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Commentary on Jan Albert van Laar: " 'I Suppose You Meant to Say ...': Licit and Illicit Manoeuvring in Argumentative Confrontations"

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Jan Albert van Laar offers a stimulating and sophisticated account of confrontational manoeuvring, placing the initial stage of a critical discussion under the analytical spotlight. He shows how it is vital that some freedom be afforded an adversary in rephrasing a standpoint, but warns that allowing too much freedom would allow the discussion to derail or degenerate into a straw man fallacy. He goes on to list soundness conditions for judging or ensuring that confrontational manoeuvring is legitimate.

If we were to adopt an argumentation theoretic or philosophical orientation, there are a number of issues and questions posed by van Laar's paper that we might explore. First on my list would be to explore the link with persuasive definitions (Stevensen, 1938): does confrontational maneouvring offer, for example, a dialogical – and pragma-dialectical – account of how persuasive definitions might be formed in critical discussions? (Cf. Aberdein, 1997). Then again, we might want to use one of van Laar's footnotes as a springboard to a new debate: van Laar mentions that, as a technicality, it is necessary to reconstruct a protagonist's negative standpoint towards S as a positive standpoint towards not-S. On both psychological and rhetorical grounds, such an alteration could have a tangible effect on the outcome of a dialogue – indeed it could be exactly the sort of revision that an antagonist might wish to achieve. Where then does the reconstruction of standpoints end and the revision of standpoints begin?

We could then start to probe for some further detail to van Laar's model. One area we might want to explore is the soundness conditions. Soundness condition (1) requires that "the critic is obligated to make it clear to the arguer that his contribution contains a proposal for a new formulation", while condition (3a) demands "the critic should be clear what the proposal amounts to" and is explained with an example, "Parties are not allowed to shift the issue while pretending to stick to the issue". The need for clarity expressed by these two soundness conditions is closely related, and it would be interesting to see their connection teased out further. Then, soundness condition (2) (teasingly, I think) suggests that a challenge is fallacious if it is "abundantly clear that the proposal will be rejected" - exactly how such abundance of clarity might be determined is intriguing. And finally, if we were to continue our exploration from an argumentation theoretic orientation, we might decide to investigate further van Laar's eyebrow-raising use of the terminology not of critical discussion, but of negotiation: a critic provides a *proposal* for a new formulation that might be *accepted* by the arguer – or might be

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rejected, and so on. Is this just a linguistic convenience or does it represent a way of approaching confrontational manoeuvring?

These we might tackle if we were to take the argumentation theoretic angle. But - leaving my rhetorical and dialectical obligations here unanswered - I am not going to take that angle. Instead, I want to take a different perspective – the computational. For throughout van Laar's paper, there are strong echoes of issues that run deep into computational territory. What I shall aim to do is to demonstrate some interesting correspondences, and then explore where they take us.

Van Laar makes use of a dialectical profile, a device for laying out the ways in which a dialogue (or part of a dialogue) might unfold. It is a device closely related to Krabbe's (1999) profile of dialogue. There are two ways of seeing such profiles. One is in their abstract form with propositional variables standing in for actual, specific content. The other is in a concrete form, with every possible propositional instantiation spelled out in excruciating detail. This latter form corresponds exactly to what a computer scientist - or research in artificial intelligence in particular – would call *search space*. An enormous variety of techniques have been developed for processing search space. The reason that there is such a focus on search on AI is that, typically, AI is about engineering systems to do something – so the space of a disagreement becomes a region to be navigated (albeit that there may be two navigators each with their own rather different compass). An AI system that might perform confrontational manoeuvring, for example, would need to select just one actual locution at a given turn from the billions that might be possible, in order to best further its goals.

But what if we're not interested in building a system to perform confrontational manoeuvring? The focus of van Laar's account is avowedly to construct a descriptive account, though inheriting the normative outlook of the pragma-dialectic tradition. Still the AI researcher is eager: a descriptive model is one that can be used to empirically describe and the probabilistically populate a search space with options. A normative model is one that provides the algorithms that work upon the data in the search space. In systems that generate arguments (such as (Reed, 1999)) argumentation theoretic normativity provides exactly the algorithms required for generation: “it should be like so and so” becomes, “it is like so and so.” Van Laar's ternary model of speech act, topic, device, and audience adaption provides exactly the sort of detail that such generation would require, and it is no surprise that he comments that they, “are not independent variables ... for example, a choice for a particular sentence excludes many choices for a particular topic, and vice versa.” For researchers in AI working on natural language generation, such incremental exclusion of options in the search space was posited as the “pipeline” model of generation (Reiter & Dale, 2000) – now much maligned, in large part due to the nasty little Latin phrase at the end of the quote from van Laar. That “vice versa” has profound ramifications on the engineering of such systems.

Ultimately, the navigation of search space requires algorithms for separating the wheat from the chaff; for distinguishing good choices from weak choices. Here, I believe, van Laar's paper is at its strongest from our computational perspective. His investigation focuses upon how a balance is struck: a balance between the dialectical and the rhetorical; a balance between doing what you should (in order to be legal) and doing what you must (in order to win); a balance between going far enough to meet your goals, but not so far that you wind up committing a fallacy. Striking this balance is as important for

any AI system that analyses, generates or models argumentation of this sort, as it is for van Laar's model.

So where do these points of correspondence (the dialectical profile and the search space; the descriptive-normative models and generation; and the balancing of competing demands) take us? Computational systems have long been advocated as a testing ground (or dare I say, proving ground) for at least some classes of theory of argument: implementing a theory and pressing the "go" button can, at times, being a way of testing whether or not the theory holds water. This can, and has on occasion, provided real value to philosophers. There is benefit in the other direction too. Mature theories of argument can contribute to computational systems that work better, do more and are easier to use. (How much better, for example, if we could *argue* with Microsoft Word, and rationally persuade it to retrieve our accidentally deleted morning's work). These benefits are now starting to be much more widely appreciated in AI. This year, 2007, for example, there has been an international workshop on Computational Models of Argument (the sixth in the series), another on Argumentation in Multi Agent Systems (the fourth), a call for the International Conference on Computational Argument (number two), and several journal special issues devoted to the topic, including one in the top journal in the field, *Artifical Intelligence*. All in all that accounts for between 100 and 150 papers this year alone.

But there are also limitations to this interdisciplinary endeavour. There are often vocabulary differences that can send things off down the wrong path (for an example, consider the AI-philosophy discussions over the frame problem (Hayes, 1987)). Even if the basic terminological challenges can be overcome, the collaboration usually requires huge investment of labour – building computer systems is simply a hugely labour intensive task. And it often requires tedious specificity and detail (that is of little interest to either discipline). Dialogue logics are a good example: the work of Mackenzie, Hamblin, and more latterly, Walton and Krabbe, describes the games in sufficient detail to be able to explore the concepts that motivated them (*viz*., fallacies and commitment). More detail was, philosophically speaking, superfluous. Yet for the engineer, every last contingency and possibility must be catered for explicitly in order to build a system that works at all.

Yet such thoroughness can be beneficial – the devil often lies in the detail, and it may be the engineer's plodding through that detail that draws the devil out from whence he poses interesting philosophical questions. So too, the process of AI engineering may demand answers to questions that simply might not otherwise have been asked. Walton's recent collaborations with the AI & Law community, and its impact on the development of current thinking on non-deductive reasoning is a case in point (Gordon et al., 2007).

Computational approaches to fallacy are, I believe, the next wild frontier. We do not yet even have a way of formulating the problems, let alone building solutions. Van Laar's paper could be seen as a starting point for such investigations, and AI researchers could do much worse than to use it as a springboard into the area. I would imagine there are a number of questions such an AI person or computer scientist might ask to take forward a collaboration (I do not know if I count as such a person, but I am employed by a computer science department, so I take a liberty in putting words into my colleagues' mouthes):

How might we go about trying to automatically detect and automatically generate the eight varieties of standpoint revision, and thence the three categories of move? How

might we automatically determine whether we have an instance of rule following or rule breaking? How can we represent the soundness conditions algorithmically? And how do conditions (1) and (3) in particular lead to distinct representations? How should we pin down “abundantly clear” of soundness condition (2)?

Of course, perhaps it is inevitable that some, if not all, of the computer scientist's questions are of a philosophical nature. That is how the best collaborations can be formed. And I look forward to seeing AI engaging with pragma-dialectical models such as van Laar's in the near future.

link to paper

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