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The expansion of artificial intelligence and the problem of values

Ekspansja sztucznej inteligencji a problem wartości

ABSTRACT

The author analyzes relation between the expansion of artificial intelligence (AI) and the issue of values. In particular, he points out the difficulties associated with "agreeing on values" in an algorithm vs during a human interaction. The article highlights the obstacles of taking human values into account while designing complex algorithms, which result from the fact that the preferred values are inconsistent, contextual and therefore variable. The values depend on cultural conditions and individual differences as well. In addition, the sentimental values are also difficult to predict and take into account. All this makes it almost impossible to unambiguously define the values to be respected by the algorithm. Currently, an attempt is being made to include "emotional computing" into a design of artificial systems, which, according to many researchers, may turn out to be a breakthrough in the development of AI. There are already advanced attempts being made to model one of the aspects of emotional intelligence, which is to recognise other people's emotional states based on the analysis of their facial expressions. According to the author, developments in the field of artificial emotional intelligence should rather worry than satisfy the users of the internet. They will contribute to greater control exercised by the institutions that use them, and consequently to further limitation of personal freedom of the individual users. The author suggests that the expansion of digital technology (contrary to the initial hopes) contributes to increased centralization of power and socio-economic inequalities. In the words of Norbert Wiener (1950), the development of digital technology contributes to "the human use of human beings".

Keywords: artificial intelligence, indefiniteness and incommensurability of values, "artificial emo-tional intelligence", comfort vs personal freedom

STRESZCZENIE

Autor poszukuje związków między ekspansją sztucznej inteligencji (SI) a problematyką wartości. Szczególną uwagę zwraca na trudności związane z „uzgadnianiem wartości" w ramach interakcji

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„algorytm vs człowiek". Przybliża problemy związane z uwzględnianiem ludzkich wartości w projektowaniu złożonych algorytmów. Wynikają one z faktu, że preferowane wartości nie są spójne i mają charakter kontekstowy (a więc zmienny). Są też zależne od uwarunkowań kulturowych i różnic indywidualnych. Szczególnie trudne do przewidzenia są tak zwane wartości sentymentalne. Wszystko to sprawia, że jednoznaczne zdefiniowanie respektowanych przez algorytm wartości jest prawie niemożliwe. Obecnie podejmowane są próby uwzględniania *emotional computing* w projektowaniu sztucznych systemów, co zdaniem wielu badaczy może okazać się przełomem w rozwoju SI. Podjęto już zaawansowane próby modelowania jednego z aspektów inteligencji emocjonalnej, jakim jest rozpoznawanie cudzych stanów emocjonalnych w oparciu o analizę mimiki twarzy. Zdaniem autora sukcesy w zakresie *artificial emotional intelligence* powinny raczej martwić niż cieszyć użytkowników Sieci. Poskutkują bowiem większą kontrolą ze strony używających ich instytucji, a w konsekwencji dalszym ograniczaniem wolności osobistej indywidualnych użytkowników. Mudyń sugeruje, że ekspansja technologii cyfrowej (wbrew początkowym nadziejom) przyczynia się do zwiększonej centralizacji władzy i nierówności społeczno-ekonomicznych. Mówiąc słowami Norberta Wienera (1950), ojca cybernetyki, rozwój technologii cyfrowej przyczynia się do „the human use of human beings".

Słowa kluczowe: sztuczna inteligencja, nieokreśloność i niewspółmierność wartości, „sztuczna inteligencja emocjonalna", wygoda vs wolność osobista

Introduction

The digital revolution, the consequences of which we face every day, is gradually but radically changing our lifestyle, everyday habits and preferred values. It is difficult to find an area of life where digital technology has not yet left its mark. In addition to remote, somewhat extramural interpersonal contacts, we are dealing with remote education, work and a wide range of virtual entertainment. Digital technology has also influenced the way the so-calledleisure activity, especially by the youngest users. There are lively discussions about the future of artificial intelligence (AI). Opinions on this issue are very polarized, ranging from enthusiastic supporters who are inclined to see the salvation of humanity in its development, on the one hand, to distrustful skeptics who make Cassandra predictions, on the other hand. In the presented text I do not intend to resolve this dilemma. I will focus on those areas where AI comes into contact with the issue of values.

Regardless of the course of ongoing discussions – our influence on the direction of technological evolution (as in the case of biological evolution) is minimal, even close to zero. The avalanche started several decades ago and is moving faster and faster. The question is rather what to do so that it does not completely overwhelm us. From a psychological point of view, it is not difficult to see many disturbing consequences and darker sides of this evolution. Digital technology tempts us with different versions of telepresence, thus robbing us of full presence in the physical and social contexts in which we abandon our bodies. It can be said that our "way of being in the world" has changed, that we are dealing with a decontextualization of existence (Mudyń, 2010). This means that time and time again our dominant mental activity takes place outside the physical and social context in which our bodies are located. This probably leads to a modification of the value system and more. Although intergenerational changes are difficult to study, as they interfere with changes related to the age of the respondents, some panel comparisons indirectly provide arguments that this is the case. Research conducted on the Dutch population (Leijen, Herk, Bardi, 2022) shows that the Millennials generation differs from the other three, i.e. Silent-generation, Baby-boomers and Generation-X, in the dynamics of changes observed in during a 12-year study.

For the sake of order, however, we should mention the least controversial and somewhat beneficial aspects of digitization. Undoubtedly, the development of AI has brought a lot of good

to medical science, especially where medicine meets engineering – surgery, prosthetics, early diagnosis or remote monitoring of physiological processes. We should also note that the development of digital telecommunications, e.g. thanks to applications such as Microsoft Teams, Zoom, etc., it turned out to be very helpful in surviving forced isolation during the SARS-CoV-2 pandemic.

Objective of the work

In general, we are inclined to believe that AI (at least for now) serves man. This would mean that it helps people achieve their goals and values. On closer inspection, however, many questions and doubts arise. Which people? To what extent does the effectiveness of instrumental goals change or modify our preferences? Referring to the terminology of Milton Rokeach (1973), one could ask how much "instrumental values" influence the experience and implementation of the so-called "terminal values"?

We are increasingly seeing the dilemma of security vs individual rights. Less obvious, however, is the dilemma: convenience vs freedom of choice. More and more attention of designers is also drawn to the issue of "value alignment", i.e. learning artificial systems of human values (and psychology) and *vice versa*. Human preferences (values) are difficult to implement because they are inconsistent, context-dependent, and not entirely explicit. In a word, they are hard to define. In addition, it is worth noting that research is currently underway on the artificial emotional intelligence. The question arises whether possessors of natural emotional intelligence should share the enthusiasm of its designers and producers? The issues raised here will be developed and justified in subsequent parts of the text.

Is AI intelligent?

So far, the algorithms artificial intelligence, despite often spectacular results, do not deserve to be called intelligent. Apart from science fiction literature, we are dealing with *de facto* sophisticated simulation of solutions and decisions that, if they were a manifestation of human activity (here it refers to the origin of the term) or other organisms, we would be willing to consider as manifestations of intelligence. Note that even the most sophisticated algorithms, with the so-called autonomous vehicles, are not autonomous, because they cannot independently maintain their existence by searching for appropriate energy resources. Not having the instinct of self-preservation, they are also unable to counteract the destructive influence of the environment and modify their structure according to changes in the environment. In short, they are essentially non-adaptive. From this point of view, plants are smarter than AI because they can actively and effectively adapt to a changing environment (Mudyń, 2022). So far, algorithms are also unable to reproduce, i.e. to duplicate their structure on their own (Fitch, 2016). Thus, it seems that a qualitative change in the development of AI will be conditioned by advances in the construction of artificial life.

However, algorithms can learn very quickly (e.g. via the Web) and share acquired skills with other virtual machines just as quickly. Toby Walsh (2017, p. 153) brings this issue closer by writing – "When one Tesla car learns to recognize a shopping cart and avoid it, we can load a new code to the entire Tesla fleet around the world". And he adds – "This is such an important issue that I came up with a new name for it *co-learning*".

Considering that in constant and well-defined circumstances, algorithms can "behave" quite adequately, we willingly and unintentionally anthropomorphize them (Mudyń, 2012, 2014), which may result in inadequate expectations and costly mistakes. Even when calling an institution we are informed (in a human voice, sic!) that we are talking to artificial intelligence, during the conversation we easily forget that we are dealing with a chatbot and try to negotiate or argue with it. Algorithms can also make mistakes that have nothing to do with intelligence and which we do not expect. Gerd Gigerenzer (2022) cites an example that has earned a special name, namely *Russian tank fallacy*. Well, an artificial system was tried to teach to distinguish Russian tanks from American ones. In laboratory conditions,

the algorithm achieved excellent results, i.e. it almost flawlessly identified Russian tanks in the photos. However, in the new, non-laboratory conditions, he completely lost this, as it were, learned skill. The reason turned out to be very simple – all the photos of Russian tanks used during training had snow on them. And this circumstance, not without reason, was treated as the most diagnostic clue.

A similar situation occurred in the case of the algorithm, which was conceived as a digital support in assessing the prognosis of pulmonary patients. In the New York hospital, where it was designed and tested, it showed very high accuracy. However, when used in other hospitals, it lost this ability. It turned out that the radiological images used in the process of learning the algorithm differed in technical terms – the images of patients in an advanced stage of the disease (i.e. patients lying down) were taken using a different, portable device, which was a very good diagnostic clue for the algorithm.

Indefiniteness and incommensurability of preferred values

Problems, not only of a technical but also of a theoretical and ethical nature, are revealed – understandably – during the interaction of particular people with various AI applications, which – by definition – should serve and help people. The question immediately arises – to what people? Users or producers? If these products are to serve users, they must necessarily correspond to their needs and take into account the most universal values. The problem is that, as you know, AI algorithms only perform very well in a stable and well-defined environment. In the case of clearly defined games, such as chess, even the most outstanding chess players are not able to cope with them. Human values, however, cannot be clearly defined and included in a complex algorithm.

Let us add that the preferred values are not abstractions, they are not what politicians willingly refer to in public situations. Rather, they are what makes us make the choices we make in situations where such a choice is potentially possible. That is, when we are not under the pressure of a life-threatening situation, and we have more than one reaction in our repertoire of behavior. To put it simply, values are not what is declared, but rather what is realized, what is revealed in behavior and spontaneous decisions. In specific life situations, we are guided rather by the so-called implicit values than declared ones. Taking human values into account in the design of artificial systems, including robots, is very difficult. There are several reasons for this.

First, preferred values are context-sensitive. In other words, our preferences are situation-dependant. To put it simply, health becomes a superior value in the case of a threat to one's own life, in the context of an unfavorable diagnosis, but in many other situations it is not.

Secondly, the accepted values are not consistent enough and even remain in a state of potential, cyclical conflict. Therefore, it is difficult to predict which option will prevail in a particular situation and will be revealed in the form of a chosen reaction.

Third, the accepted values are largely incommensurable (incompatible).It is easiest to notice when utilitarian values (effectiveness, profitability, etc.) clash with ethical values, such as honesty or truthfulness. Moreover, this incommensurability also applies to the ethical values themselves. For example, when should you be more empathetic than truthful, and when the other way around? In a sense, this also applies to theological values – how to reconcile divine justice with another attribute of divinity, i.e. mercy.

Fourth, apart from individual differences, there are also important cultural differences (cf. individualistic vs collectivistic cultures). In addition, in different cultures there are different types of taboos, usually not recognized by representatives of other cultures. Horace's postulate *Dulce et decorum est pro patria mori* probably sounds more convincing to representatives of collectivist cultures than individualistic ones.

Fifth, there are also sentimental values, which cannot be classified as either utilitarian or (usually) moral, and are usually associated with valuable souvenirs and symbols that have a special emotional value for a given person or group. By way of illustration, I will refer to an exaggerated example given by Stuart Russell (2020). Well,

let's imagine a robot designed to prepare healthy meals rich in animal protein that serves our cat for dinner, not knowing that "the sentimental value of this pet exceeds its nutritional value" (Russell, 2020, p. 32).

The problem is that an artificial system, designed to optimally accomplish a specific goal, can do it "well" unexpectedly, but bypassing the broader context and human preferences that were not explicitly included in the design. In the words of Russell – "The fact that a machine has been given a fixed objective by humans doesn't mean that it will automatically recognize the importance to humans of things that aren't part of the objective. Maximizing the objective may well cause problems for humans, but, by definition, the machine will not recognize those problems as problematic" (Russell, 2020, p. 28).

It should be emphasized that the problem is not only that designers absent-mindedly overlook something, not taking into account additional variables that are important to people in the optimization procedure. The problem is broader, and it is related to the fact that we humans are poorly versed in our own preferences. Many studies in the field of social and cognitive psychology (cf. Mayer, Twenge 2018; Nisbett, 2016, pp. 65–81) provide convincing examples of how wrong we can be when trying to determine the motives of our own behavior or external factors that influenced our decision. Also, as mentioned earlier, our preferences tend to be very inconsistent and context-dependent.

Other aspects of value in the context of AI

As we know, artificial digital systems, compared to humans, are unrivaled in the speed of information processing and learning optimal reactions in the case of precisely and clearly defined tasks. Human behavior and preferences are certainly not one of them. Considering that the *raison d'être* of artificial systems is to interact with living systems, especially with humans, more and more research is addressing this issue. A new term has appeared for the cooperation of people with "intelligent" machines, i.e. the so-called "value alignment problem". Simply put, the more sophisticated robots would have to be taught the basics of human psychology. Artificial devices, in particular the so-called autonomous vehicles must be able to anticipate human reactions. This means that both must learn who their potential partners are. As noted by Aga Dragan (2020), in the process of "value alignment", robots must first of all be taught that people are more than "objects in their environment". It seems that it is very important, and at the same time very difficult. For a human being, seeing a ball in the middle of the road with a child nearby means "extreme caution" as it is quite likely that the child will run into the road. For an artificial system, these will probably be two different objects that need to be avoided. This means that robots would have to be equipped with what in developmental psychology is called "theory of mind".

Alison Gopnik, an outstanding representative of developmental psychology, the author of the concept called "theory of mind", is fascinated by the effectiveness of learning for preschoolers. It is also from there that he tries to draw inspiration for teaching intelligent agents. She writes – "Two features of the childlike approach are especially striking. Children are active learners; they don't passively soak updata like AIs do. Just as scientists experiment, children are intrinsically motivated to extract information from the world around them through their endless play and exploration. (…) Building curiosity into machines and allowing them to actively interact with the world might be a route to more realistic and wide-ranging learning" (Gopnik, 2020, p. 230).

There is also the question of how complex algorithms, designed with a view to predicting human behavior, e.g. to predict recidivism in the case of people who have committed an offense or broken the law, are indifferent to values. This is important because in some countries, the probability of re-offending, estimated by the algorithm, influences the court's decision in terms of the need to apply detention or the amount of the penalty. It turns out that despite the lack of such intentions on the part of designers, algorithms are sometimes "accused" of bias, i.e. that they discriminate against a certain group of people by taking into account certain variables. How is it possible? Well, let's note

that complex algorithms, before they show results expressed in the form of probabilities, are "fed" with a huge amount of data, called big data, which no one analyzes in detail. These data refer to records gathered over the last few decades and are used to estimate the frequency of future events. Let us add that complex algorithms based on the learning of "neural networks" function as a "black box"– we know the source of data and the final results, but we do not know the logic of the processes that led to them. Returning to the example, it could turn out – hypothetically – that 75% of crimes of a given type were committed in the past by blue--eyed citizens. Therefore, they can expect that the court, based on these data, will treat them more severely than in the case of people with a different eye color. However, it could have happened that due to demographic, socio-cultural or economic changes, the proportion of blue-eyed people in relation to other defendants reversed in the last year. However, if the algorithm is based on data from a much longer period of time, blue-eyed people may feel discriminated against, and the algorithm could be considered biased.

You can also fill this pattern with other content. Imagine an insurance company that sets premiums based on the mortality rate of people suffering from disease X over the last 50 years. It may have happened that a new drug or a new treatment strategy appeared a year ago, which dramatically reduced the mortality of such patients. However, if, for technical reasons, the algorithm did not take into account the most recent data, it could be considered biased, and a given group of patients could be considered discriminated against by the insurer.

So, are AI algorithms neutral to human values? As already mentioned, they cease to be neutral if they were developed on the basis of an incomplete or partially outdated database, and their results influence decisions concerning specific people. Going further, it could be argued that virtually all findings about people that are made public (becoming part of social reality) cease to be completely neutral, because they influence the behavior of recipients in a specific direction. By the way, the radio play based on *The War of the Worlds* by G. Wells, in the 1930s, caused panic. The phenomenon of self-fulfilling prophecy is also known, when our own expectations unconsciously but effectively provoke reality to the realization of a specific scenario.

Conflicts of values and the problem of personal freedom

The attack on the World Trade Center in 2001 made the contradiction (conflict) between the two values, i.e. individual freedom vs security, clearly visible. This has led to the progressive reduction of the so-called basic human rights in the name of increasing security. It turned out that correspondence and, in general, privacy of citizens can be under surveillance in the name of fighting terrorism and more. AI has proven to be very useful for these purposes, and cyberspace has become a political (and hybrid warfare) battleground.

On an individual scale, the expansion of digital technology is also worth looking at through the prism of another dilemma, i.e. temporary convenience vs privacy and freedom of choice. It seems that this dilemma is underestimated or even overlooked. Gerd Gigerenzer (2022), in the recently published monograph *How to Stay Smart in a Smart World*, refers to a convincing metaphor that accurately reflects the situation of an ordinary user taking advantage of the offers available on the "have it all" network. Imagine a town where there is only one coffee shop and they serve free coffee. There is only a minor inconvenience – in this cafe, commercials are broadcast non-stop, and "hawkers" circulate around the room, persuading customers to buy various things (services), probably at promotional prices. The aforementioned author notes that time and time again, using "free services", we are very willing to sell our privacy. In fact, we are dealing with mild blackmail – you can use the content of the portal or install the application, provided that you disclose your e-mail address, telephone number and other personal data. And as a bonus, you can get a discount on purchases or a free Newsletter.

Gigerenzer suggests that it would be wiser and fairer to pay reasonable fees for these services than to pay for them with your privacy, which will inevitably be exploited, at least for commercial

purposes. However, it turns out that there is a kind of privacy paradox. Research by the same author, conducted in Germany in 2019 on a representative group of 3,200 people aged over 18, shows that although 51% of respondents consider the greatest threat related to the digital revolution to be the loss of privacy and the resulting availability of data for commercial and government. At the same time, however, when asked if they would be willing to pay any fees for protecting their data in social media, 75% of the same respondents declared their reluctance to pay any costs. Only 18% felt they could pay up to €5 per month (Gigerenzer, 2022, p. 164). In another international study involving 16,000 of people aged 18+, only about 20% of Europeans were willing to pay $1 a month for data protection. However, in countries such as the United Arab Emirates, Brazil, Mexico and China, this indicator was much higher and fluctuated around 50% (after Gigerenzer, 2022, p. 165). Besides everything else, these results shed some light (or rather shadow) on the specificity and unpredictability of human rationality.

When talking about personal freedom in the context of digitization and expansion of virtual reality, it should be mentioned that one of the conceptual oppositions of freedom is addiction. Addiction to the Internet, and more precisely to various services offered there, has been a global social problem for many years. It concerns hundreds of millions of users who are "caught in the Net" by means of games and other applications[1], designed according to the procedure of sophisticated operant conditioning, where appropriate response is rewarded on an irregular basis. This procedure guarantees the durability of the created habits and resistance to their extinction. The topic is too broad, requiring a separate treatment.

Towards "artificial emotional intelligence"

It might seem that the last bastion of defense against the expansion of AI is the so-called emotional intelligence. The concept of emotional intelligence (EI) appeared in psychology in the 90s of the last century and quickly turned out to be very useful, especially in the context of applied psychology and personal development. This broad concept refers to the ability to recognize, understand and manage one's own emotions and to recognize and influence the emotions of others. Several components or aspects can be distinguished in it.

First of all, it is the ability to recognize, name and express one's own feelings and understand their reasons. Similarly, it also concerns the ability to recognize and name other people's feelings and to respond adequately (empathetically) to other people's feelings. It also assumes the ability to "manage" one's own emotions, in the sense of controlling them in such a way that they are conducive to the effective achievement of goals, coping with stress and maintaining an appropriate level of motivation, despite disturbances and frustrating circumstances. This is especially important in the context of achieving long-term goals. An appropriate level of EI is also a prerequisite for establishing and maintaining harmonious relationships with other people, as it determines better communication and dealing with potential conflicts. It can be said that emotional intelligence goes hand in hand or goes into social intelligence.

It seems that emotional processes are particularly difficult to model within digital technology. It turns out, however, that for several years, selective attempts have been made to simulate some aspects of broadly understood emotionality, including emotional intelligence. Moreover, the literature already uses the term (Schuller, Björn, Schuller, 2018) "artificial emotional intelligence", which sounds a bit like an oxymoron. There are also related terms such as "affective computing" (Picard, 1997) or "emotion AI" (Pietikäinen, Silvén, 2021). Research conducted in various centers focuses mainly on the relatively easy to digitize aspect of emotional intelligence, i.e. on recognizing the feelings of other people based on macro- and micro-expressions of facial muscles (action units). Facial expressions accompanying seven basic emotions, distinguished long ago by Paul Ekman, are recorded and analyzed (cf. Ekman, Friesen, Hager, 2002). They are anger,

[1] I refer here to the title of the classic work by Kimberly S. Young *Caught in the Net: How to Recognize the Signs of Internet Addiction…* (Young, 1998).

fear, disgust, happiness, sadness, surprise, and a neutral emotional state. It turns out that there are about 30 critical points in facial expressions that change depending on the experienced emotion.

A particularly grateful area for research using digital technology is the so-called micro-movements accompanying emerging feelings, which manifest themselves extremely briefly, from 0.03 to 0.5 seconds. They have two research-friendly properties. First, they are not under the intentional control of the person who involuntarily expresses them. Secondly, unlike the people participating in the interaction (for whom it is a difficult task), they can be easily recorded and comprehensively analyzed using artificial systems.

When it comes to this aspect of emotional intelligence, which is recognizing (discriminating) other people's emotional states, AI already has significant achievements (Dhope, Neelagar, 2022; Alisawi, Yalcin, 2023). In laboratory conditions, the accuracy of diagnoses sometimes exceeds 90%. In natural conditions it is, of course, incomparably more difficult. The undertaken research is not limited to modeling this aspect of EI, which is a relatively easy task. Attempts are being made to incorporate the "emotional" modules into the machine learning process itself. It is, e.g. that, as in the case of humans, activated "emotions" could change information processing strategies and (at least partially) replace external reinforcements of appropriate reactions with internal reinforcements. Anyway, many authors involved in this research stream (Schuller, Björn, Schuller, 2018; Pietikäinen, Silvén, 2021) are convinced that the inclusion of emotions in the design of AI systems can revolutionize this field and lead to another breakthrough.

The authors of the monograph *Challenges of Artificial Intelligence: from Machine Learning and Computer Vision to Emotional Intelligence* (Pietikäinen, Silvén, 2021) see many practical applications of automatic identification of other people's emotional states based on facial changes. They see their use in the treatment process, by monitoring patients' facial expressions, in the education process (e.g. by catching micro-expressions showing, for example, a lack of understanding of received information), when monitoring the facial expressions of supermarket customers in reaction to the products they see, also in the context of recruitment interview and even for children's toys and video games. Therefore, we can soon expect that when entering a given portal or wanting to use an application, we will have to agree to "'camera" our reactions. Depending on the type of reaction, i.e. the identified emotional state, we will be encouraged to purchase appropriate products or services. Let us note that remote recording of facially expressed feelings will be at the service of various institutions, thus increasing the level of control of individual individuals. However, the production of "pocket emotion detectors" for the use of individual people who would like to improve their effectiveness of communication with other people is not planned.

Certain hopes regarding the limitation of this type of surveillance can be associated with the vote passed by the European Parliament on June 14 this year. The draft AI Act, which proposes a number of restrictions[2], including introducing a ban on biometric identification of people in broadly understood public situations. It is known, however, that legal changes by their nature are shifted in time and do not keep up with changes in social reality. Additional doubts are also related to their effective enforcement.

Concluding remarks

Thus, contrary to earlier optimistic expectations related to the emergence of the Internet, the expansion of the digital revolution leads to a greater centralization of power and other resources. New technologies have never been an ally of democracy. Short-term convenience wins over individual freedom, considered in a slightly longer perspective. Direct meetings and interpersonal contacts (face to face) lose to telecommunications and virtual reality. Although psychology has known for a long time that limiting personal

[2] Artificial Intelligence Act, European Parliament, https://www.europarl.europa.eu/doceo/document/TA-9-2023-0236_EN.pdf (accessed: 21.06.2023).

contacts with other people is conducive to depression (which was also seen in the context of the recent pandemic), but it is not easy to remember this on a daily basis. If you want to gain a bit of distance from this "normal", already tamed reality, it may be worth reading *Brave New World* by Aldous Huxley again.

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