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### Reconstruction and Representation: Deductivism as an Interpretative Strategy

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Godden, David M., "Reconstruction and Representation: Deductivism as an Interpretative Strategy" (2003).  
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Title: Reconstruction and Representation: Deductivism as an Interpretative Strategy<sup>1</sup>  
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## 1 – Introduction

With Johnson (2000), I take it that the study of argument and argumentation involves two basic projects: a descriptive one and an evaluative one. Following Johnson, I will call these the Theory of Analysis and the Theory of Appraisal respectively. The Theory of Analysis involves the empirical study of argument and argumentation. Its basic goals are description and analysis. Its counterpart, the Theory of Appraisal, is normative and its basic goals are those of evaluation and criticism. This paper is about the relationship between these two projects.

At one level, the relationship between these two theories seems intuitive and obvious: the one evaluates what the other describes.<sup>2</sup> Yet, contemporary changes in the study of argumentation have given rise to significant issues concerning what, exactly, it is that we ought to be describing and evaluating in our study of argument. Specifically, these changes have focussed on the essentially situated nature of all instances of argument. The subject-matter of our study is no longer seen as an abstract or rarefied product, detached from the real world - or worse, as those contrived examples that can be found in logic manuals and early textbooks on critical thinking. Rather, we as argumentation theorists ought to be concerned with those actual arguments that are really employed in practical, everyday situations. This shift has occasioned a re-evaluation of the descriptive models and evaluative theories with which we study argument.

## 2 – Terminology

In order to highlight this shift in perspective, and to bring into focus the problem that I feel it has occasioned, let me set out some terminology.

By the term "argument" I mean a set of natural-language declarative sentences, one of which is the *conclusion*, the remainder of which are the *premises*. Arguments, on this view, are products: they are artefacts, collections of text.

Importantly, there may be a variety of non-equivalent arguments supporting some specific claim or conclusion. Some of these arguments may be acceptable and some unacceptable in relation to some epistemic standard.

By the term "argumentation" I mean the activity of arguing - the activity by which arguments are transacted. Clearly, this activity may take many different forms, and (for now) I would like to render this activity in its broadest possible sense. Argumentation may be written or spoken or perhaps even take other forms (e.g., visual). Argumentation may have many participants, or may simply involve the activity of an individual reasoner. Where several participants are involved, we might say that there is an audience. Audiences may be one or

many and their members may be actively or passively involved in the argumentation. Finally, the goal or purpose of argumentation is to elicit a reasoned change in view (Harman, 1986). Again though, the goal of argumentation should be broadly interpreted so as to include activities of inquiry as well as persuasion. (For instance, weighing the evidence for a position and making up one's mind about a view are to be included as well as trying to get an audience to accept some claim.) As such, argumentation need not result in a change in view, though I shall focus particularly on cases where it does.

Finally, I shall use the phrase "an instance of argumentation" to mean a particular, and situated occasion on which one or more specific individuals come to a reasoned change in view *on the basis of* the reasons contained in the argument transacted.

### 3- *The Relationship between Argument and Argumentation*

I am now in a position to give a preliminary articulation of the problem that I would like to discuss in this paper. Accepting these definitions, we might observe that "argument is a component of argumentation" (Johnson 2000, 13). Arguments are those things that are transacted in an instance of argumentation. For this reason, as Johnson points out, "The theory of argument is a component of the theory of argumentation" (*ibid.*). While correct, I worry that this attitude is dangerously comfortable. My concern is that this attitude - which I do not see as specific to Johnson - carries with it the assumption that by studying argument(s) we are *de facto* studying argumentation. Yet, while this assumption may well be true in the general case, it is by no means true in any particular case. Rather, establishing its truth in any particular case requires additional evidence. (And, if I am correct, this additional evidence may well be rather difficult to come by in most situations.)

### 4 - *Argumentation Theory: Its Subject-Matter and Goals*

Given the recent shift from abstracted, de-contextualized, and contrived arguments towards the study of situated arguments, I assume that the subject-matter of interest to argumentation theorists is those arguments that are actually transacted in particular instances of argumentation. The goal, then, of the contemporary study of argumentation - and the study of situated, natural arguments - is the study and evaluation of the actual reasons on the basis of which particular individuals (rightly or wrongly) come to adopt or assert conclusions, or come to reasoned changes in view. The problem is, by what strategy ought we to determine those reasons.

### 5 - *Two Observations*

It is precisely in this context that my paper concerns the relationship between the Theory of Analysis and the Theory of Appraisal. On the assumption that the proper subject matter of Argumentation Theory is those situated arguments that are actually transacted in particular instances of argumentation, two general observations may be made.

(1) All argument evaluation presupposes an interpretation (or reconstruction). The subject matter for the Theory of Appraisal is provided by the Theory of Analysis, and it is

only after the descriptive project has been successfully completed that the evaluative project may begin.

(2) Any failure of the reconstructive project in producing a representative interpretation brings about a failure of the evaluative project.

The reason here should be obvious. We can only determine whether A's reasons for C are good to the extent that we have a representative picture of A's reasons. Should we fail to produce an accurate interpretation of A's argument, then any subsequent evaluation will not be relevant.

When combined in this context, these observations reveal a crucial feature of the relationship between the Theory of Analysis and the Theory of Assessment. It is not just that the descriptive project is temporally prior to the evaluative one. Rather, the descriptive project must be completely independent from the evaluative one that is, they must be conducted independently from one another.

Yet, in my view, the rigorous separation of the Theory of Appraisal from the Theory of Analysis has not been standardly maintained, and the need for this separation has not been widely recognized in the current study of argument. In the remainder of this paper, I consider reconstructive deductivism as it pertains to the theoretical concerns sketched above. I argue that deductivism does not respect the boundary between the descriptive and evaluative phases of the study of argument, and as such that it cannot be seen as offering an effective interpretive strategy.

## 6 - *Deductivism*

It is sometimes said that deductivism is the thesis that  
[D1] "All good arguments are deductively valid" (Groarke 1992, 113).

This is a thesis about the proper standards of evidence by which arguments should be evaluated. As such, it is a thesis belonging to the Theory of Appraisal. Presumably it means that the only acceptable link between the premises and the conclusion of an argument is one whereby it is not logically possible for the conclusion to be false given the truth of the premises. The only good arguments are those for which no counter-example is to be found, irrespective of the plausibility of that counter-example.

Before proceeding to my own consideration of deductivism, I would like to recognize those objections that are typically raised against it in the literature. The standard objections to deductivism (as identified by Groarke, 1992 and Gerritsen, 1994, and attributed to authors like Govier, 1987) are three:

- (i) Deductivism does not allow for differing degrees of evidential support between premises and conclusions;
- (ii) Deductivism either fails to provide an account of fallacies, or provides an incorrect account of fallacies; and finally,
- (iii) Deductivism does not provide a defensible interpretive strategy for describing the structure of natural language arguments.

Given my concern with deductivism as an interpretive strategy, I am primarily interested in the third objection on this list. Yet, any discussion of deductivism as an interpretive thesis must consider deductivism as an evaluative thesis.

## 7 - *Deductivism and Theory of Appraisal*

One way to justify deductivism as a Theory of Analysis is to assert deductivism as a Theory of Appraisal. On this point Govier writes, "The crucial point of deductivism is that anything less than a relation of entailment between premises and conclusion is unsatisfactory. On this theory, there are absolutely no degrees or kinds of logical support" (Govier 1987, 23). In this respect, the two questions that deductivism asks of any argument are 1) Are the premises of the argument *true* (or perhaps acceptable)? And 2) Does the conclusion *follow* from the premises?

The standard that deductivism upholds is that of validity. Informally, an argument is valid if and only if it is not logically possible for the conclusion to be false given the truth of the premises (Groarke 1992, 113). That is, the assumption that all of the premises of an argument are true is inconsistent with the assumption that its conclusion is false - it results in a (formal or material) contradiction.

## 8 - *Standards of Evidence*

Yet, there are a variety of non-equivalent standards of evidence. One way of characterizing the standard of evidence embodied in deductivism is to say that, accepting the premises of the argument, we should accept its conclusion if there is no counter-example to be found for the argument in question. Yet, any number of other standards of evidence might be articulated in just this way. Consider the following list:

Accepting the premises of the argument, we should accept its conclusion if

- the only counter-examples to be found are highly improbable, or
- the only counter-examples to be found are less probable than the premises, or
- no counter-example has been found yet (it has not been falsified),
- no counter-example is already to be found amongst our beliefs (coherence).

These standards are given in descending order, so that arguments meeting a higher standard will also meet the lower standard, while arguments that fail to meet a higher standard may well meet a lower standard.

The fact is, then, that there are a plurality of non-equivalent standards of evidence. In view of this, deductivism as an evaluative thesis cannot be accepted on the grounds that there are no other standards of evidence. As a result, deductivism as an interpretative thesis cannot be accepted *a priori* for purely normative reasons since arguers may be attempting to meet some lesser standard of evidence in their acts of arguing. For example, it is not justifiable to invoke the Principle of Charity as a justification for interpreting a situated argument as deductive without some additional evidence that the arguers are indeed trying to meet the deductive standard of evidence. Since the arguers may be aiming at some lesser standard of evidence, to apply the deductive standard might easily involve attributing to those arguers a stronger position than the one that they are arguing for, and this would constitute a fallacious misrepresentation of their position.

Deductivism as an interpretive strategy, then, cannot be justified on the grounds that it is the only standard of evidence. Instead, the success of deductivism as an evaluative thesis depends on one or more of the following issues:

- (a) whether deductivism represents a standard of evidence to which all other standards of

- evidence are reducible,
- (b) whether arguers are, in fact, attempting to meet the standard of evidence embodied in the rules of deduction (or that they ought to be), or finally,
  - (c) whether deductivism represents a standard of evidence in which theorists ought to take a particular interest.

In the remainder of the paper, I consider each of these options in turn.

### 9 - *The Reducibility of Other Standards of Evidence to Deductivism*

Some arguments for deductivism as an interpretive thesis may be read as claiming that all standards of evidence reduce to the deductive standard. Even though there are other standards of evidence, they may be represented on a deductive model, and as such they are effectively reducible to the deductive standard of evidence.

I claim, though, that non-deductive standards of evidence cannot be reduced to the deductive standard, and as such that non-deductive arguments cannot be represented accurately on a deductive model. To see this, consider the following two examples.

Example #1 - Consider a version of Kyburg's (1961) lottery paradox where there are 1,000 tickets in a lottery in which 1 ticket is guaranteed to win. Since we can say of each individual ticket that it is *highly probable* (99.9%) that it will not win, we could deduce (using the usual rules for conjunction and quantification) that it is *highly probable* that no ticket will win. But, we know that this is false; indeed it is certain that one ticket will win, hence the paradox.

Example #2 - It is *more likely than not* that a person born in Scotland will have red hair. It is *more likely than not* that a person born with red hair will have green eyes. So, it is *more likely than not* that a person born in Scotland will have green eyes. This argument is clearly invalid. Further, it remains invalid when we substitute qualifiers like *probable*, *plausible*, or *likely*.<sup>3</sup> I further omit normative (evaluative) qualifiers like *reasonable to accept* since the criteria for acceptability will be given in relation to some standard of evidence.

These examples are meant to show that deductive standards preserve *truth* and *certainty*; they do not preserve *plausibility*, *probability*, or *likelihood*. As such, I argue that non-deductive standards of evidence cannot be reduced to deductive ones.

### 10 - *Deductivism as a Reconstructive Strategy*

So far, I have sought to establish that deductivism as a Theory of Analysis cannot be supported on the grounds that it is a universal Theory of Appraisal. There are other standards of evidence which are neither equivalent nor reducible to the deductive standard.

In recognizing the failures of these attempts, we have each time been pointed towards the arguers as the source of the information that could authorize our interpretations of situated arguments. Indeed, Vorobej observes the curiosity of the omission of an appeal to this source when he writes:

It is more or less standard practice to assume that the author of an argument is the best authority when it comes to identifying the premises and conclusions of his

argument. Yet, curiously, time and again, accounts of critical thinking ... fail to address the third question of the strength of the logical link between the premises and the conclusion from the author's perspective (Vorobej 1992, 106).

Within deductivism moves of this sort are strongly resisted. Deductivists frequently claim that the theorist is not obliged to inquire after arguers intentions (or any other psychological data about the arguer) because it is sufficient to instead study the arguer's commitments.

In reply to this type of argument, it should be admitted that arguers are committed to the view that their premises justify (i.e., are good reasons for) their conclusions. But since the nature of a good reason is properly seen in the context of a particular standard of evidence, it does not follow that arguers are committed to providing *deductively* good reasons. The point is that the commitments of arguers ought to be determined in relation to the standard of evidence at which they are (or ought to be) aiming, and this has to be determined by (psychological) facts about the arguer.

### 11 - *Deductivism, Truth and Certainty Revisited*

This brings me to the last reason that one might be justified in seeking to render an argument as deductive. One might want to interpret an argument as deductive because one has a particular theoretical interest in those 'properties' which are preserved in deductivist standards of evidence - truth and certainty. In this context, it is always appropriate to ask whether some argument can be given an interpretation according to which that argument meets a certain standard of evidence.

Moreover, the significance of any such critical inquiry is not entirely a function of the descriptive accuracy of its analytical model. For example, if a particular argument is incapable of establishing the truth of its conclusion, then this normative fact about the argument may be of theoretical interest independently of whether the standard of truth is an important goal of the producers and consumers of that particular argument. Conversely, merely because a theorist can evaluate an argument according to a particular standard, this alone is insufficient to make such an evaluation relevant to a particular argumentative exchange.

So, theorists may choose to adopt any standard in which they have an interest when evaluating an argument. The merits of such an investigation will rest, in part, on the nature of those standards. But, they will also rest on the relevance of those standards to the goals of other theorists and the arguers themselves.

### 12 – *Conclusion*

The kernel of this paper is that to the degree that Argumentation Theorists are interested in the analysis and evaluation of situated instances of argumentation, the standards and norms of evaluation that are applied in the Theory of Appraisal must remain completely independent of the Theory of Analysis. The analysis of argument does not imply a universal standard of assessment, nor does it presuppose any one particular standard of evidence. Indeed, the very attempt to import normative aspects of the Theory of Appraisal into the process of analysis

stands in immediate jeopardy of rendering the interpretation unrepresentative. Because of this, the Theory of Appraisal must be rigorously separated from the Theory of Analysis. Theories which fail to mark this distinction steadfastly cannot offer accuracy in their interpretations or relevance in their evaluations.

## Notes

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<sup>1</sup> The author would like to recognize the contributions of R.C. Pinto and Erik C.W. Krabbe to this paper, and to thank them for their help in this regard.

Research for this paper was made possible by grants from the Social Science and Humanities Research Council of Canada, Ontario Graduate Scholarship and McMaster University.

<sup>2</sup> As Pinto pointed out to me (R. Pinto, Letter to D. Godden, Unpublished correspondence, June 5, 2001).

<sup>3</sup> I omit the qualifier *possible*, since we have a well-developed modal logic that is capable of rendering the formal structure or arguments using this term.

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