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## **Short Communication**

# Lying despite telling the truth

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#### ABSTRACT

According to the standard definition of lying an utterance counts as a lie if the agent believes the statement to be false. Thus, according to this view it is possible that a lie states something that happens to be true. This subjective view on lying has recently been challenged by Turri and Turri (2015) who presented empirical evidence suggesting that people only consider statements as lies that are objectively false (objective view). We argue that the presented evidence is in fact consistent with the standard subjective view if conversational pragmatics is taken into account. Three experiments are presented that directly test and support the subjective view. An additional experiment backs up our pragmatic hypothesis by using the uncontroversial case of making a promise.

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### 1. Introduction

Lying is an important moral category, which has been discussed by philosophers for centuries. Despite the great philosophical interest in the concept of lying there are surprisingly few empirical studies on the concept of lying coming from psychology. Psychologists have typically taken it for granted that we understand what lying is, and have therefore addressed other issues, such as lie detection or the developmental path of lying (e.g., Vrij, 2008; Xu, Bao, Fu, Talwar, & Lee, 2010).

# 1.1. The subjective versus objective view of lying

The standard definition of lying in philosophy is:

"Making a believed-false statement to another person with the intention that that other person believes that statement to be true."

[Mahon, 2008, p. 3]

This definition includes the so called *untruthfulness condition* which states that the statement needs to be *believed* to be false to constitute a lie. According to this definition it suffices that a liar believes a statement to be false even when it is in fact true (*subjective view*).

This subjective view has recently been empirically challenged by Turri and Turri (2015). They claim to have shown that most

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people have an *objective view* on lying which means that to count as a lie a statement has to be objectively false. The goal of this article is to defend the standard subjective view and demonstrate empirically that the findings of Turri and Turri are consistent with the standard view.

# 1.2. The studies of Turri and Turri (2015)

Turri and Turri (2015) used the following vignette in their experiments to test whether the concept of lying entails that the statement is objectively false<sup>1</sup>:

"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."

[p. 167]

When participants were asked "Did Jacob lie about Mary's location?", the overwhelming majority (78.3%) answered with "yes," which supports the standard subjective view. However, Turri and Turri (2015) claim that the responses are an artefact of the question mode. Rather than expressing whether the agent has told a lie, they may have interpreted the test question as a request to

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<sup>&</sup>lt;sup>1</sup> In Experiment 1 they used a slightly longer variant of this story but the quoted version was presented in all experiments that were used to argue for the objective view on lying.

assess whether the agent thinks he lied (i.e., perspective taking). Alternatively, subjects may have classified the statement as a lie because they wanted to express blame for the agent's intent.

To control for these possible artefacts, in subsequent experiments Turri and Turri (2015) used more complex response options that allowed subjects to separate attributions of the agent's intent from an assessment of whether the agent's speech act indeed constituted a lie. In Experiment 2, the crucial options among which subjects could choose were (out of four):

- (a) "He tried to tell a lie but failed to tell a lie."
- (b) "He tried to tell a lie and succeeded in telling a lie."

Choosing option (a) was interpreted as an endorsement of the objective view, option (b) expresses, according to Turri and Turri, a subjective understanding of the concept of lying. To rule out the possible confound that subjects interpreted failing and succeeding in these response options again from the perspective of the agent, Experiment 3 offered options (c) and (d) that were intended to rule out this possibility. Here option (c) expresses an objective, (d) a subjective concept of lying:

- (c) "He tried to lie but only thinks he lied."
- (d) "He tried to lie and actually did lie."

In the two experiments the overwhelming majority chose the options (a) and (c) that are consistent with the objective view.

#### 1.3. Conversational and experimental pragmatics

Turri and Turri (2015) interpret the findings of their Experiments 2 and 3 as supporting the objective view on lying. Here we offer an alternative explanation of their findings that is consistent with the subjective view on lying. Our explanation is based on conversational and experimental pragmatics (Grice, 1989; Noveck & Reboul, 2008).

It is important to note that in both experiments of Turri and Turri all the response options consist of two parts, which we shall call the "trying-part" and the "result-part." For instance, in Experiment 2 the objective option was "he tried to tell a lie but failed to tell a lie" while the option supposed to represent the subjective option was worded "he tried to tell a lie and succeeded in telling a lie." An important difference between the subjective and the objective view is that lying is a more difficult act under the objective view compared to the subjective view. To qualify as a lie under the subjective view, it suffices that the agent says something believed to be false with the intent of deception. Under the objective view, these conditions hold as well, but additionally the lie needs to state something objectively false. Because of this second component a lie can fail under the objective view, whereas failure is hard to conceive under the standard subjective view; here trying to lie and lying almost never fall apart.<sup>2</sup> In the moment the agent has uttered something he believes to be false he has lied. No further checks are necessary.

The ease of uttering a lie under the subjective interpretation makes the splitting up of the response options in a trying- and a result-part sound unnatural. When describing an action that took its normal course and was easy to achieve, we do not split up its description in a trying- and a result-part. An example from a different domain highlights this fact. For instance, if someone asks what Jacob ate for lunch and he ate a hamburger, we do not reply with

"Jacob tried to eat a hamburger and succeeded in eating a hamburger"-we just say "Jacob ate a hamburger." We only spilt up the description into a trying- and a result-part when the action was hard to perform or unlikely to be achieved ("he tried to break the world record and succeeded in breaking the world record"). Accordingly, if the question is split up for an act that normally is easy to accomplish, an additional unusual complication seems to be pragmatically implied. In the eating example, the two-part format of the question may imply that there was something special about eating the hamburger, something that goes beyond opening the mouth and swallowing food. For example, the result-part "succeeded in eating a hamburger" could be interpreted as implying that the whole hamburger has been eaten although it was really too big for a normal person, or a person is described who ate the hamburger for the first time without making a mess.

Something analogous may have happened in the lying scenario in Turri and Turri's experiments. When subjects who in our view understood lying in the subjective sense were presented with the split-up response options, they might have interpreted the question not as solely referring to whether Jacob lied. If the question had just been about lying, less complex response options would have been chosen (such as "he did lie" and "he did not lie"). Splitting up the answers into a trying- and a result-part might have led subjects to conclude that the questions were not merely about the question of whether Jacob lied but about some additional relevant component of the story, namely the fact that what Jacob said turned out to be true although he intended the statement to be objectively false. Since the trying-part is identical in both response options and only the objective option states that he failed, subjects might have chosen the objective option not because they think that lying requires falsity but because of the fact that this response option expresses the failure of the agent to say something that is objectively false.

In sum, our hypothesis is that subjects in the studies of Turri and Turri (2015) did hold the subjective view of lying but were led by the two-part response options to interpret the test question not merely being about the question of whether Jacob lied but about the question of whether what Jacob said was objectively false. In the following experiments we will provide direct empirical evidence for this view.

# 2. Experiment 1

The pragmatic implications of the split-up options used by Turri and Turri (2015) could be avoided by providing two options, one which states that Jacob lied and the other one stating that he did not lie. This is exactly what Turri and Turri did in their first experiment in which the overwhelming majority stated that Jacob lied. This finding fully supports the subjective view, and in our view is the best test for assessing how people understand the concept of lying. However, Turri and Turri (2015) pointed out two possible confounds, blame and perspective taking. In the present experiment we will focus on blame. According to Turri and Turri, subjects may have used the lying option to express their disapproval of the protagonists' conduct. It may certainly be true that the lie in the scenario is considered blameworthy by people. But no empirical evidence was offered by Turri and Turri for the further claim that subjects actually try to express blame by changing the meaning of the concept of lying. We remedied this deficit and actually tested this supposition. We presented subjects either with the story used by Turri and Turri in their Experiments 2 and 3 or with a modified version of this story in which Jacob and Anna live in a country ruled by a merciless dictator who commits crimes against humanity. Anna has reported these crimes and therefore faces torture if she gets caught. Otherwise the story was the same as in Turri and

<sup>&</sup>lt;sup>2</sup> Cases in which it may be appropriate to say that somebody tried but failed to lie may occur in extremely unlikely scenarios. For example, somebody may try to utter a lie but because of feelings of guilt (or some act of God) he may be unable to utter the words.

Turri (2015). Jacob tells the federal agents that Anna is at a grocery shop where in fact she is when the agents are searching for her. Subjects were either asked whether Jacob lied (yes or no) or whether he is to be blamed for trying to deceive the agents (yes or no).

#### 2.1. Method

## 2.1.1. Participants

The experiment was run online in the U.K. To make sure that subjects paid attention to the task, we asked them at the end of the experiment whether Jacob wanted to deceive the agents and whether he wanted to help Mary. We included the data of 249 subjects in our analyses who replied correctly to all these questions and who worked for longer than a minute on the task. Subjects earned 0.30£ for their participation.

### 2.1.2. Material and procedure

Subjects were randomly assigned to one of four conditions in a 2 (story: original vs. dictator)  $\times$  2 (test question: lie vs. blame) between-subjects design. They were presented with either the original or the dictator story. In both conditions they were asked "Did Jacob lie about Mary's location?" (yes/no) or "Is Jacob (morally) to be blamed for trying to deceive the agents?" (yes/no). Subsequently, subjects were asked to respond to the control questions and asked some demographic questions.

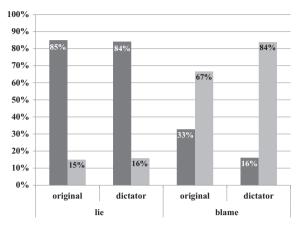
## 2.2. Results and discussion

The results of the experiment are shown in Fig. 1. We replicated the finding of the original study with the majority of subjects (85%) declaring that Jacob lied (binomial test, 51 out of 60, test value = .5, p < .001). Moreover, our blame manipulation was successful. Significantly more subjects chose to blame the agent in the original story than in the dictator story (33% vs. 16%, p < .05). However, although the blame ratings differed significantly there was no difference with regards to the question whether Jacob lied (85% vs. 84%, p = .89). These results support the subjective view (as Experiment 1 in Turri & Turri, 2015) and demonstrate that subjects did not use the test question as an opportunity to express their disapproval of the protagonist's conduct.

### 3. Experiment 2

With blame being ruled out as a confound, we now turn to our pragmatic theory and the second confound Turri and Turri (2015) postulated. Turri and Turri argued that in their Experiment 1 " [...] participants might have simply answered in accordance with how things seem to the agent. [...] Regardless of what is objectively true or false, if the agent makes a dishonest assertion, then he thinks that he is lying. So perspective-taking could produce the observed results." (p. 163) To prevent subjects from taking the protagonist's perspective, Turri and Turri removed some details from the story that could encourage perspective taking and provided subjects with the two-part response options, both of which started with "he tried to lie" which reflected the perspective of lacob in both alternative response options. The second part then contrasts "failed to tell a lie" with "succeeded in telling a lie" which, according to Turri and Turri, allows subjects to express their understanding of the concept of lying uncontaminated by the protagonist's perspective.

Our goal of Experiment 2 was to stick as closely as possible to the procedure proposed by Turri and Turri (2015) while blocking the pragmatic re-interpretation of the response options. We used the same response options as Turri and Turri in their Experiment



■ lying/blame ■ not lying/no blame

Fig. 1. Percentage of participants' response choices in Experiment 1.

2 but in one condition added one additional part in which it was stated that what was said turned out to be true. Thereby, we intended to decrease the probability of subjects interpreting the response options as a request to assess the protagonist's success or failure to state something objectively false. Given that the rest of the response options was identical with the ones Turri and Turri proposed, perspective taking is not an issue anymore. Moreover, adding the obvious fact that Jacob in fact told the truth is compatible with both the subjective and the objective view. In fact, if the objective view was true this addition should rather increase than decrease the number of responses conforming to the objective view because it highlights the fact that Jacob has told the objective truth.

# 3.1. Method

# 3.1.1. Participants

To make sure that the subjects paid attention to the task we asked them at the end of the experiment whether Jacob wanted to deceive the agents and whether he wanted to help Mary. Furthermore, to ensure that subjects paid attention to the story they were asked whether what Jacob said about Mary's location was objectively true. 107 subjects who replied correctly to all these questions and who took longer than a minute to complete the experiment were included in the analyses. Subjects earned 0.30£ for their participation.

## 3.1.2. Material and procedure

Subjects were randomly assigned to either the original condition (without the new endings) or to the augmented condition (endings in squared brackets; brackets not displayed on screen). They were presented with the following task: "Choose the option that better describes Jacob in the story. When Jacob spoke to the agents about Mary's location:

- He tried to tell a lie but failed to tell a lie [because what he said turned out to be true].
- He tried to tell a lie and succeeded in telling a lie [although what he said turned out to be true]."

Subsequently, subjects were asked to respond to the control questions and were asked some demographic questions.

## 3.2. Results and discussion

The results of the experiment are shown in Fig. 2. We replicated the finding of the original study with the majority of subjects (78%)

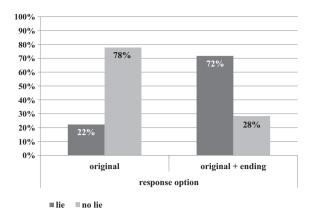


Fig. 2. Percentage of participants' response choices in Experiment 2.

choosing the objective option ("he tried to lie but failed in telling a lie") when Turri and Turri's (2015, Experiment 2) wording was used (binomial test, 42 out of 54, test value = .5, p < .001). In the new augmented condition, however, in which we added the clause that what the protagonist said turned out to be true, the majority of subjects (72%) chose the subjective option (binomial test, 38 out of 53, test value = .5, p < .05). Hence, the two conditions significantly differed from each other (p < .001). This finding provides support for the view that subjects use a subjective concept of lying. The shift toward the objective option in Turri and Turri's framing of the response alternatives is in our view due to a pragmatic re-interpretations induced by the framing of the response options.

## 4. Experiment 3

Turri and Turri (2015) expressed doubts themselves that the results of their Experiment 2 clearly supports the objective view arguing that a failed lie may still be viewed as a lie. They therefore conducted a third experiment in which they contrasted the response options "he tried to lie but only thinks he lied" (objective view) with the response option conforming to the subjective view "he tried to lie and actually did lie." We again suspected that the splitting up of the response options led subjects to focus on the failure of the lie to state something objectively false. To block this interpretation, we chose the same response options as Turri and Turri (2015) but manipulated whether it was additionally mentioned that what was said turned out to be true.

Another feature of Experiment 3 of Turri and Turri (2015) is that they added a prime immediately before the test question on the same screen. Subjects were asked whether what Jacob said was objectively true or false. Since we suspected that this prime may, as a demand characteristic, have alerted subjects that in this experiment objective truth or falsity is particularly relevant for answering the test question, we added control conditions without the prime in our design.

#### 4.1. Method

## 4.1.1. Participants

196 subjects met the same criteria used in the previous experiment and earned 0.30£ for participation.

## 4.1.2. Material and procedure

Subjects were randomly assigned to one of the 2 (prime: present vs. absent)  $\times$  2 (ending: added vs. not added) between-subjects conditions. In the prime conditions subjects were

presented with the phrase "What Jacob said is objectively:" and could choose between "true" and "false." Subsequently they were asked (in all conditions): "Which better describes Jacob?" The following response options were offered (new endings in squared brackets; brackets not displayed on screen):

- He tried to lie and actually did lie [although what he said turned out to be true].
- He tried to lie but only thinks he lied [because what he said turned out to be true].

After having answered these questions, subjects were asked to respond to the control questions and were given some demographic questions.

#### 4.2. Results and discussion

The results are shown in Fig. 3. In the conditions in which subjects were not alerted to pay attention to the objective truth ("no prime"), we found a clear reversal. Whereas we replicated the results supporting the objective view when Turri and Turri's response options were used, the pattern strongly reversed when the new ending was added in which it was stated that what Jacob said turned out to be true (p < .001). This reversal can also be seen in the conditions with the prime (p < .001) although the effects are somewhat weaker. The weakening of the effect shows that adding the prime alerted subjects to pay more attention to the objective truth of the utterance and strengthened the effect of interpreting the result-part of the response option as request to assess objective truth.

## 5. Experiment 4

So far we have argued that the shift toward the objective options in Turri and Turri's (2015) Experiments 2 and 3 are due to a pragmatic re-interpretation of the test question induced by the splitting of the response options in two parts. While the results of our new experiments support this interpretation, it would be desirable to have converging evidence for this process from a domain in which the meaning of the target concept is not under dispute. The act of making a promise is such a case. Promising is viewed by linguists as a performative act which just depends on the context of utterance and which can neither be true nor false (Austin, 1962). Most importantly, making a promise is not invalidated by breaking the promise later. Our goal is to investigate

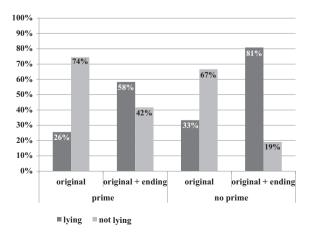


Fig. 3. Percentage of participants' response choices in Experiment 3.

whether using the split response options suggested by Turri and Turri would in this case also lead to responses that apparently seem inconsistent with the universally accepted meaning of the concept of making a promise.

#### 5.1. Method

#### 5.1.1. Participants

362 subjects who passed an inference attention check were included and were paid 0.50£.

## 5.1.2. Material and procedure

Subjects were presented with the following story:

"Jacob and Anna have been a couple for the last five years. At the moment, however, Anna is thinking about splitting up because Jacob has been drinking a lot of alcohol lately. In order to save the relationship, Jacob promises Anna to never ever touch any alcohol again. To keep his promise and thereby saving the relationship, he throws away all the alcohol that he used to keep in his flat. However, two weeks later, an old friend is visiting Jacob and brought, as a gift, a quite old and expensive whiskey. Due to his promise, Jacob first denies the offer to drink the whiskey but is not able to overcome the temptation after his friend has asked him several times. The two get really drunk. Because of Jacob having been drunk once again, Anna breaks up with Jacob."

Participants were randomly assigned to one of three conditions that merely differed in the offered response options. In the *control condition*, participants were asked to choose between two simple options:

- (a) He made a promise.
- (b) He did not make a promise.

This condition resembles the options offered in Experiment 1 of Turri and Turri (2015).

In the *two-option condition*, two different response options were offered that were inspired by the two options in Turri and Turri's Experiment 2:

- (c) "He tried to make a promise but failed to make a promise."
- (d) "He tried to make a promise and succeeded in making a promise."

In the *three-option condition*, participants were presented with the two response options of the two-option condition but in addition a third option was offered:

(e) "He made a promise but failed to keep it."

## 5.1.3. Results and discussion

The results are shown in Fig. 4. The vast majority of participants indicated that the agent in the story made a promise in both the control condition, option (a) (binomial test, 122 out of 124, test value = .5, p < .001) and the three-option condition, option (e) (binomial test, 109 out of 120, test value = .33, p < .001). Most importantly the dominant answer chosen in the experimental two-option condition was that the agent tried but failed to make a promise (option (c)) (binomial test, 94 out of 118, test value = .5, p < .001).

Thus, as in the case of "lying," participants could be pushed into answering that the agent failed to make a promise although in the other conditions they clearly expressed that he did make a promise. Restricting the response options apparently led to a reinterpretation of the meaning of the test question, as in the case of lying.

#### 6. General discussion

Our results show that Turri and Turri's (2015) conclusion that our concept of lying requires the statement to be objectively false is not as clear-cut as they suggest. In Experiment 1 we showed that their finding clearly supporting the subjective view cannot be explained by subjects' desire to blame the agent. In Experiments 2 and 3, the mere addition of an ending stating that the agent's statement turned out to be true to Turri and Turri's original response options also led to answers supporting the subjective view.

We interpret these findings as showing that subjects are highly sensitive to the pragmatic implications suggested by the response options offered to them. When the response options seem to be at odds with their intuitive understanding of a concept, they try to find an interpretation that the experimenter might have intended instead. We have shown that minimal changes can have potent effects on subjects' interpretation of response options. Moreover, we demonstrated that even in the uncontroversial case of making a promise subjects can be led to say that somebody failed to make a promise despite the fact that with different response options they

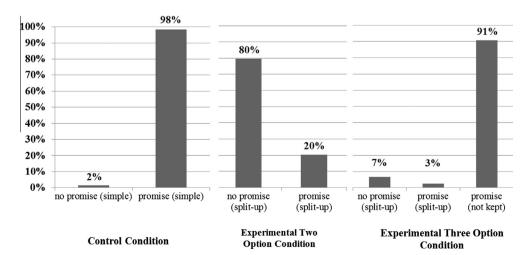


Fig. 4. Percentage of participant's response choices in Experiment 4.

could clearly declare that a promise has indeed been made. In sum, we feel that there is no reason to abandon the standard subjective view of lying which has been held by philosophers for centuries.

# Acknowledgements

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# Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.cognition.2016. 01.017.

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