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Vagueness, lecture 10: Continuous sorites.

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https://extralogical.net/teaching/vagueness2019.html

1. Generality

- Weber and Colyvan [2010] argue that their topological approach constitutes a generalisation of the discrete one since the argument form is still "a recognizable sorites" (p. 325).
- Is this the case—are either the continuous or the more general topological sorites still recognisably sorites arguments?
  - In the continuous case, does the Leibniz continuity condition correspond well to the principle of tolerance?
  - Is connectedness a good generalisation of the principle of tolerance in the topological setting?
- Even if it is, do we really need the generality this framework brings?
  - Recall Unger's argument that we can always carry out sorites arguments to 'dismantle' ordinary (including continuous) objects.

    > [O]ur argument implies no particular, not to say particulate, theory of matter. For all we care, the only physical reality may be a single plenum, modifications of which are perhaps poorly labeled as atoms or as particles.
    >
    > [Unger 1979, pp. 122–3]
- Connectedness is a global property, while disconnectedness is local.
  - Weber and Colyvan say that they have proven that whenever we have a sorites series, the underlying space must be disconnected. Is this right? Why? (Or why not?)
  - How does this affect the viability of their overall approach?
- How convincing do you find the examples in this paper? Can you come up with better ones?

2. Classicality

- Weber and Colyvan claim that "if one rigidly sticks with classical topology, then epistemicism appears to be the only viable approach" (p. 325).
- Is this right, or can one stick with classical topology and take a non-epistemicist approach to vagueness? What do they mean by sticking *rigidly* to classical topology?
- They claim their approach doesn't beg the question with regards to the right solution to the sorites paradox. Is this right?
- How does this relate to the use of classical logic in the discrete sorites? Does classical topology just inherit its classicality from the logic?
- Do the non-classical approaches we've already discussed offer a natural way to generalise to cover topological sorites?

References

P. Unger. There are no ordinary things. *Synthese*, 41(2):117–154, 1979. doi:10.1007/BF00869568.

Z. Weber and M. Colyvan. A Topological Sorites. *The Journal of Philosophy*, 107(6):311–325, 2010.