Borderline, yet not definitely so

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Abstract

Take a long (but finite) sorites series of men for the predicate 'tall'. There seems to be no sharp transition from the members of the series that are tall to those that are not. The truth-gap theorist explains this seeming absence of a sharp transition saying that there is a borderline case between the members of the series that are tall to those that are not. This explanation amounts to the truth of the next *gap principle* for the predicate 'tall': for any member x of the series, if x is truly tall, then it is not the case that its successor in the series is truly not (= falsely) tall. Since for the truth-gap theorist '*definitely*' is an object-language expression of the theory's own truth-predicate, we might express this gap principle in the object language:

(GP for 'T') $\mathcal{D}T(x) \rightarrow \neg\mathcal{D}\neg T(x')$
(where 'T' stands for 'tall' and x' is the successor of x in the series)

But the seeming absence of sharp transitions in the series cuts deeper than that. Avoiding a sharp transition between the tall and the non-tall members of the series, but positing one between the truly tall and the non truly tall members seems to achieve no real progress. Now in order to avoid a sharp transition between the truly tall's and the non truly tall's, the truth-gap theorist is committed to the truth of a second gap principle, this time for *definitely tall*:

(GP for '$\mathcal{D}T$') $\mathcal{D}\mathcal{D}T(x) \rightarrow \neg\mathcal{D}\neg\mathcal{D}T(x')$

The reasoning generalizes for any iteration of '$\mathcal{D}$' rendering all the gap principles of the form,

(GP for '$\mathcal{D}^nT$') $\mathcal{D}\mathcal{D}^nT(x) \rightarrow \neg\mathcal{D}\neg\mathcal{D}^nT(x')$

In a 2003 paper Delia Graff Fara argues that the truth-gap theorist cannot endorse all these gap principles. According to Fara the truth-gap theorist is committed to the rule of $\mathcal{D}$-introduction ($\varphi \vdash \mathcal{D}\varphi$). But Fara shows that given $\mathcal{D}$-introduction, the truth of all these gap principles is inconsistent for finite sorites series.

It is often assumed that supervaluationism in vagueness is committed to *global validity*. If this is the case, then the supervaluationist is subject to Fara's objection, since the reasoning used in her proof is globally valid. However, the notion of supertruth preserved by global validity is too strong. Global validity preserves truth in all precisifications but this notion is itself precise (since, according to this notion of supertruth, a sentence is supertrue in a precisification just in case it is supertrue in every precisification and, thus, it cannot be indefinite whether a sentence is supertrue). If the notion of supertruth is itself vague, supervaluationism is committed to a weaker notion of logical consequence named *regional validity*. The idea is, roughly, that whether something is supetrue is itself a relative-to-precisification matter; and regional validity preserves this weakened notion of supertruth.

The target of this talk is showing that the supervaluationist might (consistently) endorse gap principles adopting the regional notion of consequence. The crucial feature to show this fact is that regional validity allows (in a qualified sense) that members in a sorites series can be borderline, yet not definitely so.

References

Fara, D. G. (2003). Gap principles, penumbral consequence and infinitely higher-order vagueness. In J. C. Beall (ed.) *Liars and Heaps: New Essays on Paradox*. Oxford University Press. Originally published under the name 'Delia Graff'.