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# Fading Truth in Social Media*

Debates on lies and lying are central to moral and analytical philosophy, as well as the philosophy of language. From the perspective of cognitive science, lying, deceiving and deliberately hiding the truth by making use of speech acts is a highly interesting topic as well. The more so that a recent trend in cognitive science sees an expanding focus on the phenomena, including not only sender and receiver, but all sorts of mutual interaction, as well as environmental influences and internal feedback of the performed actions. Researchers focus on embodied, embedded, extended and enacted cognition, besides distributed and situated models of cognition. This trend, called '4e cognition' in contrast to cognitivism, is a natural result of the rising awareness of the complexity of the research subject: there is simply no way to give a homogeneous description of the phenomenon under investigation; an integrated plurality of methodologically different levels of analysis is the only appropriate way to deal with it.

Lying and falsely implicating is a sempiternal challenge in communication. Nowadays, in times of vastly rising and increasingly complicated human knowledge, our communication has to rely on trust more and more, since no single member of society is able to individually check all the information he is exposed to. That is why, according to a famous

remark by Georg Simmel,[1] lies are morally discredited in modern societies. This is without doubt true and it has a very long prehistory in all human cultures. Subtle analyses and approaches to logical modelling pile up to an enormous body of scientific literature.

# 1. The Logic of Lying

In classical logic, "to lie" usually means to contradict the truth.[2] Such a simple understanding may result in interesting logical problems, e.g., Raymond Smullyan's very entertaining and instructive book about liars and logic-knights,[3] that leads the reader as far as to Gödels theorems. That kind of consideration found practical application as well. Stanisław Ułam and John von Neumann started investigations of equation systems with a definite number of false equations. The question is: are there algorithms for solving them in spite of this obstruction? Of course, such algorithms shall possibly turn out to be extremely useful for reasoning in databases with partially defective information.

However, the notion of a lie assumed in these approaches is purely formal and thus far from any intuitive understanding of the concept. Besides this, there are few attempts to be found in the literature that investigate in greater detail the formal structure of lies or of deceptive utterances. The challenge is to construct a metamathematical counterpart of the concept of lying. What formal means to this end are available in modern logic?

Meinong's monograph *On suppositions*[4] is an early attempt to give an explication of "lie" which meets the standards suitable for logical formalization. Meinong himself did not seek for the final logical form of his considerations. This was done by Ursula Żegleń.[5] Let me quote her relevant definitions:

$$S_{xy}\alpha =_{df} W_x B_y \alpha$$
$$L_{xy}\alpha =_{df} W_x B_y \alpha \wedge \neg B_x \alpha$$

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[1]  Georg Simmel, *Zur Psychologie und Soziologie der Lüge. Vol. Individualismus der modernen Zeit* (Frankfurt: Suhrkamp, 2008), 406–420.

[2]  This section follows in part my "Just lying", *LLP* 15 (2006): 67–89.

[3]  Raymond Smullyan, "What is the name of this book" (New Jersey: Prentice Hall, 1978).

[4]  Alexius von Meinong, "Über Annahmen" (Graz: Akademische Verlagsanstalt, 1977).

[5]  Meinong's analysis of lying, *Grazer Studien* 50 (1996): 549–557.

where $S_{xy}\alpha$ reads "$x$ wants $y$ to believe $\alpha$", whereas $L_{xy}\alpha$ stands for "$x$ lies to $y$ that $\alpha$", i.e. $x$ wants $y$ to believe $\alpha$ although $x$ does not believe in $\alpha$.

In a next step she proposes an implicit, i.e. axiomatic characteriza-
tion of the predicates involved. Simple as this may seem, it is already
sufficient to prove some modest theorems, for instance:

$$L_{xy}p \rightarrow W_x B_y B_x p$$

Żegleń ends with a suggestion that the well-developed means of epis-
temic logic might be used to re ne Meinong's approach to lying. In fact,
epistemic logic is a very promising framework for this purpose. Werner
Stelzner[6] makes use of these means to approach the problem. He as-
sumes the following notion of lie: "Usually, a statement is called a lie,
if the speaker internally rejects the sentence which he publicly affirms".
In his notation, Stelzner arrives at the following formula:

$$L(x,p,t,y) =_{def} O(x,p,t) \wedge A_\star^a(x,p,t,y)$$

where

$$O(x,p,t) =_{def} \exists q \exists r (A^i(x,q,t) \wedge V(x,q,t,r) \wedge V(x,p,t,\neg r))$$

and $V(x,p,t,q)$ stands for "$x$ understands $p$ as $q$ at $t$."

In the above formulas, $t$ is the time interval when $x$ claims $p$ to $y$.
Therefore $O(x; p; t)$ means that $x$ rejects $p$ at $t$. Hence, $x$ lies to $y$ about $p$ at
$t$, iff he explicitly states $x$, though simultaneously he rejects $p$.

Of course, from now on all hinges on the (axiomatic) characteriza-
tion of the predicators involved. Subsequently, a completely internal
logical debate proceeds, discussing the formal details of the proposed
explication, drawing inferences from it, considering variants and im-
provements – in a word – there starts the happy business of construc-
tion of formal calculi. However, the connections with contextual aspects
of lying are fading away rapidly. We therefore will stop logical consider-
ations here and turn towards a more down-to-earth reflection.

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[6]  Werner Stelzner, *Epistemische Logik. Zur logischen Analyse von Akzeptationsformen*
(Berlin: Akademie Verlag, 1984).

## 2. A Common Sense of Disrespecting the Truth

It is possible, of course, to analyse lying in the context of the logos, of human essence, of reason and knowledge of reality. Then one usually finds categorical evil and reprehensibleness in any sort of purposeful falsity. But this is the philosophers' lie, so to say. Our focus is more down to earth: everyday lies, manipulations and deceptions which common sense shall deal with. In times of social networks, communication in Instagram, Facebook, Twitter, WhatsApp, in Messenger, YouTube deserves more and more attention. Influencers, bots, personalized news or programmatic advertising are part of the space of social communication and shall be included in the analysis. In such circumstances, open lies are perhaps not the most frequent phenomena among all the possible ways to deviate from veracity.

Of course, there are differences between lying, deceiving and falsely implicating. It seems, even austere Immanuel Kant is less determined to condemn intended deception. Packing suitcases into my car in front of my neighbour – to modify one of his examples – misleads her to believe that I am taking a trip. If I told her so, I would be wholly responsible for the assertion and (since I have no intention to drive far away) thus for her false belief – I would have lied. But all the mistaken inferences that I am leaving are drawn by my neighbour herself.

However, as Jeremy E. Adler[7] observes on page 452, "a defense of one's action which relies primarily on the lies-deception distinction teaches a bad moral lesson. It encourages deviousness and a legalistic attempt to get away with what one can. One may be less blameworthy for deceiving than lying, but still have acted worse by seeking to be less blameworthy. One is not attempting (…) to act as nobly or honourably as harsh circumstances permit".

Let us just mention that in everyday life untruthfulness is not always taken to be wrong. The topos of artful Odysseus seems to give room for morally acceptable subterfuge in Western iconography. In Chinese thought, stratagems are highly esteemed as military deception which diffused from the military to the political and public space. They are positively evaluated as signs of wisdom and professional mastery. To defeat an enemy by stratagems is far more praiseworthy than to smash him by sheer military power and even more than by diplomatic negotiation skills. The praise of stratagems stands in clear opposition to the traditional esteem for sincerity and virtuousness in Confucianism. Eastern

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[7] Jeremy E. Adler, "Lying, deceiving, or falsely implicating", *Journal of Philosophy*, 94 (1997): 435–452.

dialectics, however, also accepts the Thirty-Six Stratagems as highly use-
ful means for everybody in everyday life.

In European tradition, the moral allowance to lie and to deceive
in public is reserved for the mighty. Machiavelli's sarcastic advice found
followers. In 1777, Friedrich II asked the Royal Prussian Academy of Sci-
ences a question: "S'il peut être utile de tromper le Peuple?"[8] His Majesty
was not delighted, perhaps, to get a majority of abnegating responses.
Times have changed since then. Today most observers would unani-
mously diagnose a general decline of public trust. Steffen Dietzsch holds
WWI responsible as the start of this process. Propaganda lies during the
war lead to broad acceptance of public truthlessness.[9] Such an awful de-
cline into permanent lying as a normal phenomenon of social communi-
cation is opposed by social psychology with an innate human inclination
to tell the truth – at least as long as there are no negative consequences.
Truthfulness in speech is a pleasure, since it unconsciously recalls the
feeling of success in infant speech acquisition. It was a joy to call some-
thing by its true name for the very first time. That makes us tell the truth
by default, yet not always and not everywhere. We would soon become
unbearable to each other, were we always to abstain from mutual decep-
tion, modest swindle, or (white) lies in social contact. The mercy of lying
saves the meshwork of social communication from rupture.

But our focus is not lying out of politeness or mercy. Such white lies
are usually unproblematic and harmless. Mendacity becomes a problem
if it hinders, rather than facilitates, social interaction. In the following,
let us consider typical cases of problematic deviations from truthfulness.

## 3. Business

Hiding the truth is cognitively cheap. Long evolutionary training and
intellectual development have prepared us for skilled deceivers. Lying
becomes even cheaper in times of rampant secularism. Religions, as well
as all pedagogical and some philosophical systems, usually condemn ly-
ing. Lies may do damage to individual salvation, to loving parents and
teachers, or even to mankind as such.

In practical life, the attitude towards hiding the truth is less rigor-
ous. Captured soldiers are supposed to lie, defendants are allowed to.
There are more situations like these. Job interviews, negotiations with
estate agents, brokers and horse dealers, talks with political adversaries
and investigative journalists are standard situations for hiding (part of)
the truth, if not deceiving directly. In times of large-scale layoffs or po-

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[8]  Is it useful to deceive the people?
[9]  Steffen Dietzsch, *Kleine Kulturgeschichte der Lüge* (Leipzig: Reclam, 1998).

litical overthrows, sizeable parts of the population may find themselves in such a situation.

Big Business is perhaps not the first place to look for veracity and truthfulness in social communication. All veracity in modern capitalism is under constant treat from voracity: the essential purpose of business is pro t maximization. This is certainly no satisfying insight to anybody involved. Not only lefty zeitgeist intellectuals, but also high-ranking representatives of neoliberal economic order are pressed by tenacious questions about the deeper sense of all that. The current set phrase is "purpose" – as replacing "stake-holder value", "corporate citizenship", or "inclusive capitalism". Investment trusts and retirement funds are all concerned with purpose. But purpose seems to be just that: another pure pose, not any genuine approach to be-coming a do-gooder. Even "giving pledge" doesn't turn a tycoon into a world-benefactor.

Some steps down the scale we find interesting results concerning the practical role of truthlessness in business. Lying is a self-evident part of professional duty in some organizations or even occupational groups. Rick Jenkins and Sarah Delbrick[10] demonstrate how lies may be institutionalized in a workday routine despite of the resulting moral precariousness. Think of e.g. a fake call center whose role is to make clients believe they phoned a busy, prospering enterprise. Employees answer the client's request if possible, or forward it, but most of all they hide that they are not employed by the given enterprise. The call center's employees perceive their behaviour as unproblematic: they work for their employer, not for the clients of their employer, and they do no harm, since in most cases the truth is not important. There is no explicit manual on how to lie successfully. Fellow workers act as role models. Lying is not seen as a personal action, but as performing a role. It is the organization itself which acts. It is convincingly shown how organizations may frictionlessly install expectations deviating from social morality.

Dan Ariely, a cognitive psychologist and behavioral economist, works on remedies. He partially rejects Gary Becker's classical position, saying that deception and crime result from rational balancing expected profit against possible punishment. Ariely demonstrates in detail that, besides fear of punishment, there is a considerable influence of dignity and honour. In principle, this is well known.[11] But Ariely is able to identify practical ways to e.g. design questionnaires for voluntary disclosure

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[10] Rick Jenkins, Sarah Delbrick, "Trusted to deceive: a case study of 'strategic deception' and the normalization of lying at work", *Organizational Studies* 38, no. 1 (2017): 53–76.

[11] See e.g. Kwame Anthony Appiah, *The Honor Code: How Moral Revolutions Happen* (New York: W.W.Norton, 2010).

to insurance companies or revenue office to considerably increase fair dealing.[12]

## 4. Science

In science there are quite a few issues related to lying and intellectual fraud. There are plagiarism and theft of ideas, suppression of naming collaborators or naming non-collaborators in publications, careless data acquisition and data security measures, misuse of reviewer position and other issues of a scientist's personal integrity.

A specific problem is the widespread lack of motivation for replicating scientific findings. Fact checking in science needs urgent attention as well. Things are improving, but they are rising from a very low level. Russel Poldrack founded at Stanford University a "Center for Reproducible Neuroscience". To an uninformed mind this may sound like "Center for Well-documented Statistical Data", or "Center for Reliable Mathematical Results". But actually, it is a reasonable step forward: in psychology and the neurosciences, thousands of non-replicable results have had to be withdrawn from prestigious journals.

In these disciplines there is rising awareness of methodological pitfalls, at least. The deeper reason for such a state of affairs, however, seems to be a fundamental organizational turn-around in all sorts of academic institutions. The traditional "currency" in academia, i.e. reputation among peers, is successively replaced by the usual incentive system based on annual income. Scientists naturally try to adjust their behaviour accordingly. Non-income-related activities lose against the desire to optimize financial performance. Third-party funding and high-pro le publishing are good and beneficial, academic self-government, mentoring undergraduates, or reviewing get less attention.

The old system was more or less well-balanced over many decades and worked reasonably well to ensure academic education, research and scientific rigour. But, as an old saying goes, "people react to what you inspect". The change in incentives changes the rules of the game, which thus needs to be rebalanced. Perhaps we need to calculate prices for many forms of formerly self-evident academic behaviour. It will be a challenge, however, to include all desired behaviour of faculty into a scorecard. Consultants from outside will hardly be helpful.[13]

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[12] Dan Arieli, *The Honest Truth About Dishonesty. How We Lie to Everyone – Especially Ourselves* (New York: Harper, 2012).

[13] Comp. Roxana-Diana Baitaru, "Do non-academic professionals enhance universities' performance?", *Studies in Higher Education* 43 (2018): 1–15.

An especially shameful phenomenon is false testifying to laymen or politicians by scientists who are paid for it. Such egoistic and cynical misconduct by a handful of researchers is not only harmful to the society, but also does enormous damage to the public image of science. Since such misdeeds are usually committed by leading authorities in their field, there are all sorts of moral and legal obstacles to overcome to stop the turpitude).[14]

There is one more point to add. Currently we are experiencing another revolution in the sciences. When 400 years ago medieval science was expanded to empirical science, observation, experimentation and a new scientific method, i.e. induction, enlarged the available organon. This happened not without vivid as well as legitimate critique of many of the contemporary researchers. But there was no alternative: society expected science to deliver practical research- it had to turn towards applied science.

Today, another basic assumption is under critique. Homogeneous, reductive analysis will hardly be adequate to model the non-linear, ergodic processes what turned out to be ubiquitous in nature and in society. Another expansion – call it computational science – together with a new scientific method – massive simulation *aka* uncertainty quanti cation *aka* calculation as theory – tries to conquer the fascinating realms of complexity which were previously mistaken for a wasteland of anomity. The results of simulation methods, e.g. in climate research, differ from the well-known, old-fashioned outcomes of scientific research.

What we get from simulation are essentially approximations: data together with confidence intervals, rather than pointwise numerical findings. What once was evidence for serious scientific work is now in many cases a strong indication for charlatanry. The public is not yet used to that. So the new situation may easily be used by ill-willed political decision makers to ridicule science and create doubt in its authority: "Look, they tell us temperature will rise by 1.5 plus/minus 1.2 degrees centigrade. Does that mean 0.3 or 2.7 degrees? These eggheads do not know themselves! Let them do their homework first, then they may come back".

## 5. Media and Politics

The social public is a modern phenomenon. It is closely connected with political participation and thus requires education, political freedom and extended forms of organization. For the first time, radio in the 30's and

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[14]  Comp. Eric M. Oreskes, Naomi Convay, *Merchants of Doubt* (New York: Bloomsbury, 2012).

television in the 60's transformed inhabitants of developed countries into one general public. Technological progress, together with socio-political circumstances, made both the public and public opinion possible. The integrity of the public de-bate space is a condition for the possibility of democracy. Both concepts involve the janiform nature of social communication: conformance pressure to exert necessary social control in order to unify society vs. free exchange of opinions, ideas and arguments by mature citizens. And so modern media are not only instruments for social communication and free formation of opinion, but also means of manipulation and distraction.

Unintended by constitutional deliberations, the modern press in particular occupies a powerful position in the traditional forcefield of legislature, executive and judiciary. Freedom of the press is an important prerequisite for healthy democracy. In everyday praxis, though, emerge various options for the misuse of medial freedom.

A frequent critique is that media create a vision of political and social reality, rather than honestly reporting the facts. "Reporting the facts" sounds naïve, since there are too many things happening in the world. So what is meant is systematic concealment of information which is unwelcome by deciders for some reason. Parts of political life are made morally or even cognitively invisible, to keep the lambs steady. "It never happened. Nothing ever happened. Even while it was happening it wasn't happening. It didn't matter: It was of no interest".[15]

Other techniques include the fragmentation of related facts, thereby disrupting their meaning, decontextualization of facts to make them appear as isolated special cases, recontextualization of facts to embed them into "positive" context to get rid of possible moral outrage, declaration of facts as mere opinions.

The last option is of special interest from a cognitive point of view. If facts are similar to opinions and opinions may stand polar to each other, then why not accept alternative facts concerning one and the same phenomenon? (Analytic philosophers know about the pitfalls of claiming the possibility of objective verbalization of "what had happened").

Look at the following fragment of CNN interviewer Alisyn Camerota with US-Republican Newt Gingrich:[16]

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[15] Harold Pinter in his Nobel speech, December 7th, 2005. Pinter's speech is another example of an almost invisible event.

[16] http://transcripts.cnn.com/TRANSCRIPTS/1607/22/nday.06.htm

> CA: But we are safer, and [violent crime across the country] is down.
> GI: No, that's your view.
> CA: It's a fact.
> GI: I just – no. But what I said is also a fact. (…) The current view is that liberals have a whole set of statistics which theoretically may be right, but it's not where human beings are. People are frightened. (…)
> CA: Mr. Speaker, because you're saying liberals use these numbers, they use this sort of magic math. This is the FBI statistics. They're not a liberal organization.
> GI: No, but what I said is equally true. People feel it.
> CA: They feel it, yes, but the facts don't support it.
> GI: As a political candidate, I'll go with how people feel and I'll let you go with the theoreticians.

That's a new understanding of the British "Gentlemen do not argue over facts", indeed.

Public media try to react and rebuild the trust and confidence of their audience by e.g. institutionalized fact-checking. This, however, seems hope-less. The attention span for bad news is broader than for correcting bad news. And this is no new phenomenon:

> Exposure to this flood of information may serve to narcotize rather than to energize the average reader […] His social conscience remains spot-lessly clean. He is concerned. He is informed. And he has all sorts of ideas as to what should be done. But, after he has gotten through his dinner and after he has listened to his favoured radio programs and after he has read his second newspaper of the day, it is really time for bed.[17]

Fact checking is heroic work: hopeless, but it needs to be done. Fake news[18] and alternative facts[19] may mislead people into a distorted or false world view, focussing on unimportant problems and missing the real challenges which need their attention. Unfortunately, natural cognitive predispositions stand firm against correcting wrong beliefs. We will come back to that in next section.

The phenomenon of fake news is old, but its size is new. Thanks to social media, now anybody can post news. Traditional media have

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[17]  Robert K. Lazarsfeld, Paul F. Merton, "Mass communication, popular taste, and organized social action", vol. *Communication of Ideas* (Harper Bros, New York, 1948), 95–118.

[18]  Copyright perhaps by Donald Trump who made it viral at a press conference on January 11, 2017 with CNN reporter Jim Acosta. Ranging from blatant lie to bullshit, i.e. communication in which truth plays no role, fake news is not a precise concept and therefore not really helpful.

[19]  Copyright by Trump advisor Kellyanne Conway, when excusing Trump's spokesperson Sean Spicer from lying by claiming that he just offered "alternative facts" about the number of attendees at Trump's inauguration.

lost their gatekeeping role. They are caught in a vicious circle: as digitization offers alternative media content, readership, subscriptions, advertising and revenues decline, they then lay-off journalists and use ad-funded content instead, journalistic quality suffers, even more customers are lost to internet-based media.[20]

Any misconduct menaces confidence in public media and thus undermines their business model. This is particularly problematic if part of the media is taken out of market mechanism for the greater values of freedom and democracy. In Germany, e.g., the public radio and TV-stations are paid by a common broadcast license fee, which is commonly understood as some sort of tax. At the same time these media insist on their political neutrality and independence from the government. Suffering from decreasing reputation, the German public-TV companies searched for scientific help to stop the process. Stanford-trained linguist Elisabeth Wehling was ordered to prepare a manual on how to use techniques of cognitive framing to improve good public standing. Not without reason, customers all over Germany reacted furiously: their main concern with the state media" was propagandistic manipulation. Now they see their money used to train staff to manipulate the public.

Fading trust in public media is obviously problematic for their role. But the phenomenon is by no means singular. Trust is dwindling also with respect to other media. A telephone survey by researchers from Johann-Gutenberg-University Mainz conducted in fall 2018 with 1200 respondents[21] drew quite an optimistic picture: 65% of respondents find information programs of public television trustworthy or rather trustworthy. Only 8% do not. Regional and nationwide newspapers enjoy 63% and 49% positive feedback, respectively. The world wide web in general is a trusted source of information for 11%; 51% distrust. News in the social media get 4% trust with 51%, again, mistrust.[22]

Be that as it may, given the low level of trust, is there any problem with fake news from the internet at all? A necessary condition for the very possibility of lying is trust. No trust, no lies. Things are not that obvious in social networks.

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[20]  Lee McIntyre, *Post-Truth* (Cambridge: Cambridge University Press, 2018), 63ff.
[21]  See *Frankfurter Allgemeine Zeitung* of March 3, 2019, 13.
[22]  One may wonder whether good relations to the nearby headquarters of public TV had any influence. The methodology used is in any case unacceptable: who on Earth is a competent social media user and yet takes part in phone calls?

# 6. Social Media

The issue with truthful social communication was fanned by social media.[23] What is specific about this kind of communication? We already mentioned that professional gatekeeping is almost non-existent. In the internet, "everybody is a journalist". Fake news and conspiracy theory find their way to their audience with very little impediment. This is facilitated by specific cognitive mechanisms which were imprinted under different evolutionary circumstances. Let us have a closer look at these mechanisms to understand the malady.

Users' attention is the raw material for the product sold by the platform industry: personal data. In times of information over ow, attention is a scarce resource. Bad news attracts attention. From an evolutionary point of view, this makes a lot of sense. To spot an unclear shape as a tiger, rather than a badger, increases your proliferation options. Angst is good. This is the origin of the so-called negative bias. In our modern world, however, it causes problems: we focus on bad news even if it is unimportant.[24]

A close relative is the simplicity bias. If you have alternative hypotheses, go for the simpler one. This, again, made a lot of sense, since our sense of simplicity was shaped by effectiveness. Evolutionarily, we found appealing and simple what worked well. Medieval philosophy transformed it into a famous principle. In a world of ubiquitous deterministic chaos, however, you should not make explanations simpler than possible. The truth is usually not found at the regulars' table.

Another relevant bias results from our inclination to prefer information coherent with our beliefs. This leads to the confirmation bias – we over-rate consistent news against inconsistent. From an evolutionary perspective, again, this makes a lot of sense. We are well advised to trust our previous experience – in a world with few and slow changes. But, our present world is not like this.

The reverse of confirmation bias is the pain of cognitive dissonance. We usually suffer when being exposed to information which doesn't

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[23]   The considerations below in parts follow the presentation in David Jaster and Romy Lanius, *Die Wahrheit schafft sich ab. Wie fake news Politik machen* (Stuttgart: Reclam, 2019).

[24]   There is a counter-tendency, though. Overstuffed with bad media revelations, we thirst for good news. Books like Hans Rosling, *Factfulness: Ten Reasons We're Wrong About The World – And Why Things Are Better Than You Think, Sceptre* (New York: Sceptre, 2018) and Steven Pinker, *Enlightenment Now: The Case for Reason, Science, Humanism, and Progress* (New York: Viking, 2018) fulfil the need.

match our beliefs. The more mature we are, the more we suffer.[25] This phenomenon leads to motivated or selected cognition: we readily accept coherent news but try to ignore information inconsistent with our basic beliefs. In extreme cases this may lead to conspiracy theory. The chaotic nature of social systems obscures any hope for a planned ruling towards previously established goals. Even if there were a tacit order ruling the world, it would necessarily fail. The miserable outcome of democracy export and regime change, Brexit chaos and demographic explosion in Africa sows sufficient doubt in the effectiveness of any deep state. (This is not to say, of course, that there are no effective conspiracies.)

The so-called information cascade is another driving force causing the homogeneity of belief systems. The more members of my community believe in some news, the more plausible it seems to me. People who find some news plausible initiate the cascade: to them it is easy to believe. Others follow suit since their neighbours believe as well. This may quickly add up to many thousands of people who believe in that news. The popularity of restaurants, prestige of influencers, but also trends in medical diagnoses and treatment are practical examples of information cascades.

Another bias results from our strong desire to be socially accepted. It is connected to cognitive dissonance, which may be painful and trigger aggression. All sorts of traitors or renegades are battled more strongly than "normal" adversaries. Whatever the reason for their decision, it threatens my own beliefs. I must protect my convictions. When you change sides as a homeopath, drop out of a sect, or act as any other sort of dissident – the cold rage of your former allies is unavoidable. In former times, exclusion from the tribe meant death. Our evolutionary memory reacts hysterically upon social rejection. We are ready to pay a high price for inclusion: social conformity pressure makes us agree with group behaviour even though there is good reason to doubt – think about the classical experiments by Solomon Asch.[26] Our own opinions are suppressed in order to align with the majority. For a successful career you would better err together with all others than be right in isolation. The result is a conformity cascade. This is not necessarily based on belief, since we are often not sure what the other group members really believe. What group members claim to believe is not necessarily their authentic belief. Maybe many of them believe nothing at all, e.g. in case when large parts of the social media group are bots.

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[25] In some cases, inconsistencies are intriguing. They evoke a feeling of depth and mystery. Think about Tertullian's "credo quia absurdum" or Schiller's lines "in abyss dwells the truth". Also blatant lies which are obviously unjustified may be attractive as evidence of invulnerable power.

[26] Solomon Asch, *Social psychology* (Englewood Cliffs: Prentice Hall, 1952).

Cognitive biases are responsible for the emergence of homogeneous groups in social media, so-called echo chambers. All members agree on all debated issues, other opinions do not occur among members. There are no corrections from outside. Criticism and doubt are excluded. The resulting phenomenon is known as group polarization.[27] In strongly polarized groups the subjective truth of an utterance becomes less important. The essential role of an utterance is to demonstrate: I am with the group. Obviously, any rectification of false news from outside the group will be ignored. One may speak about tribalistic epistemology inside such a group. In social media the effect is known as digital tribalism. Platform owners further the intellectual isolation by microtargeting, i.e. feeding the users with personalized information input, be that advertisement or, far worse, news. People feel good and well-affirmed, they extend their stay at the platform and get that way even more confirmation for the truth of their own position.

This may lead to a strange effect. Claims inside the social community are immune to principal criticism. Even if they are not consistent with other beliefs of the audience they are excused as being morally, if not literally true. The opposite to moral truth is immoral truth: it is true, but one must not say it – it's disgusting. It seems that the negation in immoral truth may strangely shift thus resulting in moral falsehood: it is deeply wrong, and it is mean, even if literally true. Moral truth and falsehood is limited to the deeply polarized group. From the perspective of another polarized group, everything said in the first group may be (at least morally) false, and vice versa.

All sorts of bias are effective for intuitive or emotional reasoning. They are far less effective for careful rational thinking. In social media we are usually concerned with shallow-brained content thus engaging mainly "fast thinking" capacities. Whence the internet invites the encounter with fake news.

Sometimes, this inter-group antagonism spills over to the real world. Recently, two large and polarized facebook groups met personally at Berlin Alexanderplatz for a punchfest. Other forms are of greater political impact. By analysing customers web behaviour and supplying personalized information specialists may influence people's behaviour. Not at an individual level, of course, but in a statistically significant way. Again: consumption or political actions are triggered by the same mechanisms. During the last presidential election in the US, a firm called Cambridge Analytica attracted public attention for the first time. Neither is this firm unique; there are many more players worldwide who try to influence e.g. elections. The usual method is to spread uncertainty, disorientation,

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[27]   Cass Sunstein, "The law of group polarization", *Journal of Political Philosophy* 10, no. 2 (2002): 175–195.

confusion, resignation, apathy – or in-difference: "No need to go out to make your cross, the elections have already been fixed anyway".

The technique was allegedly invented by Stalin himself, who founded a specialized disinformation office some 95 years ago. But this can be perfected at low cost in times of neural networks and social media. In recent weeks we have seen a disinformation campaign by the platform industry on their own behalf. In effect, millions of users protested the scheduled new EU-copyright legislation – which would be very expensive, indeed, for Facebook & Co.

Disinformation is cyberwarfare. In most cases, it is extremely hard to prove liability. Progress in artificial intelligence is fast. Computer animated politicians already may be indistinguishable for normal users from real presentations of these people in the media. Not only muddle-heads begin to fear for the foundations of democratic order.

Some of the founding fathers of the internet bemoan its degeneration. Concerned by privacy issues, Sir Tim Berners-Lee wants to give his invention a new start after 30 years.[28] Essentially for the same reason, Jaron Lanier urges to cancel all our social media accounts right now.[29] To some extent, this may be due to romantic reminiscences of joyful days back in Big Sur or Millbrook. But of course, those times are gone. You may still enjoy the feeling at Burning Man once a year, but you cannot operate the most valuable companies worldwide on a hippy mindset.[30]

## 7. What to Do

In order to get rid of mendacious information, first of all, one needs to identify it. The following checklist, adopted from Jaster and Lanius' booklet,[31] may be helpful.

1. How plausible is the information? What else should be the case to make it true?
2. Are the sources laid open? Can they be checked and verified?

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[28] On 30 September 2018, Berners-Lee announced a web decentralizing project, which aims to give users more control over their personal data and lets them choose where it goes, and who's allowed to use that data [see https://www.engadget.com/2018/09/30/tim-berners-lee-solid-data-control/].

[29] Jaron Lanier, *Ten Arguments For Deleting Your Social Media Accounts Right Now* (London: The Bodley Head, 2018).

[30] Besides, even in the good old days, not all was sheer love and brotherhood. The heroine of the early period, Ayn Rand, held very specific views about individual responsibility and social solidarity.

[31] Jaster, Lanius, *Die Wahrheit schafft sich ab. Wie fake news Politik mache*.

3. What about the quality of the sources? Are they authored e.g. by independent scientists?
4. Is the information consistent with other reports on the same topic? Are there serious news agencies, ideally using independent sources, which come to the same conclusion?
5. Are there published counter-statements? Anything to be found on fact-checking internet portals?

Fact checking, filtering uploads and deleting mendacious postings will not solve all problems. Sustainable countermeasures are laborious and tedious. But that is the only way to improve social processes.[32] First of all, we need an lively democratic culture of debate. This is certainly no new idea:

> It's hardly possible to overstate the value, in the present state of human improvement, of placing human beings in contact with other persons dissimilar to themselves, and with modes of thought and action unlike those with which they are familiar. Such communication has always been... one of the primary sources of progress.[33]

And vice versa: if we refuse talking to each other reasonably and respectfully, any social communication comes to an end and next to that social coexistence will end as well. Only open exchange beyond political and ideological opposites may reveal common standards for a felicitous policy.

It is important to convey media literacy to everybody starting in school. What is serious news? Where to find it? In times of digitization it is crucial to know the basic mechanisms of disinformation, propaganda, public relations and advertisement. Equally important is at least elementary psychological knowledge: what are the main features of human cognition, what biases influence belief formation, how do they co-determine our intuitive reactions? In such a required education in critical thinking, cognitive science has an obvious role to play.

Even the best training, however, would not alter human essence. There-fore we should search for mechanisms which make communication, cognitive processes and decision structure "fool proof". One idea would be to nudge people into contact with different-minded fellow citizens. This might be achieved by appropriate redesign of social media architecture.

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[32]  Some more ideas are presented in Jaster and Lanius', *Die Wahrheit schafft sich ab. Wie fake news Politik mache,* 102 ff.

[33]  John Stuart Mill, *Principles of Political Economy* (London: John W. Parker, 1848), 594.

Not all is lost. Under normal circumstances, there is a natural inclination towards truthfulness. It has the rank of a moral obligation. Moral norms differ from juridical norms or sociological norms by their unconditional validity. In all human societies people contravene the "thou shall not lie" principle. But that does not make its validity fade away. Similarly, human rights violations are terribly frequent sometimes, in some regions. But this doesn't make torture, rape or state terrorism less condemnable. Ethical principles and moral norms retain their power when they are disobeyed. They are independent from factual compliance. Based on that rock, one may think of means to restore trust in social fabric.

Traditional tolerance of lying appears to be in decline, as the ravages of Climate Change accumulate. No flood or re can completely eliminate a distinctly human behavior, but young people are demanding a clear-eyed assessment of the harm done to the planet they will soon inherit. They want honest leadership, and hope to have found it in a Swedish teenager with Asperger Syndrome. Greta Thunberg is extraordinarily direct, and has no time for those who equivocate. The greatest challenge in human history will claim many casualties, and with enough Gretas, one of those casualties might be the act of political lying.

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# Summary

What happens if we shift the classical philosophical perspective on the problem of lying from intersubjective communication to lying as a public process? We concentrate on a few areas: business, science, and public media. Next we focus on specific tendencies emerging in the social media. Since these phenomena cause deep going and profound worries, we try to survey possible remedies.

**Keywords**: lies, social networks, cognitive biases, moral truth

# Streszczenie

# Zanikanie prawdy w mediach społecznościowych

Klasyczna perspektywa filozoficzna rozważa kłamstwo jako problem komunikacji intersubiektywnej. Co się dzieje, kiedy spojrzymy na kłamstwo jako na zjawisko społeczne? W niniejszym artykule rozważamy kilka przykładów z obszarów gospodarki, nauki, mediów publicznych. Następnie przyjrzymy się specyficznym zjawiskom w mediach społecznościowych. Skoro niektóre z nich budzą uzasadnione obawy, postaramy się o przegląd możliwych środków zaradczych.

**Słowa kluczowe**: kłamstwo, sieci społecznościowe, błędy poznawcze, prawda moralna