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Pluralism about Criteria.

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Logic has historically been thought to enjoy a series of properties that make its status to various degrees privileged – in particular, its propositions have long been regarded to be a priori, unrevisable, necessary and analytic; moreover, the set of such laws has generally been taken to be unique. These traditional conceptions on the nature of logic have further often come coupled with a particular system, viz. classical logic (CL). However, more or less recently, some serious stabs have been taken at dismantling all of these assumptions. Several counterexamples even to the most basic laws and rules of inference of classical logic have been advanced to begin with, the most notable example of which is arguably [3]. Moreover, logical pluralists (for example [1]) took the task of defeating logic's uniqueness, by arguing that we should be accepting that there is in fact more than one correct logic. Finally, anti-exceptionalists about logic (for example [5], [4], [2]) have argued, building on Quinean ideas, that logic does not deserve any special place among the other disciplines for its laws do not possess any of the above mentioned features, and that its theories can be justified, revised, and compared just as scientific theories are – that is, by means of a broadly abductive methodology.

It is a merit of the recent discussion on anti-exceptionalism to have brought a focus on selection criteria that underlie theory-choice in logic. These criteria differ both in their kind and in the number of logics they select. In the exceptionalism vs. anti-exceptionalism debate, for example, traditional criteria such as analyticity, aprioricity, formality, necessity, etc. are opposed to abductive criteria such as simplicity, adequacy to the data, consistency, strength, etc. Orthogonal to this dispute, the logical monism vs. logical pluralism debate sees positions that contend that the relevant criteria can select at most one logic opposing positions that claim that more than logic is selected by those criteria and therefore legitimate. This tends to generate a wide combinatorics of positions: on the two ends, classical exceptionalist monists and deviant anti-exceptionalist pluralists; in between, a spectrum of anti-exceptionalist monists and exceptionalist pluralists, each with their logic or logics of choice.

Unfortunately, this can also quickly render disputes at cross-purposes, as theorists soon start talking past each others. So, for instance, classical monists might argue that CL has an edge in virtue of its simplicity, and/or widespread use in arithmetical, and hence scientific, practice; deviant logicians will not put this into question, but answer that - say - CL is unable to account both for our intuitions on natural language implications, and for longstanding semantic and set-theoretic paradoxes. That is, disagreement appears to rest not only (and, arguably, not prominently) on the various theories' own merits - e.g. on whether the material conditional really captures our informal use of "if ... then" statements - but rather on the grounds or criteria on the bases of which we should evaluate them - e.g. on whether natural language intuitions have a say in our selection of a logical theory. Similarly, pluralists will not object to the advantages of classical (or any other) logic in particular fields or applications, but rather claim that the grounds for selection compel us to sanction other, equally

legitimate, theories.

An arguably more fruitful and cogent strategy would consist in going the other way around – by first specifying a set of criteria for establishing when a theory is to be considered a legitimate logic, and only then by evaluating which candidate or candidates satisfies or satisfy those criteria. To these criteria we now turn. First, we survey a number of possible criteria for theory-choice, divided into different categories according to whether they count as exceptionalist or anti-exceptionalist, on the one hand, and whether they can be used to support logical monism or logical pluralism, on the other. We then suggest a new classification of possible views in the philosophy of logic based on the kind (exceptionalist or anti-exceptionalist) and number (monist or pluralist) of the criteria they adopt. We show how such novel classification suggests a form of pluralism about criteria themselves and we compare it with exceptionalism and anti-exceptionalism about criteria bout criteria.

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