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# The role of the lie in the evolution of human language

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## ABSTRACT

The literature on language evolution treats the fact that language allows for lying as a major obstacle to the emergence and development of language, and thus looks for theoretical means to constrain the lie. In this paper, I claim that this general formulation of the issue at hand misses out on the fact that lying made an enormous contribution to the evolution of language. Without the lie, language would not be as complex as it is, linguistic communication would be much simpler, the cognitive requirement of language would not be so heavy, and its role in society would be radically different. The argument is based on Dor's (2015) theory of language as a social communication technology, collectively-designed for the *instruction of imagination*. The theory re-thinks the essence of lying, and suggests that the emergence of language did more to enhance the human capacity for deception than it did to enhance the human capacity for honest communication. Lying, then, could not be constrained, but language did not collapse. The conception of lying as a threat to language, as it is formulated in the literature, is based on a series of unrealistic assumptions. Most importantly, the cognitive, emotional and social capacities required for lying, lie-detection and moral enforcement are never equally spread within communities: they are highly variable. Lying and language came to be entangled in a never-ending co-evolutionary spiral, which changed the map of communicative relationships within communities, and participated in shaping our languages, societies, cognitions and emotions. We evolved *for* lying, and *because of* lying, just as much as we evolved for and because of honest communication.

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## 1. Introduction

The literature on language evolution treats the fact that language allows for lying as a fundamental obstacle to the emergence and stabilization of language itself, and thus looks for theoretical means to reduce the interference of lying in the evolution of language to minimal levels. The underlying argument is based on a set of foundational conceptions from evolutionary theory, having to do with the conditions under which *honest signaling* (and other types of co-operative behavior) could emerge and stabilize in the biological world (Trivers, 1971; Krebs and Dawkins, 1984; Gintis, 2000): every system of honest communication also allows for *cheating*, which from the point of view of natural selection seems to be a more advantageous strategy than honest communication; other things being equal, selfish cheaters (*free-riders*) raise their gains at the expense of their co-operative interlocutors, and thus increase their reproductive success; other things being equal, then, we should thus expect communicators to cheat, but that would immediately cause the collapse of the entire communication system; for honest communication to be evolutionarily stable, additional assumptions concerning the interactions between

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communicators need to be introduced. One such assumption is that honest communication is evolutionarily stable when the signal's reliability is guaranteed by its energetic cost (the *handicap principle*; Zahavi and Zahavi, 1997; Grafen, 1990). This, however, only seems to aggravate the problem in the case of language: while honest signals used by other animals are often expensive, speaking seems to be energetically cheap, which makes linguistic cheating, i.e., lying, much easier to produce.

Different authors, then, suggest that different mechanisms evolved before or together with language to constrain the option of lying: human societies and individuals became more co-operative and morally-aware already before the emergence of language (Tomasello, 2008, 2009, 2016); honest communication was ensured by conformist learning and moralistic enforcement of norms by punishment (Richerson and Boyd, 2005; Boyd and Richerson, 2009); language evolved on the basis of a rise in social trust and the emergence of the rule of law (Knight, 1998, 2007); societies won the war against individual deception by inventing the *collective lie* (Knight, 1998); language evolved as a kin-selected system, which ensured honest communication within the kin group (Fitch, 2004, 2010); human reasoning, with its specific properties, evolved mainly for argumentative communication, whose function was to make information flow more reliable (Mercier and Sperber, 2011); language itself was helpful in the struggle against free-riding (Smith, 2010); and the all-important linguistic activity of *gossip* evolved, among other things, as a form of collective defense against free-riding (Dunbar, 2004). All these arguments undoubtedly capture important facets of the dynamics of lying in the evolution of language in particular, and human co-operation in general, and I will get back to them as the argument unfolds.

In this paper, however, I will claim that the general formulation of the issue at hand, i.e., the conception of the lie as an obstacle to the evolution of language, misses out on the fact that lying made an enormous direct contribution to the evolution of language. Without the lie, language would not be as complex as it is. Linguistic communication would be much simpler, and the cognitive requirements of language would not be so heavy. The role of language in society would be radically different. In many ways, we are who we are not because we constrained the lie, but because we never quite managed to do that. Lying cannot be theoretically constrained, and it does not need to be: it needs to be incorporated into the story of the evolution of language as a major and direct driving force.

The option of lying, moreover, should not just be thought of as a major driving force in the evolution of language. It should be acknowledged as a crucial facet of its uniqueness, of what makes it so different from all the other forms of communication in the biological world. This uniqueness suggests that the honest signaling paradigm, which defines the evolutionary game in a way that is suitable for animal communication, may need to be re-thought for human language. I will get back to this issue as the argument unfolds, especially in section (5). Here, I would like to make four preliminary points.

The first has to do with the very definition of the distinction between honest and deceitful signaling. Within the paradigm, the distinction does not concern the truthfulness of the signal, but the benefits and costs incurred by the signaler and receiver as a result of the event of signaling. Thus, the signaler signals honestly when the signal also benefits the receiver, and cheats when the signaling benefits the signaler at the cost of the receiver. In animal communication, this distinction may indeed be correlated with the truthfulness criterion: the signal benefits the receiver if it is truthful, and harms the receiver if it is false. In language, however, the correlation is no longer there. On the one hand, as we shall see below, lying is very often performed with the intention to benefit the receiver. On the other hand, and as importantly, honest communication is very often driven by the intention to harm the receiver: to insult and humiliate, frighten and control, and so on. The evolutionary game in the case of language, then, may remain the same in terms of costs and benefits (as, for example, in Desalles' (2014) analysis of linguistic communication as a means to attract strategic allies), but it changes quite radically in terms of the distinction between lying and honest speaking. As I will claim, individuals would be selected to the extent that they manage to maximize their capacity for the flexible and context-dependent maneuvering between the four available options: co-operative honesty, harmful honesty, co-operative lying and harmful lying. Every individual, in every social circumstance, eventually has a different maneuvering space available.

The second point, which is related to the first, has to do with the fact that lying, lie-detection and social enforcement are almost always based on intentions and their evaluation.<sup>1</sup> Signaling theory bypasses the problem of intention and defines honest communication and deception as statistical generalizations over sets of signals, which may be the right way to go as far as animal communication is concerned. With language, however, this is no longer an option. It is still true that if all members of a community conclude that all the rest communicate with them with harmful intentions, this could cause a general communicative breakdown. The breakdown, however, would eventually be based not on the evaluation of truthfulness, but on the evaluation of intention, harmful or co-operative. The evolutionary game, that up to now had to do with the signal itself, is now concerned with *two* levels of intention behind the signal, their camouflaging and exposing: the intention to persuade the interlocutor of a false claim, and the intention to harm the interlocutor. As we shall see, what this means, among other things, is that individual variability in the cognitive, emotional and social capacities involved in the competition over the evaluation of intention becomes much more crucial.

The third point has to do with the handicap principle. On the one hand, as the evolutionary literature already shows very clearly, the cost of signaling is neither a necessary nor a sufficient condition for honest communication in much of the signaling that takes place in the animal world (Számádó, 2011; Higham, 2013; Zollman et al., 2013, Johnstone and Grafen, 1993; Lachmann et al., 2001). On the other hand, while uttering a sentence may indeed be energetically cheap, the process of language acquisition that makes it possible is far from that. While it is true that language makes deception much easier,

<sup>1</sup> As we shall see below, the Mopan Maya seem to provide an interesting counter-example to this generalization (Danziger, 2005).

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