

Practical vs Logical Reasons

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Abstract

For years, the European world saw millions of swans, and all of them without exception were white [1]. If inductive reasoning is valid, one would conclude that all swans are white. However, this would be incorrect: in 1667 Dutch explorer Willem de Vlamingh observed black swans in Australia, falsifying the hypothesis that all swans are white. While often used as a cautionary tale for the use of induction, such as with Popper's falsification principle [6], I want to explore a slightly different idea: does the existence of fabricated or otherwise failed accounts of Black swans give me a reason to ignore future arguments or doubt their existence? I argue that while faulty or fabricated reports do not give us a logical reason to reject a claim, they can give us a practical one for refusing to consider future arguments. This practical vs logical distinction gives an inductive reason for believing that future arguments will be invalid, but keeps one from being able to necessarily deny the claim in question without further argumentation.

1 Introduction

1.1 FFFF'd arguments

Fabricated, Falsified, Fallacious, or otherwise Failed (The four F's, FFFF) are "bad" arguments for a claim. These include fallacious arguments such as circular reasoning, fabricated evidence such as people lying or falsifying data, and arguments based on improper premises. I want to explore the extent to which FFFF arguments have on one's *justification* for believing a claim.

1.2 The Burden of Proof

Consider the following claims and position.

- PC (Positive Claim): X exists (black swans exist)
- NP (Neutral Position): X may or may not exist (black swans may or may not exist)
- NC (Negative Claim): X does not exist (No black swans exist)

The NP, or neutral position, is the default position referring to unbelief [4, 5, 7], whereas both the PC and the NC are claims that thus bear a burden of proof. To prove the PC, one simply needs to provide a single example (X in our case can be a black swan, to demonstrate black swans exist, one needs to find one). To prove the NC, one needs to show that either a) it leads to a contradiction (for instance, no married bachelors exist by definition) or b) by exhausting all possibilities (There are no members of the Supreme Court who went to Rice University; we can tell by looking at the alma mater of each) [2]. Thus, while one can argue the NC is given evidential support by the existence of many positive examples, it is never proven by the existence of these positive examples unless these positive examples are the only such examples.

2 Logical Reasons

As a result, it is clear that the existence of FFFF arguments or proofs for X do nothing to prove NC. In fact, they do nothing to necessarily affect the underlying probability judgement that that NC is true: if it did, one would be assuming that there was a statistical relationship between bad proofs and reasons and the existence of X itself; in other words assuming $P(X|F) \neq P(X)$. This is absurd in many cases; it would be arguing the fact the existence of doctored photos and reports of black swans existing in Europe has a causal (or confounding) influence on the actual existence of black swans later discovered in Australia. Of course, if all of our reasons for believing the PC turn out to be faulty, this undermines our belief in the PC. However this does nothing to logically justify our acceptance of the NC. A syllogism would be as follows

- A. The NC can only be logically concluded via contradiction or exhaustion of possibilities
 - (S1) B. FFFF arguments for the PC are neither a contradiction nor exhaust all possibilities.
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- C. Therefore, FFFF arguments for the PC do not allow the logical conclusion of the NC \therefore .

3 Practical Reasons

While the previous logically holds, there is something about it that feels off given our everyday experience. It implies that finding out people are lie to us does not affect our whether we should trust them (or anyone else) less in the future. It *does* seem we are justified assuming if someone lies to us before, they will likely do it again (like the children’s story “The Boy who Cried Wolf”). By moving from logical to pragmatic reasons, we can give a pragmatic, inductive argument against listening to further reasons, even if it does not logically follow that all such reasons are false. However this pragmatic conclusion is weaker in its metaphysical and ontological commitments; it is not an argument against

the *truth* of the claim rather than an argument for saving one's own time. It goes like this

- A. Past behavior is a good/pragmatic indication of future behavior (Inductive principle)
 - (S2) B. All past arguments for a claim have been FFFF arguments (FFFF'd condition) .
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- C. I am pragmatically justified in assuming the next argument will also be FFFF. \therefore

Notice here how the conclusion is not related to the *ontological* status of the claim; rather it relates to one's reasons for considering it. These reasons are practical in nature, and involve the fact that each of us have a finite amount of time to consider different arguments. With an infinite amount of time, one would need to investigate every possible occurrence or claim, especially in light of possible new evidence.

This pragmatic conclusion gets around the problem of induction described by Popper [6], while still allowing us to move on with our life without needing to consider each claim independently [3]. By removing oneself from considering future arguments, one cannot claim they are *logically* justified in rejecting the claim. However they *can* claim they are making a decision based on practical (temporal) considerations, which is only inconsistent with logical reasons if they overreach and claim these practical concerns affect the ontology of the claim in question.

Of course, there are ways in which even a practical conclusion fails. Premise (S2B) is not met if some past argument *is* valid, one did not perform an unbiased search for the best arguments, one does not understand the claim in question, and so on. Since it is a personal call and not a logical one, individuals can set their own "threshold" which could itself be influenced by motivated reasoning or a desire to not follow the evidence where it leads. Regardless, a practical vs logical distinction seems to make it possible for one to be pragmatically justified spending their time in other areas.

References

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