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The lie as concept of a competitive society

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Abstract

In times of machine intelligence evidence and truth take on new meaning as an orientation in a constructed reality. Large language moduls as used in machine learning are designed for simulation and deception. An electronic network that is suitable for imitating human language logic provides most of the properties to perfect lies. Lies are very much based on rationality and logic. Dichotomous thinking creates the polarity between the extremes of truth and untruth. While truth is immutably derived from the application of established laws and regulations evidence arises from the distinction between the probabilities of right and wrong or adequate and inadequate. Social conventions regulate many interhuman relationships in which we have to be able to rely on each other. In terms of social development, we have learned to live with compromises related to honesty. Direct lying remains socially unacceptable but concealment, deception and misleading are common means of competition. Although, peaceful and tolerant coexistence in the community is based on trust, lies are prevalent in the human society. Dealing openly with the topic allows to recognize how large and comprehensive the influence of lying within a community is. Rather than feeling a false sense of certainty it is better to use common sense and to estimate the probability of potential uncertainty. It remains to be hoped that the new machine intelligence can also be used to check data quality and provide precise information about data truthworthiness.

Keywords: Bioethics; deception; ethics, professional; research; philosophy, medical; truth-telling

Evidence in Context

• Machine intelligence challenges traditional truth and evidence, enabling deception.
• Lies are rooted in logic, with truth shaped by established laws.
• Social norms tolerate deception, while direct lying remains unacceptable.
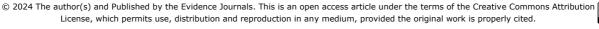• Acknowledging deception promotes critical evaluation and probability-based judgment.
• Machine intelligence can help verify data quality and assess truthfulness.

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Introduction

The physical environment is only perceivable to a limited extent by humans. There is a blurred border between constructed reality and unreality. Subjective, conscious experience determined as qualia (derived from the Latin word *qualis* for "such as") differs between people, occasions and moments. According to Charles Peirce (1866) qualia deals with the subjectively recognizable characters of the given [1]. Consequently, a merged reality out of a multitude of individually experienced realities would correspond to an illusion. Our consciously experienced reality does not depend on our sensory perception alone as the metaphysical truth does not rely on the external physical world. Using his critical realism based on scientific, metaphysical and spiritual perspectives Roy Bhaskar evaluated as to why and under what conditions, human beings generate false or otherwise inadequate accounts of their practices [2]. In the history of human development lies appear in various types and arise for numerous occasions. Lies have become well-established and well-tolerated. They have found widespread use e.g. for pretense as survival technique and for deception as a drive for playful creativity to mention some purposes. Manipulation, pretense and deception within society benefit certain groups but they also act kind of social glue [3].

The essence of lies is deceit. Liars who say what people want to hear are not easily identified. But a liars' success is not limited to compliments. A person who speaks out a statement that is corresponding with common knowledge may be judged a person who tells the truth. The lied to may be convinced what was said is truly believed by the liar. The most effective lies that are generally difficult to uncover mimic generally known facts. Sometimes we may notice that in common lies only the circumstances do not fit the message. As sensual and spiritual being's humans are easily seduced by lies. Seduction is an art. Tolerance to small lies correlate with young age, charm and appearance of the liar. Children enjoy fibbing. Growing up implies learning how to lie and fairy tales are not only loved by children. Among the well-known fairy tales for adults are "honesty is the best policy", "you can get rich by working hard", "the boss is the most competent person", and many more [4]. The doctrine that honesty is the best policy is primarily binding for those who have to follow the rules and not necessarily for those who make the rules. It was Mark Twain who adapted the doctrine to honesty is the best policy - when there is money in it. He also specified to: "Always tell the truth. That way you don't have to remember what you said" (https://due.com/mark-twain-honesty-is-the-best-policy/).

The lie is designed to benefit the liar. Collective lies potentially serve the general public. Daily life seems easier practicable with a set of white lies. We can live under a lie as long as it brings any advantages. According to Friedrich Nietzsche, society imposes on all of its members to lie herd-like in a style obligatory for all [5]. However, prosperity thrives better under conditions of trust and solidarity. Traditional education focuses that trust depends on truthfulness and telling the truth is general social value. In times of machine intelligence truth and evidence take on new meaning as the counterpart to a constructed reality. The new potential of influence from unverified information underlines the importance of being aware of misinformation and deception.

This essay is not about condoning lies, but about finding out when trustfulness may not be appropriate. The aim was to critically analyze the central role of lies in the human society.

Methods

The method was descriptive and followed the hermeneutic approach (derived fro the Greek word hermēneúein (ἑρμηνεύειν) that means to interpret). I used both, sequential and non-linear thought for critical analysis. According to Stanford Encyclopedia of philosophy lies are of commission through active use of false statements. This also includes hiding unpleasant truths. Even remaining silent is an equivalent to making a statement when silence is intended to support the untruth [6]. Having considered the above mentioned properties I defined a common lie as a composition of a false statement from a calculated intention that is made in a specific context and that is becoming the cause of changes that have desired consequences. In order to evaluate the meaning of human intentions, beliefs, and actions which are the basis of a lie I applied the hermeneutic method as the underlying theory of interpretation. The hermeneutical experience of truth is no blind acceptance of the authority of tradition [7]. In contrast to theological and legal hermeneutics, the phenomenon of understanding and the correct interpretation of what is understood can also be achieved following seven steps between identification and ascertaining:

1 Identification (actualitas)

2 Application (usus)

3 Abstraction (arithmetica)

4 Reasoning (logica)

5 Apprehension (sensus commuis)

6 Censure (critica)

7 Ascertaning (verisimile)

The message

Inaccuracies are common and the transition from a misinformation to a lie is smooth. Humans are usually confronted with varying aspects of relative truth. There are different types of relative truth including the conventional and the practical truth. Following the pragmatic theory of truth by

William James (1909), then truth equals utility [8]. John Dewey (1938) defined truth in terms of utility corresponding with our experienced reality, even if it cannot be directly equated with scientific verification [9]. Accordingly, a belief is true if it coheres with other beliefs that we take to be true. This utilitarian approach also prepares the ground for conventional and practical lies. Similar to practical truth a practical lie also depends on the underlying circumstances. This can even lead to a paradoxical situation in which one ought to lie when attempting to tell the truth. In both cases it is about paternalism. Occasionally, it is not easy to detect whether telling a lie or telling the truth is the higher measure of respect in a certain condition.

Preoccupied interpretations by those who write or read about historical events increase the ambiguous and biased nature of historical truth. The line between trivializing and exaggerating historical events is blurred. Those who want to know about the truth in the history of their nation, better look for it in the history books of their neighboring states. The anachronistic interpretation of historical scripts is an inglorious characteristic of research related to history, theology and even philosophy. To expose a "fact" as a lie of what was believed for generations is extremely difficult and to question truth that is taken for granted is generally not welcomed. It may take several decades until historical science can uncover how truth was intentionally converted into lies and lies into truth. Euphemism is a very popular form of lie. Hypocrisy and euphemism constitute integral parts of a state's self-image and serve as cradle for common socially accepted lies. Praise, regardless how exaggerated, is welcome, if not expected [4]. Diplomacy is the twin sister of hypocrisy. Even high-ranking personages of church and state institutions, particularly those of a military or judicial nature, may appear to be somewhat resistant to impartial reflection [4].

Artihmetic operations that take place between abstraction and concreteness have a high potential for misinformation. The simplified notation of one and one equals two (1 + 1 = 2) can easily lead to misinformation depending on whether the characters are understood as symbols, numberts or values and on whether the equation is based on the premise that the amount of 1 plus the amount of 1 equals the amount of 2. The equation follows the sequence: odd + odd = even in number theory (1).

$$|1| + |1| = |2| \tag{1}$$

According to Ludwig Wittgenstein every language-game is based on words and objects being recognized again, but a sentence outside its context, appears in a false light [10]. For Wittgenstein (1921) there is only logical truth what can be talked about [11]. He is taking in to account that in his concept of language-game learned beliefs are based on numerous propositions. Furthermore, he states that any proposition can be derived from other propositions. Subjective certainty arises from the absence of an alternative language-game [11]. The total absence of doubt might be an illusion [10].

Verbalization makes it easier to retrieve information from different categories. It facilitates exchange and comparison of impressions and interpretations of consciousness contents between people. Verbalization plays a key role in human consciousness. It allows categorization of information, reconsideration and rapid recall. An excepted terminology provides the base for definitions and categories. Verbalization creates reality. Verbalization facilitates acquisition of knowledge by exchange of information between humans. Unfortunately, it also facilitates deception, in particular when minimal changes on sentence structure lead to maximum changes in meaning. The use of text-to-speech synthesis in machine intelligence prepares the basis for faking facts at the highest level.

Unfortunately, the existence of a logical truth also implies the existence of a logical lie. It is a question of semantic understanding whether there can exist something contradictory like a false fact or a true lie. Facts by definition ought to be correct. Pretenses may be false but by definition facts cannot. The link between facts and lies is that both seem to be what they claim to be. A fact is a fact as long as it is not refuted. Similar, lies are considered true as long as they have not been discovered as lies. The sequence of words alters the meaning but lies are not restricted to language. Facial impressions and mimics and body posture support wrong interpretations.

In his theory of gathering scientific knowledge Karl Popper introduced the concept that scientific progress goes along with increasing approximation to the truth, producing findings that are not

True but "truelike" [12]. When defining a state between the extremes of "true" and "false" then "truelike" would correspond to a state that is "true and false" at the same time [13], e.g. a specific medication may be beneficial to one patient but harmful to another one. In addition, a medication can be beneficial and harmful to one patient at the same time. This also implies that contrastive does not necessarily mean contradictory and even a contradiction may become conclusive when seen within the pounds of possibility. How can a life-saving procedure that fails to save the life of a specific patient be life-saving? While in the broader sense it is true that the procedure is normally life-saving in the narrower sense it is definitely false because it was not life-saving in this very case. In this system allocations of evidence occur between the extremes of "true false" and "false true". While truth is tied to hundred percent accuracy, lies do not need hundred percent. This is why half a truth makes a whole lie, but half a lie is still a lie.

The intention

Even more important than the message is the intention of the liar. The intention to speak accurately is a prerequisite of telling the truth. A person who wants to tell a lie and erroneously speaks out something that is true, is not trustworthy, although the specific message may be regarded correct. If the truth is mistakenly asserted when trying to lie, it is not a lie. It is rather an attempt at a lie by an untrustworthy person. Correspondingly, a person who wants to tell the truth but erroneously speaks out a false statement, is still trustworthy, although the specific message may be regarded false. Plausibility and verification of a claim are essential but plausible does not mean verified. The lie always needs an intention but this may also occur unconsciously. Untruth can be claimed by mistake, but lies cannot be made by mistake.

Lying as an instrument of power and administration is part of the basic understanding of various institutions including politics, military, and health care. Lying as an evolutionary brain training creates passion for playing with excitement (related to the Latin term "*homo ludens*" which aims at people's passion for gaming) and a willingness to take risks. These are basic requirements for curiosity and the acquisition of knowledge. Through play the adolescent discovers his individual characteristics and develops the personality that is inherent in him [14]. At the latest when it comes to winning, gambling and cheating are interlinked. In trading and commercial business, the command "You shall not lie" is interpreted differently. Withholding information and bluffing are well accepted strategies in profit seeking ventures.

A common misinformation regarding the equation $1 + 1 = 2$ is based on the assumption that 2 is the sum of two equal halves of 2. Unfortunately, the sum of all parts is not the whole. From this point of view, the sum of all individual parts of an alarm clock without switching one after the other in a predetermined sequence are just junk and not a working alarm clock. Consequently, the equation in its pure form can acutally only go like one plus one equals one plus one following the logical sequence: odd + odd = odd + odd applying number theory (2).

$$1 + 1 = 1 + 1 \qquad (2)$$

According to the statements of Immanuel Kant (1788), lying was always immoral [15]. His only categorical imperative stated that: "Act in such a way that the maxim of your will can at any time also apply as a principle of general legislation". Kantian ethics refered to a hypothetical universal ethical law on human dignity. Kant postulated that a person with good intentions cannot lie. However, the structure of moral reasoning cannot give definitive answers to moral questions but it can produce almost any answer that is desired [16]. When critical analysis of ethical doctrines is not welcome, lying within the framework of ethics is facilitated. Ethics cannot be scientifically proven. Furthermore, the definition of conventional truth can vary from culture to culture and can change over time. What is considered ethical in one society may not be considered ethical in another. The combination of hypocrisy and intended misinformation provides the base of ethical lying. On the one hand, lying is generally considered unethical. On the other hand, an ethical dilemma arises from rules that occasionally accept ethical lies and consider them morally justifiable when they are intended to protect someone from harm. In any case, lying to gain advantage, to win favor and to avoid punishment is given low credits.

In society laws provide the base for administrative and economic power and regulate the balance of forces. Civil rights are more likely to be respected by those in power if they do not challenge

Customary law and the law of the superior. Frequently observed events under standardized conditions are subject of becoming a law. The laws of nature are based on human interpretation of regularities in human observations. By definition laws do not have exceptions, hence, observed regularities without exceptions deserve at least statistical validity. Nancy Cartwright questions whether laws based on observed regularities are suitable to describe real conditions of a not fully accessible reality [17]. According to Cartwright they are more consistent with theoretical models of physics that are ultimately based on unproven axioms [17]. The laws of nature do not equal eternal truth. They are created by our brain and reflect the human way of thinking. Natural events do not occur on the basis of the laws of nature, but the laws of nature do depend on the natural events. Control demands transparency. Equality before the law is a basic principle of democratic constitutions. It is important to know that everyone is equal before law, but with the better lawyer one may achieve the better result. It would be naive to confuse jurisprudence with truth. Jurisprudence is based on reconstructed events derived from reconsolidated memories of different persons regarding different images and expectations from a constructed reality. There is a blurred transition from a factual review by a sworn expert to the personal opinion of a sworn expert [18]. A guilty verdict should be based on sufficient certainty of evidence. In non-totalitarian states a lack of evidence is sufficient for an acquittal. No one can be imprisoned because of a lack of evidence of innocence. However, being acquitted of a charge does not automatically mean being innocent. In court, the defendant's lie remains unpunished, unlike the lie by the witness. Even without lying in justice the balance between depiction and counterstatement of facts depends on the key figures involved.

Complex lying is difficult. In comparison to complex ethical lies, political and military lies appear somewhat simple-structured. Deceit and concealment by the military and secret services to protect and to cover up are granted high merits. The command "You shall not kill" does not apply to military services in action. Political and military ethics also include political and military lying. In politics and military, it may be more beneficial to bend the truth or withhold certain information (lying by omission) in order to protect secrets and maintain or avoid controversy. Even distraction and paltering are traditional methods to actively bend the truth. Again, it is the intention that matters when bend truth is used to navigate difficult situations. Camouflage, deceive and biased reporting are generally accepted principles of military defense and do not conflict military ethics. Wars are frequently initiated on the base of lies and the truth is considered the first victim during the preparations for war.

The question also arises whether censorship constitutes a lie. Historically, that would be particularly cynical in view of the truth being suppressed by religious and imperialistic power structures. Is hiding facts a lie in the paternalistic intention of protecting the community of faith? It occurs that guardians of the truth are also the ones who may endanger the truth. In this context, education, language skills, bigotry and uncontrolled power are important prerequisites for successful lying. Accordingly, Wittgenstein postulated that what we believe is what we learn [10].

The context

The context of an information is crucial. Lying is contextual. It depends on the context and the circumstances in which it occurs. Truth and its counterpart untruth depend on their current interpretation. An information can be true or wrong depending on the realization wíthin the current perspective of consciousness. In this context we can speak of certainty when we want to determine what we are currently certain of.

In empiric research we express certainty with the term evidence. We use the term in the understanding that a finding is valid until it is replaced by new evidence. In science hidden information is kind of scientific fraud, in particular when the hiding of facts prolongs the state of misinformation. However, a small proportion of inaccuracy in a conclusion may even promote scientific communication.

In mathematics, nothing can become something through a symbol. This visualization of theoretical entities involves contextual arithmetic operations and their decontexualization. It was Kurt Gödel who mathematically proved the existence of an absolute divine truth, but he also showed that number theory in mathematics can prove false statements [19]. Another common misinformation regarding the equation $1 + 1 = 2$ occurs when pre-existing dependencies between two entities are ignored, e.g. one cannibal and another cannibal ultimately make only one cannibal.

If the proof is provided by counting and not by weighing, then in this case 1 and 1 equals 1 following a harmonious but unorthodox sequence: odd + odd = odd that would not fit the number theory (3).

$$1 + 1 = 1 \qquad\qquad (3)$$

Scientific theories are always subject of revision. In science bending the truth to achieve a certain result is common (frequency information of side effects defines common as occurring between 1 and 10%) In case of false results it is crucial to distinguish between fraud and error [20]. We do not know the ideology, the value system, and the personal preferences of individual researchers. Even if a lie cannot be discovered, there is still the possibility of recognizing the liar in the beneficiary of a questionable statement [21]. Regarding scientific truth and falsehood we should demand truth in research without relying on it. Scientific truth tends to tolerate imprecisions from abstract thinking. Simplifications and generalization are common causes of imprecision. In science null-hypotheses are based on generalizations. Consequently, the falsification of a generalization would represent a lie.

Science is grounded on established axioms that are not proven. How one can find scientific truth on the basis of unproven axiomatic assumptions is difficult to imagine. Infinite regress and circular reasoning as frequently used in theological science cannot provide justification either. Amazingly, theorems based on a specific axiom can be defined and proven. A theorem as an off-spring of time represents relative truth. It appears that the half-life of relative truth is getting shorter and shorter. New knowledge changes our perspective on things but does not automatically mean that our previous knowledge was based on lies. The shape of the earth was assumed to be disc-like for several millenniums. This fundamental theorem was replaced by the theorem of the spherical image of the earth that lasted for centuries. Space travel in the twentieth century corrected the spherical shape to that of the flattened globe that has now lasted for decades. To say it with Wittgenstein, "we are satisfied that the earth is round." [10].

Understanding that truth may be not absolute we have to be more careful with the use of absolute terms such as honesty, responsibility and authority. Blind belief is not justified. Contextual truth can change depending on the context or situation. Consequently, an individual's experience may change depending on the context. What appears true in one situation may not be true in another. Similar, what is true for one person may not be true for another.

According to *René* Descartes (1642) doubt is the origin of wisdom [22]. This is truer than ever in times of dominant electronic data processing, which influences every domain of human consciousness. From his perspective, monism would mean simplification whereas multism would mean dilution. The great danger that arises from monism is fanaticism that doesn not accept further doubt. Fanaticism is a fundamental problem of truth especially in institutions committed to truth. The life-long search of Descartes for the single true axiom on which the construction of realness is build was in vain.

Cause and consequence

In principle, lies serve to obtain advantages. In certain conditions the omission of telling the truth is sufficient to keep a person misinformed without the need to actively tell a lie. Not to react when someone draws the wrong conclusions also fulfills the criteria of a lie. Furthermore, disadvantages are experienced differently according to expectations and circumstances. The absolutization of values and concepts leads to conflict between relative demands and needs. There are further conditions that influence the final outcome, e.g. the potential of misunderstanding and misinterpretation by the lied to that again can modify the message.

It needs a non-linear thought processes when intending to achieve a more complex and holistic approach for a comprehensive understanding of the reality. While sequential thought refers to a linear, step by step process of thinking non-linear and non-sequential thought allows for multiple perspectives [23].

Hypothetically, the conceived (constructed) reality (R^c) is made up of the observed reality (R^o) and the anticipated reality (R^a). In this setting the validity (V) of scientific evidence (E) can be quantified as product of E and plausibility (q) that follows the equation: q = 1 – p in a Bernoulli trial (4).

$$V = E \cdot q = E\,(1-p) \tag{4}$$

From this I propose that a conclusion more likely appears rational and determined when V of the scientific E is within the realms of R^o. However, it may also appear irrational as V of the scientific E is related to R^a, too (5).

$$E = \frac{R^o}{R^c\,(1-p)} \tag{5}$$

In the complementary context of true evidence (E) and bias (B) [13], the known truelike evidence (E·) appears as the difference between E and E intersection B (E∩B). Certainty seems to be just an approximation (6).

$$E· \approx E - (E \cap B) \tag{6}$$

What can be known with absolute certainty? Certainty arises from our imagination. Pain and anxiety are constructs of the brain. Pain is real as is anxiety. The certainty of pain is absolute in terms of present and lasting effects and does not depend on the real existence of causes and underlying conditions. Anxiety is known to be a potent amplifier of pain. Anxiety does not depend on the real existence of causes and underlying conditions either. Attempting analgesia, then diminishing anxiety concurrently diminishes the perception of pain [derived from the Greek word *aisthesis* (αἴσθησις) that means perception]. This effect is based on apperception when current experience is modified by recalled experience. We commonly assimilate the information to the body of ideas that we already possess. Apperception is selective. The observations we make often confirm the results we expected. This is why we often find what we are looking for.

In his model of fast and slow thinking Daniel Kahneman reported that it is difficult to know when we can trust our intuitions and when not [24]. When comparing two patterns, the realized one (experienced) and the recognized one (memorized) it needs abstract thinking to cast a fused image from it. This abstraction may contain known properties or attributed properties. Choice and intensity of abstraction modify the impression of reality. When attributed properties stem from completely different objects then new entities can emerge from them. Different properties make a module within the set of a pattern and provide the base for anticipation.

Based on Hegel's dialectic in "The Phenomenology of Spirit" (1807) as interpreted by Slavoj Žižek truth cannot exist without its counterpart the lie [25]. Understanding truth as a subject it can emerge only retroactively as a construct. In order to exist at all, truth must take the risk of turning into its opposite, a lie [25]. The problem with the use of political correctness is that as a consequence both quality of lies and claim to correctness increase. The most ardent advocates of divine truth can also impress as masters of lies. In this context, even truth would become kind of a lie if one assumes that hundred percent accuracy is not possible.

Realizing truth as partially unrecognized untruth and constructed reality as a partially unrecognized unreality, then lies correspond to unrecognized untruth and (constructed) unreality. While untruth and unreality arise, the lie is staged, but all three are created. The absoluteness of truth and reality determines their inaccessibility. Truth and reality are seen absolute while untruth, unreality and lies appear either absolute or relative. Experiencing and understanding requires dexterity.

Conclusions

In terms of social development, we have learned to live with compromises and to survive through tolerant coexistence in the community. Even before the induction of machine intelligence lies were prevalent in the human society. Since life in the community is tied more to a constructed reality than to truth, the space for untruth appears larger than for unreality. Untruth appears in many facets, from distinct distortion of facts to blatant falsifications. Lies create a false perspective within a generally accepted reality. The resulting illusion can be used by those who have insight to their own advantage. However, in times of machine intelligence evidence and truth take on new meaning as an orientation in a constructed reality. Truth does not exist in and of itself but it is concluded from the application of established laws and regulations. Without the existence of a lie, the

Attribution of truth would have no need. It would be rather important to determine the degree of evidence and to distinguish between the probability of right and wrong or adequate and inadequate. Hopefully, the comprehensive verifiability of massive amounts of data by machine intelligence can also be used for determination of data reliability. We will have to learn to live with restricted trust in axioms and related theorems and always allow for a certain probability of uncertainty when confronted with absolute statements.

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