Multilateral Supervaluationism and Classicality

Scandinavian Logic Symposium 2024

Reykjavik University, Iceland

Abstract

Does supervaluationism entail a departure from classical logic, and if so, should this departure be considered a defect? This talk reconsiders these classic questions [6, 8, 9, 10], in light of Incurvati and Schlöder's [5] recent proposal to define supervaluationist logic in a multilateral framework.

Supervaluationism holds that our language is vague because its semantics is underdetermined, and compatible with several *precisifications*; ways of making it precise. A sentence is only properly true (false) if it is true (false) according to all precisifications, and borderline if it is true on some precisifications but false on others. Different formal implementations of this account produce different logics with different relations to classical reasoning, and hence different questions on the justification and acceptability of the deviations (should there be any). Multilateralism [1, 3, 4, 7] treats the speech acts of weak rejection and assertion as primitive alongside strong assertion, through natural deduction systems that govern formulae prefixed with force-markers to indicate the speech acts. Supervaluationist logic is naturally formalized through such a system, for while definite truths (falsehoods) should be strongly asserted (rejected), borderline cases warrant neither, and hence should be both weakly rejected and weakly asserted. [5] presents both sentential and first-order supervaluationist multilateral logics (SMLs).

However, it is far from clear how these systems relate to classical logic, because the non-embeddable force-markers in the multilateral syntax prevent a straightforward comparison of valid theorems, inference rules, metarules, and so on, between multilateral systems and conventional 'unilateral' ones. Moreover, Incurvati and Schlöder's [5] argument that their approach defuses objections by Graff Fara [2] and Williamson [11], which concern supervaluationisms departure from classicality, is incomplete as a result.

We fix the situation, by developing a systematic method for the comparison of inference rules (of any order) across multi- and unilateral languages, and applying it to determine the precise relation between multilateral supervaluationism and classical reasoning. We show that the sentential SMLs of [5] are perfectly classical regarding theorems and valid inferences, but strictly weaker than classical logic on meta- and higher-level inferences, while [5]'s quantified SML is subclassical already on the level of theorems. Moreover, we prove that these departures from classicality are necessary—the former to allow for borderline cases, the latter to account for higher-order vagueness. No modification of the systems can possibly improve on classicality without incurring unacceptable costs. Finally, we see how our comparison method allows us to fill in the gaps in [5]'s response to the objections of [2] and [11]. We conclude that, when understood multilaterally, supervaluationisms departures from classicality are not defects.

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