



# Objective falsity is essential to lying: an argument from convergent evidence

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**Abstract** This paper synthesizes convergent lines of evidence to evaluate the hypothesis that objective falsity is essential to lying. Objective accounts of lying affirm this hypothesis; subjective accounts deny it. Evidence from history, logic, social observation, popular culture, lexicography, developmental psychology, inference, spontaneous description, and behavioral experimentation strongly supports the hypothesis. Studies show that the only apparent evidence against the hypothesis is due to task substitution, i.e. ethical concerns or perspective-taking interfering with performance on categorization tasks. I conclude that, overall, existing evidence decisively favors objective accounts.

**Keywords** Lying · Truth-value · Task substitution · Logic · Social cognition · Perspective-taking

Lying is an important social category that has been studied for thousands of years by philosophers and theologians (e.g. Augustine 395; Aquinas 1273; Grotius 2001 [1625]; Bok 1978; Williams 2002; Fallis 2009). In recent decades, it has also been extensively studied by social scientists (e.g. Kraut 1980; Coleman and Kay 1981; Vrij 2008). Much of this research focuses specifically on defining our shared, pretheoretical concept of lying (for an extensive review, see Mahon 2016). Conceptually, what is it to lie? This general question gives rise to many more specific ones. Are lies essentially unethical? Does lying require deceptive intent?

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Are lies essentially false? This last question, about objective truth-value, is my focus here.

There are two possible answers to our question. Subjective accounts say “no,” whereas objective accounts say “yes.” According to objective accounts, lying essentially involves making a statement that *is* false. Simply put, lies are objectively false assertions. According to subjective accounts, lying essentially involves making a statement you *believe* is false. Simply put, lies are believed-false assertions. Many lies might also be false, but that is inessential to their being lies.

The simplest objective account says that there is nothing more to lying than making a false assertion, but objective accounts can add further conditions. Like their objective competitors, subjective accounts of lying can add further conditions, too, beyond making a believed-false assertion. I won’t be concerned with adding further conditions to either account, though. Instead I will focus simply on the disagreement over whether objective falsity is essential to lying. I’ll begin by reviewing evidence supporting objective accounts, followed by evidence offered for subjective accounts.

The history of logic is one source of evidence that lies are essentially false. Since ancient times, people have noticed that statements such as, “I am lying right now,” are extremely puzzling (Beall and Glanzberg 2011). Although it’s of course possible for you to lie, it doesn’t seem like you could lie by saying that you’re doing so. Or consider two statements:

1. Statement 2 is true.
2. Statement 1 is a lie.

Can they both be true? That seems impossible.

For thousands of years, logicians, mathematicians, and philosophers have grappled with these issues under the broad heading of “the liar paradox.” But if lies could be true, then it’s all been a massive and embarrassing waste of time. Saying “I am lying right now” presents no paradox because it could be one of the true lies. Similarly, as long as Statement 2 was one of the true lies, Statements 1 and 2 would both be true. It defies belief that such easy solutions eluded thinkers for so long. If lies could be true, then surely over the course of thousands of years, someone would have noticed, “There’s no puzzle here, much less a paradox, because it’s possible for lies to be true.”

One might wonder whether we need to appeal to the concept of lying to get the paradox in this case. What if, instead, we just considered these two claims: (1′) Statement 2′ is true; (2′) Statement 1′ is false?<sup>1</sup> On this alternative, *truth* and *falsity* are at the heart of the paradox. In response, if *falsity* is essential to the paradox, and substituting “a lie” for “false” preserves the paradox, then it follows that lies are false. In other words, the fact that the paradox is naturally stated in terms of *lying*, when it is ultimately *falsity* that matters, is powerful evidence that lies are essentially false.

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<sup>1</sup> Thanks to an anonymous reviewer for posing the question.

Children's stories are another source of evidence for objective accounts. They contain riddles which presuppose that lies must be false, such as the two-door riddle in the 1986 children's film *Labyrinth*. As the protagonist, Sarah, works her way through a maze, she arrives at a pair of doors protected by two guards. The rules of the game are simple. One door leads to where she wants to go, while the other door leads to death. She can ask one question directed at one of the two guards. One guard "always tells the truth," and the other "always lies." Sarah doesn't know which guard fits which description. She has no further information about the doors or where they lead, but she has all the information she needs to deduce the correct one.

The key move in her reasoning is *answer laundering*. If Sarah directly asked one of the guards whether this door leads to the castle, the answer would be useless. She couldn't know if the guard was telling the truth or lying, in which case she might as well just guess a door herself. So Sarah took an indirect approach that laundered one answer through another. By asking one guard whether the other guard would say that this door leads to success, Sarah deduced the correct one. Either she gets the truth about a lie, or a lie about the truth. Whenever she is told "yes," the correct answer is "no," and whenever she is told "no," the correct answer is "yes."

Given the rules of the game, this is guaranteed to produce immediately actionable information. The lie and the truth cancel each other out. But if lies could be true, then they might not cancel and the riddle wouldn't have a solution; it could only lead to a best guess. It's worth repeating that this riddle appears in a children's film, so the logic is considered elementary enough that even young children can appreciate it.

One might object that all this shows is that some screenwriters think that lies must be false.<sup>2</sup> This is a fair response to the way I presented the riddle above. In response, the riddle predates the film by decades, at least, and versions of it had been discussed by mathematicians and philosophers (e.g. Kraitichik 1953, pp. 14–15; for historical discussion and further references, see "Knights and Knaves"). The puzzle is thus not the screenwriters' idiosyncratic doing. Instead, although they might have stumbled upon it independently, the more plausible explanation is that they adapted it from earlier discussions, where it sometimes goes by the name "Knights and Knaves" or "Fork in the Road."

Relatedly, developmental findings demonstrate that the riddle's solution aligns with young children's understanding of lies. In one study, developmental psychologists used puppet shows to study lie attributions (Strichartz and Burton 1990). People across all ages treated truth-value as relevant to whether a statement was a lie. For children up to age 6, truth-value was basically the only thing that influenced their judgment about whether a speaker lied. When learning what lies are, the first thing we learn is that they are false.

Introspection and social observation provide additional evidence for objective accounts. Consider what can be inferred from the fact that someone believes a lie. A politician lies to his audience, "Iraq has weapons of mass destruction," and they

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believe him. It seems to follow *automatically* that they have a false belief about Iraq. No further information seems needed in order to deduce that conclusion. But if lies could be true, it wouldn't follow automatically. Instead it would follow only with some measure of probability.

Or consider how we might evaluate an accusation of lying (Carson 2006). You make an assertion and someone says, "That's a lie." Evidence is then produced proving your assertion was true. This *definitively* refutes the charge of lying. Your accuser would seem confused and ridiculous if she replied, "I admit that the assertion was true, nevertheless it was still a lie." But if lies could be true, the refutation would not be definitive and it's hard to see why her reply would seem confused and ridiculous.

(I would like to emphasize that observational claims made in the preceding two paragraphs are based on my own introspection and social experience, which might be idiosyncratic.)

This relates to a widespread understanding of lies reflected in lexicography and popular culture. Dictionaries define "lie" as "an intentionally false statement." The advertising copy for the film *The Invention of Lying* says, "In a world where everyone can only tell the truth ... this guy can lie." If only truths are told, then lying does not yet exist and so must be invented.

Or consider the film *Liar Liar* whose basic premise is that the lawyer Fletcher Reede is a pathological liar. Fletcher misses the birthday party for his son, Max, after promising that he would be there. Devastated, Max blows out his birthday candles and wishes that his father couldn't lie for a whole day. Most of the rest of the movie follows Fletcher around as he realizes that he is unable to lie. Instead, he is able to make only true assertions. This leads to many comically embarrassing conversations and a general inability to effectively represent his client at trial. According to the film's logic, true assertions cannot be lies.

Experimental studies confirm that people make strong and spontaneous inferences about a lie's truth-value. In one study, participants read scenarios that differed only in whether a speaker's reply was described as "lying" or "not lying" (Turri and Turri 2018: experiment 4). Later participants recorded judgments about the proposition asserted by the speaker. Participants strongly inferred that the statement was false when the speaker was described as "lying," and they inferred it was true when the speaker was described as "not lying."

In another study, researchers asked participants to read scenarios that differed only in whether an assertion was either true or false (Turri and Turri 2018: experiment 5). Participants were then asked, "If you had to describe the speaker's statement in just one word, what word would you use?" They entered any word they wished into a textbox. When the speaker's statement was false, a majority of participants selected "lie" or a cognate term such as "liar" or "lied." But when the statement was true, very few participants answered that way. People spontaneously associate lying with falsity, even when responding entirely free-form and "lying" is not mentioned in the stimuli.

Despite the considerable evidence discussed above, it's fair to say that objective accounts of lying are not widely accepted in philosophy. For example, a *Stanford Encyclopedia of Philosophy* article (Mahon 2016) organizes its discussion of lying

around this “traditional” definition: “To lie = to make a believed-false statement to another person with the intention that the other person believe that statement to be true.” Versions of this view go all the way back to at least the 4th century, when Augustine (395) wrote, “He may say a true thing and yet lie, if he thinks it to be false and utters it for true.”

In support of subjective accounts, philosophers and social scientists appeal to intuitions about thought experiments. An influential textbook on lie-detection says that lying “is defined solely from the perspective of the deceiver and not from the factuality of the statement,” so that “an actual truth could be a lie” (Vrij 2008). To support this, the textbook describes a version of a thought experiment originally due to Jean-Paul Sartre in his 1937 short story “The Wall.” For instance, “Suppose that a suspect, who believes that his friend is hiding in his apartment, tells the police that his friend is abroad.” Did the suspect lie or not? The textbook answers for us, “This statement is a lie [even] when, unknown to the suspect, his friend has actually fled the country” (Vrij 2008, p. 14).

Is this how the ordinary concept classifies such cases? A recent study addressed this question by testing cases like the following: Jacob’s friend Mary recently posted information on the internet that will alert the public to serious government corruption. Soon some federal agents visit Jacob and ask where Mary is, in order to detain her. Jacob thinks that Mary is at her brother’s house, so he tells the agents, “She is at the grocery store.” In fact, Mary is at the grocery store.

After reading the story, participants were asked, “Did Jacob lie about Mary’s location?” The response options were “yes” and “no.” Subjective accounts predict that people will attribute a lie. The results confirmed the prediction (Turri and Turri 2015: experiment 1). A strong majority answered “yes.” This is the strongest evidence available against objective accounts.

Broadly speaking, there are two explanations for this outcome. One is that subjective accounts of lying are correct. Undeniably, the result is favorable to this conclusion. The other explanation is that the results are misleading because they are due to *task substitution*. Task substitution occurs when participants are asked to do one thing but they do something else instead, effectively substituting one task for another.

Task substitution could plausibly be occurring here in at least two ways. First, people might be using the lie attribution to cast blame. Saying that someone lied implies blame and disapproval, whereas saying that he didn’t lie does not. Existing psychological findings show that inculpatory and exculpatory affect can cause people to distort obvious features of a situation and sometimes even offer contradictory answers to simple questions (Alicke 1992; Turri and Blouw 2015; Turri 2019). Second, people’s answers might be due to perspective-taking. Perspective-taking occurs when you consider how things seem to someone else, when you put yourself in their shoes. This ability is a major building block of social life and humans can be very good at it (Flavell et al. 1981; Tomasello 2008; Surtees and Apperly 2012). Jacob thought he was lying. He meant to lie. So participants might use the lie attribution to report how things seemed from Jacob’s perspective.

There is corroborating evidence that task substitution occurs in cases where speakers “unluckily” make a true assertion despite their intentions. In the

developmental study on lie attributions mentioned earlier, researchers asked adults to explain their answers. Commenting on a scenario where the speaker's name was "Chris," one adult said, "Well, I could have answered some of those stories the other way. I wasn't sure whether to answer in terms of what really happened, or what Chris believed" (Strichartz and Burton 1990). In another study, participants who attributed a lie in cases of "unlucky" true assertions explained their answers by saying things like, "Because she intended to lie," "Her intent was to deceive," "She thought she was lying," and, "In her mind, she was lying" (Turri and Turri 2018).

Taking a cue from people's explanations, researchers suspected that plain binary answer options ("yes/no" or "lied/didn't lie") promoted task substitution. Strictly speaking, these options provide all the descriptive resources needed to classify a statement as a lie or not. But there is an important difference between the affirmative ("yes", "lied") and negative ("no", "didn't lie") alternatives, which goes beyond mere description.

Denying that the speaker lied potentially forces a choice that affirming the speaker lied doesn't. When the speaker's statement is false, answering "he lied" does several things at once: it accurately categorizes the statement as a lie, reflects the speaker's perspective, and can express disapproval. But when the speaker's statement is true, answering "he didn't lie" can't do all those things at once. If you pick "didn't lie," that contradicts how the speaker views the situation. And, you might worry, you might appear to be condoning deceptive intent.

A richer pair of answer options would be "thinks she lied and actually lied"/"thinks she lied but actually did not lie." Another promising pair would be "he tried to lie and actually did lie"/"he tried to lie but only thinks he lied." These alternatives begin by characterizing the speaker's perspective, so participants would not be forced to choose between how things actually are and how they seem to the speaker. They also speak to ethical concerns. Someone could be criticized for making a statement that she thinks is a lie.

Accordingly, in light of participants' own explanations of their answers and previous psychological findings on processes affecting social judgments, researchers re-tested relevant cases, including Jacob's, with the richer answer options. The subjective and objective accounts make opposite predictions for these studies. If the subjective account is correct and the earlier results were not due to task substitution, then participants should continue attributing a lie to Jacob: he tried to lie and actually did lie. By contrast, if the objective account is correct and the earlier results were due to task substitution, then participants will no longer attribute a lie to Jacob: he tried to lie but only thinks he lied.

The results strongly supported the objective account. When Jacob made a deceptively motivated true statement, nearly everyone answered that Jacob only thinks he lied (Turri and Turri 2015: experiment 3; see also Turri and Turri 2015: experiment 2; Turri and Turri 2018: experiment 3).

Importantly, these studies included closely matched controls that allow us to rule out alternative explanations. Just as it is fair to wonder whether plain "yes"/"no" options artificially inflate lie attributions, it is fair to wonder whether the richer options artificially deflate them. Perhaps the richer answer options discourage people from attributing a lie.

Anticipating this possibility, researchers manipulated the statement's truth value in the experimental design. One group of participants read a version where Jacob's deceptively motivated statement is true (true condition); this is the version presented and discussed above. Another group of participants read a version that was exactly the same except that Jacob's deceptively motivated statement is false (false condition). As already mentioned, in the true condition, people overwhelmingly judged that Jacob only thinks he lied. By contrast, in the false condition, people overwhelmingly judged that Jacob lied. These results rule out the concern that the richer options bias people against attributing lies.

Thus it is highly probable that the principal evidence offered for subjective accounts is due to task substitution. Aside from appealing to tainted responses to particular cases, subjective theorists have claimed that "the vast majority" reject objective accounts and that it "seem[s] peculiar that whether or not one is lying depends on luck," such as one's statement actually turning out false (Mahon 2008, pp. 217–218). The empirical generalization about what a vast majority thinks is unsubstantiated and anecdotal reports of peculiarity don't differ significantly from appealing to intuition. I am aware of no other evidence offered for subjective accounts.

In summary, I have reviewed existing evidence relevant to determining an important feature of the ordinary lying concept, namely whether objective falsity is essential to it. Objective accounts claim that it is whereas subjective accounts deny it, substituting a psychological condition of believed-falsity for actual falsity. Objective accounts explain a wide range of convergent evidence from history, logic, lexicography, popular culture, linguistic development, social observation, inference, spontaneous description, and lie attributions in carefully controlled behavioral experiments. The only evidence offered against objective accounts is an appeal to intuition about cases of deceptively motivated assertions that "unluckily" turn out true, but even these cases turn out to support objective accounts. Participants' free-form explanation of their answers, previous findings on the effects of inculpatory affect and perspective-taking on social cognition, and behavioral experiments using multiple questioning procedures reveal that subjective accounts make false predictions about these cases.

Overall, then, the balance of existing evidence strongly favors objective accounts of lying. Consistent with the available information, there could be multiple ordinary lying concepts, including a dominant objective one and a secondary subjective one, solid evidence for which has so far eluded us. This cannot be ruled out, though it's worth noting that all the existing evidence can be explained by a single objective concept, alongside some identifiable task substitution that superficially might seem to suggest a subjective concept. Further research is needed before drawing firm conclusions on this issue.

Although positing multiple concepts has the theoretical drawback of being less economical, it could have the advantage of being more charitable in at least one respect. Suppose that one lying concept requires objective falsity whereas another requires only a deceptively motivated statement (which might or might not be false). People might then flexibly choose to apply one or the other concept when judging speakers. This hypothesis—that people competently decide among multiple lying



concepts and tend to accurately apply the chosen concept in any given situation, including when some true statements are counted as lies—is arguably more charitable than the hypothesis, defended above, that some judgments reflect task substitution leading to inaccurate categorizations. In response, one might argue that the task-substitution hypothesis needn't attribute incompetence or an all-things-considered error to participants. Instead, depending on how participants prioritize factual accuracy, fairness, sympathy, or other values when judging the situation at hand, they might be perfectly reasonable to engage in task substitution.

In this paper, I have set aside another potential source of evidence for the objective account. Some arguments begin with stronger, more specific proposals about the definition of lying which imply that objective falsity is essential to lying. For example, one proposal is that to lie is to knowingly make a false assertion (Turri 2016; Benton 2018; Holguín in press). Because knowing an assertion is false implies that the assertion is false, the proposal implies that lies are essentially false. The proposal is motivated by research on the normative connection between knowledge and assertion, on the one hand, and lying and cheating, on the other. Evaluating this particular proposal, however, falls beyond the present paper's scope.

In conclusion, unless and until subjective theorists show how their view explains existing evidence as well as objective accounts, or substantial new evidence emerges that objective accounts cannot explain, it is reasonable to conclude that objective falsity is essential to lying.

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