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THINKING ABOUT THE FUTURE AS A SOCIOTECHNICAL CHALLENGE. SUSTAINABLE DEVELOPMENT AND THE PROSPECT OF A GLOBAL CATASTROPHE – AN ETHICAL REFLECTION

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Purpose: The aim of the publication is to present the problems related to the impossibility of unambiguous verifiability of forecasts formulated on the basis of science and concerning the future of human civilisation. This problem gives rise to completely new phenomena and triggers mechanisms that lead to the emergence of persuasive mechanisms, taking on a self-contained meaning, requiring reflection and analysis.

Methodology/approach: The analysis is based on a hermeneutic method exploring the rootedness of the texts analysed in a wider cultural context.

Limitations: The research focuses on showing the current state of these phenomena, hence the references to recent data and publications entering the publishing market.

Implications: Research on current phenomena is burdened with the danger of subjectivism. However, it allows to bring the analysis of the phenomena closer to current problems.

Value: The study is intended for researchers of environmental awareness issues and the debate over the prospect of a climate catastrophe.

Keywords: sustainable development, positive thinking, scientific forecasts, global catastrophe.

1. Introduction

We are living in times that are increasingly defined as times of unimaginable breakthroughs taking place before our eyes. The summer of 2023 in which we live is seen as a moment of radical breakthrough in the development of modern civilisation. The media are bombarding audiences with data depicting the current summer as the hottest in the history of measurements, which began with the development of industrial civilisation.

Their importance is determined by the fact that this information does not appear to show some sudden catastrophe that has been orchestrated by an unforeseeable unexpected configuration of factors that make the current situation unique and unrepeatable. It should be stated that the opposite is true. Something that was anticipated and expected has occurred.

What is surprising at best is the speed at which the expectations that were to be met over the coming decades are being realised.

News of drought in southern Europe, further temperature rise records and fires, warming seas and oceans are appearing in the media with increasing frequency. They are accompanied by analyses highlighting that the 2015 Paris Agreement's goal of limiting temperature rise to 1.5 degrees Celsius, compared to the temperature of the pre-industrial era, is proving impossible to achieve and is expected to be exceeded within a relatively short timeframe. Current expectations are linked to the development of climate catastrophe processes associated, above all, with the consequences of changing temperatures (Otto, von Brackelen, 2019). This information was succinctly summarised by UN Secretary-General António Guterres, stating that "The era of global warming is over. The era of global boiling has arrived" (Dmitruchuk, 2023).

The increasingly widespread conviction that a climate turn is taking place raises fundamental questions about the reflection to date on the issue of environmental risks, which after all is neither new nor surprising. Predictions of an impending catastrophe, both from a general ecological perspective and a specific climate perspective, have been known for years (Rich, 2020). The question addressed in this study concerns the relationship between the dominant direction of reflection on the issue of climate catastrophe and the direction of events. Specifically, it concerns the sense of the tendency to resort to a persuasive strategy referred to as "positive thinking," which, as a result of a particular coincidence, has become very deeply rooted in contemporary debate. The paper attempts a hermeneutical analysis of this phenomenon.

As one might think, this analysis will reflect on the contemporary shape of the debate around an issue that is becoming one of the most important, if not the most important problem of the present day.

2. The changing importance of forecasts in the modern world

Hegel's aphorism, from the Introduction to the "Principles of the Philosophy of Law", that "The owl of Minerva spreads its wings only with the coming of the dusk" teaches us to be cautious about making statements about the times we live in and the possible consequences of processes taking place.

Deeper reflection, however, indicates that we are living in times that in some fundamental ways transcend the horizon of this seemingly obvious reflection. Forecasts, whose message speaks of the real possibility of a catastrophe of the civilisation in which we live, have become a fundamental determinant of our present day for several decades now. This renders the wisdom

emerging at the end of the historical process completely useless and requires thinking that goes beyond the traditional Hegelian horizon.

Of course, it can be argued that catastrophic forecasts are nothing new in the history of mankind, and that predictions about the "end of the world", understood in one way or another, are a frequently recurring motif in history (Tauber, 2016). However, it is impossible not to notice that one fundamental issue is changing. Predictions and prophecies in past history, as a rule, have not appealed to objective or "intersubjectively controlled" scientific knowledge. Neither international organizations such as the IPCC nor the consensus of the overwhelming majority of experts stood behind them.

Moreover, this catastrophe turns out to be anthropogenic in nature, i.e. not the result of external forces beyond man's control, but the effect of his own choices and actions, the consequences of which turn out to be extremely destructive for his continued existence. This leads to the conclusion of the need for a radical change in the current life. The idea of a catastrophe provoked by man and the possibility of avoiding it by changing behaviour is also not new. Already the Old Testament spoke of the inhabitants of Sodom, who, by acting immorally, brought destruction upon themselves. The idea has recurred many times in history. In this case, the differentiating factor is the nature of the knowledge being referred to. The question of whether establishing anthropogenic causes for the current global catastrophe is a return to this traditional social engineering is also a recurring motif in our time, despite a complete change of context.

3. Theoretical implications of the new quality of forecasts

The fact that the realisation of catastrophic forecasts leads to a paradoxical situation in which the wisdom gained with the passage of time and their fulfilment proves barren and no longer useful for anything accompanies reflection on thinking about the threat of a catastrophe almost from its beginning. This observation becomes the starting point of the fourth report for the Club of Rome *Learning Without Borders* (Botkin, Elmandjra, Malitza, 1982), which formulates a programme of anticipatory community education geared towards thinking that anticipates crises and shapes communities able to take up the fight against them. An analogous approach is the premise of Georg Picht's philosophy of responsibility, developed in parallel (Picht, 1981), and the cornerstone of Hans Jonas' ethics of responsibility (Jonas, 1996)¹. To some extent, this is reflected in the concept of sustainable development (Kuzior, 2008).

¹ One problem is Hans Jonas' aversion to collective action and his emphasis on the role of individual leadership. However, this is secondary to the common starting point and the belief that it is the awareness of danger that must be the premise of all action within technical civilization (Ciażela, H., 2006, pp. 193-220).

The problem of the uselessness of warnings against threats, the implementation of which turns out to be lethal for the warned, has other dimensions besides the futility of waiting for verification. The most well-known and obvious is the traditional suspicion of using a catastrophic forecast to manipulate the warned. A mechanism that involves forcing the warned to behave in ways desired by the warner under the influence of fear for the future. The problem of not being able to verify the forecast before it is realised is enriched by the fact that the forced behaviour, by changing the development of events, leads to a situation in which the warner can always claim that it was the forced change that avoided the alleged catastrophe. This mechanism has been a traditional part of the analysis of all prophecies, generally of a religious nature, concerning catastrophes, understood in one way or another, that were to bring about the proverbial "end of the world". Accusations of manipulation of this kind are now an important topic of public debate and are part of the standard repertoire of arguments of populist ideologies and conspiracy theories. The main difference related to this is that the place of priests and prophets, according to the scientific nature of the predictions, has been taken by scientists participating in the global conspiracy. The differences mainly arise in the answer to the question of whether they are manipulators of humanity wishing to impose their utopian projects on it, or whether they are the tools of a conspiracy of business and political elites seeking to reduce the masses of people superfluous to the processes of technological development of modern civilisation².

In addition to these two most classic and still keenly debated problems, involving the question of the attitude to the impending catastrophe, there is a third one that seems to be gaining in importance. This problem is, like the previous one, sociotechnical in nature. Its essence lies in the observation that the reality and scale of the threat, even despite its anthropogenic nature, can lead to a sense of powerlessness and resignation. Recognition that the challenge is beyond the capacity of those who could take it on.

4. Two approaches to the reality of the prospect of a global catastrophe

The way to remedy this situation is to foster optimism and self-confidence. It should be noted, however, that there are two approaches to this issue that are increasingly diverging in practice.

² Conspiracy theories about the so-called depopulation should be distinguished from forecasts about the inevitable death of part of the human population if a climate catastrophe develops, as discussed by Peter Frase, who draws the perspective of what he calls "exterminism" as a policy pursuing the interests of the elite at the expense of the poorer part of humanity (Frase, 2018; Ciażela, H., 2020).

The first is the attempt to reduce the gap between the scale of global challenges, often beyond imagination, and the scant capacity of individuals and groups to address them by operationalising action. The second focuses on the problem of psychologically understood motivations as such. It recognizes that action is motivated by the prospect of a positive outcome, while its absence demotivates and induces passive compliance with the inevitable course of events.

The first approach has accompanied catastrophic thinking since its very beginnings. In fact, the diagnosis of an environmental catastrophe is the premise of the demand to actively combat it. The main problem then becomes the problem of how to effectively combat the threat. The division and concretisation of the task facing the challengers becomes an essential element of this strategy. In practice, this operationalisation can take very different shapes. The boundaries of the spectrum of solutions to this problem are marked, on the one hand, by Georg Picht's postulate of achieving competence to find one's way through the maze of challenges posed by the threat of a catastrophe, and, on the other hand, by the emphatic and unambiguous directives of the first report to the Club of Rome, *Limits to Growth* (Meadows, D.L., Meadows, D.H., Randers, Behrens, 1973), which set concrete dates and rules for halting economic growth.

The issue of strategic solutions to combat the climate catastrophe is primarily technical in nature, and as such, despite raising various repercussions, is mainly debatable in a broader context. This approach often leads to the question of whether it is entangled in manipulations related to controlling people through intimidation, as was the case when interpreting the radical recommendations of the first report for the Club of Rome. However, it should be noted that it represents an area of issues far beyond the problem horizon outlined in this study.

The psychological approach to the issue, which focuses on triggering the activity of the subject (whether we are dealing with an individual or a collective), refers to completely different mechanisms and models of action. It focuses on the mechanisms of motivation, recognizing that they have a significant, positive impact on the effects of action and even the effectiveness of the efforts undertaken. "Belief in success breeds success", so in order to achieve the desired goal, the subject must be properly motivated.

5. "Positive thinking" about global issues

Although the situation we are talking about is qualitatively new, the way to approach it is by no means entirely new. It can even be said that it is the result of reflection on the fundamental processes of human development. The most reaching in depth is the inspiration of the mechanisms of mythical thinking. As analysts of this phenomenon point out, myth (irrespective

of the question of its veracity) is a formula for inducing effective action where the pattern of objective circumstances does not promise success (Armstrong, 2021). Derived from the psychology of American pragmatism, the concept of the positive influence of beliefs on the organisation of life practice has a much shorter history. Nowadays, it functions in a new, radicalised and simplified version as a formula for promoting the so-called "positive thinking", which triumphs in popular culture in the form of both numerous self-help books and educational practices.

Although the "positive thinking" idea functions mainly in the realm of problems related to the ways of achieving individual success in life and business, unfortunately its influence on the broader public consciousness is not limited to these spheres.

The environmental debate has also been very strongly influenced by this kind of thinking. A key moment in the development of this way of thinking, in the area under discussion, came with the discussion of the first catastrophic predictions that sparked lively interest in world public opinion, namely Paul R. Ehrlich's book *The population Bomb* (Ehrlich, 1968) and the first report for the Club of Rome *Limits to Growth*, already referred to in the text. In both cases, the debate revealing factual and methodological limitations³ turned into radical and harassing and often unfair criticism, which led to a deep crisis in circles addressing the threat of environmental catastrophe. In particular, the Club of Rome, as an international body that brings together many well-known figures serving as authorities in various fields, faced an image disaster that made the Club of Rome a training ground for new narrative strategies to continue its mission by new means (Ciążela, 2006, pp. 273-209).

Although the Club of Rome itself has not recovered from the image disaster of the 1980s, the lessons from the deep crisis of the environmental debate of the late 1970s and early 1980s proved momentous. The consequences of its failure caused trauma that continues to this day. Its effect has been a marked reluctance to make catastrophic predictions and a very strong emphasis on the possibility of action to resolve the crisis. The most well-known manifestation of this new thinking was the report entitled *Factor Four. Living Twice as Well on Half as Much (Mnożnik Cztery. Podwojony dobrobyt - dwukrotnie mniejsze zużycie zasobów naturalnych)* (Weizsäcker, Lovins, A.B., Lovins, L.H., 1999) developed within the German branch of the Club. It presented strategies for widespread recycling, the economical disposal of raw materials, which were expected to bring about not only the deceleration of dangerous trends, but also

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The problem was that, in the case of Ehrlich's book, as a result of what D. Wallace called an unfortunate coincidence (Wallace-Welles, 2019, pp. 68-69), the publication coincided with one of the most important economic developments, the so-called "green revolution" involving the global application of new technologies that radically increased global agricultural productivity, creating the possibility of feeding a much larger population than before. And in the case of *Limits to Growth*, it very quickly became apparent that the estimate of natural resources did not take into account their very limited exploration and the fact that, as it turned out, new rich deposits were waiting to be discovered. As with Ehrlich's book, there have been accusations of irresponsibility and incompetence. Both, however, fail to take into account that - as Wallace -Welles, quoted above, points out - the "green revolution" was a one-off event, while the increase in the number of known and exploited fossil resources (primarily fuels) triggered mechanisms that exacerbated the crisis (Ciażela, H., 2018).

an improvement in the quality of life, which until now seemed incompatible (Kuzior et al., 2012).

The shift in emphasis, of which the *Factor Four* report was the most striking example, showed the logic of a process that took the form of a whole spectrum of attitudes, among which the reference to "positive thinking" strategies began to play an increasingly important role in the presentation of the issue of environmental threats (among which the threat of a climate catastrophe became increasingly dominant).

The most important manifestation of these trends is the 1987 report Our Common Future, prepared under the aegis of the UN by a commission headed by a Norwegian politician Gro Harlem Brundtland (Our Common Future, 1991). The report plays an extremely important role to this day as the cornerstone of the UN's adopted and hugely popular concept of sustainable development. Its formulation was significantly influenced by criticism of the *Limits to Growth* as a concept that did not take into account the interests and specificities of Third World countries (Furtado, 1982). Sustainable development has become a concept that addresses the challenge of organizing modern civilization in a just and sustainable way. On a global scale, this concept, starting from the diagnosis of the existence of global threats to the development of civilisation, focused on strategies to counter them, treating as an objective the balancing in this process of the harmonisation of problems and the diversity of ecological, social and economic interests. Thus, it was a concept intended to combine the resolution of global processes with a vision of global justice through global consensus building (Kuzior, 2014a). It has achieved unprecedented popularity as an official doctrine of the UN and the European Union (Kuzior, 2014b). It has become a way of popularising the issue of global threats on the one hand, and unfortunately marginalising them on the other.

It is clear that the question of how the sustainability formula works does not simply boil down to the internal logic of its operation. External pressure from groups uninterested or even threatened by its possible consequences played a huge role in its failure. However, it is important to realise that these groups have used and are using this internal logic to their advantage. The most important problem here is relating the concept of sustainable development to an undefined future in which development is to be balanced. The sustainability narrative, increasingly disconnected from reality, is only the most obvious example of the impact of positive thinking on the debate around the increasingly clear symptoms of an environmental catastrophe (Ciążela, 2019).

The consequences of this approach are most clearly demonstrated by the phenomenon of the so-called climate optimism. Its presentation is a post by Christiana Figueres - UN negotiator for the Paris Agreement, co-author (with Tom Rivett-Carnac) of *The Future We Choose: The Stubborn Optimist's Guide to the Climate Crisis* (Polish edition: *Przyszłość zależy od nas. Przewodnik po kryzysie klimatycznym dla niepoprawnych optymistów* (Figueres Warsaw, 2021), published in 30 languages, and the popular *Global Optimism* podcast promoting the

notion that the climate crisis represents an opportunity for humanity, opening up new perspectives and possibilities.

Even more symbolic, both in terms of title and content, is Zahra Babiani's publication *Climate Optimism: Celebrating Systemic Change Around the World* (Babiani, 2023) with an introduction by the author of the previously cited study.

These texts represent an extreme form of thinking that has settled very deeply in the reflection on the prospect of a climate catastrophe. Another formula is the phenomenon referred to as "ecosocialism", or the belief that the opportunity that "climate optimists" talk about creates the possibility of a political transformation that allows for the construction of a more equitable and, paradoxically, better-satisfying socio-economic system (Hickel, 2022). Ideas of transformation of the socio-economic system turn out to be the offspring of the idea of sustainable development in terms of the conviction that the time horizon is sufficient for such transformations and the weakness of the forces maintaining the existing order, creating the myth of a harmonious future, which, according to the authors cited, remains a realistic prospect.

Another formulation of the belief in the impact of positive thinking on reality is the proposal for a mental revolution in economics, developed in Kate Raworth's study *Doughnut economics:* seven ways to think like a 21st-century economist (Ekonomia obwarzanka. Siedem sposobów myślenia o ekonomii XXI wieku). As with "ecosocialism", "doughnut economics" seems to operate in a world governed by its own logic, in which the desirable forms of activity to avert catastrophe seem obvious and their dissemination is only a matter of time (Raworth, 2021; Sutowski, 2023).

A moderate version of this utopian quest is the large field of reporter-journalistic publications presenting actions to combat global warming, intended to popularise forms of activism and success stories as models of grassroots action to save humanity. The logic of these publications is perfectly illustrated by the title of Simon Mundy's book *Race for Tomorrow*. Survival, Innovation and Profit on the Front Lines of the Climate Crisis (Wyścig po jutro. Przetrwanie, innowacja i zysk na froncie kryzysu klimatycznego) (Mundy, 2022).

A genetic phenomenon dating back to the tradition of the debate around Ehrlich's book are the ideas that focus on the technical possibilities of averting the climate catastrophe. With the use of new technologies and technical solutions that, like the "green revolution" in agriculture, have averted the disaster of overpopulation, it represents one of the most important trends in the debate on the prospect of a global climate catastrophe. These issues have even become an important thread in studies on the subject⁴ and often radical criticism (Frase, 2018). Since it is not possible to provide a reasonably complete picture of this phenomenon in this article, I will limit myself to the statement made by George Soros at the recent Munich Security Conference delivered on 16 February 2023. Signalling the importance of the climate

⁴ A significant part of the book *Retoryka i marazm antropocenu* (*Rhetoric and Marasm of the Anthropocene*) by Ewa Bińczyk (Bińczyk, 2018) is devoted to issues of fighting climate catastrophe.

catastrophe, the billionaire reduces the fight against it to the idea of spraying artificial clouds over Greenland and warning that ignoring the phenomenon leads to a dramatic increase in the cost of dealing with it (Soros, 2023).

When discussing this aspect of the issue, however, it is impossible not to take into account the fact that in the practice of economic life there is an ongoing offensive of technologies aimed at reducing greenhouse gas emissions or even achieving zero-carbon economic activities. Although the scale of this process is still limited both sectorally and geographically, it provides a context that cannot be forgotten or ignored, although the scale of action is certainly not adequate to the enormity of the challenges facing modern civilisation.

Focusing attention on the possibilities of preventing the catastrophe by harnessing the technological potential of modern civilisation leads to a clear marginalisation of the problem of the catastrophe itself. The constant presentation of, to say the least, questionable methods of preventing the catastrophe gives rise to the illusory belief that we are dealing with a problem that can be dealt with within the framework of the current shape of civilisation, and that people can cope with it without having to radically modify the way they function on the planet.

6. Question about the consequences of "positive thinking"

Studies and statements on the prospect of a climate catastrophe dominated the content determing ways to prevent it. Emphasis on ways to prevent the catastrophe breeds a manifestation of optimism about their effectiveness⁵. However, it has far-reaching and not always fully understood consequences.

It puts those who do not share the optimism invoked in an ambiguous position. Their catastrophism gives rise to the suspicion that, by presenting bleak scenarios, calling for renunciations, sacrifices or a radical change of the principles of the organisation of social life, they are not so much serving to save the planet as to realise particularist utopias like Arne Naess's ideas of "deep ecology". In doing so, it brings back the traditional suspicions accompanying prophecies of impending doom about their sociotechnical and manipulative nature. Since the problems are not so momentous and urgent, their exaggeration turns out to be only a strategy for achieving ideological goals presenting the aspirations of certain social groups to realize their particularist visions of the world.

⁵ The scale of the phenomenon is very well illustrated by a study of environmental awareness using the New Ecological Paradigm Scale (Dunlap) questionnaire on a group of more than 600 Polish students, among whom optimism about the possibility of overcoming the environmental crisis predominates (Ciążela, A., 2021). The vast majority of students agreed with the statement: "Earth has vast natural resources, we just need to learn how to use them well". Almost half of the respondents agreed with the statement that "Human creativity will prevent the Earth from becoming an uninhabitable planet".

The struggle against demands to end the climate catastrophe, or to refer to the broader term ecological catastrophe, has a long history, the discussion of which is beyond the scope of the paper presented here. It can be reduced to a denial of the threat of a climate catastrophe. Its effect is recognizing the campaign to fight the climate catastrophe as the result of a global conspiracy directed against freedom and property.

It is not, one would think, a matter of coincidence that, despite the intense struggle against this type of argumentation, it proves to be surprisingly vital and attractive to audiences confused and unprepared for serious debate. A very interesting development, in this context, is a study on the borderline between climate denialism and positive thinking in the technology trend by Michael Shellenberger *Apocalypse Never: Why Environmental Alarmism Hurts Us All (Apokalipsy nie będzie! Dlaczego klimatyczny alarmizm szkodzi nam wszystkim)* (Shellenberger, 2021). The author, who speaks openly about his business ties to the nuclear power industry, states, based on extensive argumentation, that the only force constructively working to solve climate problems is rationally oriented business. Whereas all sorts of climate "alarmists", like their predecessors associated with environmental movements and ideologies, only sow confusion and get in the way of saving the planet from threats.

7. The current shape of the debate

Looking at the current shape of the debate on issues of climate catastrophe prospects, it is important to note that the surge of interest in climate catastrophe, triggered by the publication of the IPCC reports starting in 2018 (Ciążela, H., 2021), has been followed by a decline in interest in this topic. The focus was first on the global Covid-19 pandemic and then on the war in Ukraine. However, it is hard not to notice that issues related to the discussion itself played an equally important role.

Discussions of the costs and strategies of the ongoing transition turned out to be the crisisgenerating factors. The enormous costs of changes that could lead to a reorientation of the development mechanisms behind the desired changes have provoked a strong reaction from the societies exposed to bearing the costs.

A no less complex and controversial issue has become the question of whether the so-called "green transition", a term which is now very often used in business circles to refer to the strategy of radically transforming the economy in order to reduce greenhouse gas emissions, promoted by big business circles, really means a change, or whether it merely shifts the factors leading to the climate catastrophe to other areas of economic activity, leading only to a new phase in the competition between large economic players to maximise their profits (Pitron, 2020).

The combination of all these factors leads, it can be concluded, to a situation in which the old balance of power is being reborn on a new basis, in a typical pre-2018 situation. Therefore, we have a strong movement denying the importance of destructive, anthropogenic climate change. We also have a political and economic establishment that specializes in playing the game of appearances and winning particularist interests, avoiding decisive steps to confront the problem. We also have a more numerous than before, but consistently marginalized group of activists with radical attitudes, stemming from taking reports and studies seriously, the symbol of which was Greta Thunberg, who patronized the revival of the debate after 2018 and is now marginalized.

Thus, "positive thinking" about the climate catastrophe, regardless of the intentions of the authors developing this approach, reinforces the *status quo*, fostering the perpetuation of a false sense of security and control over the situation.

However, all these conclusions are debatable insofar as the global situation is changing very rapidly. The rapid escalation of extreme climate events, the most prominent manifestation of which was the drought in Southern Europe in 2022 and what is happening now in 2023, carries the potential for changes that could radically alter the current trend.

Citing a whole series of publications showing the state of the debate on the prospect of a climate catastrophe almost on a daily basis, it is hard not to realize that the publishing cycle and the selection mechanisms of the publishing and reading market, although extremely dynamic at present, do not yet include reflection on the latest developments. The question of whether any changes are taking place is important. Although it must always be remembered that the mechanisms of opinion formation as a result of debate are largely based on inertia, that is, the privileged position of what has already been said over new things that have yet to fight for their place in the discussion. On the other hand, it is worth keeping in mind the tendency to develop and deepen and often radicalise positions already established, as well as the law of the independence of means in relation to ends, formulated by Georg Simmel.

Thus, the state of the debate today and the positions taken in it will affect its future. However, developments cannot be ignored. One of the most recent publications presenting "positive thinking" about the climate is a collection of interviews with authorities in Polish ecology, conducted by Tomasz Borejza under the very telling title *Odwołać katastrofę (Cancel the Catastrophe)* (Borejza, 2023). The title unambiguously suggests that the situation is not as dangerous as it might seem, since the catastrophe can be called off. However, one of the participants in this discussion, Professor Szymon Malinowski (Malinowski, 2023), in a recent interview with "Wprost" weekly entitled: *Fala upałów, gigantyczne pożary. Ekspert nie ma wątpliwości: Usmażymy się (Heatwaves, giant fires. The expert has no doubts: We will fry)* states when discussing recent climate developments that the climate is on the verge of transitioning to another state, one that is very unpleasant for us (Romanowska, 2023). Thus, the debate remains open.

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