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LOGIC AND RHETORIC

PRELIMINARY REMARKS

In the last fifty years we have seen an enlargement of the scope of logic from syntax to semantics and pragmatics. But the question remains: How do we go from logic to rhetoric? In other words, is there a relationship between the study of formal systems and that of style and figures of speech?

As a logician, I was very much interested by the fact that people disagree on questions of value. From the point of view of empirical logical positivism, such disagreements arise because value judgments are subjective and therefore cannot be substantiated; but I could not accept this conclusion. This suggests the problem: Is there a logic of value judgments? Can they be justified through reasoning?

As a simple example, when at the beginning of this conference Father Bochenski restricted his definition of logic to the study of formal reasoning and excluded all other conceptions of logic, he was implicitly making a value judgment. Now, did he merely assert without giving any reasons that logic should be defined in this manner, or did he attempt to justify his definition as being a reasonable one, that is, as being preferable to alternative formulations? Here we have an example of the problem of choice, which we resolve, not by arbitrary, subjective decisions, but by an appeal to *reasonableness*. This manner of reasoning is employed not only in law and philosophy, but in the sciences as well, whenever one must choose between competing methodologies or definitions.

Thus I began to investigate the logic of value judgments, proceeding empirically, much as Frege had done a century ago; but whereas Frege had analyzed the method of deduction in mathematics, I examined how people justify reasonable choices. After several years of work, I came to the disappointing conclusion that a logic of value judgments simply does not exist. I finally realized something which as a logician I had completely ignored: there are tools of reasoning *other* than those studied in formal logic, tools which Aristotle had called *dialectical* reasoning, but which I preferred to term *argumentative reasoning*. (People often forget that Aristotle is the father not only of formal logic, which he terms *analytical reasoning*, but also of dialectical reasoning to which he devoted his *Rhetoric*, his *Topics* and the *Sophistical Refutations*)

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When the results of my inquiry began to coalesce into a field in its own right, it was time to choose a name for it: the most natural choices were Rhetoric and Dialectic, the two main branches of Aristotle's study of dialectical reasoning. (They are discussed in his *Rhetoric* and his *Topics*, respectively.) Rhetoric seemed the wiser choice, for Hegel and Marx have used 'dialectic' in a very different sense. Moreover, the concept of the *audience*, which I considered vital to an understanding of argumentative reasoning, was completely absent from the *Topics*, playing an explicit role only in the *Rhetoric*.

As I began to study the history of the subject, I noticed that in the Middle Ages and the Renaissance, the important distinction that Aristotle had drawn between analytic and dialectical reasoning had, inexplicably, been forgotten. Both forms of reasoning were known as Dialectic but some logicians stressed formal logic, others rhetoric. For example, Professor Bochenski alluded to Valla's three volume treatise, *De inventione dialectica*, 'invention' being the principal component of rhetoric. (The other components are disposition, elocution, memory and action). Other important logicians, in the rhetorical tradition, were Sturm and Agricola.

Dialectic continued to display this lack of unity until Ramus, the well-known sixteenth century French logician who died in the Saint-Bartholomew's Day Massacre. Ramus conceived Dialectic as the study of *all* forms of reasoning and thus included both analytic and dialectical reasoning in his ambitious work, drawing no distinction between them. He reserved the term 'rhetoric' for those components of persuasive communication (elocution, memory and action) which cannot strictly be called reasoning: these topics he left to his friend, Omer Talon, who conceived rhetoric in the narrow sense of *ars ornandi*, the art of ornate speech. And so, from Talon's time onward, rhetoric was regarded as nothing more than the study of literary form and expression; as such, it gradually disappeared as a branch of philosophy.

In contrast, modern logic, which has greatly expanded upon Aristotle's analytics, has flourished. But what of the discipline which Aristotle had called dialectical reasoning? And which I have tried to revive under the name "Rhetoric"?

One question that interested me greatly was how to connect persuasive discourse with rhetoric (used in the sense of Ramus and Talon) on the one hand, and with formal logic on the other. Clearly, Ramus was mistaken in his assertion that figures of speech are merely ornamental and cannot be characterized as reasoning. They are, in fact, condensed arguments: this explains why figures of speech are used as effective methods of persuasion.

What of the connection with formal logic? A dialectical argument can be judged strong or weak, relevant or irrelevant, but it does not possess the quality of incontrovertibility or self-evidence which characterizes an analytical argument. Also, in formal logic, everything which gives rise to controversy must be eliminated, necessitating the invention of an artificial language with formal rules for manipulating symbols and forming well-defined sentences.

After this brief introduction, I would like to present my own ideas on *'the new rhetoric'*.

The reduction of logic to formal logic, which became widespread under the influence of Frege, Russell and those logicians who had received a mathematical training, resulted in the neglect of the large field of non-demonstrative reasoning, of those reasonings which enable us to choose among a set of opinions that which seems the best, the most acceptable, the most reasonable. It is the vast field of reasoning relating to controversy, criticism and justification of every kind, reasoning by means of which we attempt to convince and persuade, to find reasons for and against some thesis in the course of a deliberation, whether individual or collective. It is therefore not surprising that to remedy the baneful effects of the aforesaid reduction, we should endeavour to complete formal logic — regarded as the theory of demonstrative proof — by a rhetoric conceived of as a theory of argumentation.

Let us quickly examine the features which mark the differences between the two.

An essential condition for the establishment of a system of formal logic necessitates the preliminary removal of any difficulty which could only be solved by having recourse of a power of interpretation or decision. This is the reason why the 'language' of formal logic must exclude every ambiguity right from the start. In saying that '$x = x$' or that '$p \rightarrow p$', we are not stating a law of nature but simply asserting that in each of these propositions the same values must be substituted for symbols 'x' and 'p' as they are not liable to receiving two interpretations.

When it comes to a natural language, this condition is not necessarily satisfied. It is presumed that the same word has the same meaning, but proof of the contrary is admissible. Thus it seems normal to derogate from the presumption to univocity whenever the latter could be preserved only at the cost of resulting incoherence, triviality or unacceptability.

We normally hesitate to believe that an intelligent man asserts something which at first sight strikes us as a contradiction. When Heraclitus says that

"we step and do not step twice into the same river", we try to avoid the apparent contradiction by interpreting "the same river" in two different ways. When we hear such a proposition as "war is war" we understand that we are faced with a "pseudo-tautology" aiming at the justification of a piece of behaviour which would be shocking in peace time: this we could not do had we considered the proposition as a mere application of the principle of identity. When in his *Pensées*, Pascal tells us that 'When God's word, which is true, is false literally, it is true spiritually", he thereby urges ut to look for a new interpretation of the biblical text in order to safeguard its truth.

In a natural language, the univocity of signs is not, as in an artificial language, a condition required under all circumstances. As a result, a reinterpretation of signs is always possible, and this prevents us from deciding, once and for all, whether a thesis is true or false by means of a formal criterion. Law and theology supply numerous cases in which, for some reason or other, the literal interpretation of a legal or a sacred text is unacceptable.

A system of formal logic contains rules of deduction which make it possible to transfer a property (truth, probability, modality) from the premisses to the conclusion. However, where is the warrant that the premisses possess the property in question? The classical logicians trusted self-evidence as a guarantee of the truth of the axioms which were considered as the principles of a science. But Aristotle had already pointed out (*Topics*, 101) that when the interlocutor refused to regard these principles as true, recourse to argument was indispensable in order to persuade him. This enables me to emphasize the distinction between argumentation and demonstrative reasoning: whereas a formal, logical or mathematical system can be developed independently of any reference to whoever's agreement, argument can only proceed by taking into consideration adherence to a given thesis.

The explicit reference to adherence, which is always somebody's adherence, is the only way to explain why the *petitio principii* is no logical fault, whereas it *is* a fault of argumentation. Whereas the principle of identity, expressed "if p, then p", is an indisputable law in any logic, presupposing the adherence to a thesis when the purpose of the argument is to gain such adherence constitutes undeniably a *petitio principii*.

I must add, in this respect, that adherence to a thesis may vary from one individual to another, and that its intensity may differ.

Whereas the presupposition on which any usable logic is built is that the truth of a thesis of the system is objective and cannot by virtue of the principle of contradiction be contradicted by any other thesis, in argumentation there is not guarantee that a thesis to which one agrees will not turn out

to be incompatible with another thesis to which one also adheres. By incompatibility, I do not mean the existence of a formal contradiction but the fact that two theses cannot be simultaneously applied to a given situation. Thus the two moral rules "one may not lie" and "one must obey one's parents" become incompatible if one of the parents orders a child to lie. There are numerous antinomies in law and morals. When an incompatibility is unavoidable, we are forced to make a choice which limits the field of application of at least one of the theses. We shall restrain the field of validity of the thesis which is of less import for us.

Insofar as argumentation aims at reinforcing adherence to a thesis by an audience, be it the individual who deliberates, the interlocutor in a discussion, an assembly listening to a speech, or the universal audience — an ideal audience composed of all men qualified to judge of the matter — it must rely on an explicit or presumed adherence to other theses which will serve as starting points. The latter will have to be expressed in a language, whether natural or technical. Agreement on such theses implies agreement on the meaning of the terms used. This constitutes a preliminary given. If agreement on the terms of a thesis is accompanied by disagreement as to their interpretation, argumentation will aim at making one of them prevail. Thus the distinction between that which is given and that which must be the object of argumentation is not preliminary to the discussion. It will emerge as a result of the participants' attitudes and the latter will often only come to light in the course of the debate.

The theses accepted at the beginning of an argumentation make up a more or less indeterminate body among which the speaker, the person who presents the argument, will have to choose those which seem most relevant for his purpose. The choice of the type of theses will be determined by the subject matter and the audience. Sometimes they can be limited to commonplaces, to facts or to commonly accepted values, sometimes they will have to cover a whole field, scientific, legal or theological. They may even include sacred texts of the works of authoritative writers.

It may happen that in a controversy or in a political debate each of the speakers relies on different theses while trying to lend them *presence* in the minds of their audience. Often their argumentation will lead to incompatible conclusions. In such cases, the discussion will turn either on the value of the arguments leading from the accepted to the controverted theses, or it will require greater precision or eventually the confrontation of the theses which have served as premises to the speakers. Very often, the matter at stake, the very object of disagreement, will only be revealed when the opposed theses have been fully developed.

When we compare formal logic to rhetoric, demonstrative methods and the techniques of argument, we realise that demonstration unfolds within a closed univocal system, problems of interpretation and choice having been eliminated beforehand. Argumentation, on the other hand, concerns a body of presumably accepted theses which is indeterminate and equivocal, containing elements which could, each of them, be questioned again if the need were to arise. That is the reason why an argumentation is never impersonal, mechanical and compelling, correct or incorrect, but rather stronger or weaker, for its value is the result of the confrontation of different, even opposite points of view. Whereas demonstration unfolds inside a system, like a monologue, typical argumentation makes up a controversy, the confrontation of opposed theses and discourse, which the listener, who is also often the judge, will have to compare before taking a decision. This explains why in a lawsuit a balanced judgment presupposes that both parties have been heard. The judgment will bear either on the procedure or on the substance of the debate. The issue will lead to individual or collective action or simply to an adherence to a general thesis, whether political, legal, moral, philosophical or religious.

Education aims at creating a state of mind, at instilling some general theses transmitted from adults to children, masters to pupils, the initiated to the non-initiated, the purpose being to obtain the adherence to theses which will serve as premisses for further argumentation with ultimately concrete situations in view. This difference between general theses and their application to particular situations is referred to in ancient rhetoric as the well-known distinction between '*quaestio*' and '*causa*'.

In the treatise of argumentation we published over twenty years ago with the title *The New Rhetoric*[1], we produced a detailed analysis of the various types of arguments and of the specific problems which arise through recourse to argumentation. I cannot dwell on those points here. It will suffice to point out that we distinguished arguments of association (quasi-logical arguments, arguments based on the structure of reality and relations establishing the structure of reality) and dissociation of concepts. But it may be worth our while to end this talk with a few remarks concerning a problem of interest to all logicians: "Can the various types of arguments be reduced to purely formal structures?" It is impossible to give a wholly general answer to such a question. But we could try enumerating the conditions which are required to make the reduction of argumentation to formal operations possible.

The first would be that the theses which are accepted at the beginning of an argumentation should be made univocal, so as to ensure that

different interpretation of a phrase and any possibility of further interpretations is excluded. It should be necessary that all clarified theses should possess a property (truth, probability or modality) which would guarantee their independence from the adherence of any audience. Further, all the theses accepted at the start should be enumerated without exception, so as to avoid any surprise — and the whole thus constituted should be coherent. It would also be indispensable for the various arguments which are not formally valid to lead to conclusions regarding the probability of which there should be no disagreement, at this probability should be ascertained independently of the parties' opinions.

Such conditions could be satisfied in some disciplines for which the recourse to argumentation could be replaced by a recourse to the logic of induction and to the theory of probability. However, although the reduction could eventually succeed in those fields where arguments of association are used, be they of a quasi-logical nature or relative to the structure of the real, it is out of question that the dissociation of concepts should be amenable to formalization whenever the concepts about which argumentation takes place call for restructuration. We are in the presence of such a typical case when, from a single concept, we are led to create a philosophical couple. The stock example is that of the opposition between *appearance* and *reality*.

The purpose this opposition serves is to eliminate an incompatibility by specifying a criterion which makes it possible to subordinate one aspect of experience to the other when they seem incompatible. For example, if happiness is presented as opposed to virtue, we may disqualify this kind of happiness by calling it *apparent*.

That is the reason why I hold that the methodology proper to the elaboration of philosophical thinking is supplied by rhetoric, not by formal logic[2]

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NOTES

[1] Ch. Perelman and L. Olbrechts-Tyteca, *The New Rhetoric: A Treatise on Argumentation*, University of Notre-Dame Press, 1969 (French edition 1958).

[2] Cf. Ch. Perelman, 'Philosophy, Rhetoric, Commonplaces', in *The New Rhetoric and the Humanities*, D. Reidel, Dordrecht, Holland, 1979, pp. 52–61.