On the Nature of Reason in the Present-day Academic Research

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1. Front Matter

I am concerned here with a certain way of reasoning as a contingent historical truth about the dominant theories of today and their consequences on the growth of knowledge. This has limited philosophical significance, at best. I propose to discover here a form of rationality that can enhance our understanding about the nature of reason underlying present-day academic research, heavily influenced by western theories. I shall speak mainly from the point of view of modern language studies, and relate it at random with other disciplines and social living.

The paper is organized as follows. Section 2 presents an operational definition of the reasoning informing present-day theories. Section 3 characterizes the reasoning as Contending Dichotomous Reasoning or -AR. Section 4 deals with the characteristic features of -AR. Sections 5 and 6 discuss the roots and consequences of -AR, respectively. Section 7 clarifies the conception of -AR by showing what it is not. Section 8 discusses a way of getting out of the -AR. Finally, section 9 presents the conclusions.

2. Reasoning in modern theories

Modern theories in academic research appear in my view to employ a certain way of reasoning that may be operationally described as follows:

(1) Given an object of inquiry X, assume that it has apparent duality, consisting of the dual elements A and –A; take up one of the elements of the duality, say, A, and argue that it is of primary/ basic significance in X, while the other, -A, is of
secondary/ derived significance, and conclude that for an explanation of X the proper subject of study is A, not –A, and vice versa.

For instance, in his well-known book, *Knowledge of Language: Its Nature, Origin, and Use* (1986), Chomsky presents a general outline of the theory of Universal Grammar (UG), following a general scheme of reasoning given in (1). He divides the concept of language as a complex of two different types, one, called E-language, having to do with linguistic behaviour, and the other, called I-language, having to do with the knowledge underlying linguistic behaviour. He justifies the shift of focus from E-language to I-language for the advancement of the UG programme. The argument plan can be inferred from the titles of the chapters. There are four chapters in all. The titles and subtitles of the first two chapters are:

Chapter 1: Knowledge of Language as Focus of Inquiry.
Chapter 2: Concepts of Language;
   2.1 The Commonsense Concept and Departures from It,
   2.2 Externalized Language,
   2.3 Internalized Language,
   2.4 The Shift of Focus from E-Language to I-Language,
      2.4.1 On the Reasons for the Shift of Focus,
      2.4.2 The Empirical Basis for the Study of I-language,
      2.4.3 Some Consequences for the Shift of Focus.

Chapter 3 is about the UG of I-Language. Chapter 4 briefly deals with an aspect of E-language.

Several versions of this mode of argumentation can be found not only in the specific theory of language that Chomsky propounded and that is the dominant theory of language today, but also its opposites, known as the Functional theories of language, as in Foley and van Valin (1985) and in Givon (1993). On another plane, one comes across arguments between linguists with theoretical and with descriptivist persuasions advocating their goals and relegating the goals of the other. Chomsky’s criticism of American structural linguistics and of the behaviourist theory of learning (Chomsky 1959) is well-known. In recent years, descriptivist arguments have come afresh. Thus Dixon (1997) makes a plea for the documentation of languages and for developing a ‘Basic Linguistic Theory’ in place of formal theories, which, in his view are antagonistic to fieldwork and writing of grammars.

The line of reasoning operationally described in (1) can be termed as *Contending Dichotomous Reasoning* or *Main-and-Auxiliary* type of reasoning or –AR.
Contending Dichotomous Reasoning (–AR) needs to be distinguished from plain Dichotomous Reasoning (see e.g. Ellis 1962, Beck 1963). If the relationship between the elements of the object is seen as complementary, the type of reasoning may be termed as Complementary Dichotomous Reasoning or +AR. If, on the other hand, the relationship between the elements of the object is seen as contending (either-or), the type of reasoning may be termed as Contending Dichotomous Reasoning or –AR. The main interest of this paper lies in investigating the attributes and consequences of Contending Dichotomous Reasoning (–AR) in the growth of knowledge in modern times.

3. Contending Dichotomous Reasoning (–AR)

Consider the following list as illustrations of the instantiation of –AR in different disciplines:
- Philosophy: Empiricism/Rationalism, Analytical/Synthetic.
- Psychology: Behaviorism/Cognitivism.
- Economics: Capitalism/Communism.
- Political Science: Democracy/Dictatorship.
- Arts: Art-for-Art’s Sake/Art-for-Life’s Sake, Culture/Science.

The point about the dichotomies in the various fields is that the pursuit of knowledge in them requires one to choose between them. The choice having been made, one must depend on a set of concepts, categories and techniques of analysis that are unique to it and at odds with the opposite element of the dichotomy. Thus a philosopher must assume knowledge to be based entirely on either experience or innate mental dispositions. A psychologist concerned with accounting for learning in a certain domain must either devise ways and means of incorporating all the contents of learning in the domain or allow for the learning to depend on the creativity of the learner. An economic policy must not undermine either individual freedom or collective growth in any way. One can go on enumerating instances of dichotomous concepts and approaches in the various fields of human knowledge today as evidence of the force with which –AR seems to overwhelm them. There is little doubt that –AR leads to polarizing knowledge in terms of opposing concepts and methods.

However, the –AR method does not lie in simply proposing opposites and choosing between them, but rather in certain modalities that can be said to yield a complex character to it. These modalities are discussed in the following section.
Before proceeding with the discussion of the modalities of Contending Dichotomous Reasoning, however, it is useful to briefly consider the main issue in linguistics, as it relates to other disciplines concerned with language, such as philosophy and psychology. Linguistics in the past fifty years has been concerned with two alternative views of language, namely, as consisting in the knowledge of linguistic structure (e.g. Chomsky 1965, 1986) and the use of that knowledge (e.g. Halliday 1985). This fundamental difference in the two views of language, broadly known as the formal and functional views (see e.g. Newmeyer 1998), informs all the other aspects of theoretical inquiries in linguistics (e.g. see Pandey 2001), such as the relevant data (intuitive or from the community), valid evidence (internal or external), type of explanation (formal or functional), etc. Theoretical studies on language in related disciplines, such as psychology (e.g. Bates and MacWhinney 1982) and philosophy (e.g. McDowell 1980) are along the lines of the fundamental difference in the two views.

4. Characteristics of –AR Reasoning

Contending Dichotomous Reasoning is characterized by the following features.

Polarity. Intrinsic to –AR in the investigation of an object of study is the propensity to ascribe polarity to it. Thus, human knowledge has been assumed by philosophers (Locke and Descartes), psychologists (Watson and Piaget), political thinkers (Burke and Chomsky), aestheticians (Derrida and Mendelssohn), language philosophers (Quine and Putnam) and linguists (Bloomfield and Chomsky) to depend on two alternative properties, experience and innate abilities. Leading thinkers in these disciplines must show their allegiance to one of the elements of polarity.

It is often observed that investigations in these disciplines must be marked by a clear choice between the polar opposites in all possible aspects. For instance, in the announcement of the topic (“Experience and Experiences”) of the 13th Colloquium 2007 of the International Philosophy Colloquia Evian, it is mentioned that the Colloquium “aims to provide a setting in which participants can discuss whether to understand experience as mediated or unmediated, conceptual or sensory, linguistic or prelinguistic, subjective or intersubjective, foundational or subversive, passive or active, practical or theoretical, etc.” The ‘etc.’ here, it is easy to guess, is of other possible polar options.

Prioritization. It is not the case that only one of the elements is accepted as a true representation of reality, while the other is rejected as false. Rather, it is assumed that one of them is the main/basic/
primary, while the other is auxiliary/derivative/secondary. As an illustration, consider the following quote from Michael Dummet (1989: 192), a well-known philosopher of language, on the function of language:

Language, it is natural to say, has two principal functions: that of an instrument of communication, and that of a vehicle of thought. We are therefore impelled to ask which of the two is primary. Is it because language is an instrument of communication that it can also serve as a vehicle of thought? Or is it, conversely, because it is a vehicle of thought, and can therefore express thoughts, that it can be used by one person to communicate his thoughts to others? [italics mine PP].

It is not clear to me as to why we are "... impelled to ask which of the two is primary", unless there is a ruling assumption that when presented with such dichotomies, one of them must be assumed to be primary.

**Irreconcilability.** There is no relationship between the opposing elements of the dichotomy. Only one of them must prevail. Thus, Chomsky, for a long time argued for the superiority of ‘formal’ over ‘functional’ explanations in linguistics, as can be seen in the following quote (Chomsky1971: 44):

Where properties of language can be explained on such “functional” grounds, they provide no revealing insight into the nature of mind. Precisely because the explanations proposed here are “formal explanations”, precisely because the proposed principles are not essential or even natural properties of any imaginable language, they provide a revealing mirror of the mind (if correct).

The development of one of the elements of the polarity must be seen as a criticism of the other. Thus a formalist explanation of a linguistic phenomenon must be seen as implying the inadequacies of a functionalist approach and *vice versa*.

The relationship of irreconcilability is one of the traits of contending theories involving a ‘paradigm shift’ in the words of Kuhn (1962: 103), “…the normal-scientific tradition that emerges from a scientific revolution is not only incompatible but often actually incommensurable with that which has gone before”.

**Reversal.** Focus on one of the elements of a duality often leads to a reversal of research programmes in terms of their methods and goals. This has to do with the in-built polarity in the mode of –AR reasoning. As one of the ends of the polarity is denied any significance, the progress in the sciences takes the form of the swing of a pendulum.

Such a swing (see Kiparsky 1971) took place in linguistics at the turn of the last century, when linguists, following de Saussure (1911), turned their attention from the study of historical change to synchronic descriptions. Instances of such swings are common to a majority of disciplines.²
Recall the debate between Karl Popper’s notion of Falsifiability and Thomas Kuhn’s notion of Paradigm Shift characterizing the essential nature of the growth of science (see e.g. Lakatos et al. 1969). Kuhn’s explanation of ‘paradigm shift’ in programmes of research, on account not of evidence or reason, as argued by Popper (1959 [1935]), but of sociological factors, seems to be a predictable phenomenon rather than ‘irrational’ (see e.g. Maxwell 1974), from the present point of view. When a critical aspect of a polar reality being investigated is ignored, the search for truth is bound to lead to a reversal to it; a complete account is impossible from an investigation of half-truth.

**Argumentativeness.** –AR is argumentative in the following senses.

One, it supersedes evidence, that is, the evidence is used to prove the argument.

Two, it selects supporting intra-theoretic evidence. Thus, for instance, once having argued for the empirical basis for the investigation of an aspect of reality, say I-Language in linguistics, as shown above in §2, the evidence that will be found to have a bearing on the investigation of that aspect of reality must all come from within it.

Three, –AR reasoning ignores evidence from the opposite position as metathecologically irrelevant. Thus, in linguistic theory of I-Language, it is unusual to find a hypothesis being justified on the basis of data from linguistic variation or language pathology, because these areas of language are assumed to belong to E-Language.

**5. Roots of –AR**

A strong reason for the predominance of –AR in modern theories is its instrumentality in the growth of normal science. Scientific inquiries require a problem to be broken down into smaller, distinct problems for exhaustive and in-depth analyses, so that its investigation can grow on firm, falsifiable grounds. However, the extension of –AR to all domains of inquiry, and without simultaneously seeking interrelation among the aspects of a problem can lead to an inadequate and thus distorted view of reality. The progress in natural sciences as well as in social sciences has thus come to be questioned (see e.g. Laudan 1977, Wagner and Berger 1995).

**6. Consequences of –AR**

The consequences of –AR reasoning on the growth of knowledge have been immense. In fact, the entire enterprise known as the Modernity Project seems to have grown in the way of –AR, as can be inferred from Habermas (1985), where he argues that the main aim of the project was to focus on the development of “objective science, universal morality and law, and autonomous art according to their inner logic. At the same time,
this project intended to release the cognitive potentials of each of these domains from their esoteric forms. The Enlightenment philosophers wanted to utilize this accumulation of specialized culture for the enrichment of everyday life—that is to say, for the rational organization of everyday social life.” (p. 9). Habermas’s proposal, in the face of the prevailing situation, opposed to peaceful social living, is to continue the project, not abandon it, by seeking a relinking of the three separated domains. Pandey (2001) tries to show Generative Linguistics as an exemplar case of the Project of Modernity and how it can grow in the direction suggested by Habermas. Pantham (1981, and in subsequent papers) has argued that the crises being faced in the politico-economic and socio-cultural affairs in the modern times, a topic of critical concern in the writings of Habermas, have a solution in Gandhi’s social theory and praxis. The point about the solution is that it is based not on resolving in favour of one of the opposite sides in conflict, but in striking a relationship between the opposing sides of the conflict.

7. Getting Out: Synthesis

A way out of the consequences of contending dichotomous reasoning determining the fate of academic disciplines in modern times is in seeking a synthesis between polarities. Proposals for synthesis can be found in most major disciplines today.

In linguistics, the title of Haspelmath’s review article (“Why Can’t We Talk to Each Other?”) is a loud cry for the formalist and functionalist approaches in linguistics to come together. The growing realization of the need for a synthetic relationship between the two approaches has been felt mainly on two grounds: one, each having been found to be valid in different domains of linguistic structure (see e.g. Newmeyer 1998); two, language, their common object of study, having come to be seen as both a natural and a social kind (e.g. Pateman 1989), requiring both formal and functional approaches of investigation. In a different vein, it is such a synthesis that Agnihotri (2001) argues for: without undermining the contributions of formal linguistics, whose main concern is with the structure of language, he argues at length for the need to bring into methodological focus ‘the interdependence of language and society’.

In the field of political philosophy, Gellner (1998) has argued persistently for a synthesis between two opposed visions of human society, namely individualism and communalism, with analogues in other spheres, such as rationalism and empiricism in philosophy and cognitive psychology, and capitalism and communism in economic thought. Gellner argues that neither of “these visions [individualism and communalism] will do: we are not, in fact, self-sufficient individuals,
nor do we possess self-contained and self-authenticating communities. Mankind has shifted, and is continuing to shift, from relatively self-contained communities to wider community endowed with powerful knowledge, which works more or less in terms of norms conveyed by the individualist model. It is only by understanding this transition that we can come to terms with our condition. Absoluting either end of the old polarity will not do.” (Gellner 1998: 188)

As another instance of the expressed need for a synthesis between contending theories in a discipline, we find Lee (1986) in the field of demography. “There are two grand themes in macro-demographic theory: the Malthusian one, that population equilibrates with resources at some level mediated by technology and a conventional standard of living; and a Boserupian one, that technological change is itself spurred by increases in population. The striking association between the levels and changes in technology and population over the past million years leaves no doubt in my mind that at least one of these views is correct. But it is also possible that both are, since the two theories are not contradictory, but rather complementary.” (p. 96) The writer’s assumption underlying the proposal for a synthesis between the two contending demographic theories, namely, that only complementary theories can be synthesized, follows contending dichotomous reasoning. We are however concerned here with the attempt at synthesis, and skip a discussion on that assumption.

At the micro-level in a field of inquiry, it is easy to come across similar attempts at synthesis. As an illustration, phonological theory, within the broad field of linguistic theory, has experienced a recent move to reexamine the relationship between formal phonology with functional phonetics and to show their mutual influence on one another as against their strict separation as sub-components (e.g. Hayes 1998, Pierrehumbert et al. 2000, Cohn 2007).

8. What –AR is not

In trying to grasp the concept of contending dichotomous reasoning, it is necessary to distinguish it from certain cases that may appear to be its instantiations but are not. Two of the well-known cases are taken up here.

One of the cases is the ‘Divide and Rule’ policy that is often ascribed to the British rule in India and other places in the world. The policy has actually a long history and the expression can be traced to early Latin and Greek, as a translation equivalent of “divide et impera” and “divide ut regnes”. The policy can be seen as a general negative principle of governance. Its relation to –AR, if any, is indirect. The principle, as can be easily seen, differs from –AR in its goal of application. -AR aims at proving the primacy of one over another.
the principle of ‘divide and rule’ is to keep two entities divided. The two objectives are clearly non-identical.

The other case of a possible instance of –AR is the Socratic/ Elenctic method of hypothesis elimination, which depends on positing two opposites, with one of them shown to be untrue. This method too is not an instance of –AR, since it involves mutual agreement between interlocutors to engage themselves in it in order to arrive at the truth about an object of inquiry. As we saw above, -AR crucially leads to irreconcilability in the positions of its adherents.

9. Conclusions
The Contending Dichotomous way of thinking that has been a strong trait of the modern theories has had both beneficent and meretricious influence on the growth of knowledge in the modern times. As argued above, the dominant theories are based on polarity, claims about superiority of their own validity, and theoretical reversals, among others. It happens to be the case that most of the modern theories in the various fields of knowledge are Western in origin as well as growth. Considering the negligible role of developing countries from the East, such as India, where knowledge has not been based on such a mode of reasoning, it appears plausible to characterize –AR as Western, albeit purely in the socio-historical sense of having to do with the modern times. The case of that plausibility appears stronger when we notice that even in a field such as linguistics, which has had a long tradition in a developing country, like India, research is guided by concerns that are seldom related to the native tradition. While there is a lot of merit in the modern Western theories, largely owing to rigorous scientific techniques of analysis and explanation, researchers in developing countries like India, not having internalized the mode of contending dichotomous reasoning that underlies them, fail to make substantial contribution to them. The foundational issues that the theories address remain obfuscated to them, especially with regard to strict allegiance to the goals and methods of one of them.

It is necessary to closely examine the nature of the –AR mode of thinking, its influence on the growth of knowledge and ways and means of arriving at beneficent modes that critically involve scientific methodology, without doubt, but that avoid partial representation of reality and avert predictable reversals.

REFERENCES


International Philosophy Colloquia Avian 2007 http://www.uildesheim.de/evian colloquium/topic.html


**NOTES**

1. Earlier versions of the paper were presented at the Department of Journalism and Mass Communication, The M. S. University of Baroda, Vadodara, and at the Forum for Contemporary Theory, Vadodara. I would like to thank Probal Dasgupta, P. G. Patel and Thomas Pantham for their comments on the paper and on their insightful suggestions, some of which I hope to take up in a larger study.

2. Thus, Tully (2007: 9-10), on economics: “In my own life time, the governing school of economics in the Western world has made a 180-degree swing, from the certainty that socialism is the ultimate and absolute truth to the conviction that market capitalism is the only guarantee of prosperity. Left-wing politicians, civil servants, nationalized industry employees and trade unions once espoused a socialism that came to dominate us in the West, and government became a vast vested interest. Now big business is dominating us because we have been led to believe in market economics with absolute certainty...It’s not just economics but also our sexual mores that have swung 180 degrees, from one form of certainty to another.”

3. I am grateful to P. M. Kulkarni for the reference.