Towards a Theory of Informal Argument Semantics

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In this paper I set out the framework for a theory of informal argument semantics which is designed to make the assessment of the language of arguments easier and more systematic than is currently the case. The framework, which attempts to identify arguments suffering from linguistic confusion, is intended to complement existing approaches to argument appraisal and is envisaged as a third stage of assessment after procedural and inferential analyses have been conducted.

KEYWORDS: argument evaluation, argument semantics, definition of argument, fallacy theory, language fallacies.

1. INTRODUCTION

Argumentation theory has been greatly informed by insights from linguistics and the study of discourse, most obviously in the pragma-dialectical approach championed by Frans van Eemeren and Rob Grootendorst (2004). However, these insights have been rather from the field of pragmatics than from semantics. Problems of meaning in argumentation theory are largely considered only in the study of certain 'fallacies of language', generally taken to be cases of some kind of ambiguity, although there has been interest recently in considering other traditional fallacies as language rather than reasoning based errors (see Visser et al., 2018).

Ambiguity, particularly in the form of equivocation, is a serious matter in argument; but it is also an inherent part of language, and it is far from the only concern caused by the meanings of words. Language contains within it argumentative content, whether the "argumentativity" of Anscombre & Ducrot (1989) or the implicatures of Grice (1975). Words also have relationships: some of them cannot be used together, what I refer to as semantic incompatibility; and often sentences are imprecise to the point at which no real propositional value can be found in them.

In this paper, I set out the framework for a theory of informal argument semantics which is designed to make the assessment of the language of arguments easier and more systematic than is currently the case. The framework attempts to identify arguments which are based on linguistic confusion; arguments which feature linguistic confusion, be it ambiguity, imprecision or meaninglessness; and arguments that lead to linguistic confusion in their conclusions. This is a challenging task with a broad scope and this paper represents the early steps towards a settled theory. It will, however, feature a number of examples of argument from philosophy and politics, and illustrate how they can be better understood through a thorough semantic analysis. This analysis, it should be stressed, is not designed to replace, but rather to complement existing approaches to argument appraisal and is envisaged as a third stage after procedural and inferential analyses have been conducted.

2. A THEORY OF ARGUMENTATION

In order to establish a system of informal argument semantics, certain background theoretical assumptions are necessary. Firstly, I should make it clear that the semantic assessment scheme which is the end product of this work is an informal scheme, and that it is designed to be applied to informal arguments: the informal argument semantics I refer to, therefore, is both an informal semantics and a semantics of informal argument. The word 'semantics' is not used in exactly the same sense as in more formal work where a semantics constitutes a list of what is acceptable within a particular system; something which would hardly be possible when dealing with natural language. However, the 'semantics' of this paper does mean a scheme for determining whether the textual input provided by an apparently argumentative utterance is acceptable and meaningful, based on the semantic qualities of the words used, rather than their pragmatic force within the discourse situation of which they are part.

As I mentioned in the introduction, there is a sense in which all language is, or at least contains, argument. What we say is what we have inferred to be the truth, or what we have inferred to be the appropriate or advantageous thing to say at this moment. We expect others to be able to follow our line of thought, without making each step explicit, and to make further inferences on the basis of our utterances. Language use, then, can be said to inherently contain argumentative content. That does not mean, however, that every piece of language can be construed as being an argument. When someone makes an assertion without providing any support for it, he is simply asserting, not arguing. That his words hint at previous reasoning and lead to implied inferences does not make them, in themselves, an argument. When an utterance is used

as part of an argument, however, that implied reasoning and those further implicatures do become part of the overall argument structure and their meanings become part of its semantic content.

The mere assertion of some standpoint, then, is not an argument; but what is? Definitions of both argument and argumentation abound: in their textbook, Copi, Cohen & McMahon, (2014, p.5), claim that:

> argument refers strictly to any group of propositions of which one is claimed to follow from the others, which are regarded as providing support for the truth of that one. For every possible inference there is a corresponding argument.

Which is a rather awkward way of putting it. Tindale makes it clearer by describing arguments as structures "where one or more statements (premises) are given in support of a conclusion" (2007, p.1). Apart from its clarity, Tindale's version has an advantage in that it refers to statements which are "given". This introduces both the idea of the form of expression of the argument, how it is given, and the necessity of their being some context in which the giving takes place.

Argument can, of course, mean one such structure or a type of discourse occurrence in which any number of such structures are expressed and exchanged. This ambiguity can be eased by employing the word 'argumentation' for the latter, or it can be compounded by using 'argumentation' for both: "An argumentation consists of one or more expressions in which a constellation of propositions is expressed" (van Eemeren & Grootendorst, 2004, p. 2), but also, one page earlier:

> Argumentation is a verbal, social, and rational activity aimed at convincing a reasonable critic of the acceptability of a standpoint by putting forward a constellation of propositions justifying or refuting the proposition expressed in the standpoint.

Still, taking these suggestions together, we can safely conclude that arguments are "expressed" and that argumentation is an "activity", what Ralph Johnson succinctly calls "an exhibition of rationality" (2000, p.13). Building upon these, and with my own purposes in mind, I propose to define an argument as an expression of reasoning, and argumentation as the expression of reasoning within a process. By what that process may be constituted, I am more flexible than the pragma-dialecticians, and am happy to include activities which do not much resemble the model of the critical discussion, but what other modes of argumentation are possible is not a subject to take further in this essay.

The proposed definition of argumentation, which I do not claim to be better from a theoretical viewpoint than some other suggestions, has an attractive practical consequence in the consideration of the poor practice of the activity, known as fallacy theory. The three stages of the definition translate easily into three varieties of fallacy, rendering unnecessary the contortions sometimes performed to include all the well-known fallacies within categories, or, indeed, within any conception of what fallacies actually are. On my model, an argument can go wrong, and therefore deserve rejection, at any one of three stages (sometimes more than one at once): it can contain unsound reasoning, it can be erroneously expressed, or it can be unsuitable to the process. In this way, we arrive at three varieties of fallacy: reasoning fallacies, linguistic fallacies, and process fallacies. While some of the frequently discussed examples may be capable of rejection on the basis of more than one of these areas for analysis, none is left outside the typology and no general category is needed as a collection point for all those which do not fit comfortably elsewhere. Any argument which is rejected must be rejected at one point of the analysis, and that rejection will automatically assign it to the fallacy group associated with that assessment stage.

3. A SCHEME FOR THE ASSESSMENT OF ARGUMENTS

The scheme for the analysis of arguments which I set out in the following section is, therefore, divided into four sections: an initial analysis, which establishes whether, in fact, the chosen text does contain an argument; a process analysis to determine the suitability of the argument to the argumentation discourse in which it has been offered, the details of which, obviously, are governed by the standards of that process and the goals of the participants; a reasoning analysis which includes the investigation of formal logical fallacies, considers the truth or otherwise of the premises, implicit and explicit, and assesses the strength of the inference, retaining a reference to the earlier process stage and the requirements of the given situation as regards argument strength; and, finally, a linguistic analysis, which is the main focus of this article, and is described in detail below. An argument which passes through all these stages without being rejected must be accepted, at least presumptively, by any reasonable arguer. At each stage, rejection may actually mean reformation, and where it is possible to avoid the fallacy which has been committed by changing the argument in some way, linguistically or structurally, it can be so-altered and re-submitted to the initial stage.

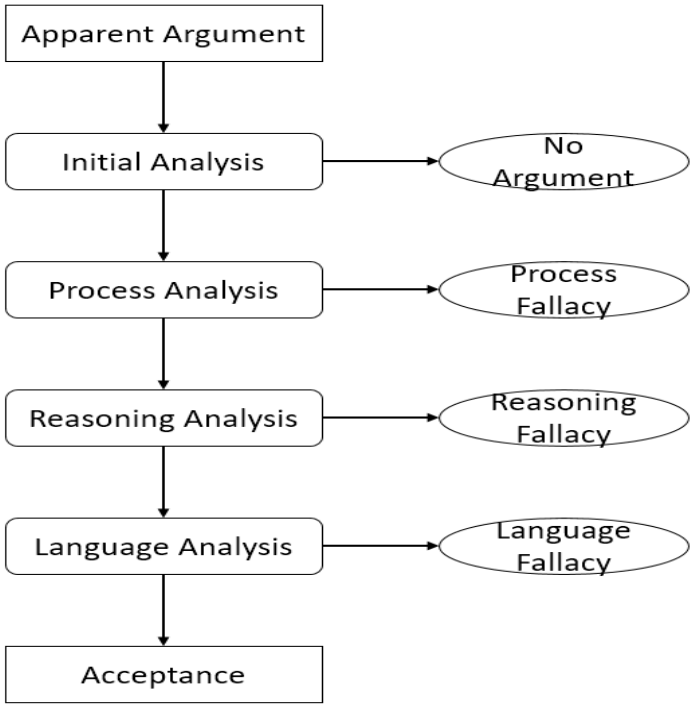

Figure 1 – A general scheme for argument assessment.

There are two points to be made about this ordering of the stages of analysis. Firstly, the order is implied by the practicalities of the process of assessment and a desire to save time. The initial stage discovers whether there is an argument to assess, this is, I assume, an uncontroversial beginning, especially as a great many texts, such as newspaper opinion columns, political speeches, and, sadly, academic essays, which are expected to contain arguments, do not, in fact, do so. This is followed by consideration of whether the argument is admissible and relevant to the process. It makes sense to look at this first since there is no point in carrying out detailed analysis on arguments which are of no use even if they are strong and clear. If an argument can be admitted to the process, then its reasoning is checked, and only then once that has been accepted, is the most detailed and complex level examined, the informal argument semantics.

An analyst whose main interest is in forms of inference might be tempted to reverse these last two on the principle that it is not worth doing detailed inferential analysis on arguments which are flawed linguistically. This is a point of little consequence to the overall framework since the scheme can be thought of as having a nature more

circular than linear, with the proviso that once a full lap has been completed, there is no just cause to refuse acceptance of the argument. It should be obvious that the initial stage is, largely, a stage of linguistic analysis. It is an analysis at the level of normal reading comprehension which would be expected to weed out examples of arguments expressed very badly indeed: the informal semantics stage is intended to be applied to arguments which look good and may only be suffering from some deeply hidden flaw, not obvious earlier.

This is a point related to the second justification for this ordering of the stages which is its reflection of the levels of sophistication of argument as set out by Harald Wohlrapp. Wohlrapp identifies Natural, Scientific, and Philosophical argument. The first is what people engage in most of the time, it is largely unrestrained by any rules and he describes it as "a confusing mess" (2014, p. 384). The second level is more organised, it is "for making claims and for validating them with justifications or invalidating them with objections" (2014, p. 385). Arguments at this level may descend to the Natural if good principles of reasoning are ignored, or may ascend to the Philosophical where the very grounds of validity of justification at the Scientific level are called into question.

There are, I believe, parallels to be drawn with the three elements of my definition of argumentation and the three levels of analysis at which fallacies may be detected. Natural argumentation is characterised by a lack of agreed process which means that whatever standards of process one introduces in the assessment of such arguments (most of the rules of pragma-dialectics can be applied at this stage), one is likely to find that standards are not adhered to and fallacies are committed constantly: Natural arguments will often be irrelevant, sometimes threatening, frequently unsupported. The Scientific level demonstrates the use of reason and evidence, so at this level one may expect to find fewer process violations, scientists (hopefully) don't insult one another or refuse to defend their work, but there will certainly be examples of poor logic and questionable conclusions; correlations taken as causes, weak inferences turned into strong claims, statistics misused and misunderstood. This level of argument, then, corresponds to the reasoning level of analysis and would be expected to produce examples of the fallacies found therein. The highest, most abstract level, the Philosophical, is most vulnerable to errors of language. A host of philosophers have criticised their peers and rivals for mistakes in their systems which result from misconceptions of language. These misconceptions are generally of either of two types: attempts to shape language use by redefining words; or attempts to find the truth about the world through reasoning

upon the accidents of language. In both cases, it is a misunderstanding of the very nature of language which leads the philosopher into error.

The reason for the emphasis in this paper on the analysis of language is thus revealed: not only is there an obvious lack of an informal argument semantics, which needs to be filled, but it is the assessment of the subtlest errors in the most fundamental arguments for which it is needed. Describing and evaluating the everyday argumentative discourse of society and opinion makers in order to help people understand the process of which they are a part and raise the level of public discussion is a noble task, but how much nobler to expose the errors and misapprehensions which riddle the beliefs and assumptions which underpin that society's culture and hold it in ignorance and superstition!

4. INFOMAL ARGUMENT SEMANTICS

The third main stage of analysis is carried out according to the informal argument semantics depicted in figure 2 below.

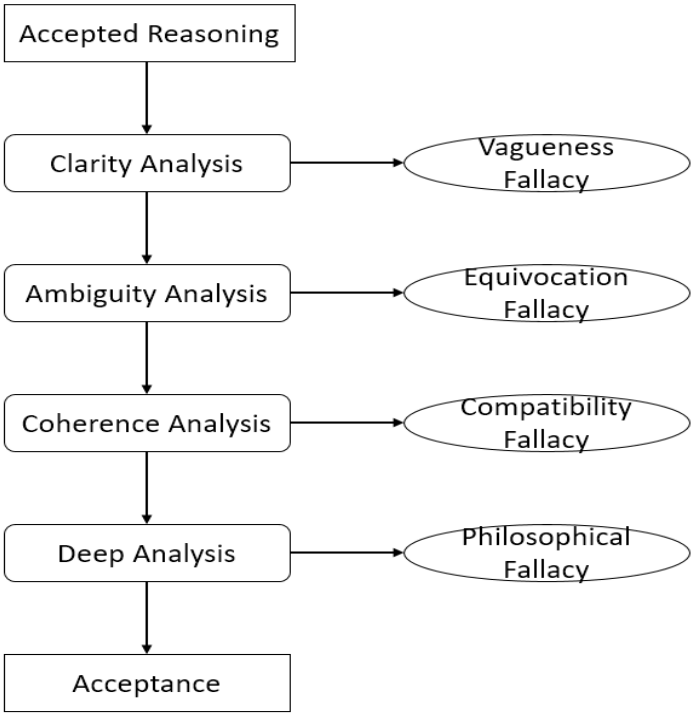

Figure 2 – A scheme for the linguistic assessment of arguments

Traditionally, those argument forms considered linguistic fallacies are either condemned as displaying species of vagueness or some kind of ambiguity. In both cases the problem is an ability to properly discern the meaning of the argument in question. It should also be noted that in both cases the question is whether the meaning is precise enough for the task at hand: statements can always be further clarified, and ambiguity is an essential feature of language, without which we should require as many words as we have objects of sense.

Vagueness comes in three main forms: language may be obscure, obtuse, twisted and contorted, full of jargon, or odd usage; it may be clear as far as it goes but insufficiently precise for its purpose, its key terms under-determined; or, separate statements which are acceptable in themselves may not add up to a clear and coherent argument for a comprehensible conclusion. Such language is not to be confused with nonsense, of course. Nonsense is not really language at all, it just looks like it, and would not be accepted past the initial stage of analysis. The difficulty in gaining the real sense of the argument with which we are concerned at this point is far subtler.

Ambiguity, in which I shall include amphiboly for present purposes, can disrupt an argument in two ways: either by making it hard to know which of two meanings was actually meant, or by masking an error in logic. In the latter case, what appears to be a common term in different parts of the argument structure is, in fact, not one at all, and an equivocation has occurred.

Less commonly recognised, and, therefore, more interesting, are what I refer to as compatibility fallacies. These are cases where words have been used with a clear sense and according to the rules of syntax, but have been combined in ways which make the final sentence a semantic impossibility. I can offer two simple examples of this. One comes from the UK Labour Party 2017 general election manifesto. The policy of the party was to accept the result of the referendum which decided in favour of the UK's leaving the European Union, but also to "reject 'no deal'" (Labour Party, 2017, p. 24). The problem with this standpoint is that the lack of a deal is not the kind of thing which one can reject. Rejecting leaving without a deal is only possible if one is prepared to reject leaving full stop, which was not the policy at the time, or accept absolutely any deal on offer, which the party declined to do. The same incoherent position has been advanced by many British politicians in the succeeding years.

While politicians may not always be expected to make a lot of sense, a second example constitutes one of the key flaws in one of the most important ethical systems in the history of philosophy. According to Jeremy Bentham, in deciding how to act we should: "Sum up all the values of all the pleasures on the one side, and those of all the pains on

the other" (Bentham, [1789]1962, p. 66). Whether we make the object of our arithmetic pleasure, pain, utility or happiness, is of no importance: the fact remains, that only numbers can be summed. There is a fine line, and it may be no line at all, between such examples and those I consider a result of the fetishisation of language and, thus, concept fallacies. The linguistic fact that one pleasure can be said to be greater than another, that one pain is small and another enormous, has seduced many otherwise intelligent philosophers into thinking that they might treat them as though they could sensibly be given numerical values.

This is leading us into the fourth level of linguistic evaluation, the deep analysis which exposes philosophical fallacies, and is depicted in more detail in figure 3.

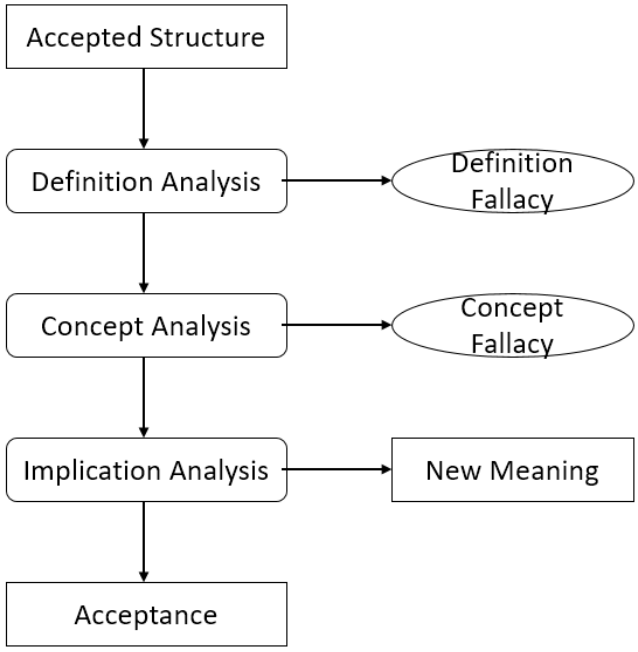

Figure 3 – A scheme for the 'deep' analysis of the language of arguments.

Definition fallacies are most commonly varieties of "persuasive definitions" a term introduced by Charles Stevenson (1944) and best described by Andrew Aberdein's phrase "gerrymandering a term" (2006), since the fallacy involves shifting the borders of what a particular word can be used for in order to suit one's own purposes. The 'no true Scotsman' fallacy is an example of this nefarious practice and,

thus, also an example of a fallacy which is not usually grouped with fallacies of language, but ought to be. Other varieties of suspect definition are G.E. Moore's Naturalistic Fallacy (1903) and Leonard Nelson's Philosophical Fallacy (2016).

Something has already been said of concept fallacies, brought on by an undue faith in the ability of language to represent the world as it is. To avoid such pitfalls, one would do well to remember Arne Naess's warning "that the existence of some concept term in no ways guarantees that something falls under the concept" (1966, p. 67). Wittgenstein also draws attention to this phenomenon, noting in the Blue Book (1958: 1) that:

> The questions "What is length?", "What is meaning?", "What is the number one?" etc. produce in us a mental cramp. We feel that we can't point to anything in reply to them and yet ought to point to something.

Later, he states: "This kind of mistake recurs again and again in philosophy" (1958, p. 6), and I suspect outside of it as well.

The final layer of analysis is different from that all have come before in that it does not identify any fallacious moves in an argument, rather it serves to fully explicate what that argument is. In the implication analysis, all of the inherent argumentativity and the Gricean implicatures of the statements making up the argument structure are considered, and it is also here that ethical assumptions lying behind any evaluative or emotional language are exposed. If anything of relevance to the argumentation process is discovered, then it is made explicit and added to the argument which can then be sent back to the initial stage to begin its evaluation once more. Naturally, it is a question of judgement whether or not a given implicature is relevant, and this applies all the way through any analysis employing this scheme. The entire scheme, including the informal argument semantics section, is a guide for a human analyst, not an automated process. It cannot take the place of the analyst because it is concerned with meaning, its subtleties and contradictions, which are of infinite variety and known only to a language user. The purpose of the scheme is to show which questions we should ask when assessing arguments. The experienced analyst will be able to jump straight from the initial stage to the relevant questions which are likely to expose the frailties of the text before him: there is no requirement to follow the scheme step-by-step when one can already see which stage will prove decisive.

5. AN EXAMPLE

Space will allow for only a partial analysis of one example, in which I shall concentrate on linguistic considerations. Below is a statement made by Ruth Halperin-Kaddari, who is vice-chair of the UN committee on the elimination of discrimination against women, and which, I suggest, does appear to have merit on an initial view. Her comments concerning the law governing access to abortion in Northern Ireland were quoted in the Guardian newspaper (Gentleman, 2018):

> Denial of abortion and criminalisation of abortion amounts to discrimination against women because it is a denial of a service that only women need.

The use of the word "because" makes it clear that this is an argument in which the first part of the sentence is the conclusion, or standpoint, and the second part is the supporting premise. The phrase "amounts to" gives an early indication that the argument may be making some kind of definition or categorisation.

First, we ask if the argument is sufficiently clear. There are two apparent problems here: first the switch from "denial […] and criminalisation" to "is a denial" suggests that criminalisation is not important, or more likely, not relevant to this particular argument. The statement can easily be rephrased without the word. Secondly, abortion is referred to as "service", a usage which might be designed to hide the reality of what it involves. Even if such euphemistic language is readily understood, it can create a further problem. There does not appear to be any equivocation in the argument, but there is uncertainty over the ambiguous word "need". Since abortion in cases of danger to the mother's life is not illegal in Northern Ireland, the "need" must refer to something other than physical survival. Once emotional and self-realisational needs are brought into consideration, however, it is no longer clear that they are relevant only to women, and the use of the word "service" also implies something other than the medical procedure which only women can undergo. This is an example of how a piece of reasoning considered sound at the earlier stage of analysis can begin to look doubtful when the language of the premises is studied more closely.

All of these concerns can be overcome with some rephrasing of the argument, although it may lose a little force. We are left with:

> Denial of abortion amounts to discrimination against women because it is denial of a procedure only women can undergo.

There does not appear to be any semantic incompatibility here, so we can move on to the deep linguistic analysis stage. First, we ask: is there an attempt at redefinition? Clearly there is, but that does not automatically disqualify the argument. A definition may ask us to look at the use of a word anew, but we may agree that certain cases are covered by that word even if we had not realised it previously. 'Discrimination' we normally understand to mean different treatment, usually worse, of some individuals on the basis of some feature they possess. We understand it to mean that differential treatment is unfair. In this case we are being asked to include in our understanding of the word cases not where two groups are treated differently, but where one is denied something which the other cannot have. Whatever one's view on abortion or discrimination, that is certainly stretching the accepted meaning of the word.

One way in which this definition, or rather categorisation, could be maintained is if we take it to imply that men, generally speaking, are not denied procedures which only they can undergo. This would require further supporting arguments and would be difficult to show given the lack of anything which might be considered a male equivalent of the right to abortion. We have now moved into the final stage, the implication analysis. One other interesting inference which the argument invites us to draw is that if we do accept the principle that denial of some good which is only available to women constitutes discrimination against women, then presumably, we are committed to maintaining that such denial against any group amounts to discrimination against that group. That is a general principle which might lead to some awkward places, perhaps awkward enough to cause a supporter of our original argument to reconsider.

There is more to say about this argument, but the intention here was to show how the scheme works in practice. The clarity and ambiguity assessments led to some rephrasing of the original text; the deeper analysis highlighted a possible definitional fallacy which itself leads to some important implications. The full argument, rephrased and carrying what it implies explicitly, can then be re-submitted for full analysis from the beginning.

6. CONCLUSION

The definition I have offered of argumentation, as the expression of reasoning within a process, allows the tidy division of fallacious argument moves into three categories, and the arrangement of the analysis of arguments into three corresponding stages.

The assessment of suitability to process and soundness of reasoning I have mentioned, but not expanded upon, and I invite others

to fill out those sections of the analysis scheme. My own focus has been on the discovery of fallacies of expression through the development of an informal argument semantics of which I have given only an outline in this paper. The previous section in which I analysed a short example of an argumentative utterance illustrated the power of the scheme based on that semantics to draw out weaknesses and hidden implications in arguments which appear to have acceptable form.

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