LYING WITH CONDITIONALS

BY ROY SORENSEN

If you read this abstract, then you will understand what my essay is about. Under what conditions would the preceding assertion be a lie? Traditional definitions of lying are always applied to straight declaratives such as ‘The dog ate my homework’. This one-sided diet of examples leaves us unprepared for sentences in which conditional probability governs assertibility. The truth-value of conditionals does not play a significant role in the sincere assertion of conditionals. Lying is insincere assertion. So the connection between lying and falsehood is broken when lying with conditionals.

Drawing on Frank Jackson’s account of indicative conditionals, I argue that it is possible to lie with true conditionals by virtue of their false conventional implicatures. False conversational implicatures only guarantee misleading assertions, not lies. Lying remains a semantic rather than a pragmatic affair.

What does lying have to do with falsehood? Quite a bit when the lie is in the declarative mood. When Eve denies eating the apple, she lies by virtue of the falsehood of what she asserts – or at least by virtue of her belief that her assertion is false.

Heretofore, declarative lies constitute all the data used to define ‘lie’. Declaratives also form all the data Harry Frankfurt uses in his analysis of bullshit. (He characterises the bullshitter as a self-advertiser who asserts with indifference to the truth.) This one-sided diet of examples includes more broad-minded commentators who extend their analysis to related phenomena such as spin, half-truths, and ‘keeping someone in the dark’.

When we lie with conditionals, conditional probability is the key to sincerity, not truth-value. These neglected lies show that a comprehensive definition of lying must start with sincerity and derive a requirement for truth from the sincerity conditions of declaratives.

1 Predecessors of this paper were presented at the University of Oslo, Smith College and at the Pacific American Philosophical Association in 2012. Special thanks to my commentator, Don Fallis, for prompting me to say more on ‘what is said’.
I. TOP-DOWN ARGUMENTS FROM INTERCHANGEABILITY

Some linguists and philosophers (Michael Geis and William Lycan⁴, updated in Lycan⁵) view prototypical declaratives and prototypical conditionals as opposite poles of a spectrum. Declaratives blend into conditionals as more marks of conditionality are displayed. These gradualists will be suspicious of any attempt to exile lying to the declarative wing of the continuum. If you can lie with ‘I will leave when you leave’, then you can lie with ‘I will leave if you leave’.

Even those who think there is a sharp line will concede that many declaratives are interchangeable with conditionals. Consider an embezzler who lies when she assures her boss ‘No one except you knows the password to this account’. This embezzler could not have avoided lying by substituting the synonymous conditional ‘If anyone knows the password to this account, then that person is you’.

Together, ‘if’ and ‘all’ can define negation and thereby form a truth-functionally complete set of connectives⁶. Consequently, if it were impossible to lie with conditionals, then all lying could be prevented by translating everything into universalised implications of the form ‘For all x, if . . . then . . .’. But this does not fulfill G. C. Lichtenburg’s fantasy: ‘I often wished that there would be a language in which it were impossible to tell a lie.’

II. A BOTTOM-UP ARGUMENT FROM MATERIAL CONDITIONALS

Who told the first lie? In Sunday school, I was told that the answer lay in Genesis (2:17). God warns Adam and Eve ‘If you eat the fruit from the Tree of Knowledge, you will surely die’. The serpent denied this.

I assumed the serpent was lying because God always tells the truth – and the serpent knew God’s veracity. I was surprised that when Eve ate the fruit, she lived. My surprise was based on the most persuasive rule for evaluating conditionals: Assign falsehood when the antecedent is true and the consequent is false. Jonathan Bennett’s textbook A Philosopher’s Guide to Conditionals⁷ symbolises the rule with the formula: T → F = F.

My Sunday school teacher defended God’s honesty by insisting that ‘die’ meant transformation from immortality to mortality. Under this interpretation, God’s warning was true because eating the apple made Eve mortal (though Eve’s enormous life span of many centuries suggests some momentum from her earlier immortality). The antecedent and consequent of God’s warning are each true. My Sunday school teacher was applying the second most persuasive formula for conditionals: $T \rightarrow T = T$.

But what is the content of the serpent’s lie? If God was uttering a material conditional and the serpent was merely negating God’s conditional, then the serpent’s denial is equivalent to a conjunction: ‘You will eat the fruit and you will not die’. That is too strong. The serpent’s denial is not a conjunction; it is a contrary conditional, namely, ‘If you eat the fruit, you will not die’. Given conditional excluded middle, only one of the two conditionals can be right. So the serpent is indeed disagreeing with God.

### III. THE $T \rightarrow F = F$ FORMULA

An older boy warned my brother and me: ‘If you step on a crack, you will break your mother’s back’. We thought this unlikely. But given the stakes, we walked carefully home. As we approached our front yard, my brother deliberately stepped on a crack and then raced through the doorway. Frozen in my tracks, I shortly heard my brother triumphantly shout: ‘It was a lie!’.

A material conditional is false exactly when the antecedent is true and the consequent is false. This formula, $T \rightarrow F = F$, works well for all conditionals.

The $T \rightarrow F = F$ formula is grudgingly conceded even by sloganeers who say ‘Conditionals lack truth-values!’ (Bennett at pp. 114–118). Most of these ‘no-truth-value’ theorists further concede that the formula $T \rightarrow T = T$ also holds. They only balk at the remaining cases. (For a thunderous broadside of arguments for assigning truth-values to conditionals, put yourself in ear-shot of Lycan’s *Real Conditionals*, chapter four.)

The real point of their slogan ‘Conditionals lack truth-values’ is that their truth-values, even when possessed, are insignificant. To understand conditionals, focus on the conditional probability expressed by the sentence, not the probability of that sentence being true. (This is the probabilistic version of Frank Ramsey’s heuristic in which one tests
conditionals by tentatively adding the antecedent to one’s stock of beliefs and checking whether this leads to belief in the consequent.)

I endorse the spirit of the ‘no truth value’ slogan but not the letter. I agree with H. P. Grice, that indicative conditionals have the same truth conditions as the material conditionals. Grice believed that the paradoxes of material implication arise from confusion between truth and assertability. If one knows that the antecedent is false or one knows the consequent is true, then Grice’s maxim of quantity says one should make this stronger claim. Failure to do so is misleading. And if one knows there is no connection between the antecedent and consequent, the maxim of relevance is violated.

IV. LYING WITH TRUE CONDITIONALS

Given the truth conditions for the material conditional, there will be true conditionals that can be used for lies. Consider the false directions residents of Cornish, New Hampshire gave to protect the reclusive author J. D. Salinger from nosy reporters: ‘If you drive two miles down that dirt road, you will be at his front yard’. The conditional is a lie even if the reporter does not drive down that road. There is no need to falsify the speaker’s assertion for it to be a lie. (The conditional is true given the truth table definition for material conditionals: $F \rightarrow F = T$.)

Subscribers to Grice’s theory might join those who hold that all lies are falsehoods. I shall present a counterexample to this coalition.

In the ‘All ye his Saints’ episode of Bonanza, a little boy, Michael, hears a physician pessimistically conclude that only God can help Michael’s father (who has been wounded in a gun accident while clearing owls from his barn). As night falls, the farmhand Elijah, an Indian convert to Christianity, tucks Michael in bed. Elijah describes God as an old man who lives alone, high in the local mountain, careworn from all his responsibilities.

This makes a big impression on the boy. Determined to save his father, Michael slips away during the night. He rides a mule up the mountain. There he meets an old, white bearded mountaineer, Tom Caine. Michael mistakes Caine for God.

Caine is actually a fugitive; he had been convicted of leading a drunken raid against an Indian village in which Indian children were murdered (like ‘wolf cubs’). Naive Michael begs ‘God’ to spare his father’s

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life. When Caine denies being God, Michael infers that God is just testing his faith. Soon Michael’s pestering is eclipsed by a much bigger problem for the old mountaineer; a rescue party for the boy has come into view. One of the rescuers, the impetuous Joe Cartwright, will not be scared off by rifle shots. Joe is injured in a reckless charge. His companions retreat. Caine must now extend his supervision to Joe.

Exasperated, Caine gets drunk. When Joe asks for a drink, Caine fills a cup and tells Michael that if he carries it to Joe without spilling a drop, his father will be all right. Joe is appalled. He implores Caine to tell the boy it is a lie. Caine denies he is lying. He insists that this is a test. The boy carefully carries the cup to Joe without spilling a drop. At the end of story, we learn that the boy’s father unexpectedly recovers.

Does this happy ending show that Caine was not lying? The conditional has a true antecedent and a true consequent. If it is a material conditional, then it is true. And given that lying is restricted to falsehoods, Caine did not lie. On the Gricean analysis, Caine merely violated the epistemic corollary of the maxim of quality by asserting what he did not know.

Those who think Caine did lie might reject Grice’s identity thesis that the indicative conditional has the same truth conditions as the material conditions. For instance, Strawson9 maintained that the indicative conditional A→C means that there is some connection between A and C which ensures A ⊃ C. Since there was no connection, Caine was lying.

Strawson’s proposal is widely (and correctly) rejected because indicative conditionals are also used to deny connections. Someone who knows of the father’s recovery can appropriately assert ‘If the boy spills a drop, then the father will be all right and if the boy does not spill a drop, then father will be all right.’

The alternative to rejecting Grice’s account of indicative conditionals is to drop the falsehood requirement for lying. If lying is insincere assertion, then the truth-value is irrelevant.

Indeed, belief in the truth of a conditional is compatible with lying. Suppose Caine already knew of the father’s recovery and was confident the boy could accomplish the water-carrying task. Then under a Gricean account, Caine would believe his conditional is true and would be intending to make the boy believe this truth. Yet many agree with me that Caine’s conditional would still be a lie rather than a merely misleading truth. A liar can know that his conditional is true and intend to his hearer to learn that truth from the assertion.

Frank Jackson\textsuperscript{10} offers an attractive compromise between Grice and Strawson. Accept Grice’s identity thesis that the truth conditions for indicative conditionals are just those of the material conditional. Concede to Strawson that conversational implicatures are not sufficient to explain away the anomalies. But stay within Gricean orthodoxy by instead invoking Grice’s account of conventional implicature. The content of the implicature is that the conditional is robust with respect to the antecedent. In other words, if you were to learn of the antecedent you would continue to assert the conditional. (Put negatively, news of the antecedent’s truth would not prompt you to recant the conditional.) The function of the conventional implicature is to facilitate a potential modus ponens (or other inferences). The conditional needs to be co-assertible with the antecedent to expand knowledge to the consequent. The grammatical mood of the indicative signals this robustness just as the interrogative mood signals curiosity about an answer.

This inferential traffic control is also performed by conventional implicatures carried by words: but, nevertheless, even, therefore, yet, anyhow, however. To appreciate their role in comprehension, Jackson\textsuperscript{11} recommends having a friend delete such words from an unfamiliar philosophy paper; you will find the residue difficult to follow.

Since conventional implicatures are a semantic phenomenon, and lying is a matter of not believing what your assertion means, you can lie with an indicative conditional without relying on the hearer making inferences from Grice’s maxims.

\textit{Non-natural Meaning}

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<th>Lie</th>
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Lying stands to misleading as conventional implicature stands to conversational implicature. A conversational implicature is inferred from the fact that \( p \) was uttered rather than from \( p \) itself. A speaker who asserts a

\textsuperscript{10} F. Jackson, \textit{Conditionals} (Blackwell, 1987), pp. 17–42.

\textsuperscript{11} Jackson, \textit{ibid.}, p. 95.
(believed) truth in the hope of deceiving the hearer into believing one of its conversational implicatures has misled the speaker. But this pragmatic implicature is not a lie because it is not part of the meaning of $p$.

Immanuel Kant condemns all lying but permits some misleading. His rationale is that one can mislead only those who participate in their own deception. The misled make inferences beyond what is licensed by the content of the speaker’s assertion. To some extent, the deception’s success is the listener’s fault.

Kant’s lectures contain several examples of permissible deception. Some involve feigned natural meaning; you pack bags to fool a suspected thief into believing you intend to take a trip. Verbal misleading is also permissible on occasion. When Saint Athanasius’ pursuers failed to recognise him and asked for his whereabouts, Athanasius replied ‘He is not far away’. Kant does not count this as a lie. In a footnote to ‘The Contest/Conflict of the Faculties’ Kant recounts a personal experience. The King pressured him to refrain from writing about religion. Kant promised to refrain ‘as His majesty’s obedient servant’. When the King died, Kant insisted his promise expired as well – and resumed writing on religion.

Recent American law echoes Kant’s emphasis on inference. Although the witness under oath is forbidden to lie, he is permitted to mislead. The Supreme Court affirms (Bronston v United States [409 US 352] (1973)) that it is the cross-examiner’s responsibility to prevent the witness from misleading the court.

Sincerity is a matter of revealing your belief forming processes. Grice’s analysis of utterance meaning reflects this revelatory conception of sincerity. The speaker intends that the hearer believe $p$ by virtue of recognising that very intention. The rationale for following the intention flows from the advantages of emulating the speaker’s mental states. This psychological sharing requires matching belief content. And semantics is about content.

Whereas conversational implicatures are a pragmatic phenomenon, conventional implicatures are semantic. They are learned like idioms and lack the context sensitivity of conversational implicatures.

As Christopher Potts elucidates, conventional implicatures play an editorial role, providing clues as to how the primary content should be processed. In this supporting role, they add useful side-information. Whereas presuppositions merely reflect background assumptions, conventional implicatures add novel, supplementary content. Like

\[\text{C. Potts, } \textit{The Logic of Conventional Implicature} \text{(Oxford UP, 2005), pp. 13–46.}\]
footnotes and parenthetical remarks, conventional implicatures are not conjoined to the primary content. They are ancillary assertions. Conventional implicatures are off-stage— but on the record. When uttered insincerely, these de-emphasised remarks are lies.

Insincere conventional implicatures can be the truth-makers for charges of slander, libel, and defamation. Just as an object’s shadows shape its perception, secondary assertions shape the perception of innuendos and insinuations. Since conversationalists focus on the primary assertion, the recognition of a secondary lie is taxing and its rebuttal necessitates an awkward meta-linguistic circumlocution. Consequently a lie lives most safely in the shadow of a truth.

Each conventional implicature is a logically independent proposition that is expressed with the original utterance (and so has no affect on the truth conditions of the main assertion). Consider a wager made before the 1973 Kentucky Derby: ‘Secretariat, who was sired by Citation, will win the 1973 Kentucky Derby’. This is a winning bet even though the supplemental clause is false; Bold Ruler sired Secretariat. What is at issue in the bet is Secretariat winning the 1973 Kentucky Derby, not his lineage. As Grice emphasises, conventional implicatures are logically and compositionally independent of what is ‘said (in the favoured sense)’ (at pp. 25–26).

An irate champion of Bold Ruler is apt to use the complement of ‘say’ as his favoured sense of ‘what is said’: ‘You know very well that Citation did not sire Secretariat! Don’t say otherwise!’ The plasticity of ‘what is said’ makes it poor rope for a tug of war. Students of lying should instead focus on assertion, recognising that two assertions can be made with a single utterance.

Similar double-talk takes place with indirect speech acts. Consider the exchange between a beggar and a pedestrian: Beggar: ‘Do you have any change?’ Pedestrian: ‘No’. Beggar: ‘Liar! I can hear the change jangling in your pocket!’ Pedestrian: ‘I was saying “No” to your request, not your question.’ The pedestrian’s distinction is easier to discern because the natures of the two speech acts differ saliently and because the perception of an indirect speech act switches focus to the implied act. (Indeed, we immediately hear ‘Can you pass the salt?’ as a request.) Double-talk is more difficult to tease apart when both speech acts are assertions and the secondary assertion is merely playing a clarificatory role in the service of the primary assertion.

Only conversational implicatures are calculable, malleable, and reinforceable. A conversational implicature can be cancelled or consistently

denied. They are not monotonic. Conversational implicature stands to conventional implicature as induction to deduction. Given the semantic character of conventional implicature, the only way to avoid a conventional implicature is to alter the meaning of the sentence – to detach by recanting and then rephrasing.

The semantic shift from ‘Kant’s universal prohibition of lying is controversial’ to ‘Kant’s universal prohibition of lying, which is based on careful argument, is controversial’ does not affect the truth conditions of the main assertion. The supplementary relative is merely designed to ward off dismissal of Kant’s claim. In the case of straight declaratives, the speaker lies if he does not believe what he asserts. What he utters is a semantic matter. What he conveys in uttering is pragmatic. The speaker’s lack of belief in his conversational implicatures makes his assertion misleading. But to lie, the speaker must fail to believe what his assertion entails (what is true in virtue of the meaning of the words he used).

Given that lying is a semantic phenomenon, a speaker can lie by conventionally implicating something she does not believe. Consider an American addressing a British audience during World War II. To flatter her British audience, the American asserts, ‘Winston Churchill is an Englishman, therefore, he is brave’. The ‘at-issue’ content of this assertion is equivalent to a conjunction that the American does believe: ‘Winston Churchill is an Englishman and he is brave’. But since the American does not believe the conventional implicature (that being British supports being brave), she is lying.

Strawson characterises if as a first cousin of therefore. Strawson’s genealogy gives us reason to think that if carries conventional implicatures similar to conclusion indicators such as so and thus and to premise indicators such as since and because.

It is useful to consider conventional implicatures carried by more distant kin of ‘if’ and ‘therefore’:

i  I have not cured your father yet. (Said by Caine)
ii  Thoughtfully, Caine poured a drink for Joe.
iii  Caine is still drinking. (Said after Caine has completed his drinking.)
iv  Even Joe is concerned about the boy.

As Grice notes, conventional implicatures are not comfortably negated. A simple No to (i) will backfire because it will be heard as affirming that Caine intends to cure the father. To avoid preservation of the implicatures, the negation must go meta-linguistic.
VI. ROLE BASED ASSERTION

So far, I have been using conditional probability to broaden the scope of lying beyond the declarative mood. We can lie even when engaged in informative, truth-telling testimony. I now want to use conditional probability to narrow the scope of lying; we can assert some known falsehoods without lying.

An individual may assert as an umpire or as a judge or as an appraiser. Umpires are obliged ‘to call them as they see them’. They are required to avoid inference (rather like eye-witnesses in court cases). This creates a dilemma when the umpire does not see the play but can infer what happened. For then there is a divergence between non-epistemic seeing and epistemic seeing (the ‘theory-laden’ type of seeing which involves belief).

This divergence underlies Colin Radford’s prophetic article ‘The Umpire’s Dilemma’\(^ {14}\). Since the situation he imagined transpired in 2009 (see Ian Rumfitt\(^ {15}\)), I will use the historical case. The umpire, Asad Rauf, did not see whether the ball was deflected by Ricky Ponting’s bat or by Ponting’s kneepad. The umpire knew that Ponting would be out under either condition. However, Rauf did not know which condition obtained. Since he is obliged to know which way the player is out (cricket score cards require this information), the umpire was obliged to declare Ponting not out. Many of those sympathetic to the fielding side initially felt the umpire lied. Rauf saw that Ponting was out and so knew that Ponting was out. Others defended Rauf’s scrupulousness. The umpire may declare a batter out only if he sees the out. Rauf was not entitled to base a dismissal on an inference (even an excellent inference). What counts for dismissing a batter is what is seen, not what is known.

For other roles, the speaker can make limited inferences but the restrictions often yield a conclusion that the speaker does not believe. This became evident to me when selling my house. To set a price, I hired an appraiser. Happily for me, I found someone willing to buy the house for 18% higher than this professional estimate. But the buyer also needed an appraiser to secure a loan. To my surprise, this second appraiser estimated the value of the house as only 1% higher than the first appraiser. This second appraiser ignored the evidence provided by the prospective purchase. Like the first appraiser, the second appraiser reasoned by analogy from a small set of houses that had recently been sold in my little


The second appraiser thus wound up agreeing with the large underestimate of what the house was worth.

No one (in my informal poll) believed the second appraiser’s estimate. The only criterion for what the house was worth was what the market would bear. So why did the appraiser ignore his best evidence (an actual offer on the very house in question)?

Because heeding all the evidence, especially the best evidence, would expose the bank to a risky circularity. The function of the second appraisal is to ensure that the loan does not exceed the value of the house. If the second appraiser were to use the negotiated price, then there would be no independent check on the value of the house.

Was the second appraiser lying on his official estimate? The document he signed required him to solemnly attest that the value was near the price he specified. But he did not believe it was.

None of those I informally polled considered the appraiser to be lying. My explanation is that the sincerity condition for the appraiser tracks a conditional probability: How much is the house worth given independent evidence about the market? This is a different question than the one he answered in the document. The bank had asked how much the house was worth. The bank preferred to receive a false non-circular answer rather than a true, circular answer.

A similar pattern holds for legal verdicts. The judge sincerely answers when she conditionalises on the legally admissible evidence and to legal standards of proof. But the judge’s available verdicts are restricted to two: Guilty and Not guilty. ‘Guilty’ does not mean ‘Guilty given the legally admissible evidence and legal standards of proof’. (People are punished for what they did, not for what evidence they generate.) Thus the judge who knows that the accused did not commit the crime will experience dissonance when she judges the defendant guilty (because, say, the evidence of innocence is inadmissible).

**VII. INTERNAL DISSONANCE**

The motives for constraining evidence are usually external – a tradeoff between reliability and non-epistemic values. For the sake of fairness, the hiring committee imposes a deadline for applicants to present credentials. Tardy evidence is excluded. In law, closure is important. Judges do not want litigants to drag out the deliberations by introducing late breaking evidence.
Internal dissonance arises when we ignore evidence to improve the reliability of our judgment. For instance, Paul Meehl makes a strong case that physicians should rely on actuarial methods (which use a very narrow base of evidence) rather than clinical reasoning (which uses all the evidence the physician thinks relevant)\textsuperscript{16}. Meta-analyses show that clinicians are uniformly outperformed by simple models based on statistical techniques that focus on a small number of highly predictive variables. Though simple-minded, these minimal models have potent advantages: they consistently handle the data and are never influenced by predictively useless data, hindsight bias, and self-fulfilling prophesies. If clinicians are given an opportunity to override the minimal model, the ‘cyborg’ performance goes down, not up. Clinicians intervene too much!

Should clinicians avoid all intervention? This leads to the Broken Leg problem. Suppose you apply statistics to infer the probability of Mona going to the movie. For instance, you know that 99% of those who buy advance tickets attend the performance and you know Mona bought an advance ticket. You then get the news that Mona broke her leg after purchasing the ticket. Should you revise your probability in light of this new evidence? Simple actuarial models are not sensitive to rare, causally influential events. So it is tempting to revise. Yet one also knows that the policy of intervening leads to less reliable predictions overall. We make too many exceptions because we overestimate the frequency of ‘broken legs’.

The Broken Leg problem is exacerbated by the involuntary nature of belief. News that Mona broke her leg makes you believe she will not go to the cinema regardless of the statistics. Here we have a conflict generated by the ideal of truth-telling. Your actuarial angel sits on one shoulder, advising you to stick with the policy that leads to greatest accuracy, while on the other shoulder, the devil of clinical reasoning tells you to heed the evidence afforded by the rare event.

**VIII. SUMMARY**

I define lying as insincere assertion. The sincerity requirement for assertions is that one believes the content of what one asserts. (To handle slips of the tongue, I restrict belief to shallow belief\textsuperscript{17}; this adjustment extends


seamlessly to misspoken conditionals.) Once we add conventional implicatures as secondary assertions, we get the possibility of lying with informative truths.

I have argued for four theses:

1. Definers of ‘lie’ have entirely neglected lying with conditionals.
2. Conditional lies vindicate the principle that sincerity is the primary consideration in lying. Truth-value is a derivative concern.
3. It is possible to lie with an informative, true statement by virtue of its false conventional implicature.
4. Thanks to a displacement of sincerity conditions, a role based declarative can be asserted without lying even though the speaker knows that the declarative is false.

Digesting these four theses will remedy the one-sided diet of examples. The result will be a more robust understanding of this fascinating form of human behaviour.

Washington University in St. Louis