Imagining others deception, prediction, and disguised intentions in strategic interactions

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Abstract
The present study explores the place of deception, prediction, and disguised intentions in strategic interactions. This paper refocuses on a topic that was, at one and the same time, evoked and neglected within the field of semiotics. Whilst semiotics professed to be the discipline that studies anything that can be used in order to lie, we are nowhere near this at this current time. Whilst this paper argues for the significance of the semiotics of deception, it considers one aspect of this issue, namely, the relation between prediction and deception. What is the relation between deception and human predictability? Does deceiving others in interpersonal relations presuppose a dimension of prediction? What does this type of imagination, that is nested in deception, consist of? What socio-cognitive skills are required to engage in complex acts of deception? What kind of knowledge must a successful deceiver have in order to mislead others? These are all relevant questions in debating deception in human relations. The analysis reveals the need for an evaluation of the importance of prediction in order to understand deception.

Keywords

1. Introduction

Omnis homo mendax. Forms of manipulations occur in socio-cultural domains as well as in nature and affect all compartments of life.[1] Because deception is endemic to the human condition, evaluating what is true and what is false is something we all have to do. In fact, this skill has been essential for the evolutionary history of man and other species (Sommer 1992; Trivers 2011) and it will be a vital asset for men's future existence.

Truth, fiction, illusion, manipulation, and deception are topics often reported in the media and discussed as academic subjects. Today, such matters are at the forefront of discussion arousing interest among experts and ordinary people alike. Indeed, «fake news», «post-truth», and «post-fact» have become the new buzzwords (Lorusso 2018; Polidoro 2018). An enquiry into the problem of deceit, thus, not only is of utmost importance, but also very topical.

Deception is a very complex phenomena that has exercised a fascination upon the human mind for millennia. Discussion on truth, falsehood, fiction, and deceit goes back to the earliest day of philosophy and has continued ever since. Historically, philosophers have the

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[1] There is no general agreement about this point. V. Sommer (1992) holds that deceit is an evolutionary trait that can be found both in human and non-human animals. Other scholars disagree with this view. For instance, H. Arendt (1972), T. Hobbes and S. Ferenczi argued that «the ability to lie is one of the criteria that distinguish human beings from other animals» (Barnes 1994: 3). Likewise, R. Rappaport (1979: 224) holds that «lying is essentially a human problem». Recent studies have investigated the subject of deception in animal communication with particular focus on the phenomenon of mimicry (Maran 2017; Martinelli 2004; 2007). The bibliography on this subject is vast. Useful indications can be found in R. Mitchell and N. Thompson (eds.), *Deception. Perspectives on Human and Nonhuman Deceit*, Albany, State University of New York Press, 1986.

most to say on the subject. They have generally addressed the question of what is right and what is wrong in deceiving others. Because the purpose of this study is to outline the strategic and semiotic significance of deceit in interpersonal relations, it is useful to release the term from its moral weight.[2] As D. Nyberg (1993: 25) pointed out, «truth telling is morally overrated». St. Augustine, St. Thomas Aquinas, I. Kant and many other thinkers have discussed this problem at length from a moral standpoint.[3]

A. Greimas pointed out that the human race entered into an era in which symbolic manipulation became the dominant paradigm. As a result of this, the boundaries between plausibility and veracity, truth and certitude became blurred. The divide between what is regarded as true or false is constantly negotiated and questioned anew. Veracity and plausibility became artificially constructed effects. They are a by-product of discourse (Greimas 1989).

Today, the paradigm of symbolic manipulation has seen a re-emergence through the widespread use of digital media. Technological advancements have brought in radical changes in the use of symbolic systems and the representation of reality. Through digital media communication, messages, images, and narratives have decoupled from their original sources. As a result of this it became difficult to assess the truthfulness of the speakers and their credibility (Ruesch 1972: 268). This issue poses important epistemological questions, namely, how knowledge of reality is acquired and to what extent one can assess the accuracy of information altogether.

2. Towards a theory of deceit: a reappraisal of U. Eco's definition of lying as the 'proprium of semiotics'

Deception takes many forms and the lie is, undoubtedly, one of them. One can lie through words, pictures (Nöth 1997), gestures (Genosko 1995), and even by means of an eloquent silence (Colish 1978; Mazzeo 1962). A lie would be altogether inconceivable without the use of signs, however. As both J. P. Sartre and F. Nietzsche note, the concept of deceit is quintessential to the notions of sign and representation (Castelfranchi, Poggi 1998: 19). A similar idea is nested in U. Eco's depiction of semiotics as it was initially laid out in his *Trattato di semiotica generale*: «semiotics is the discipline studying everything which can be used in order to lie. If something cannot be used to tell a lie, conversely it cannot be used to tell the truth: it cannot be used to tell at all» (Eco 1976: 7).

This definition became well-known and very fortunate. Within the disciplinary domain of semiotics, thus, the logic of the lie and the concept of the sign became closely intertwined as an offshoot of Eco's oft-quoted definition. However, it is worth noting that elsewhere Eco recanted this statement and clarified his position (Eco 1997; 2017). Because this is a development of Eco's original formulation that generally goes unnoticed in the literature on the subject, it is worthy spelling it out.

On several occasions, Eco pointed out that semiotics should not be conceived as a theory of lying but rather as a theory of how it is possible to say what is not the case. This important explication is apparent in the following excerpt:

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[2]   On the concept of lying and deception, in the extra-moral sense, see Nietzsche (1873) and Scheibe (1980).
[3]   For historical accounts on the philosophy and ethics of lying, see Müller (1962), Bok (1978), Nyberg (1993), Bettetini (2001), Tagliapietra (2001).

La semiosi nasce perché vogliamo parlare circa il mondo. Ma la si capisce se si intende la semiotica come la teoria–non della menzogna (e correggo una mia definizione del *Trattato di semiotica generale*)– bensì di come si possa dire ciò che non è il caso, o comunque ciò di cui non si può dire se sia il caso o no) (Eco 1997: 37).[4]

In light of this remark, it would be probably more accurate to say that semiotics should be considered as a theory of erroneous inference rather than a theory of lying, thus, broadening the scope of semiotics. This shift of perspective would allow us to extend the field of semiotics beyond the study of sign situations where a lie may manifest, in order to include as semiotic phenomena instances of erroneous inference—such as errors or misperceptions—that, strictly speaking, cannot be regarded as lies.[5]

This said, one would expect that the natural development of semiotics would include the study of the semiosis of deception and that, broadly speaking, phenomena like mistakes, erroneous inferences, lies, deceits, simulations, misperceptions, and all devices of misrepresentation would appear to be the proper domain of semiotics. In fact, quite the contrary is true. Despite the fame of Eco's definition, semiotics has been almost mute on the subject of deception. Regrettably, in comparison to philosophers,[6] theologians, psychologists, linguists, journalists and political scientists, semioticians have been concerned with this subject sparingly and did not quite keep up with advancements made in other fields. This fact is astounding, to put it mildly.[7]

As M. Danesi (2017: 20) pointed out, «it is somewhat surprising to find that virtually no one has approached sign analysis from Eco's perspective, even though it goes way back to 1976». This claim is backed up by the paucity of semiotic research conducted on the subject, with the exception of a few studies (Anderson 1986; Danesi 2014; Eco 1997; Gramigna 2011; 2013; 2020; Jervis 1970; Levin 1974; Lotman 2015; Maddox 1984; Maran 2017; Nöth 1997; Nuessel 2013; Pelc 1992; Sebeok 1975).[8] In a nutshell, the significance and theoretical import of the semiosis of deceit have been overlooked,[9] and as such I feel that my enquiry is totally justifiable. Undoubtedly, there is a need to bridge such a gap.

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[4]   «Semiosis is born because we need to talk about the world. Yet we can understand it if we conceive of semiotics as the theory–not of the lie (and I correct a definition of mine from *A Theory of Semiotics*–but of how it is possible to say what is not the case, or in any case that of which one cannot say whether it is the case or not». My translation from italian.

[5]   I have discussed the difference between lying and othter forms of falsehood elsewhere (Gramigna 2013).

[6]   The literature on the subject from the standpoint of analytical philosophy, philosophy of language, and linguisticts is vast. For a recent account on the subject, see Jennifer M. Saul, *Lying, Misleading, and What is Said. An Exploration in Philosophy of Language and Ethics* (Oxford, Oxford University Press, 2012). See also James E. Mahon «The definition of lying and deception», in *Standford Encyclopedia of Philosophy*, Standford, Standford University, 2008; A. Isenberg, «Deontology and the ethics of lying», *Philosophy and Phenomenological Research*, 24/4, 1964, 463–480; Frederick A. Siegler, «Lying», *American Philosophical Quarterly*, 3, 1966, 128–136; L. Coleman, P. Kay «Prototype semantics: the English word lie», *Language* 57/1, 1981, 26–44; F. D'Agostini, *Menzogna* (Torino: Bollati Boringhieri, 2012).

[7]   The historical and disciplinary reasons behind this lacuna are not known to me. These are matters that, however interesting, fall outside the scope of the present inquiry.

[8]   It is worth noting that some scholars registered a lack of interest of Western scholarship in general about the issue of deception and lying. As D. Sless (1986: 28) states «It is a curios fact of Western scholarship that there are endless treatises on the subject of truth but few on lying». This tenet is endorsed by Barnes (1994: 4-5), Bok (1978: 5), Raskin (1987: 445) and Shibles (1985: 24).

[9]   To be accurate, Eco was not the first semiotician who foresaw the potential of lying as a semiotic problem. Ogden and Richards, in their seminal work, *The meaning of meaning*, underscored the significance of the problem while discussing «the treachery of language». Likewise, Charles Morris in discussing the informative function of signs makes an important remark about the possibility of lying through signs: «Lying is the deliberate use of signs to misinform someone, that is, to produce in someone the belief that certain signs are true which the producer himself believes to be false. The discourse of the liar may be highly convincing. The mere making of false statements is not lying, nor are the forms of misrepresentation lying – as in painting which portrays objects with characteristics which they do not in fact have. Lying is connected

The goal of this study is to make the case for the semiotics of deception, including a more detailed description of the underpinnings of this issue to encourage the discussion on such a fascinating yet neglected topic of research. After providing some preliminary insights into the concept of deception, its definitions and typologies, my intention is to focus on one specific angle of this phenomenon, namely, the strategic and predictive dimension embedded in deception, especially when this phenomenon is tackled within the frame of strategic interactions.

3. Grappling with the concept of «deception»: some theories of deceit

The field of study that focuses on deceit is vast and complex. To begin, a general discussion and definition of the concept of «deception» is relevant. At present, a systematic science of deceit does not exist and studies conducted on the subject in other scientific domains, albeit very valuable, were fragmentary and unsystematic (Castelfranchi, Poggi 1998: 18). Because its nature is multifaceted, the study of deception requires a multidimensional and multidisciplinary approach.

There seems to be a conundrum about defining «deception». Let us be clear that there is no complete agreement among experts in this field of research. Several authors have ventured into the study of the subject reaching inconsistent and divergent conclusions. In the research to date, a universally accepted definition of «deception» does not exist, let alone an independent and objective methodology for identifying certain phenomena as cases of deception (Bavelas et al. 1990: 175). Different authors have each offered their opinion. The difference in judgments on the interpretation of this concept is due to the non-homogeneity of the criteria used on each occasion by the scholars for the elucidation.

The deception construct has unavoidable overlapping with other forms of misrepresentation and distortion of reality that despite having some features in common, must nonetheless be distinguished. With this understanding, the concept of deception has been widely extended to a host of complex phenomena—lying, simulation, fabrication, feigning, pretence, mimicry, hypocrisy, disguise, error, camouflage, non-serious talk, to mention but a few. McGlone and Knapp (2010: 186) have aptly termed such phenomena as «blood relatives» of deception. This overlapping, however, is often a source of confusion.

As I will argue next, some authors considered the intentional aspect of deceit as significant; while others, in contrast, opted for an informational criterion—the management of information. Whilst scholars have generally studied the issue of deception from the perspective of language, truth-telling, assertion, intentionality, goals and effects and so forth, I will, instead, start from a different premise and make the case, after reviewing some theories of deceit, for treating deception in connection with prediction.

3.1 Lying and deceiving

Let us first briefly examine a dictionary definition of the term «deception», and then proceed with an overview of the main criteria used in scholarly discussions for outlining what constitutes deception. The *Oxford English Dictionary* (OED) formulates the definition of «deception» as follows: «to cause to believe what is false».

This definition is quite broad and general and is a good starting point for the discussion. Firstly, it posits that deception is a kind of action. This action is geared towards a specific

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with the informative function, regardless of which kinds of signs are used for the purpose of misinforming» (Morris 1955 [1946]: 200).

goal, namely, to lead someone to believe [as true] what is false. The OED definition is as broad as to include in the genus of deception both intentional and non-intentional types of untruthfulness. Intentional deception occurs when an agent intentionally causes another to believe what is false. Non-intentional deception occurs inadvertently. A subject who is led into a perceptual error by misleading appearances without any human agency that intentionally caused this to happen is a good illustration of non-intentional deception.

This is a problematic node in the OED's definition because the distinction between intentional and non-intentional types of deception remains concealed. By placing the two modalities of deception under the same head, without any further qualification, this definition remains rather ambiguous.

A further loci of semantic ambiguity that is common to deception studies concerns the definitions of «deception» and «lying» which, in numerous scholarly treatments, fall into the same basket. Given the lack of homogeneity of the criteria used for the definition, it is not surprising that the notion of deception often intertwines with definitions of what is to lie and the whole outfit of insincerity. From this standpoint, lying and deception are treated in tandem because both phenomena tend to include an element of intentionality—the intent to deceive—as a necessary criterion for the definition. L. Coleman and P. Kay (1981), for instance, identify the intent to deceive as essential to the prototypical definition of the lie.

Whilst some scholars (Ekman 1985: 26) use «deceit» and «lying» as interchangeable words, others distinguish the two concepts on the basis of whether or not the victim is successfully deceived.[10] In other words, from this standpoint the criterion for discerning between lying and deceiving is the effect that deceit exercises upon the victim. Whilst a lie that is seen through is still a lie regardless of its success, an act of deception that is uncovered by the dupe can no longer be regarded as an act of deception. In this connection, G. Ryle (1949: 114) notes that «to deceive» is a verb of success and, as such, it signifies «not merely that some performance has been gone through, but that something has been brought off by the agent going through it».

J. Mahon is an advocate of this view. Claiming, as does Ryle, that «to deceive» is a «success or achievement verb» (Mahon 2007; 2008: 211), Mahon presents the following distinction:

> Whether or not an act of deceiving has occurred depends on whether or not a particular effect – normally, the having of a false belief – has been produced in another. […] In this respect, deceiving differs from lying. […] Whether or not an act of lying has occurred does not depend on whether or not a particular effect has been produced in another; if no effect has been produced in another, then the act of lying may have occurred nevertheless. Properly speaking, therefore, lying is not a type of deceiving (Mahon 2007: 181).

T. L. Carson endorses a similar view. He holds that «unlike 'lying' the word 'deception' connotes success», therefore «an act must actually mislead someone (cause someone to have false belief) if it is to count as a case of deception» (Carson 2010: 55).

In contrast to this view, S. Bok, claims that lying is a sub-category of deception. The author distinguishes deceptive statements (e.g. lies) from other forms of deception by arguing that in a lie the message must be stated:

> When we undertake to deceive others intentionally, we communicate messages meant to mislead them, meant to make them believe what we ourselves do not believe. We can do so through gesture, through disguise, be means of action or inaction, even through silence. Which of these innumerable deceptive messages are also lies? I shall define as a lie any intentionally deceptive message that is stated. Such statements are most often

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[10] I use the terms «victim» and «dupe» intercheangeably. By these two terms I refer to the subject or subjects to whom the act of deception is directed to.

made verbally or in writing, but can of course also be conveyed via smoke signals, Morse code, sign language, and the like. Deception is the larger category, and lying forms part of it (2003 [1978]: 13-14).

A similar view can be also found in Betz (1985: 221), Simpson (1992: 623), and (Vasek 1986: 271).

3.2 The intention to deceive

The crux of the matter in defining lying and deceiving revolves around the notion of the intention to deceive. The point of contention is whether an explicit intention to deceive is to be taken as an essential element in the definition of the lie (Gramigna 2020).

In an influential article titled «The Intent to Deceive» (1977), R. Chisholm and T. Feehan spell out an eightfold taxonomy of cases in which a person L may deceive a person D with respect to a proposition *p*, whereby *p* is false. The two philosophers discern eight basic ways used to deceive, which they divide on the basis of three main criteria:

(i) Deception by «commission» / «omission»;
(ii) «Positive» / «negative» deception;
(iii) Deception *simpliciter* / deception *secundum quid*.

The «commission/omission» dichotomy is predicated upon the causal contribution of the deceiver toward the victim's belief. The distinction between «positive» and «negative» deception is predicated upon the way in which the deceiver alters the pre-existent stock of beliefs accepted or held by the dupe. When a «positive» deception occurs, a false belief is either being acquired or retained by the dupe due to the deceiver contributing causally towards it. In the case of «negative» deception, the deceiver causes the victim either to lose a true belief or entails the prevention from acquiring a true belief.

Moreover, the distinction between *simpliciter* and *secundum quid* signals whether L has brought about the change or not. The deception *simpliciter* implies that «L brought about the change from the state of not being deceived with respect to p» (Chisholm and T. Feehan 1977: 144). The juxtaposition of the three criteria listed above renders a matrix of eight possibilities of deception. Four of them are grouped under the rubric of «deception by commission» and another four falls under the head of «deception by omission». The table here-under (Table 1) summarises the taxonomy of deception outlined by the two philosophers:

Commission	Types of deception	Omission
(a) *L* contributes causally toward *D*'s *acquiring* the belief in *p*	Positive deception *simpliciter*	*L* allows *D* to acquire the belief in *p*
(b) *L* contributes causally toward *D*'s *continuing* in the belief in *p*	Positive deception *secundum quid*	*L* allows *D* to continue the belief in *p*
(c) *L* contributes causally toward *D*'s *ceasing* to believe in not-*p*	Negative deception *simpliciter*	*L* allows *D* to cease to have the belief in not-*p*
(d) *L* contributes causally	Negative deception	*L* allows *D* to continue to

| toward preventing *D* | *secundum quid* | have the belief in not-*p* |
| from *acquiring* the believe in not-*p* | | |

Table 1. The eight basic types of deception outlined by Chisholm and Feehan (1977).

In light of the eightfold taxonomy of deception Chisholm and Feehan outlined, the following definition can be gleaned:

> To deceive is to contribute causally toward another person acquiring a false belief, or continuing to have a false belief, or ceasing to have a true belief, or preventing another person from acquiring a true belief, or to allow another person to acquire a false belief, or to continue to have a false belief, or to cease to have a true belief, or to allow another person to continue without having a true belief (Mahon 2007: 186).

Despite the high degree of sophistication of this approach, there is one aspect that remains obscure and is unresolved in Chisholm and Feehan's account. As Mahon (2007) pointed out, whilst to contribute causally toward another person acquiring a false belief falls into the category of deception, to allow another person to continue without having a true belief is a difficult case and it could be argued that this is not strictly speaking a case of deception. In other words, «allowing a person to remain ignorant, or allowing a person to become ignorant, is not deceiving that person» (Mahon 2007: 187).

3.3 Deception as a device of information manipulation

Communication scholars as well as psychologists have focused on the concept of information as the benchmark to the study of deception. Information facilitates control and knowledge confers supremacy. Information management is a complex phenomenon ruled by a logic of concealment and revelation. Whilst reciprocal knowledge is a precondition for human interactions, the sharing of knowledge is always partial because the distribution and access to information are unequal. In the presence of unfriendly or hostile processes, whose goals conflict with friendly goals, information can be altered and obfuscated for the purpose of gaining personal advantages, maintaining supremacy or for the promotion of other disruptive goals. Accurate information is key, especially in the strategic interactions where it is «of interest for one party to an interaction to be able to predict the course of action or thought of the other party» (1979: 4).

As M. Knapp and M. Comadena (1979: 271) note, deception is thought of as «the conscious alteration of information a person believes to be true in order to significantly change another's perceptions from what the deceiver thought they would be without the alteration». Bavelas argues much the same thing and proposes that «the primary definition [of deception] must be informational, that is, based on the truth or falsity of the information represented in the message. This dimension can be called truthfulness-falsity, or distance from truth» (Bavelas et a. 1990: 175). Likewise, K. Scheibe conceives of mirrors, masks, lies, and secrets as «techniques for the manipulation of information» and regards them as «the major devices of the strategic armamentarium» (Scheibe 1979: 52). Such devices operate following the binary logic of detecting/ concealing information and serve different functions, either protective and/or intrusive.

G. Durandin, in his study *Les fondements du mensonge* (1972), pointed out a parallel between deception and concealment. These strategies can be used either for offensive

(prevarication) or defensive purposes (survival).[11] The common feature between deception and concealment lies in its ability to alter and distort the informational capital at the disposal of a living organism. Because the very essence of social life depends upon the existence of mutual trust between the members of society and «all relationships of people rest upon the precondition that they know something about each other» as G. Simmel (1906: 441) stated more than a century ago, deceit, thought of as a breakdown of trust and mutual confidence, undermines the foundations of society itself.

The altering of the relationship between the deceiver and the dupe, with respect to the access to information as well as the distribution of power, is an important aspect of this phenomenon. The privileged position of the deceiver (both in terms of information and power), as compared to the one to whom the deceit is directed, compromises the balance between the participants of the human interaction in favour of the one who orchestrates the deceit.[12] In this respect, deception can be seen as having an intrinsic connection with violence. Deception perpetuates powerlessness in others by coercing them into believing an altered depiction of reality.

This is particularly illuminated in the seminal study of S. Bok (2003 [1978]: 27), where deceit and violence are «the two forms of deliberate assault on human beings». The privilege inherent in the deceit, as has been described above, affects the exercise of power in an identical measure in which the access to knowledge confers supremacy. Therefore, there exists, for Bok, a biunivocal correspondence between deceit and power. Deception manifests an insidious influence through the manipulation of information to the extent that it coerces the choice-making process of the dupe.

3.4. The nexus between perception and deception

It is often said that appearances are deceiving, and rightly so, for this tiny piece of wisdom is worth pondering. Perception and deception are interlocked phenomena more than one would dare to think. The nexus between perception and deception has not escaped the attention of those who have tackled the problem of deceit and illusion from the standpoint of magic (Jastrow 1900) and strategic intelligence (Whaley 1969; 1982). Deception should be framed within a general theory of perception because, strictly speaking, deceit falls within the facts of «misperception» (Whaley 1982). As Whaley (1969: 180) remarks, «deception is one form or mode of perception. Specifically, it falls in that main division of perception called misperception».

A preliminary definition of deception presupposes a perceiving subject, an act of perception, and a perceived object. Deception is grafted upon sense perception inasmuch as deception implies a subject who perceives an object in his immediate environment. Deception does not lie in the things themselves but is predicated upon the perception of a subject. By drawing on the work of the physiologist H. von Helmholtz and the neuropsychologist R. L. Gregory, Whaley (1982: 180) conceives of perception in terms of «hypotheses» based on an unconscious inference.

The human brain draws inferences based on the sensory inputs that it receives from the environment. Upon receiving the incoming data, a part of it is filtered, processed and stored. This forms the basis for making inferences. Gregory (1973: 62-63) explains that the phenomenon of illusions should be assessed against the background of the cognitive process of inference-making because illusions are failed or «misplaced hypothesis». Illusions occur

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[11]   On this point, see Knapp et al. (2016: 78-82). For a critical review on Information Manipulation Theory (IMT), see Levine (2020: 292-332).

[12]   Here I often use the term «liar» in order to refer to the subject who designs and tells a lie. However, it would be more appropriate to use this expression to refer to those who have the habit of lying.

either due to a malfunctioning of the physiological perceptual input mechanism or when our cognitive abilities for making appropriate hypotheses misfires (Whaley 1982: 182). When the subject fails to form an accurate hypothesis about an object, a fact or an event, then, «sense deception» (Jastrow 1901) or «misperception» (Whaley 1982) occur.

Whaley has classified classes of misperception, including deception, as the chart below depicts (Fig. 1):
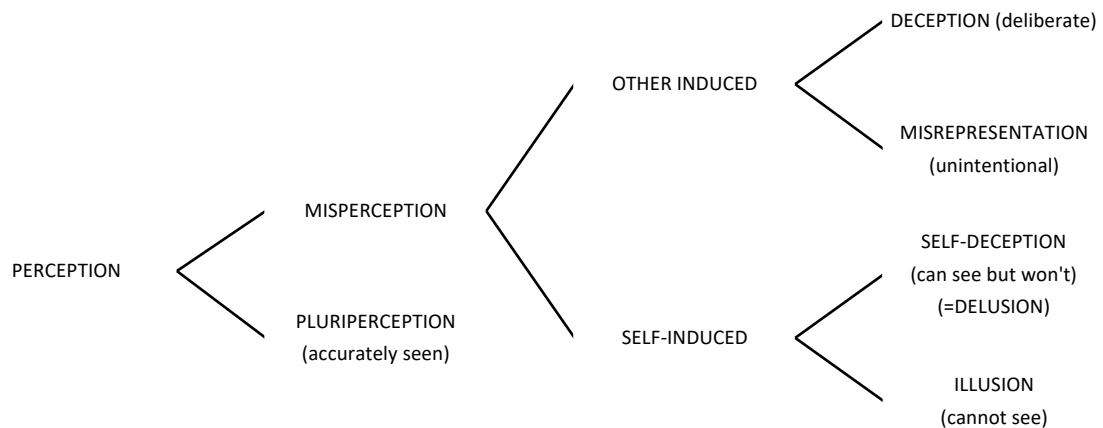

Fig. 1. Whaley's typology of perception (adapted from Whaley 1982: 180).

Misperception can be either induced by others or self-induced, and deliberate or unintentional. Whaley considers deception within the frame of the psychology of misperception and defines it as follows:

> *Deception* is the distortion of perceived reality. Operationally, it is done by changing the pattern of distinguishing characteristics (charcs) of the thing (whether object or event) detected by the sensory system of the target. The task (purpose) of deception is to profess the false in the face of the real (Whaley 1982: 182).

From this definition it can be gleaned that deception alters the perception of reality through the distortion of the patterns of the object perceived. Moreover, deception entails a primitive concept of what is false that overlays with the real. However, an explication of what is meant by «false» in Whaley's definition of deception is left unattended. We can tentatively define falsity in a broad sense as that which is other than it seems.

For the present study, I will employ the definition of deception outlined by Castelfranchi and Poggi (1998: 55):

> Deceit is an act or a trait of an organism (M) whose goal is to prevent another organism (I) from gaining true knowledge. This knowledge should be relevant to the organism (I). Moreover, M's deceptive goal should not be revealed to I.[13]

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[13] My translation from Italian: «Un inganno è un atto o un tratto di un organismo M che ha la finalità di non far avere a un organismo I una conoscenza vera che per quell'organismo è rilevante, e che non rivela tale finalità» (Castelfranchi and Poggi 1998: 55).

This definition is predicated upon five essential features (Castelfranchi and Poggi (1998: 56-60):

1. The notion of *act* included in the definition should be understood in broad terms. An act can be verbal or non-verbal. The lie is a typical illustration of a verbal act. Pretence or simulation is an example of a non-verbal act. An act can also entail inaction, the act of not acting. An omission is an example of inaction;
2. Deception entails a conscious intention. In other words, an act of deception presupposes awareness on the side of the deceiver of the deceptive goal. The deceiver intends to deceive and he or she is aware of it;
3. Deceit entails the prevention that another organism gains true knowledge. Here, «true knowledge» refers to subjective knowledge. In other words, what the subject assumes, takes or believes to be true;
4. Relevant knowledge: the prevention from gaining true knowledge should have relevance for the organism M;
5. Meta-deception: deceit entails that the intention of M of not letting the other organism I to gain true knowledge is covert, so it should not be revealed to I.

I will now turn to a brief discussion of the main ways of deceiving.

3.4.1 Two modes of deceiving: simulation and dissimulation

There is one common theme that runs through the study of deception, namely, the distinction between «simulation» and «dissimulation». The two terms are generally contrasted one against the other and yet they are two facets of the same coin. This macro-distinction has served as the basis to discern two large modalities of deceiving, one geared upon the logic of secrecy and the other on revelation.

The meaning of the Latin term *simulatio* has a long pedigree and its rich semantic history cannot be dispensed with in a few words. *Simulare* derives from *similis* («simile») and it means to make something similar, «to feign» what is not, «to pretend». *Dissimulare*, in contrast, comes from *simulare* with the addition of *dis-* which implies a contrary and negative meaning. *Dissimulare* in fact means «making something unrecognisable», «to conceal», «to hide». The Latin term *simulator* harkens back to the Greek word *hypocrita*. There is a semantic correspondence between these two words. However, their connotation is different.

Whilst the ancient meaning of the Greek *hypocrita* meant «actor» and it had a somewhat neutral connotation, the Latin terms *simulo/simulatio/simulator* took on a negative connotation and a moral overlay within the biblical and Christian tradition. A *simulator* is a person who ostensibly feigns to have virtue that he does not possess (Portalupi 2004: 448). In the *Summa Theologiae*, St. Thomas Aquinas discusses the problem of dissimulation and explains the meaning of «hypocrite» by quoting both Isidore and St. Augustine. For Aquinas hypocrisy consists truly in one appearing other than he is, that is to say, acting so as «to seem what he is not». Aquinas defines hypocrisy as «a kind of dissimulation whereby a man simulates a character which is not his» (Q. 111, A. 3, c.).

Torquato Accetto (1997 [1641]: 11), in his *Della dissimulazione onesta*, defines «simulation» as to appear what one is not and «dissimulation» not to appear what one is («La dissimulazione è un'industria di non far vedere le cose come sono. Si simula quello che non si è, si dissimula quello ch'è»). Not dissimilarly, Francis Bacon analysed simulation and dissimulation among the strategies of hiding and veiling oneself:

There be three degrees of this hiding and veiling of a man's self. The first, closeness, reservation, and secrecy; when a man leaveth himself without observation, or without hold to be taken, what he is. The second, dissimulation, in the negative; when a man lets fall signs and arguments, that he is not that he is. And the third,

simulation in the affirmative; when a man industriously and expressly feigns and pretends to be that he is not (Bacon 1838: 387).

If one considers deception as geared upon the dichotomies of hiding and showing or concealment and revelation, simulation and dissimulation can be respectively thought of as two sides of deception. Whilst dissimulation is covert, it hides the real, and «its task is to conceal or at least to obscure the truth», simulation is overt, it shows the false, and «its task is to pretend, portray, profess an intended lie» (Whaley 1982: 183). What is important to stress is that simulation and dissimulation often occur in tandem. Both dissimulation and simulation operate though a plethora of devices and operations. Whaley singles out three ways to dissimulate and three ways to simulate, one representing the counterpart of the other. Hiding the real can be done «by making it invisible» (*masking*), «by disguising» (*repackaging*), «by confusing» (*dazzling*). Showing the false can be done «by having one thing imitate another» (*mimicking*), «by displaying another reality» (*inventing*), «by diverting attention» (*decoying*) (Whaley 1982: 185).

Another way to unravel the logic behind the duplet simulation/ dissimulation is to couch these two strategies of deceiving in terms of an additive or subtractive quality. Guillaume Leonce Duprat (1903) is very explicit on this point. Duprat, who was an advocate of the scientific study of lying, designates the lie as a suggestion of error because it aims at «the production in another of a representation without objective value or of a judgment would not be able to confirmed by experience» (Duprat 1903: 16).[14]

Among the varieties of lies, Duprat (1903: 23) distinguishes between simulation and dissimulation. Whilst simulation operates through addition, dissimulation works by means of subtraction. He terms these two modalities of lying or suggestion of error «positive suggestion» (simulation) and «negative suggestion» (dissimulation). Simulation adds elements to the accurate depiction of reality in a variety of ways, by invention, by exaggeration or by making things up completely. Attributes can be added to people as well as to facts, events and situations. Duprat (1903: 16) distinguishes four sub-categories which further expounds the ways in which simulation operates: 1) by «illegitimate attribution»; 2) by «addition»; 3) by «recombination»; 4) by «pure fiction».[15]

Opposite to simulation there are other forms of deceit that are catalogued under the rubric of dissimulation, which includes denial, suppression, attenuation, negation, false testimony. To summarise, simulation adds up elements to the true description of reality whereas dissimulation suppresses elements that should be included in the true depiction of reality.

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[14] My translation from French: «le mensonge a pour fin la production chez autrui d'une representation sans valeur objective et d'un jugement que l'expérience ne saurait confirmer».
[15] My translation from French. The original text uses the following terminology: 1) «attribution illégitime»; 2) «addition»; 3) «exagération»; 4) «recombinaison»; 5) «pure fiction».

MODES OF SUGGESTION OF ERROR (or CLASSIFICATIONS OF LIES)	
A) POSITIVE SUGGESTION	B) NEGATIVE SUGGESTION
• Fully-fledged inventions • Fiction, simulation • Addition • Distortion • Exaggeration	• Complete dissimulation • Denial • Suppression of testimony • Omission • Mutilation • Attenuation

Table 2. A taxonomy of lies or modes of suggestions of error (adapted from Duprat 1903: 24)

It is also worth noting that Duprat pointed out that lying and belief are closely interlocked and that belief is a gradual phenomenon. Moreover, he noted that lies need to adapt to the degree of belief that aims to produce (Duprat 1903: 16).

4. Imagining others: representing the other's mind and perspective-taking in deception

Psychologists have generally focused on the way in which the ability to lie is acquired as a skill throughout child development (Vasek 1984; 1986) and the psychological reasons why people lie (Fechheimer 1936; Krout 1931; 1932). Valuable studies were also conducted on gender and socio-contextual differences in telling lies (DePaulo et al. 1996) and lie detection via non-verbal cues and facial expressions (Ekman 1985; 2009; Ekman and Rosenberg 2005). The latter approach to deception holds that truth is written on people's faces. In other words, signs of deception are inscribed in micro-expressions used by the lie detector in order to spot a liar.

For Paul Ekman lying to others entails two main strategies, concealment and falsification. Whilst «in concealing the liar withholds some information without actually saying anything untrue», in falsifying «not only does the liar withhold true information but he presents false information as if it were true» (Ekman 1985: 28). Deceit is often a combination of both (Ibid.). What Ekman termed «concealment» may be understood as lying by omission. However, this point deserves further qualification. Concealment as a strategy of withholding information may or may not entail an intention to mislead. If concealment does not entail an intention to deceive it can hardly be called a lie. Thus, one must distinguish between concealment and secrecy because the two concepts are intertwined.[16]

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[16] S. Bok comments on this difference: "Lying and secrecy differ, however, in one important respect. Whereas I take lying to be *prima facie* wrong, with a negative presumption against it from the outset, secrecy need not be. Whereas every lie stands in need of justification, all secretes do not (Bok 1983: XV). On this fascinating connection between deceit and secrecy, see Scheibe (1979: 91-100) and Bakan (1954).

There is an additional aspect that is worth pondering. This has to do with the hypothesis that an act of successful deception entails the representation of the other's mind (Castelfranchi e Poggi 1998) and the ability to take the perspective of the other (Flavell 1968; Hyman 1989) as essential prerequisites for deception. Moreover, this standpoint leads to the idea that deception may involve a certain degree of premeditation, which in turn requires planning and design from the side of the deceiver (Hopper and Bell 2009). In this section I will explore the ramifications these issues have for the concept of deception.

The ability to take the perspective of the other and to be in someone else's shoes was underscored both by G. H. Mead (1934) with the concept of «the generalised other» and by J. Piaget (1932) in his study on egocentrism. The ability to impute mental states to themselves and to others, termed «the theory of mind», has found fertile ground in philosophy. Here the term used is «meta-representation». Developmental psychologists and cognitive social psychologists have long recognised the importance of the concept of perspective and role-taking in the explanation of the psychological development of the child. In this connection, it is noteworthy that the literature shows evidence that there is an important link between the rise of deception in children and the ability of perspective-taking (Selman 1980).[17]

Hartshorne and May, in their first study on children's deception based their analysis on children's own accounts of deceptive acts, defining deception as follows: «the conscious method of circumventing the will of another by misleading the other as to one's own will» (Hartshorne and May 1928: 13). Empirical studies suggest that children not only develop an awareness of other agent's intentions (namely, the attribution of intentions of a first-level order), but also that children achieve an awareness of other people's awareness of other's intentions (attribution of second-order beliefs). T. Shultz and K. Cloghesy (1981) refer to this aspect as the «recursive awareness of intention» in social interactions. The authors provide evidence that such type of awareness of intention does not appear before the age of five (Shultz and Cloghesy 1981: 469). Although perspective taking is not the only ingredient that enables deception, it is certainly an important aspect to be considered in connection with the very possibility of deception. As C. Schmidt argues:

> Other persons also possess belief systems and therefore in communicating with another one must recognise that the overt action, which has been termed the message, will be interpreted by others within the context of their beliefs about the actor's plan and motive. Thus, the theory of human action is essentially recursive (Schmidt 1975: 199).

Schmidt goes a step further by making the case for recursive thinking to be the precondition for engaging with strategic actions that involve deception and the disguise of intentions for deceptive purposes (Schmidt 1976). Vasek makes this point very clear:

> Engaging in or coping with deception requires that the child interacts socially, communicates clearly, and understand how the communications of others are to be taken. These requirements, in turn, involve perspective-taking skills, communicational competence, and an understanding of intentionality. Though conceptually distinguishable, these social-cognitive skills appear to be mutually dependent. If one is to understand children's (and adult's) deceptions, one must understand these social-cognitive capacities and how they make deception possible. In fact, one might operationalise the concept of deception as «communicating untruthful information with the intention of altering another person's perspective of a situation in ways inappropriate to the other's perceived goals» (Vasek 1986: 276).

In this framework, deception is possible when one can master such abilities. Selman shows clearly the connection between the possibility of deception in children and the ability

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[17] For a review of the literature on children deceits with particular reference to verbal deception (the lie), see Vasek (1986), Rotemberg and Rotenberg (1991).

to take the perspective of the other. In his study he singled out five levels of perspective taking (from Level 0 to Level 4) that show an increasing level of social complexity. Selman notes that deceptive actions occur starting at Level 2 when the child is able to «articulate that he or she is trying to act in ways that will mislead the opponent without the opponent being aware that the self is aware that the opponent is being misled. In effect the child acknowledges that the other is trying to figure out the self's motives» (Selman 1980: 60). As Wimmer and Perner pointed out, «the practical importance of representing another person's wrong beliefs consists in the use of this representation as a frame of reference for interpreting or anticipating the other person's actions» (1983: 106).

5. Prediction in deception: outsmarting others in strategic interactions

Erving Goffman (1969: 100-101) defines «strategic interactions» as follows:

> Two or more parties must find themselves in a well-structured situation of mutual impingement where each party must make a move and where every possible move carries fateful implications for all of the parties. In this situation, each player must influence his own decision by knowing that the other players are likely to try to dope out his decision in advance, and many even appreciate that he knows this is likely. Courses of action or moves will then be made in the light of one's thoughts about the other's thoughts about oneself. An exchange of moves made on the basis of this kind of orientation to self and others can be called strategic interaction.

It is from this standpoint that I shall attempt to view the problem before us. What Goffman termed «dope out» is a type of predictive mode of thinking that allows an agent to figure out and decipher in advance the decisions to take by an act of forward thinking. By capitalising on Goffman's intuition, I make the case that such a predictive mode of thinking–which is strategic and future-oriented to its core–plays an important role in strategic interaction and, therefore, its significance should not be overlooked. As we pointed out in the preceding sections, theories of deception have generally focused on definitional criteria that do not necessarily and explicitly include this factor, which is either left in the background or considered as an implicit element in deceptive acts. For this reason, my intention is to bring this feature to the foreground and to unpack its significance.

My theoretical interest, thus, lies in the special kind of mutual mind-modelling that goes on between the parties to an interaction that engages in deception. Because this aspect is particularly visible in the contexts of strategic interactions, I decided to take two illustrations of such interactions as explanatory models for supporting my claim. In strategic settings when one is wary of the possible moves of the other, it is not surprising to see that calibrating and recalibrating plans of actions, anticipating the moves of other parties in the interaction, and disguising and guessing intentions, are factors of paramount importance. In such types of interaction there is a deceptive game–based on imagination, guessing and, surprise–in which each party to the interaction seeks to outsmart the other. What is important to stress is that in these settings, each participant to the interaction tailors his or her behaviour to the that of the other, like in a mirror reflection.

5.1 The mistrustful hearer: two cases of deception

In order to make a case for prediction as an element embedded in deception, I draw on an illustration that comes from the philosophical discussion of lying and deceiving set forth in St. Augustine's *De mendacio*, a treatise on falsehood written more than fifteen hundred years ago.[18] St. Augustine introduces two interesting case studies on the assumption that the hearer

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[18]   I have dealt with St. Augustine theory of lying at length elsewhere (Gramigna 2020).

is in any case sceptical–that is, he has no trust in the speaker. According to this prerequisite, the speaker has to calibrate his communicative strategy to the particular system of beliefs held by the hearer. In other words, the speaker must calibrate his or her moves by anticipating that of the other. If someone expects not to be believed because the hearer is mistrustful, the speaker then could follow one of the following strategies: either telling a falsehood so that the truth could be inferred from a false statement, or telling the truth in order to deceive.

Here is the first case as described in chapter four of *De mendacio*:

> In the first place, we have a person who knows or thinks that he is speaking falsely, yet speaks in this way without the intention of deceiving. Such would be the case of a man who, knowing that a certain road is besieged by bandits and fearing that a friend for whose safety he is concerned will take that road, tells that friend that there are no bandits there. He makes this assertion, realizing that his friend does not trust him, and because of the statement to the contrary of the person in whom he has no faith, will therefore believe that the bandits are there and will not go by the road.[19]

The analysis of the first situation designates the case of a falsehood that is put through not for deception but in order not to deceive. The conditions set for the analysis of this case are the following: 1) the listener's mistrust; 2) the speaker's benign motif; 3) speaker states what is not the case – the speaker states that there are no robbers along a certain road, while it turns out that the contrary is the case.

St. Augustine in fact sets out the first scenario by considering the case in which someone, who is aware that a certain road is besieged by robbers, tells the contrary of what he assumes to be the case to a mistrustful traveller, whose intention is to proceed with his journey along that road. Whilst it is the case (*de facto*) that there are robbers along a certain road, the speaker tells the traveller the opposite of what is the case, namely, that there are no robbers along the road where the traveller intends to walk. The speaker, then, makes a statement that the *de facto* is false.

However, the speaker in question is moved by a benign motif. He is in fact concerned for the wellbeing of the traveller, who may be in jeopardy if he takes the wrong direction. This motif prompts him to speak a falsehood. He has a positive agenda because his goal is avoiding a potential harm to another person. Capitalising on the traveller's mistrust, the speakers tells the contrary of what he takes to be true. Because the listener has no confidence in the interlocutor, the speaker predicts that the traveller would choose a different direction from the one indicated by the speaker since he would not believe him, thus, avoid the bandits.

The second case is the reverse of the first one:

> In the second place, there is the case of a person who, knowing or thinking what he says to be true, nevertheless says it in order to deceive. This would happen if the man mentioned above were to tell his mistrustful acquaintance that there are bandits on that road, knowing that they actually are there and telling it so that his hearer, because of his distrust of the speaker, may proceed to take that road and so fall into the hands of the bandits. Now, which of these two men is lying? Is it he who chooses to tell a falsehood without the intention to deceive, or is it he who chooses to tell the truth with the intention to deceive?[20]

In the example above, the speaker is consciously asserting something that he knows to be true in order to deceive his listener. He uses the truth strategically in order to lead the hearer into error, albeit, technically, he asserted what is true, both subjectively (what he thinks to be true) and factually (what is actually the case).

In comparison with the conditions set by Augustine for the analysis of case a), without prejudice to condition 1), in case b) Augustine alters conditions 2) and 3), whereby the speaker intends to deceive and says that which is *de facto* true. The conditions supposed by

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[19] *Mend.* 4,4 (trans. Muldowney, *On Lying*, 56–57).
[20] *De mend.* 4,4 (trans. Muldowney, *On Lying*, 57).

Augustine for the analysis of case b) are, therefore, the following:

1) The listener's mistrust;
2) The *bona fide* intention of the speaker;
3) The speaker saying what is *de facto* the case (in fact, it turns out that there are robbers along a certain road).

Augustine's two illustrations of deception are revealing because they show that deceiving others requires an exercise of imagination by identifying with the other and forming an image of him or her. R. Mitchell (1986: 20), who studied deceit from a cognitive perspective, conceives of deception as fulfilling the following criteria:

(i) An organism R registers something Y from organism S;
(ii) R acts appropriately toward Y, because
(iii) Y means X; and
(iv) It is untrue that X is the case.

From his research Mitchell constructed four levels of deception. The levels are ranked from the simplest to the most complex, thus are arranged according to an increasing level of cognitive complexity. Different levels of deception entail a different semiotic freedom. Mitchell's fourth level of deception includes an element of planning in it, the intention to deceive as well as a modification of the deceiver's behaviour or deceptive strategy «based on knowledge of the other's past and present behaviour» (Mitchell 1986: 26).

This point is important because it makes clear that a deception of such complexity must take into account the «awareness of another's awareness on the part of the deceiver» (Mitchell 1986: 26). Thus, at this level of deception, there exists, as Mitchell writes, the «recognition of the animal's belief about actions» (1986: 25). Along the same lines, the philosopher Daniel Dennett (1978) subscribes to a similar view holding that in order to intentionally deceive someone there must be a second-order intentional system, that is, the deceiver must have beliefs about the intended victim's beliefs. This point is worth pondering because Augustine, through the skilful examples described above, considers the way in which the deceiver models his or her strategic moves according to the knowledge of the dupe's present attitude.

6. Conclusions

My original intention in undertaking the present enquiry has been to explore the connection between deception and prediction. I have argued that the strategic significance of deceit in relation to human predictability should not be overlooked. As I have argued in the introductory section, not only the semiotics of deceit has not found the place that it would deserve within general semiotics, but the study of the role of prediction within deceptive interactions has been generally overlooked. Whilst numerous studies have been conducted on the prediction and detection of deception, much less was done to explain the predictive processing that goes on in the mind of the deceiver. My contention, thus, was that in the study of deceptive actions an element of prediction should be considered because it plays a role not at all secondary in the orchestration of a successful deceit. Needless to say, the present work does not exhaust the vast domain of the semiotics of deceit for this issue is far more complex than it is depicted here. This paper covers only one aspect of the issue, which would deserve a much longer examination.

This study argued that next to the characteristics that are generally considered as relevant for the understanding of deception – such as the intention to deceive, the manipulation of information, and the various strategies of deceit – the role of anticipation and the strategic and predictive thinking are aspects that should not be left unattended. This is especially apparent when the phenomenon of deception is studied from the perspective of strategic interactions. In such settings the ability to form an image of the other is key. Capitalising on Goffman's intuition that in strategic settings one party always seeks to «dope out» the other's moves, I have argued that forming an image of the other plays a significant role in deceptive actions, too.

The image of the dupe operates, as it were, as a tool in the hand of the deceiver that uses it as a compass in order to decide the next possible moves to take according to the predictions made about the moves of the other. Thus, the image of the other serves as a template or a scenario which plays a remarkable role in the decision-making process and in the selection of the strategy that is adopted in a deceptive context. Such a deceptive scenario, understood as a gamut of possible future courses of action, aids the deceiver to form a strategy that is tailored to the image of the dupe. Needless to say, such a scenario can be more or less accurate and this yields to a fascinating game of guessing and outguessing, where one can perceive or misperceive, imagine and mis-imagine the other, and project onto others accurate of false hypothesis.

The two cases of deception discussed in the concluding section aptly illustrate this dynamic. When in an interaction, one expects not to be believed by the listener, as in the case of the mistrustful hearer, the other interlocutor needs to adapt and calibrate his or her moves according to the belief system of the victim. The strategy of the deceiver, thus, not only entails an element of premeditation, but also shows an element of foreknowing and prediction that allows one party to outsmart the other.

The case of the mistrustful hearer is similar to the example provided by Sigmund Freud based on a train conversation between two Jews, in which the possibility of deception is reduced to a sort of communicative game between the two interlocutors:

> Two Jews met in a railway carriage at a train station in Galicia. 'Where are you going?' asked one. 'To Cracow,' was the answer. 'What a liar you are!' broke out the other. 'If you say you are going to Cracow, you want me to believe you are going to Lemberg. But I know that in fact you are going to Cracow. So why are you lying to me'. (Freud 1960: 137–138)

These are illustrations of psychological «acumen» which designates «a mode of knowing and thus of predicting» that «demands an identification of the analyst with the mind and the person of the other, the capacity to anticipate with fidelity the choices they will make, the mental corners they will turn» (Scheibe 1979: 40).

In conclusion, forming an image of the other and anticipating the other's possible moves is an essential aspect of the way in which deception operates in strategic interactions. A successful deceiver should have a specific skill, namely, the ability to form an accurate image of the other that would enable to tailor deceptive acts according to this predictive model. The production of a successful deceit, thus, entails a sophisticated set of assumptions by the deceiver, who must skilfully calibrate his or her strategy and tailor the deceptive plan in view of an image of the target. In other words, deception entails skills of high cognitive order such as perspective-taking and metacognition in order to take place. Ultimately, the deceiver must form a mental image of the dupe, the right evaluation of the dupe's credibility, the ability to anticipate the future moves of his or her adversary, and to calibrate the course of action accordingly. The present study has argued that there exists a strategic and predictive element, a design, that is implicit in deception, which implies forming an image–a model–of the other.

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