

# What logics talk about when we talk about metaphysics (if any)

Logics *pro{v/b}e*.<sup>1</sup>

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Let logics not only prove but also *probe* for the sake of metaphysics. Our accompanies, surprisingly, include two seemingly completely opposite philosophers, namely Micheal Dummett and Ted Sider.

LET'S TALK ABOUT METAPHYSICS REALISTICALLY. But how? The most common variant of "incredulous stare" at the realism enterprise of metaphysics<sup>3</sup> would ask: how do you know what is going on in such a thing called *metaphysical reality*, which should be *independent of our epistemic and linguistic activities*, according to your own (standard) understanding?<sup>4</sup>

LET LOGIC SAY SOMETHING TO METAPHYSICS. Logic is often characterized by its universal (i.e. context-free) nature. Philosophers have traditionally expected logic as an *organon* since logic is believed to guide our *any* intercultural endeavour and lead us to the valid, correct and justified conclusions. The logic—the single, guine, true, and only logic—may do such a job. However, it has become highly questionable<sup>5</sup> to state there is such a privileged and ultimate logic. We are living in the era of *logical pluralism*: each logic is as logical as others.

LET LOGICS SPEAK, THEN. Although any single logic cannot work as a guiding rope as the old school expected, collective logics can contribute to metaphysics as a *probe*<sup>6</sup> to search the reality hidden behind our epistemic and semantic veils.

LET DUMMETT USE LOGICS FOR METAPHYSICS. Michael Dummett specifies one's metaphysical stance via her logical stance; to adopt bivalence (law of excluded middle,  $\phi \vee \neg\phi$ ) is to adopt realism; to reject bivalence is to reject realism (i.e. adopt *anti-realism*). Our favorite Dummett is the "laid-back" later Dummett, who steps back from his well-known commitment to intuitionistic logic and the resulting anti-realism.

LET SIDER RIDE ON THE SAME BANDWAGON. While his preference<sup>7</sup> is opposite to Dummett, Ted Sider's argument underwrites Dummett's move. His *structural realism* claims that there should be the privilege language which carves at the joint in nature, i.e. perfectly

<sup>1</sup> An individual presentation at the annual meeting of Japan Association for Philosophy of Science (JAPS), Chiba University. The latest version of this handout is available on: <https://www.overleaf.com/read/wrjmhxvswkfx>

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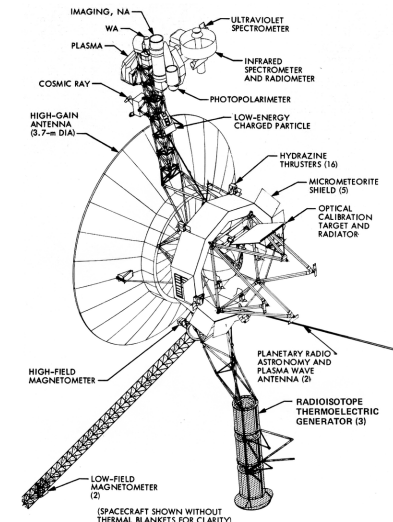
<sup>3</sup> In modal metaphysics, *epistemic* objection to modal realism of David Lewis questions why and how we know anything in other worlds, spatio-temporally (hence causally) isolated from our world.

<sup>4</sup> The standard characterization of metaphysics (e.g. Putnam) often emphasizes this *independency* clause.

<sup>5</sup> To insist that there should be the single privileged logic (*logical monism*) is still an available option but it requires three-fold discussions: (i) to defend logical monism itself and (ii) to secure her selection is correct (confirming she picks the right logic) and (iii) to explain *any* phenomenon in the framework of her picked logic.



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<sup>7</sup> Sider's: classical logic and (structural) realism.

describes the fundamental level of reality. As the title of his book says, there is a way to write the book of the world, although we do not have the complete version of the book of the world at our hand at this moment.

Sider believes that classical logic (plausibly and reasonably) deserves to be the language of the world book. Sider postulates physics and mathematics as research disciplines which carves at joints and hesitates to reject logic which works in their back-ends.

LET ME PARTICULARLY TALK ABOUT METAPHYSICS: MODALITY.

Modal metaphysicians including me are curious of metaphysical status of worlds<sup>8</sup> and the description of their inter-multiversal structure (if any). Semantics (both pure and applied) plays its important part. Granted the Dummettian conversion (semantics commits metaphysics), picking a logic through semantic model (by putting certain conditions) is also picking its background metaphysical theory. You cannot expect any single particular logic (i.e. the logic) to defeat all other logics and to celebrate its corresponding metaphysics as the genuine theory. However, still, modal metaphysicians can predict the backgrounding structure by testing whether many different logics can sit there. Or, our task is to build the metaphysical *platform* which many distinct logics fit into.

DO I TALK ABOUT METAPHYSICS REALISTICALLY? Yes I do.<sup>9</sup> I am (slowly) heading to the nice semantics which embraces many distinct logics and different metaphysical standpoints, being itself the real structure.

<sup>8</sup> Our main concern lays on *as what* possible worlds exist, granted its existence. This trend is mainly due to two arguments: (i) popularity of possible worlds as a powerful and handy analysis tool for philosophers in any field; (ii) Quinean ontological/ideological commitments.

<sup>9</sup> And I will. A poster related to this talk will be presented on June 17, 2018. The author unfortunately cannot present on site. Visit and leave comments!