

Review of: "Impossibilities, mathematics, and logic"

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Potential competing interests: No potential competing interests to declare.

The paper "Impossibilities, mathematics, and logic" overviews some examples of famous proofs of impossibility in mathematics and in logic. It is not completely clear what the purpose of the paper is, as some previous reviewers have already claimed. If the author is aiming only to present some of the famous examples of impossibility proofs, then, that aim is achieved, but at the price of being not very informative. However, if the paper is going to be a research paper, that is not enough. Furthermore, I would suggest that the following topics to be addressed in case there is a new version of the paper:

1. Wigner's famous claims concerning the unreasonable effectiveness of mathematics and impossibilities proofs are not the same kind of problem. If the author believes that they relate, this should be made explicit.
2. Even if the paper is restricted to an expository goal, the proper understanding of 'impossibility' in this context should be made clear. The proofs discussed in the example can be clearly framed in terms of the non-existence of certain entities exhibiting certain properties (a function, a rational number, a formal system), with no direct modality involved. 'Impossibility' then is just a synonymous for 'non-existence'. That makes the idea that mathematics also deals with impossibilities much less spectacular, but, it seems to me, closer to a more regimented view of proofs.
3. Given the unclear aims of the paper, once that is fixed, we expect that some conclusion is reached. So far, it is not clear what is the lesson to be learned from the cursory look on some examples of impossibility proofs.