be the most conventional ones, it is as though the speaker were implicitly pointing out to the audience "My thesis is not so weird as it might appear to be at first, since everything that I am trying to argue is already implicit in your own words, those which you commonly use; therefore your own way of talking compels you to accept it."



In this example Anders infers that, if realism is representation, this representation is not so much in the object as in the subjectivity of whoever is doing the representing; consequently the choice of representing reality in a certain way reveals the worldview of an author, and in the case of science fiction authors their worldview accepts the power system of the world as it is instead of transcending it. In this sense it is actually self-evident that any “representation” is in itself a “taking issue with”.

This kind of resemantization, illustrated so eloquently by the Anders excerpt, highlights a crucial aspect of the workings of argumentative dynamics: words, even the most common ones, are in some way pliable and, if used skilfully, can be led to mean whatever is most appropriate and convenient for the speaker in his argumentation. If the word “realism” had admitted only of the sense “representation of reality”, like the mathematical symbol  $\pi$  admits only the numerical value 3,14..., Anders would never have been able to argue that science fiction authors are too realistic. His thesis is possible, even before it is arguable, thanks to the fact that a skilful semantic analysis can extrapolate from the basic meaning of a term inferential implications which are cleverly and arbitrarily selected, and which the speaker can use in his argument. Of course this does not mean that any word can be made to mean anything, but simply that skilful inferential work can allow the meaning of some carefully selected terms to be extended in a direction which is helpful to the overall trend of a particular argumentation, giving them the role of supporting it not only conceptually but also structurally.

Even where the shift in the meaning of keywords is not so evident and so explicit as in the texts by Knuth and Anders, keyword manipulation is often observed to be a basic preliminary procedure for the construction of an argumentative text. Countless argumentations hinge on an original semantic analysis of their keywords, that is on the creation of new concepts by resemantization, and the fact that this procedure is applied to conventional concepts, creating a version of them which is favourable to a given argumentative trend, leads ultimately to a blurring of the distinction between conventional and original concepts. Every time that in an argumentative text a keyword is explained or defined, be it only through a brief aside such as “By X I mean the following”, we witness an instance of one of the most interesting argumentative strategies, that of modulating (with the implicit assent of the audience) the expression of the objects of prior agreement

in such a way as to strengthen the structural links of the argumentation, with the end of making the connections which hold it together (which are by definition open to dispute) seem like a self-evident necessity.

That such a necessity may never be anything but an optical illusion is of course evident from an analysis, however cursory, of the difference between the functioning of keywords in two different forms of reasoning, argumentation and demonstration. The possibility, indeed the necessity, of semantic transformation is one of the most important traits which distinguish argumentation from demonstration. A demonstration is a tautology which unfolds implications which are objectively and necessarily present in the definitions; an argumentation, on the other hand, is an inferential process which works by transforming the meaning of keywords. As a consequence demonstrations do not need the assent of their audiences, since an agreement on the initial definition necessarily entails that on their deductive developments, while in argumentations the assent of the audience is nothing short of vital because, even if it were possible to reach a completely explicit and exhaustive agreement on the starting points (which it isn't) these very starting points would be necessarily continuously subject to renegotiations in the unfolding of the discourse. This is why Perelman and Olbrechts-Tyteca's contribution in highlighting the radicality of the dichotomy between demonstration and argumentation must be acknowledged as a great one, and as a definitive result in argumentation theory.

## REFERENCES

- Anders, G. (1980). *Die Antiquiertheit des Menschen 2*, München, Beck.
- Ariès, Ph. (1962). *Centuries of Childhood*. Translated from the French by Robert Baldick. London: Cape.
- Dell'Aversano, C. & Grilli, A. (2005). *La scrittura argomentativa. Dal saggio breve alla tesi di dottorato*. Florence: Le Monnier.
- Knuth, D. (1991). Theory and Practice. *Theoretical Computer Science* 90, 1-15.
- Perelman, Ch. & Olbrechts-Tyteca, L. (1958). *La nouvelle rhétorique. Traité de l'argumentation*. Bruxelles-Paris: Presses de l'Université de Bruxelles-Presses Universitaires de France.