The Adoption Problem and Cooper's Program

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The Nature of Logical Assessment
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1. Two problems of logical assessment

Williamson (2024), Fairbank et al (2025)

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b. The *background logic problem* (BLP): how can we evaluate a logic?

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(4) We conclude that $\Sigma \vdash \varphi$ is sound. (MP 2, 3)

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Hence, adoption is either superfluous or impossible.

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- How do we **gather** evidence of this kind?
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I then experimented with further argument forms generated more or less randomly. It began to appear that once one got beyond the simple inference patterns discussed in logic textbooks, English arguments for which the classical rules of logic failed to work right (when applied in textbook fashion) were almost as common as those for which they did. One might almost as well flip coins as use the classical logic to try to predict which English arguments would seem reasonable and which not!

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1978. *Foundations of Logico-Linguistics. A Unified Theory of Information, Language, and Logic.* Studies in Linguistics and Philosophy, Vol. 2, Springer Dordrecht.

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Thus, there is a concrete class of evidences corresponding to logico-linguistics as a legitimate science.

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Hypothesis A does **not** predict the basic evidence statements regarding dynamic implication.

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If these scales are accurate then John weighs four hundred pounds.

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John weighs four hundred pounds.

To see that this argument is not valid dynamically, imagine that you are told by person X, and accept, that *These scales are accurate* (the first premise). After John, a man of apparently normal weight, gets on the scales another person Y reads his weight and utters the second premise sentence, which you also accept. Will you necessarily come then to believe the conclusion that John weighs four hundred pounds? Hardly; for in accepting the second premise you would probably reject the first.

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Hence, Hypothesis B is logico-linguistically more satisfying.

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In a nutshell: Cooper's program can be deployed in order to answer the adoption problem.

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In the first case, E dissolves as clashing evidence.
In the latter, E cannot be recognized as such, because it is not framed in the logic B in which we carry out the revision.

Thus, revision is either innocuous or impossible.

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We should distinguish between meta-theory and background logic.

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> The use of a classical metalanguage does not prejudge in any way the hypotheses about the colloquial *if–then* of the object language which it is used to describe. All that is assumed in the choice of a classical metalanguage is that a classical metalanguage is rich enough to express the hypotheses that will be of interest. 'If–then' is associated with the material conditional in the metalanguage only as a 'convenient oral reading' as Church put it, with no claims made about how good a reading it is.

Cooper (1978)

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- Comparing Cooper's program with the generative grammar approach (Chomsky, Katz).

References

Arenhart, J. R. B. (2020)

The Problem with the Background Logic Problem.

Philosophica Critica 6(2):2-29

Cooper, W. S. (1978)

Foundations of Logico-Linguistics. A Unified Theory of Information, Language, and Logic.

Studies in Linguistics and Philosophy, vol. 2, Springer Dordrecht.

Fairbank, V. & Hlobil, U. (2025)

The Adoption Problem in the Philosophy of Logic.

Philosophy Compass, Wiley

Finn, S. (2021)

Limiting Logical Pluralism.

Synthese 198, no. S20: 4905–4923

Kripke, S. (2024)

The Question of Logic.

Mind 133, no. 529: 1–36.

References

Moscoso Vascónez, D. (2022)

El problema de la adopción y la necesidad de distinguir entre lógica y razonamiento.

Análisis Filosófico, Vol.42, Nº.2, pp. 317-337

Padró, R. (2024)

The Adoption Problem and the Epistemology of Logic..

Mind 133, no. 529: 37–60.

Priest, G. (2015)

Revising Logic.

In: Rush, P. (ed.) The Metaphysics of Logic, pp.211–223, Cambridge University Press

Priest, G. (2016)

Logical Disputes and the a priori.

In: Princípios 23 (40), 29-57.

Rieger, A. (2015)

Defending a simple theory of conditionals.

American Philosophical Quarterly, Vol. 52, No. 3, pp.253-260

References

Routley, R. (1980)

The choice of logical foundations: Non-classical choices and the ultralogical choice.

Studia Logica 39, 77–98.

Russell, G. (2014)

Metaphysical Analyticity and the Epistemology of Logic.

Philosophical Studies 171, no. 1: 161–175

Williamson, T. (2024)

Accepting a Logic, Accepting a Theory.

In: Padró, R. and Weiss, Y. (eds.) Saul Kripke on Modal Logic, Springer