

# **A Formal System for Understanding Lies and Deceit**

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**Abstract:** Issues around lying and deception arise constantly in ethics and in the practice of conflict resolution, so it would be useful to have clear definitions of the different varieties. This paper starts with a system of Colombetti's, a set of axioms that treat honest assertive communications using a small number of concepts, mostly intentions and beliefs. His approach is extended to allow for deception and lies, and related forms like insincere offers and requests, or false promises, tricks, manipulations, betrayals, half-truths, talking through one's hat, and giving one's word falsely. Some results are the distinction between lying intentionally and intending to lie, the definition of trickery versus deception in general, and a systematization of different kinds of promises and ways of performing them insincerely. The definitions are compared with a plentiful source of deceptions, the Book of Genesis.

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## 1. Introduction

What counts as a full-scale lie versus simply an evasion? Is a trick different from a betrayal, or a manipulation? These questions are important for ethical philosophers, for accounts of when and why each is permitted or not (e.g., Bok, 1978; Sweetser, 1987; Siegler, 1966). The issues arise in legal codes and systems of professional ethics. When may the police trick someone into confessing, or into committing a crime for the sake of arresting them? When is a therapist manipulating a patient? Negotiating parties try to gain benefit from the current agreement but preserve trust for the future, so when does inscrutability cross the line to deception (Cramton and Dees, 1991)? The definitional issue comes up in the resolution of social conflicts in which one party sees the other as having tricked or betrayed them. All of this assumes an understanding of different categories of deceptions.

This paper will state a formal system to understand deception and consequently its opposite, sincere behaviour. Important questions and distinctions arise – for one, it is not trivial to define communication such that lying is possible. Also, some objectionable kinds of insincerity seem to go beyond deception.

Deception often involves one party considering what the other is thinking, and to represent this, the paper will adapt Colombetti's approach (1997), where intentions and beliefs are put in chains, e.g., you intend that I have a certain belief; I believe that you intend me to have a belief (so perhaps I am wary of deception.) Strings of these operators will form the defining conditions for the different categories. Having precise definitions using only a few basic concepts allows one to see the differences more clearly.

The deceptions will be illustrated by events from the book of Genesis. These stories are interesting and well-known, and a listing of all the deceptions in Genesis (Appendix II) will give good examples and confer some confidence that the formal system includes the most important types. The characters in Genesis are constantly lying and playing tricks on each other -- by my count there are 30 incidents from the serpent tempting Eve to Joseph strategizing against his brothers in Egypt, and even God tells lies and deceives. (This is consistent with the general truth that tricks and tricksters abound

in accounts of a society's founding.) Examples and varieties of deception in life are so extensive that the survey of Genesis puts a useful bound on what this paper will try to do.

The second section of the paper will introduce the belief/intention formalism. Section 3 defines the distinction between communicative and non-communicative actions, which is central in the definitions. Section 4 discusses the definition of a lie; Section 5 deals with insincere requests, ones that cannot be fulfilled or that the requester does not want fulfilled, and Section 6 with making insincere promises and offers. Tricks and manipulations, two more difficult concepts, as well as some others are treated in Section 7, and Section 8 draws conclusions.

## **2. Intentions, beliefs and communications**

The theory has four simplifying properties: it is qualitative, atemporal, mental and it avoids agency. First, it is qualitative in that people believe something or not, intend something or not, etc., with no measures of degree in between. There is no distinction, for example, between a promise and a solemn promise. Second, it is atemporal in that beliefs and intentions and the propositions believed and intended are collapsed into the present. Introducing a logic for action through time is possible but not easy, and it would obscure the point of the discussion. Third, the theory is mental, focusing on beliefs and intentions without concern for the physical events that were observed to support the beliefs or the actions that would implement the intentions. In life someone who forms an intention must do something to trigger its plan, and it would make no sense to say that I intend such and such to happen and I will do nothing to bring it about. Here it is simply assumed that someone who forms an intention will act in an appropriate way -- that aspect is left unanalyzed. The fourth characteristic of the theory, the avoidance of agency, is related to the second and third in that time order and action in the world is necessary for agent to cause things to happen. Here, however, in defining deception a party has an intention to deceive another into a false belief and the other adopts the belief, without an explicit specification that the former caused the latter. The reason is again simplicity, as recent treatments of agency have shown that the problem is intricate (Belnap, Perloff and Xu, 2001, and Horty 2001), and even these systems sidestep

intentions. Given its limits the system below cannot be “adequate” in a strong sense, but its purpose is to clarify as much as it can within those limits. One can view many of the formal conclusions as necessary conditions, with further requirements understood, based on causation, time and agency.

The notation involves people, propositions and mental states. The idea that person *a* believes proposition *p* is denoted  $B_a p$ . This operator can be chained:  $B_a B_b p$ , meaning that *a* believes that *b* believes it. Nothing in the paper will involve more than two people, so we can define common belief, denoted  $B^* p$ , as holding between the two parties *a* and *b*. It means that *a* believes *p*, believes *b* believes it, believes that *b* believes that *a* believes it, etc., and similarly for *b*. There is no implication from  $B^* p$  that *p* is true.

The notation for person *a* intending that proposition *p* happen is  $I_a p$ . The concept of intention roughly follows Bratman’s prominent account (1987) in which it includes plan that is stable over time, and that has been committed to and will not be reconsidered unless some new relevant factor arises. An individual’s intentions must be mutually consistent. This condition distinguishes intentions from desires, since I may want to live fulltime in Hawaii and fulltime in New England, but I cannot intend both of these. To intend something is not necessarily to intend its contingent consequences, even those the individual consciously expects to follow from it -- in fixing my tooth my dentist does not intend to cause me pain. However, we do make the corresponding claim about *p*’s logical consequences, that if *a* intends *p*, and if *p* logically implies *q*, then *a* intends *q*.

Intention and belief operators can be combined, as in  $B_a B_b p$  or  $B_a I_b p$ . (An important case here will involve  $I_a B_b p$ , where one party intends that the other have a certain belief.) The axioms and simple theorems relevant to *I* and *B* follow Colombetti’s system with some extensions, and are summarized in Appendix A. Some examples are  $B_a p \supset B_a B_a p$ , or  $I_a p \supset B_a I_a p$ , or  $I_a p \supset \sim I_a \sim p$ . (Our account of communication must diverge from his to be able to include the possibility of lies, offers and requests.)

We are now in a position to define deception in general. It happens when *a* intends *b* to believe something that *a* believes to be false, and *b* believes it.

$$\textit{deceiving} \quad \text{Dec}_{abp} = I_a B_b p \ \& \ B_a \sim p \ \& \ B_b p \quad (1)$$

This would better be called “intended deception,” since in English we would not call an event deception if p turned out to be true. The stipulation that p be false is not included however, in order to keep the system mental. “Attempted deception” is weaker still, defined by removing the conjunct  $B_b p$ .

### 3. Assertive communication

An important kind of deception involves one that comes about by communication. The task then is to define communication. The prototypical communication is making an assertion, as opposed to a request or an expression of a feeling, and the prototypical deception is a lie.

A communication must communicate something that the receiver believes, and we first specify what that “something” is. We might let it be p:

$$C_{ab}p \supset B_b p \quad (2).$$

(The left side is read, “person a communicates p to b.”) However this is unacceptable, since it says that a communication has to be convincing to count as a communication at all. “He told me such-and-such but I didn’t believe him,” would be false by definition. (Rejecting (2) means we do not use Colombetti’s stronger postulate that  $C_{ab}p \supset B^*p$ .)

Another proposal for what b comes to believe would be “a believes p”:

$$C_{ab}p \supset B_b B_a p \quad (3),$$

but this is also too strong, as it says that the only real communications are those that b sees as sincere. Under (3), “He communicated such-and-such to me but I don’t think he believed it himself” would be self-contradictory.

It might seem reasonable to require that b believes that a intends b to believe p.

$$C_{abp} \supset B_b I_a B_b p \quad (4).$$

This is less problematic than the others but still faces a difficulty. According to our concept of intention, one cannot intend something that one believes is false, so that if a were convinced that b would not believe him (if persuasion were seen as impossible), then communication would be impossible. We often say something that our hearer already believes just to show that we believe it too, and we give testimony where our primary duty is to state our beliefs not to convince others.

An approach that seems to work is to require that b believes that a intends b to believe that a believes p.

$$C_{abp} \supset B_b I_a B_b B_a p \quad (5).$$

If even that were not true, we would say that b takes a to be kidding or acting. Accepting (5), then, we also state that person a really has this intention (not just that b believes a has it):

$$C_{abp} \supset I_a B_b B_a p \quad (6).$$

There is a more serious way in which (5) and (6) are still inadequate. They define communication too broadly. The idea, due originally to philosopher H.P. Grice, is that communicating is not just transferring information, but includes a stipulation involving knowledge of the intention to transfer it. Adapting Grice's approach to our present concepts, communication involves generating a set of common beliefs between the parties, about intentions, about intentions about beliefs about intentions, and still higher order beliefs as well. The distinction can be shown by supposing that I want you, my neighbor, to know that I am home. I can leave the light on and put the telephone off the hook. Alternatively, I can go to the window and when I see you looking at me, point to myself. Leaving the light on is not communication in Grice's sense, since even though information gets intentionally transferred from me to you, it was simply my arranging that you observe evidence. For my purpose, it was fine if you think that I just happened to leave the light on, that I was oblivious to whether you would see it. In the case of my

going to the window and pointing to myself, however, you know I intended to transfer information, I know you know it, and so on, and this counts as full communication. This higher order knowledge of my intention is what makes communication a special case of information transfer. Formally,

$$C_{abp} \supset B^*I_a C_{abp} \quad (7).$$

That is, “Person a communicates p to b, implies that it is common belief between a and b that a intends to communicate p to b.”

This is a “reflexive” intention, one that is part of its own plan of implementation. This circularity has made some philosophers uncomfortable on the grounds that it generates an infinite sequence of beliefs, beyond the comprehension of real people. This objection seems unconvincing, however, as people may well understand an idea even though it has an unlimited number of implications. The need for reflexive intentions is suggested by a kind of example originated by Strawson (1964). Suppose Adam wants to convince Becky that he believes some fact, and rather than telling her directly, he sets up evidence of it in a place where he expects her to find it. She is in fact watching him work and knows what he is up to. Suppose even that unknown to her he knew that she was watching him. Conditions (5) and (6) would be satisfied and more, but we would still not call this communication. Rather than add on a series of single requirements, which, it turns out, would face further counterexamples, we use the reflexive condition (7).

Conditions (5), (6) and (7) seem to be enough. With some manipulation using the axioms, the following proposition can be shown to combine them and is put as a necessary *and sufficient* condition for communication of an assertion:

$$\textit{assertive communication:} \quad C_{abp} \equiv B^*I_a(C_{abp} \ \& \ B_b B_a p) \quad (8).$$

This is not a definition, since C appears on both sides, but it is a “fixed point” condition that a relationship C must satisfy. We can extend it to a definition by saying that any property C that satisfies it is to be called assertive communication.

#### 4. Lies

A lie is the prototypical deceptive communication, but it is not always clear what counts as one. Anatol Rapoport told the story of two Russian peasants who met on the road from Minsk to Pinsk. “Where are you going?” “To Minsk.” “Aha! You just say that to make me think you are going to Pinsk, but I know you are going to Minsk, you liar!” The peasant’s answer was the literal truth, but could it also be a lie?

The definition states that person a lies by asserting something to b that a does not believe.

$$\text{lying:} \quad \text{Lie}_{abp} = C_{abp} \ \& \ B_a \sim p \quad (9).$$

It follows from (8), (9) and the axioms for belief that

$$\text{Lie}_{abp} \supset I_a B_b (B_a p) \ \& \ B_a (\sim B_a p) \quad (10).$$

Comparing (10) with (1) shows that lying is a form of attempted deception. The proposition involved in the deception is not p, but rather that the sender believes p. In most world contexts, however, the sender is interested in getting the receiver to adopt belief in p itself, so lying is usually part of a larger intention to deceive b about p.

The notion that person a is trying to get b to believe not necessarily p but only that a believes it, fits with English usage. If I am accused of lying I cannot plead that I did not intend for you to believe p, only to make you think I believed it. But I could be excused by showing that I had no intention that you believed that I believed it, that is, I thought you would take it as a joke.

Note that for lying we do not require that p be false, only that the speaker think it is false. English is ambiguous on this point. If I say something that is unwittingly true, one might argue that this absolves me of lying. We could consider adding the requirement  $\sim p$  to (9), but will not do that in order stay within a mental approach.

Not all deceptions are lies, of course. The well-known example of carrying a suitcase out of a house to make my neighbor think I am going on a trip is a lie because



there is no communication. What does the definition say about Rapoport's traveler? When one says he is going to Minsk this is literally correct, but it is still a lie. Lying is not based on the literal meaning of words; the question is the party's beliefs and intentions, not how the interaction is carried out in a particular language. In fact, since communication is not restricted to language at all, lying can happen outside of a language. Judas identified Jesus with a kiss, and if he had kissed the wrong person it would have been a lie.

There are many lies in Genesis, seventeen according to the list below. The most common one is told three times, Abraham's claim that Sarah is his sister, not his wife. Abraham would say that wherever he went, to protect his life from those who coveted her. Some have argued that this was not a lie as Sarah was his half-sister – it was a half-truth. However Abraham's intention is what counts, not the literal meaning of his words, and the present system does not distinguish deliberately misleading half truths from lies.

#### *Intending to lie versus lying intentionally*

The definition answers a subtle question. From (8) it follows that  $C_{abp} \supset I_a C_{abp}$ , that is, that communicating implies intending to communicate. Lying is a kind of communication ( $L_{abp} \supset I_a C_{abp}$ ), so one might say that lying is intentional. But does lying about something mean intending to lie about it? That question is slightly different and the answer is negative:  $L_{abp}$  does not imply  $I_a L_{abp}$ . This is puzzling, and the resolution is informative. If lying implied intending to lie, by (9) it would imply  $I_a B_a \sim p$ , meaning that a is planning to see to it that a believes p is false. I lie if I tell you there will be cookies served after the seminar and I believe otherwise. But to intend to lie would mean that if I learn that cookies are planned, I intend to take steps to remove them -- I believe that I will make sure of the falsity of my words. Another example comes from a Canadian folktale in which a judge condemns a man to death for a crime, but tells him he can go free if he can sing a song without a word of truth in it. He makes up something with flying cows, and snow falling in June, and wins his freedom. Again this is someone who intends to lie, who would have changed his song if he thought part of it were true. In the same way, intending to deceive goes beyond deceiving intentionally.

### *Talking through one's hat*

Definition (9) sets a strong criterion for lying in that the sender has to positively believe that  $p$  is false. If we replace  $B_a \sim p$  with  $\sim B_a p$ , we include someone who claims  $p$  but is just not sure. This could be called “talking through your hat,” that is, saying things with pretended confidence.

$$\textit{talking through your hat:} \quad \text{Hat}_{ab}p = C_{ab}p \ \& \ \sim B_a p \quad (11).$$

## **5. Requests**

Consider a prototypical request from  $a$  to  $b$ , “give me a drink of water.” It involves a proposition, a kind of entity that in other contexts might be asserted: person  $b$ 's giving person  $a$  the drink of water. The request refers to two intentions around that proposition, one on the part of  $a$ , to have  $b$  give him a drink, and another on the part of  $b$ , the one that  $b$  must form if  $b$  decides to do it. The difference between an assertive communication and a request is that  $a$  intends not for  $b$  to believe something, but for  $b$  to adopt an intention. To define requesting, the definition of assertive communication (8) is modified by replacing  $B_b B_a p$  with  $I_b p$ :

$$\textit{requesting:} \quad \text{Req}_{ab}p \equiv B^* I_a (\text{Req}_{ab}p \ \& \ I_b p) \quad (12).$$

A request communicates an intention ( $\text{Req}_{ab}p \supset C_{ab} I_a I_b p$ ), but like many intentions that one may not be fulfilled –  $b$  may refuse to adopt the second intention. However the communication is the sender's intention in that the sender is implementing a plan to gain an end, a plan that starts with making the request.

There are at least two ways a request to lack sincerity. One is for  $a$  to make a request that  $a$  does not really want to see happen, and another is for  $a$  to make a request believing that  $b$  cannot bring it about. God's request to Abraham to sacrifice his son had both problems, since God did not want it and intended to block it. Another likely example is Abraham's servant asking Rebecca for a drink of water. He seemed to want

only to test her, to see if she would also be as considerate to his camels as a sign that she was Abraham's destined bride.

Does asking for something one believes cannot be done imply a lie or even a deception? It suggests insincerity, but it is not lying or deceiving. To see why, note that the following is derivable from (12) and the axioms:

$$\text{Req}_{ab}p \supset I_a I_b p \quad (13).$$

The assumption that a believes p will not happen,  $B_a \sim p$ , is incompatible with  $I_a p$  by the assumption of realism, so the question of lying turns on whether the following holds as a theorem:

$$I_a I_b p \supset I_a p \quad (14).$$

If it does, then a's request would be a lie to b in that a would have b believe  $\sim B_a \sim p$  when in fact a knows that it is false (when  $B_a \sim B_a \sim p$ .) However (14) is not a theorem in the system, as a can intend that b have a certain intention all the while believing b will not succeed. An impossible request involves some kind of insincerity, which is a is holding back something b would want to know to accomplish a goal, in fact a goal that person a has given b. This can be seen as manipulation, as discussed later.

The second issue around an insincere request is asking for something that one does not want. As before, we do not assume (14) so there is no lie or deception about this, even in the most extreme case where the requester holds an intention to himself ensure that p does not happen, as in God's command to Abraham.

The Talmud tells of a rabbi whose wife was constantly angry with him, so when he asked for barley soup she would give him bean soup and vice versa. One day he wanted barley soup, and asked his student to tell that to her. The student knew her ways and asked her for bean soup instead, and the rabbi finally got the kind he wanted. Still he rebuked his student for deception. The point of the Talmud's story was that the wife's perverseness did not justify deceiving her, but we can use this situation, somewhat like the Russian travellers, to ask the rabbi each day was really communicating a request for barley soup when he asked her for barley soup, or whether to reverse his stated

preference would have been deceptive. Our answer to the first is no. Comparing the situation with (12), although his daily statement for barley established common belief that he wanted barley, it did not establish common belief that he intended to have barley, since it was clear that it would trigger the opposite event. He could not have said that and believed he would get anything but bean. Nor could it be seen as a request for bean soup, since it was clear that was not his intention. At best it was a ritual.

## 6. Offers and Promises

A promise is a communication that creates an obligation on the part of the promiser. Violating that obligation is “breaking the promise,” and interesting issues arise around this (Thomson, 1990), but the focus here will be beliefs and intentions in the original event. The definition of promising is parallel to assertive communications and requests, with obligation substituted for belief or intention. It is easier, however, to start with a general concept that includes several kinds of communicative acts generating obligations: promises, oaths, offers and invitations. There is no single word for it in English but it will be called, “a communication that incurs a conditional obligation, designated  $CO_{abp|q}$ . The obligation is on person a to do p in the event that q is true. As before, a reflexive intention is involved since this is a type of communication.

*Incurring an obligation by communication:*  $CO_{abp|q} \equiv B^*I_a(CO_{abp|q} \ \& \ q \supset Obl_{ap})$  (15).

There are many ways to incur an obligation – taking money out of the kitty obliges one to put it back -- but here the obligation is instated through communication. The simplest example is an oath, where the obligation is unconditional and one simply has to do it. Then the condition q may be thought of as a tautology that is always satisfied, and may be omitted. In the traditional conception of an oath, there is a receiver – it is taken “before God.”

*Taking an oath:*  $Oath_{abp} \equiv B^*I_a(Oath_{abp} \ \& \ Obl_{ap})$  (16).

Making a promise is incurring an obligation from which the receiver can release you. You are obliged to do p on the condition that the other does not release you.

$$\textit{Promising: } \text{Prom}_{ab}p \equiv B^*I_a(\text{Prom}_{ab}p \ \& \ \sim\text{Rel}_{ba}p \supset \text{Obl}_ap) \quad (17)$$

“Giving one’s word” goes beyond promising, as it can involve a fact that one cannot bring about: “I give you my word that the stock market will rise.” The meaning is that the word-giver will restore the harm to the receiver from relying on p if p turns out false.

$$\textit{Giving one’s word: } \text{Word}_{ab}p \equiv B^*I_a(\text{Word}_{ab}p \ \& \ \sim p \supset \text{Obl}_a\text{Restore}_{ab}\sim p) \quad (18)$$

Communicating an invitation, e.g., to come to a party, is incurring an obligation to permit b to do p (in other words, giving b a right with respect to a) conditional on b accepting:

$$\textit{Inviting: } \text{Invite}_{ab}p \equiv B^*I_a(\text{Invite}_{ab}p \ \& \ \text{Acc}_{ba}p \supset \text{Obl}_a\text{Perm}_ap) \quad (19)$$

Making a (conditional) offer is obligating oneself to do p given the other does q. (The term in Genesis is often “covenant.”)

$$\textit{Making a conditional offer: } \text{Offer}_{ab}p|q \equiv B^*I_a(\text{Offer}_{ab}p|q \ \& \ q \supset \text{Obl}_ap) \quad (20)$$

Sometimes all the other has to do is accept and it is a “free offer”, but sometimes q is substantial. A contract can be seen at least in one definition as a matched pair of conditional offers.

All of these are parallel to the criteria for communicating an assertion or a request, except that  $B_bB_ap$  or  $I_bp$  are replaced by some form of  $\text{Obl}_ap$ .

In regards to honesty, the different kinds of incurring obligations can be handled at once, through an examination of promising. The prominent issue is making a promise

that one does not intend to keep, or perhaps even intends not to keep, which would be called a false or insincere promise. Genesis has several, such as Yehuda's promise of a third husband to Tamar, and Laban's evident intention not to fulfill his offer of Rachel as Jacob's wife.

Another sincerity issue involves making a promise or offer that one does not think the other even wants, perhaps called an "empty" promise. Efron offered Abraham free land, but he knew Abraham would not accept the land for nothing. His goal was to induce Abraham to pay an unfairly high price. His offer was made to be turned down.

Within our system these defects do not count as lying or deceiving. A promise is a communication that one is incurring an obligation, and would be a lie only if somehow the obligation were not incurred. We would certainly not accept the idea that someone who did not intend to fulfill the promise was thereby not obligated to do it. However, if children are right, that crossing one's fingers means one is not even obliged, such a promise would be a lie because the speaking is communicating the acceptance of obligation without that happening. Another lie would be to make a promise that one knew could not be carried out, where one knew one would have no obligation.

This is splitting hairs very finely. In a broader sense false and empty promises are deceptive in that they are made to encourage the receiver to rely on them and therefore do something. They are part of a larger plan to engender false beliefs in the receiver, even though they are not lies themselves.

## **7. Tricks, manipulations, et al.**

### *Tricks*

A trick will be defined here as a certain kind of deception, one based on a fact that never crosses the victim's mind as a possibility. This is in contrast to a situation where the receiver considers the alternative possibility and rejects it. Laban plays a trick when he puts Leah in place of Rachel. Surely if Jacob had thought of that possibility, of Laban's need to marry off Leah first, he would have checked it, but he did not. Contrast this with Jacob's famous deception of Isaac. It is a deception but not a trick in our terms, because Isaac tried to verify who he was facing. He challenged Jacob for coming back

from the hunt so soon, and proceeded to apply every sense he had left to make sure he was blessing the right son. He questioned Jacob’s voice and tasted the meal, but Rebecca had seen to that. He felt Jacob to find if he was hairy and then smelled him. In the end he was deceived but he was not tricked. He could feel angry, but not foolish.

The word trick in English is used more broadly than that, so this is essentially a proposal, to use a vague word more precisely. It is one supported by considerable usage. If a magician causes an elephant to disappear, that is a “trick” because we do not mentally list the ways he might be doing it and assign them probabilities. We cannot imagine how it is being done. If some spoiler were to reveal it, we might say “Aha! Of course!” It is not that we disbelieved the explanation – we just never thought of it.

Recent authors, starting with Modica and Rustichini (1994), have given formal treatments of unawareness, by modifying one of the usual axioms of knowledge or belief is modified. It is no longer required that  $\sim Bp \supset B\sim Bp$ . Unawareness of p means that we do not believe it and we do not believe that we do not believe it:  $U_{ap} = \sim B_{ap} \ \& \ \sim B_a\sim B_{ap}$ .

Here is a definition of a’s intended trick on b into believing p based on b’s unawareness of q. Proposition p might be Jacob thinking he is marrying Rachel, and q that Laban has substituted Leah. It must invoke a notion of causation, and the expression “ $p \square \rightarrow q$ ” indicates a subjunctive conditional, if p were to happen then q would.

$$\text{tricking: } \text{Trick}_{abp,q} \equiv B_a(\sim p \ \& \ \sim U_{bq} \square \rightarrow B_{bp}) \ \& \ I_a(U_{bq} \ \& \ B_{bp}) \quad (22)$$

Comparing (22) with the “attempted” deception version of (1) shows that a trick is an attempted deception. Like deceptions, tricks do not necessarily involve communications and there are no reflexive intentions in play here. They are numerous in Genesis – Lot’s daughters treating their father Lot to wine for immoral purposes, and surely the possibility never occurred to Yehuda that he was with Tamar; or to Shekhem that Dina’s brothers were asking them to be circumcised in order to massacre his village. Often when tricks occur, as opposed to deceptions, there is some mind-dulling motive involved, which explains the unawareness. The person is in an altered mental state, often one associated with a deadly sin. In Yehuda’s case it is lust, in Jacob’s case love, in

Lot's it is attraction to drink, and in Shekhem's case it is greed for the goods of Dinah's family.

A recent debate in the public choice literature (Austen-Smith, 1999; Lupia and McCubbins, 2001) involves whether certain game theoretical models can portray deception. Part of the disagreement can be rephrased as whether or not the models permit "tricks."

### *Manipulation*

The proper definition of manipulation is widely discussed (e.g., Rudinow, 1978), largely for the reasons that motivated the present paper, that manipulation seems to be an objectionable kind of insincerity, but without a definition it is easy for parties to cross the line. Sometimes it is defined in terms of exerting "pressure," or exploiting the victim's "weakness," but this raises further definitional problems. We will suggest two alternatives. One is to say that manipulation is inducing someone to do something while withholding information relevant to their decision, information that they would want to know. Another is to say that manipulation occurs when one persuades another using knowledge of their particular psychology, rather than rational means. Both of these touch on the idea of the idea that the manipulator is using broader knowledge than the victim.

As is often noted manipulation can happen without deception. Jacob knew when to approach Esau to buy his birthright – when he was hungry and weary after working in the field. It was not a matter of withholding information, more of knowing which "version" of the person to approach, to get to do something that the other versions would regret. Manipulation involves the truth that the same person can face the same situation and make a decision in different ways. The notion of framing in psychology, and in particular in prospect theory, shows that someone's answer is often determined by how the question is put. Someone who exploits another's variability is being manipulative.

Two other manipulations involve leading someone down a path without showing what is ahead. An interesting manipulation is Jacob's ploy when he learns of the advance of Esau's troops. He tries to placate Esau with gifts of goats, sheep, camels, cattle and asses, but instead of sending them all forward to Esau at once, he divides them into herds.



His servants lead one herd to Esau, then leave a space before the next. Each time they are to tell Esau that Jacob is immediately following. A well-known phenomenon in decision psychology involves people who are to receive two undesired items. They want to get them at the same time. Desirable items, however, are preferred separately. If I have to receive letters of rejection, let them come on the same day, but I would rather have good news spread out. The reason is that both goods and bads satiate, so Jacob let Esau reset his status quo to zero and enjoy the full psychological impact of each new herd.

Efron's negotiation with Abraham could be seen as manipulation, as could Abraham's negotiation with God over Sodom, where he presents the question in a series of steps. If you would spare the city for 50 innocent men, surely you would spare it for 40, and so on. This is a much-debated passage, and whether man is really manipulating God is controversial.

### *Sneakiness and subterfuge*

Some further concepts round out the set of insincerities. Some actions in Genesis are just *sneaky*, when the person does nothing active to induce a false belief, but deliberately hides their own actions that would correct it. Rachel steals her father's household Gods without telling Laban or even Jacob. *Subterfuge* in its older meaning is evasive talk, often to avoid blame. It is a lie but does not include anything literally false. Rachel wants Isaac to let Jacob leave, on the grounds that she does not want him to marry a Hittite. Perhaps she does not but her real reason is more likely fear of Esau on account of the deception.

## **8. Conclusions**

Given the limited basis of the system, the definitions go a considerable distance towards treating different kinds of insincerity in assertions, promises and requests. Another contribution of the paper is that it highlights what is left to be studied. The system makes it clear that certain kinds of insincerity do not fall within the definitions.

For the sake of establishing clear norms, it is important to understand why these other behaviors are morally questionable.

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## Appendix I. Axioms for Intentions and Beliefs

Colombetti's axioms on B and I are the following, where the subscript is omitted but all I's and B's refer to the same person. Belief Bp can be thought of as essential certainty, but with no implication that the proposition is true.

- All propositional tautologies are included;
- modus ponens is an inference rule;
- all provable propositions are intended and believed;
- $Bp \ \& \ B(p \supset q) \supset Bq$  and  $Ip \ \& \ I(p \supset q) \supset Iq$ ;
- $Bp \supset \sim B\sim p$  and  $Ip \supset \sim I\sim p$ ;
- $Bp \supset BBp$  and  $\sim Bp \supset B\sim Bp$ ; (but no assumptions are made about  $IIp$ , or  $I\sim Ip$ .)
- $Ip \supset BIp$  and  $\sim Ip \supset B\sim Ip$ .

We will add the following:  $Ip \supset \sim B\sim p$ . This is that the thesis that people are realistic to some degree, that one cannot intend something believing it will not happen.

We also assume that each one believes that others follow these rules in their beliefs and intentions. Thus, for example,

$$B_a[I_b p \ \& \ I_b(p \supset q)] \supset B_a I_b q.$$

## **Appendix II. Deceptions and manipulations in Genesis.**

There is an abundance of tricks in Genesis and the explanation is controversial. Geoffrey Miller (1993) wrote on contracts in Genesis, and perhaps one can say that the deceptions are often illustrations about what can go wrong in a contract. They are included as warnings, or to give the parties a problem to solve, and a principle to illustrate.

Another reason involves Genesis is the story of how the people of Israel came to be. Looking at the traditional literature of different cultures, when a society gives an account of its founding, one often sees a certain character, the trickster figure. The trickster is more than a con-man. He has a certain constellation of properties (O'Neill, 1995): he has strong appetites, he often goes against norms, he is on the edge of the group and often a wanderer with no clear home. He mixes opposites in his personality: sometimes he is smart, sometimes stupid, sometimes noble, sometimes cowardly. He does pull tricks, especially impostures, but just as often he is the one that is tricked.

The trickster has a function in these societies, to be a bridge to heaven and bring humanity what it needs from the gods. Accordingly he often pulls tricks on the gods, and by doing this he brings humanity what it needs, its basic possessions – fire, fishing nets or hunting tools and so on.

Jacob is the clearest trickster figure in Genesis. This is not a moral criticism of him – it is more a role to be filled. Jacob pretends to be another person. He changes his name, sometimes he's honest and strong, sometimes weak and cowardly.

With regard to the role of a trickster, Genesis is different from the founding literatures of many societies -- God is more powerful and divine; the conflict is not so much humanity versus God, as elder brother versus younger. Still there are echoes of the more typical tricksters – Jacob's conflict with God gets displaced as he struggles with an angel and he is named the God-fighter. Often trickster figures have some physical embodiment of their connection with heaven. Coyote throws his eyes up to the top of a tall tree. Eleggua, in Nigeria, climbs a tree every morning to open the eyes of a goddess who gives him knowledge. The trickster is somewhat diluted in America, but Jack has his beanstalk, Benjamin Franklin has his kite, and Jacob has his ladder.

So Genesis is the book where one would expect deceptions, in line of with what happens to get a society founded. Understanding Genesis "as genesis" means understanding its tricks. (A very thorough study of lies in Genesis, Williams 2001, accepts the trickster explanation, but focuses on the morality of the actions.)

#1. Gen 3:1-5. God had ordered the man and woman not to eat from the tree in the middle of the garden. The serpent tells Eve that he understands that God has told her not to eat any tree in the garden. She says she must not eat from or touch the one in the middle. He tells Eve that if she eats the fruit she will not die. (It is not clear why the serpent refers to all trees in the garden, or why the woman exaggerates God's injunction. Some commentators suggest that Adam exaggerated it to her, which would then count as the first deception. Another interpretation is that the serpent did not know the details of the rule, and his initial statements underlines the couple's foolishness in believing his assurance about eating the apple, when he has already revealed himself to be

misinformed. Eve's exaggeration may be her attempt to resist. In this case, both Eve and the serpent lie.)

#2. Gen 12:10-20. Abraham fears that if the Egyptians think Sarah is his wife, they will kill him to take her. In Egypt they will say that she is his sister. Pharaoh takes her into his house, but God sends plagues against Pharaoh. (The midrashic sources sometimes rationalize the lie somewhat by having Sarah tell it.) Pharaoh confronts Abraham and gives her back. (See Firestone, 1991).

#3. Gen 18:11-15. Sarah denies to Abraham that she "laughed inside" when he told her that they would have another child. (a lie) The interpretation of this passage is variable, with some versions suggesting that Sarah lied to God that she had laughed.

#4. Gen 18:13. Sarah had laughed inside because Abraham was so old; God tells Abraham that Sarah laughed because she herself was so old. (a lie, to keep peace in Rashi's interpretation.)

#5. Gen 18:22-33. Abraham induces God to successively lower the number of innocent men in Sodom required to spare the city. (a manipulation.)

#6. Gen 19:1-11. God sends angels disguised as men to test the hospitality of Sodom. (a trick)

#7. Gen 19:30-38. Lot's daughters give him wine so they can lie with him and become pregnant. (a trick)

#8. Gen 20:1-15. Abraham tells Avimelekh, king of the Phillistines, that Sarah is his sister, and she tells him that the same. He states that he has told it everywhere else he has travelled. Abraham explains she is his half-sister. (a lie or subterfuge). When God intervenes to stop Avimelekh's marriage to Sarah, Abraham explains that she is his half-sister, by his father's other wife.

#9. Gen 22:1-12. God orders Abraham to sacrifice of Isaac. Abraham tells Isaac that God will provide the lamb for sacrifice. An angel calls from heaven to stay Abraham's hand. (a false request; a lie as it implies falsely that God will break the covenant, Gen 17:19-21; a subterfuge to Isaac, although some commentators have claimed he understood.)

#10. Gen 23:10-16. Efron offers Abraham a field to bury Sarah; Abraham wants to buy it; Efron insists on it being a gift, but mentions its worth as four hundred pieces of silver, a small amount between them, as friends. Abraham pays. (an insincere offer. Efron, in this interpretation, leads Abraham into a situation where he cannot try to lower the amount by negotiation.)

#11. Gen 24:10-20. Abraham's servant asks Rebecca for a drink from her pitcher, as a test whether she should be Isaac's bride (an insincere request.)



- #12. Gen 25:29-34. After Esau comes in weary from the field, Jacob persuades him to sell his birthright for a mess of red stew. (a manipulation.)
- #13. Gen 26:7-11. Isaac tells the Philistines that Rebecca is his sister. (a lie)
- #14. Gen 27:1-40. Jacob and Rebecca pull their elaborate deception on Isaac to gain his blessing. (a deception) (See Goodnick, 1994, 1995.)
- #15. Gen 27:41-46. To let Jacob escape from Esau, Rebecca tells Isaac that she wants Jacob sent away for fear of him marrying a Hittite. (a lie or subterfuge)
- #16. Gen 29:15-30. Laban offers Rachel to Jacob as his wife in exchange for seven years of Jacob's service, but on the wedding night slips Leah in instead. Laban insists Jacob work seven more years for Rachel. (a false offer and trick.)
- #17. Gen 30:27-43. Jacob makes a deal with Laban to receive all the speckled sheep and goats in the herd. Laban and sons remove all such animals. Jacob uses charms to induce birth of more and takes them. (tricks by Laban and Jacob.)
- #18. Gen 31:7 and 31:41. Laban cheated Jacob and changed his wages ten times over, according to Jacob. (false offers)
- #19. Gen 31:17-21. While Laban is away shearing his flock, Jacob leaves with his wives, children, livestock and goods. (sneakiness)
- #20. Gen 31:19, 30-35. Rachel steals Laban's household gods, sits on them while he searches the tents, and claims she cannot rise because she is menstruating. She does not tell Jacob she has taken them. (a lie to and sneakiness Laban, sneakiness to Jacob). (See Spanier, 1992.)
- #21. Gen 32:14-22. Jacob divides his animals into parts, sends each herd on ahead to meet Esau with spaces between. The servant with each group is to tell Esau that Jacob is right behind. (a manipulation and a lie.)
- #22. Gen 33:12-15. Jacob says he will not keep up with Esau on his return because the young children and animals would suffer. Esau leaves some of his men with Jacob's group. (suspected deception.)
- #23. Gen 34:1-31. Dinah's brothers say that their religion requires all the men of Shekhem's village be circumcised before they can give Dinah to him. While the men are hurting, the brothers kill them and plunder the city. (a lie and a trick)
- #24. Gen 37:18-33. Joseph's brothers plot to kill him, then sell him to the Ishmaelites. They cover his coat with goat's blood and tell Jacob he had been killed. (sneakiness to Joseph, a lie and deception to Jacob using the coat.)

#25. Gen 38:11. Yehuda tells Tamar that if she can marry Shela if she waits till he has grown. Yehuda has no intention to give him to her for fear he should die as his brothers did. (a false offer)

#26. Gen 38:13-20. Tamar dresses as a cult prostitute, to become pregnant by Yehuda. She demands his articles as pledges for his payment, her real motive being able to prove herself later. (two tricks -- see Wassen, 1994.)

#27. Gen 38:27-30. At the birth of Tamar's twins, Zerah puts out his hand first, the midwife ties a scarlet thread on it, but his brother Peretz comes out first. (a trick by Zerah, but an unsuccessful one since Peretz' descendant was David.)

#28. Gen 39:7-20. Potifar's wife produces Joseph's garment and claims he tried to seduce her. (a lie, and a deception using the garment.)

#29. Gen 42:1-44:34. Joseph pretends not to recognize and not to believe his brothers, slips their payments in their saddle bags for the journey back, puts a goblet in Benjamin's bag, etc., all to test them. (lies and tricks)

#30. Gen 50:16-17. Joseph's brothers claim that Jacob made a dying wish that Joseph should forgive them. (probably a lie.)