DEFEAT RECONSIDERED AND REPAIRED

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Philosophers commonly distinguish between demonstrative arguments, which are designed to preserve truth, and non-demonstrative arguments, which conserve something else. R. A. Fisher (1936: “Uncertain Inference”, *Proceedings of the American Academy of Arts and Sciences*, 71, pp. 245-58.), for example, thought that statistical reduction was a type of logical, non-demonstrative inference whose aim is to assign a statistical probability to an individual. What is preserved by Fisher’s early proposal for *direct inference* is a presumption of “representativeness” of a statistical class to its individuals. Jon McCarthy and Pat Hayes (1969: “Some Philosophical Problems from the Standpoint of Artificial Intelligence”, *Machine Intelligence*, 4, p. 463-502.) thought that non-demonstrative reasoning was necessary in order for a robot to keep track of the things that remain unchanged by its actions. The consequences wrought by opening a door, for instance, do not typically include the shutting of a window. What is preserved by McCarthy and Hayes’ non-demonstrative *frame conditions* are commonsense assumptions governing office building kinematics.

John Pollock (1987: “Defeasible Reasoning”, *Cognitive Science*, 11, pp. 481-518.) thought that a common feature of these and other examples of non-demonstrative reasoning is the provisional standing of their conclusions, and how the evidential support for those conclusions may be *defeated* by additional information (1987: p. 484):

**Defeater:** Where $D$ and $E$ are jointly consistent propositions, $D$ is a *defeater* for $E$’s support for $H$ if and only if $E$ is a reason to believe $H$ and $E \& D$ are not a reason to believe $H$. 
In a recent paper, Jake Chandler (2013: “Defeat Reconsidered”, *Analysis*, 73(1), pp. 49-51) identifies an unwarranted symmetry constraint in Pollock’s definition, namely

\[
\text{Symmetry: For propositions } E, D, \text{ and } H, \text{ if both } D \text{ and } E \text{ provide a reason to believe } H, \text{ then } D \text{ is a defeater for } E \text{’s support for } H \text{ if and only if } E \text{ is a defeater for } D \text{’s support for } H \text{ (Chandler 2013: p. 50).}
\]

Chandler argues, convincingly, that Symmetry should not be a necessary condition for evidential defeat: it is straightforwardly possible for \(D\) to defeat the support that \(E\) gives to \(H\) without \(E\) defeating \(D\)’s support for \(H\). Chandler then proposes an alternative to Pollock’s account, one that avoids Symmetry. But Chandler’s fix, which he calls Defeater’, runs into a difficulty of its own.

\[
\text{Defeater’: Where } D \text{ and } E \text{ are jointly consistent propositions, } D \text{ is a defeater for } E \text{’s support for } H \text{ if and only if } D \text{ is a reason to not believe that } E \text{ is a reason to believe } H \text{ (Chandler 2013: p. 50).}
\]

The problem with Defeater’ is that it fabricates phantom support for a defeater to defeat: \(D\) may be a reason to not believe that \(E\) is a reason to believe \(H\)—which thereby suffices for \(D\) to defeat \(E\)’s support for \(H\)—without \(E\) being a reason for \(H\) in the first place. For example, inspecting the first 10 light bulbs from a production line and finding all 10 defective (\(E\)) does not provide a reason to believe that the next bulb off the line is faultless (\(H\)). Even so, learning that the last delivery of filaments to the factory are all oxidized (\(D\)) is a reason to believe that the 10 defective light bulbs do not provide a reason to believe that the next bulb is faultless. By Defeater’, \(D\) is a defeater for \(E\)’s support for \(H\) even though \(E\) does not support \(H\).
Defeater’ can be repaired by stipulating, as Pollock does in his original analysis, that $D$ is a defeater for $E$’s support for $H$ only if $E$ gives support for $H$. This yields the following repair to Chandler's Defeater’, namely

**DEFEATER'**: Where $D$ and $E$ are jointly consistent propositions, $D$ is a defeater for $E$’s support for $H$ if and only if (i) $E$ is a reason to believe $H$ and (ii) $D$ is a reason to not believe that $E$ is a reason to believe $H$.

Defeater’ enjoys all the advantages of Chandler’s Defeater’, and does so without the spectacle of phantom support.

**References**


