

- MATTEO DE CEGLIE, *The V-logic multiverse and Benacerraf's challenge*.
University of Salzburg.
E-mail: decegliematteo@gmail.com.

Clarke-Doane (2020) argues that the pluralist stance in the philosophy of mathematics, i.e. the position that any consistent mathematical theory produces a legitimate mathematical universe, can provide an answer to Benacerraf (1973) problem iff we interpret it in terms of safety: our set-theoretic beliefs are reliable iff, for any one of them P , we couldn't have easily had a false belief as to whether P . In other words, if and only if we can be safe that by entertaining that belief we are not easily making a mistake. For example, the belief that " $V = L \wedge \exists 0^\#$ " cannot be held safely, since we have a proof that it is inconsistent, and we cannot have both the conjunctions. However, he also argues that it's not clear how the pluralist can show that her set-theoretic beliefs are safe. In this paper, I argue there is actually a way for the pluralist to show whether her set-theoretic beliefs are safe. To do so, I propose the following, more precise, safety principle:

Principle 1 (Pluralist Safety). *A set theoretic belief φ is safe if and only if it is possible to find a theory T such that $T + \varphi$ is consistent, and there exists an extension of V that witnesses such theory.*

If we were to entertain a belief that φ , but φ cannot be added consistently to any axiomatisation of set theory, then it would be probable that the belief is false, thus not satisfying the Safety principle. At the same time, even if φ could be added consistently to an axiomatisation of set theory, if we still cannot find an extension of V that witnesses this addition we would have doubts on the safety of our belief.

[1] CLARKE-DOANE, JUSTIN, *Set-theoretic pluralism and the Benacerraf problem*, *Philosophical Studies*, vol. 177 (2020), no. 7, pp. 2013–2030.

[2] BENACERRAF, PAUL, *Mathematical truth*, *The Journal of Philosophy*, vol. 70 (1973), no. 19, pp. 661–679.