Commentary on: Ralph H. Johnson's "Defeasibility from the perspective of informal logic"

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In his brief but penetrating discussion of defeasibility, Johnson develops four main lines of criticisms towards Pollock’s account of this notion. He argues that:

- the notion of information, as used by Pollock, would require clarification;
- there has been too much loose talk in the secondary literature on defeasibility, with “defeasible” being equated with or associated to “revisable”, “falsifiable”, “criticizable”, and more;
- the defeasibility frame is too adversarial, tending to describe argumentation as a competition;
- Pollock’s inventory of defeaters is guilty of premise blindness, a flaw he inherits from “the deductivist proclivities of formal logic”.

On the first two criticisms, I can only agree with Johnson: indeed, the notion of information is extremely problematic, and Pollock’s treatment of it was sketchy at best; and yes, the amount of loose talk on defeasibility in the literature is hard to stomach and in dire need of regimentation.

As for the accusation of excessive militarization of argumentative exchanges, again I am happy to concede Johnson’s point, although I would add two considerations. First, argumentation theories should strive to remain neutral, as much as possible, on the competition / cooperation axis, when it comes to the analysis of arguments: to my mind, a theoretical account that systematically marginalizes the adversarial aspects of argumentation is as biased as one that gives them too much emphasis. Second, quite often a non-adversarial theoretical framework is obtained by solving ex ante one or more significant tensions between opposite priorities. Johnson himself offers a good example of this, when he describes his approach as one where “the purpose of argumentation would be to arrive at the best outcome; and we agree that the way to achieve this is through the giving and processing and criticizing and evaluation of reasons” (p. 10). No matter how much one agrees with this view, it is easy to notice that some potentially relevant factors here have been removed from the scope of consideration: for instance, the rhetorical values of different arguments, or the idea that each person is entitled to argue to foster private goals, whether or not these converge on any shared “best
outcome”. This is how peace looks after a (meta-theoretical) war has been fought and won, regarding the purpose and practice of argumentation.

However, these are just cursory remarks that basically underscore my agreement with Johnson’s views, with some qualification. Instead, I am a bit more sceptical on his accusation of premise blindness, and on the way in which he arrives to formulate such charge against Pollock. Thus, I will devote the remainder of my commentary to this issue.

Let me start by saying that the famous “Tweety example” is indeed a very poor one, and thus offers an easy target for Johnson’s well aimed criticism. It wouldn’t be fair to claim that Johnson is straw-manning Pollock, but only because it was Pollock himself that was straw-manning his own cause, by providing such a poor example of defeasible reasoning as a case study.

Here is the original argument:

(1) Tweety is a bird. Birds fly. 
Therefore, Tweety flies.

Johnson shows that, depending on whether one interprets “Birds fly” universally (“All birds fly”) or existentially (“Some/most birds fly”), the argument becomes either deductively valid (thus not defeasible, according to Pollock) but unsound, since “All birds fly” is false, or deductively invalid but defeasible on Pollock’s definition. Crucially, Johnson observes, the reason why the argument is unsound on the first interpretation is exactly the same that makes it defeasible on the second interpretation: that is, the fact that not all birds can fly. This in turn leads Johnson to criticize Pollock’s account for not contemplating the possibility of a defeater aimed at premises – a shortcoming that Johnson considers an instance of premise blindness.

Let us start from the first part of Johnson’s argument. Since it is based on the analysis of a single example, albeit a very famous one, it is fair to ask whether the same considerations would apply equally well to other examples. As a case in point, let us consider the following variation of Pollock’s original example:

(2) Tweety is a bird. Most birds fly. 
Therefore, probably Tweety flies.

This argument is still defeasible, of course: adding the premise “Tweety is a penguin” makes the conclusion false, since at that point the fact that Tweety can fly is no longer probable. Yet, here the option of considering the argument as deductively-valid-but-unsound is not viable: both premises are true, they remain true even after adding “Tweety is a penguin”, and the original argument is clearly not deductively valid, precisely because its premises could be true, and yet its conclusion false.

A first upshot of this analysis is that the ambiguity noted by Johnson in Pollock’s example is not a universal feature of any instance of defeasible reasoning. But there is a further insight that can be gained by reflecting on our variation of the Tweety case. I take it as self-evident that most people would consider (2) a good
argument, and certainly a much better argument than (1). But why is that? After all, they are both defeasible, and for the exact same reason: namely, the fact that Tweedy may turn out to belong to a non-flying species of birds.

The fact that (2) is a better argument than (1) is also revealed by how we would judge each of them retrospectively, after having learned that Tweedy is in fact a penguin. Such revelation would make us realize that (1) was flawed since the beginning, either because it was based on a false premise (in the universal interpretation) or because the conclusion did not follow from the premises (in the existential interpretation). In contrast, learning that Tweedy is a penguin would not prompt any retrospective criticism of the original argument in (2), since at that time, for all we knew, the premises did support the conclusion: that is, knowing that Tweedy is a bird increased the likelihood of Tweedy being able to fly. Nevertheless, the additional premise that Tweedy is a penguin defeats this argument too, no less than what happens in (1).

The morale of these considerations is, to me, that genuine defeasibility is based on the accrual of evidence – I would even say, it is a side effect of it. The universal interpretation of Pollock’s original Tweety example is not an instance of a defeasible argument, only of a trivially unsound deductive reasoning. Proper defeasibility reflects the fact that conclusions based on evidence are always open to revision, if more evidence comes to light. Such revision can be subversive, thus defeating the argument, or supportive, providing further grounds for its conclusion: as a case in point, imagine being told that “Tweety is not a penguin” as a further premise to (2), one that would further strengthen its conclusion.

How does all of this connect with Johnson’s charge of premise blindness, with respect to Pollock’s treatment of defeasibility? There are two main points of interest. The first is relatively trivial: it amounts to emphasizing that Johnson’s charge is too narrowly based on a problematic example, so that adequately making the point would at least require further discussion of other instances of defeasible reasoning. The second aspect is more interesting: focusing on Pollock’s original Tweety example has the unwanted side effect of limiting the discussion to truth considerations, whereas there are other features of premise adequacy that are equally relevant, if not more. As I already mentioned, the observation that “Tweety is a penguin” is a defeater not only for (1), but also for (2). If we reconstruct it as a counter-argument, following Johnson, we end up with:

(3) Tweety is a penguin. [No penguin can fly.]
Therefore, it is false that probably Tweety flies.

Interestingly, now (3) defeats (2) not by falsifying its premises (it is still true that Tweety is a bird and that most birds can fly, even if Tweety is a penguin), but rather by revealing their irrelevance to the point under debate, to wit, whether or not Tweety can fly. As far as the ability to fly is in question, knowing that Tweety is a bird and that most birds can fly is utterly irrelevant, if Tweety happens to belong to the sub-set of non-flying birds.

In fact, one may even pursue this line of reasoning a bit further, speculating that the intuitive appeal of an argument like (2) is based on pragmatic
considerations. In particular, we may give to that argument more credence than its literal meaning justifies, precisely because we read an implicature into it: that is, we take the speaker to be saying not only that “Tweety is a bird”, but also that, as far as s/he knows, “Tweety is not a penguin, nor an ostrich”. Whether or not this is indeed part of our standard understanding of that statement is an empirical question, one that I do not aim to settle here. But consider the following by way of intuitive evidence: If you were presented with argument (2), only to discover later that the speaker knew all along that Tweety was a penguin, would you not consider yourself justified in remonstrating against the speaker for a breach of basic cooperative principles? Personally, I certainly would.

To sum up, I tentatively agree with Johnson that Pollock’s treatment of defeasibility may be guilty of premise blindness, but I would like to see more evidence of that charge before passing a definitive verdict on the matter. As I tried to outline here, this would be a useful exercise not only to better establish Johnson’s case, but also to enrich his related analysis of premise adequacy. As he knows very well, premises are not only adequate in terms of truth, but also depending on their relevance, as well as other criteria. Whenever informal logicians fail to pay attention to this point, they are in danger of feeding another pathological offspring of deductivism: an obsession with truth.