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**Joachim Mueller-Theys\*** (mueller-theys@gmx.de). *On the Induction Problem*. Preliminary report.

Pure empiricism fails for  $\sigma := \forall x \phi(x)$  (e. g. “all men are mortal”) if parts of the structure  $\mathcal{M}$  considered are inaccessible, whether by place, time, number, or in an other way. Then  $\mathcal{M} \models \sigma$  simply has no such solution.

This calls for the other way of recognition: *deduction*: If evident, entailing axioms  $\Sigma$  can be detected, ideally  $\mathcal{M} \models \Sigma$  and  $\Sigma \vdash \sigma$ , then  $\mathcal{M} \models \sigma$ , as desired. Though ostensibly mysterious, it can be that axioms are immediately discernible, whereas consequences are not.

However, the axiomatic method requires conceptual determination: If mortal is universal (to human), “Fosca” (or “MacLeod”) was not human; if mortal is not universal, “Fosca” might be human.

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