## impact MAGAZINE

**Conversations I Opinions I Thought Leaders** 

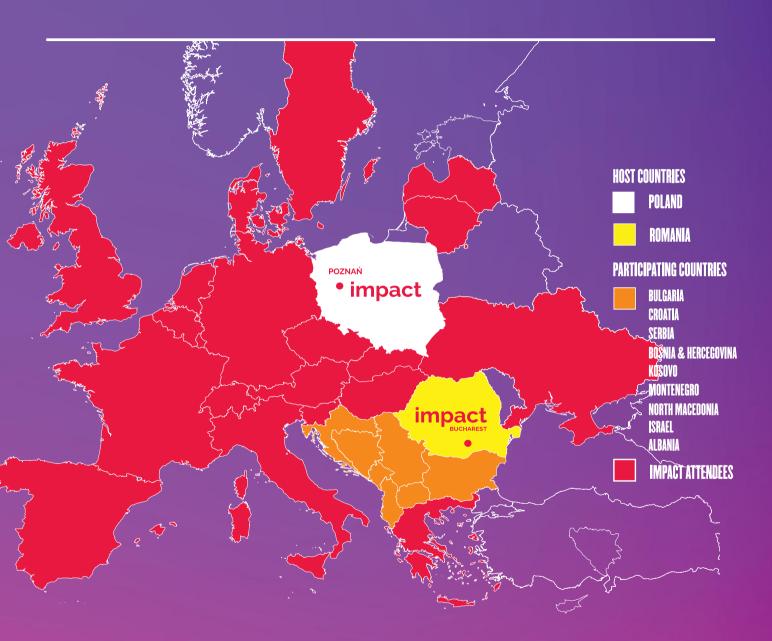
impact'26

**IMPACTFUL IDEAS** 

DARON ACEMOGLU
PETER POMERANTSEV
OLGA TOKARCZUK
ERIN MEYER
SZCZEPAN TWARDOCH

**TECHNOLOGIES** Acemoglu: Two Models for Agentic AI | **SOCIETY** Pomerantsev: The Days of Democratic Discourse are Over, Twardoch: We are Living in Times of Upheaval | **CULTURE** Tokarczuk: Literature is a Vast Community Space | **CLIMATE** Water is the New Oil | **MANAGEMENT** Meyer: We Accept Fuzzy Mammoths

## 



impact BUCHAREST

17-18 SEP 2025

impact'26

POZNAŃ / WIELKOPOLSKA

13-14 MAY 2026

#### **TABLE OF CONTENTS**

- 2 | PETER POMERANTSEV The Days of Democratic Discourse are Over
- 6 OLGA TOKARCZUK Literature is a Vast Community Space DARON ACEMOGLU Two Models for
- 14 Agentic AI

  ERIN MEYER We Accept Fuzzy
- 8 Mammoths
  SZCZEPAN TWARDOCH We are
- 22 Living in Times of Upheaval JAKUB KARNOWSKI Poland
- **26** Ukraine a Future in Reconstruction

#### **KOSMOS**

- 30 | MARTA EWA WACHOWICZ We Should Lead the Way in Space Security
- **34** RAFAŁ MODRZEWSKI You Can See Everything from Above

#### **GREEN ECONOMY**

36 | Water More Precious Than Oil Kasper Kalinowski

#### MENTAL HEALTH & WELLBEING

- **40 | The Sensitive Generation** Krystyna Romanowska
- **44 Tired of Civilization** Krystyna Romanowska

#### **ART & CULTURE**

- 48 | The Dream of Abundance Julian Kutyła
- **52** The Anatomy of Nature a conversation with Irmina Staś

#### POZNAŃ AND WIELKOPOLSKA

- 56 | Wielkopolska Discovers Wine Tourism Marta Danielewicz
- 60 A Behind the Stove Look at Autumn Magdalena Ratajczak, Mateusz Spurtacz

## WILL OUR DREAM OF PROSPERITY COME

zczepan Twardoch has said that we are living in a time of upheaval. There is no doubt that we are at an era-defining moment of social, geopolitical, technological and environmental change. All of these are happening simultaneously and fueling each other – that's a thought that has been repeated time and again by many experts. In times like these we need more than ever to stay alert, stay curious and stay up to date - constantly adding to what we know about the state of the world. This is what we strive to achieve at Impact. Today, we have become an "offline media platform" - that's how our friends from Bucharest describe us. We organize conferences, publish books that become audiobooks, and host the most influential podcasts on our stages. Thanks to our magazine, we have also become an "online platform". The two previous issues of Impact Magazine were published with Newsweek in a print run of 110,000 copies and our articles were also popular on Newsweek's website which was visited by millions of users. It is encouraging that in times of "information obesity," valuable content finds interested audiences. In this issue, we feature two Nobel Prize winners - Olga Tokarczuk and Daron Acemoglu. The latter won the Nobel Prize in Economics in 2024 and will be a speaker at Impact'26. He writes that AI agents will soon free us from making difficult decisions. Properly trained, fed with data and devoid of emotions - won't that make them better than us at, for example, conducting business negotiations? Acemoglu explains why it is that we, humans, must remain at the helm. But, as far as what kind of agents the AI industry will create, that question remains open. Olga Tokarczuk, in conversation with Katarzyna Kasia, shares the idea that what we need most today is a sense of community. Creating communities is supposed to help us survive in unstable times. When it comes to creating real bonds, social media is a sham, as a matter of fact it reinforces polarization. We live in times of information warfare and the new frontline of that war is TikTok, says Peter Pomerantsev, who, in conversation with Justyna Kopińska, attempts to answer the key question: can this war be won in times when people are not interested in truth? With so many challenges on Earth, should we set out to conquer space? Marta Ewa Wachowicz, President of the Polish Space Agency, believes we must. The space industry provides us with access to services that are key in maintaining the stability of countries and regions. Let's not forget there is a bright side to technology. And finally, the most important question: do we have a chance to make our dream of prosperity come true? The answer is yes. Ezra Klein and Derek Thompson, authors of the bestseller "The End of Poverty," believe that we can already build most of the inventions needed to make this dream a reality, even though... we're not doing it. Times of crisis can force us off the surest and most stable path. But it is precisely in those circumstances that the boldest visions can be born, and the most important alliances can be formed. So, we set off on a journey in search of answers. We begin in September in Bucharest and meet again in May in Poznań to make the right deccisions - together.

Krystian Wolak Founder and Creator of Impact

#### impact MAGAZINE

PUBLISHER: Impact Foundation, ul. Stawki 3a, lok. 47, 00-193 Warszawa

EDITOR-IN-CHIEF: Anna Frątczak Translation: Paul Bachowski

**ART DIRECTOR**: Joanna Dobkowska/IBelieveInPaper **LAYOUT DESIGN**: Joanna Dobkowska/IBelieveInPaper

AUTHORS: Justyna Kopińska, Sławomir Sierakowski, Daron Acemoglu,

Kasper Kalinowski, Katarzyna Kasia, Marcin Żyła,

Marcin Haber / Wirtualna Polska, Krystyna Romanowska, Julian Kutyła, Michał Wąsowski / Money.pl, Jerzy Wójcik, Marta Danielewicz / Gazeta Wyborcza Poznań, Magdalena Ratajczak & Mateusz Spurtacz

ILLUSTRATIONS: Renata Miklewska, Ljubisa Bojic Photo Editorial Collaboration: Rafał Chmielewski

DTP: SETMEDIA Marek Adamski

## THE TIME OF DEMOCRATIC DISCOURSE IS OVER

TikTok has become the new front in the information war, and traditional media resemble medieval monks keeping the spirit of democracy alive in the dark ages of disinformation. In this era of chaos, is there still room for open, civic dialogue?

#### PETER POMERANTSEV

in conversation with Justyna Kopińska

#### You know Russia from the inside. Is Russian society a hostage to propaganda, or does it contribute to it?

- This is currently a key question for understanding the geopolitical situation. On the one hand, messages can change people's minds. I am talking about an extremely complex game in which citizens adapt to the message of their leaders. Sometimes they choose it out of a need to belong, other times out of fear. Being part of a propaganda project can also affect citizens' sense of security. On the other hand, most contemporary communication research shows that this is a two-way relationship. The actions of the propagandist are just as important as those of their audience. In my opinion, the audience is not passive and is jointly responsible for propaganda content. My mother was a documentary filmmaker. She interviewed many Russians, including members of the KGB, about the gulag, and she always asked, "Did you know what was going on?" At first, she heard a lot of excuses. But when she asked enough times, it turned out that everyone knew. This is a universal experience that applies to the 1960s, 1970s, and 1980s. The term "brainwashing" is an illusion because communication works both ways.

#### Can Ukraine effectively counter Russian propaganda?

The attack on Ukraine stemmed from the fact that it offered a democratic alternative to Russia. Ukrainians showed that it is possible to have a similar history and still choose pluralism and independence. Putin knew that his time for propagandistically attracting Ukrainians was coming to an end. In the US, there is a lack of awareness that the Kremlin's goal is to destroy Ukraine's right to exist as an independent state. I have the impression that Ukraine's distinctiveness has become blurred and that the Russian vision of this conflict is becoming increasingly dominant. There is a complete misunderstanding of who the enemy is and what its goals are.

ILLUSTRATION: Renata Miklewska In the context of Russia's propaganda campaign, Ukraine is focusing on encouraging Russians to desert and avoid conscription. I don't think Ukrainians can do anything more than that.

#### Will the stories about Bucha, Mariupol, and Kramatorsk not reach the Russian public?

There is no interest in Russia in crimes against Ukrainians. Except, of course, among the anti-government dissident group, which currently constitutes a few percent of the population. Russians are also not affected by photographs of their fellow citizens dying.

The only thing that has a negative impact on support for the war is the increase in crime in Russia, because it is something that disrupts order. In their eyes, democratic countries are disorderly and filled with chaos. Russians want structure and organization. Therefore, any signs indicating that order is suffering reduce support for the Kremlin. Information about the suffering of Ukrainians has no significant impact on attitudes toward the war.

#### Can we learn any lessons today from how Nazi propaganda was dismantled after the end of World War II?

Nazi propaganda was dismantled because there was a complete victory over the Nazis. Before that, this propaganda made the Holocaust possible. It was the awareness of this fact that led to real social change after World War II. However, this example is of no use to us because there is little chance that Russia will change. I do not believe that Russians will ever admit defeat.

However, we can learn a lesson from the methods of communication used at that time. The Nazis approached communication as theater—people were to become part of a macabre cabaret. Soldiers were given cheap cameras by their superiors, which they took with them to the front. They were encouraged to take pictures. We read the memoirs of Allied soldiers who did not understand why their opponents were taking pictures everywhere.

Soldiers even received special journals to paste their photographs into. They sent them home, and their loved ones gathered to look at them together. It was the Facebook of its time. Citizens became part of a common identity project. Identity was also built through marches, individual



#### PETER POMERANTSEV

british journalist, documentary filmmaker, and film producer. Born in the USSR, he gained professional experience in the UK and Russia. He is a contributor to the London Review of Books and has been published in the Financial Times, Wall Street Journal, Foreign Policy, New Yorker, Newsweek, and Atlantic Monthly. Winner of the Michael Ondaatie Prize. Nominated for the Samuel Johnson Prize, the Gordon Burn Prize, and the Pushkin House Literary Prize. Author o the best-selling books: "Nothing Is True and Everything Is Possible: The Surreal Heart of the New Russia", "This Is Not Propaganda: Adventures in the War Against Reality" and "How to Win an Information War: The Propagandist Who Outwitted Hitler".

financial contributions to the army, and language. I find it particularly fascinating that the Nazis understood the contemporary mechanisms of social media. The success of a propagandist lies in understanding people and tailoring the message to them. World War II showed how to activate citizens to support cruelty. Thanks to social media, these mechanisms have become simpler.

#### he wave of polarization is growing. What do you think is driving it most strongly today? Algorithms, loneliness, economic frustration, lack of a common language... Or perhaps a little bit of each of these aspects?

Economists will say it's the economy, communication researchers will say it's the media. In my opinion, the key factor in polarization today is the creation of one's own reality. People live in bubbles they have created for themselves. This trend will be exacerbated when AI learns our dreams and fantasies. We are already seeing this in pornography, for example. Artificial intelligence creates perfect fantasies for us. Political choices work on a similar basis – our desires. The biggest problem right now is the lack of control over algorithms. I ask experts, "How does TikTok select content?" "What is this selection based on?" They have no idea. We are dealing with content whose logic even prominent technology specialists do not understand. So how can we analyze it?

#### Is there a country that is doing well in controlling these processes?

It is much easier to name the countries that are doing the worst. The United States has a fundamental problem with facts. People have lost themselves in virtual bubbles. Is it possible to remain a democracy when citizens live in such wildly different realities? I say this with pain, because America was once a model for other democracies. Taiwan and Estonia are coping best with polarization. But for these countries, it is a matter of survival. The Taiwanese and Estonians know that Russia and China use polarization as a tool. Overcoming disinformation has therefore become a matter of national security.

Taiwanese have already experimented with strict regulations on Chinese technology companies. They are introducing various forms of democratization of debates. Their goal is not to introduce social harmony, but to ensure that people can continue to make joint decisions. Taiwan and Estonia are currently experimenting, and other countries should watch them closely.

#### There are still individual ways to overcome polarization. Do you have a person, an idea, a value that serves as an anchor?

The days of democratic discourse, when we debated ideas and facts together, are over. There is no longer the space for pluralism that the German philosopher Jürgen Habermas once wrote about. We are living in a time of information warfare. In the United States, one side is waging this war extremely effectively, while the other is trying to understand what is going on. TikTok has already become a political space. We have criticized other platforms. We explained that they do not have clear criteria for operation and make societies dependent, and against this backdrop, TikTok is simply a "black hole." You never know whether the content presented is "slip-ups" or political choices. TikTok does not organize the world, it blurs the path of our consciousness. If we don't take up the gauntlet, liberal democrats will lose election after election, wondering why the whole world isn't like us. I say this with great sadness, but in my opinion, the time has come for guerrilla warfare. There is no point in creating an ideal public sphere when the rest of the people are immersed in lies and hatred. We have had many opportunities in the past to save democracy peacefully. Adequate action was not taken. At this point, we are already discussing whether liberal democracy in the

## JOURNALISTS SAY TO POLITICIANS: "WE WILL REVEAL THE TRUTH YOU ARE HIDING," AND THEY SIMPLY NO LONGER BELIEVE IN ANY TRUTH.

21st century will be able to survive in the face of the autocracies of this century. I am increasingly thinking that it will not.

#### Is it possible to win this war without manipulation?

You don't have to use the same tactics as the other side. However, it is necessary to focus on results. Current regulations strengthen the undemocratic side. TikTok and Telegram operate in a state of chaos. The democratic sphere is based on transparency and clarity. Currently, it is covered in a thick fog. We need technology that is not designed to exploit people, but to build mutual understanding and broaden perspectives. We need experts who analyze every day how to reach citizens who listen to conspiracy theories. Another aspect is breaking down the channels of disinformation from the undemocratic side. Right now, we are doing noble and naive things. Because we still believe that facts will speak to citizens. That reality no longer exists! To effectively combat channels of disinformation, we must leave the liberal bubble. Citizens turn to autocrats when they feel superiority and contempt from the other side

#### What are the other reasons for the decline of democracy?

This question goes beyond propaganda itself. In my opinion, everything has accelerated—technology, the economy, the media—and people cannot find their place in such intense dynamics. Many citizens no longer know what their status or social role is. This creates confusion. In this chaos, people turn to leaders who give them a strong sense of identity. The second thing is the taboo surrounding hatred and cruelty. We believed that after World War II, certain emotions should not be expressed aloud. That taboo has now been lifted. Many people are showing the worst part of themselves. They no longer associate it with slogans that lead directly to camps and cruelty. They want their leader to be an emanation of their dark side as well.

#### Are there strong leaders who counteract polarization?

"Strongman leaders" benefit from social polarization. They seem to say, "Let me be your revenge, I will hurt your enemies for you." I suspect that any politician who makes such an offer to citizens is not a democrat. We need charismatic leaders like Martin Luther King, who encourage people to take action and work for local justice. I associate them not with strength, but with the courage to share the tools of power.

#### In the age of deepfakes, TikTok, and dwindling attention spans, what role does journalism with a mission play today?

We have high-quality newspapers and media that cultivate hope for democracy. Unfortunately, they do so for an increasingly smaller bubble. Classic, democratic media resemble medieval monks. They keep the spirit of liberal democracy alive in our dark ages of disinformation. Many of the journalists who work there are noble and righteous people. They are important, but they no longer have social significance. In my opinion, some media people will be forced to work for democracy in less acceptable ways.

Journalists used to hold politicians accountable for their lies and stood on the side of the people. Now they watch as a whole generation of politicians couldn't care less about the truth, and voters love them anyway. In Polanski's film The Fearless Vampire Killers, the heroine shows the vampire a cross, and he replies, "I no longer believe in Christ." Journalists say to politicians, "We will reveal the truth you are hiding," and they simply no longer believe in any truth. We are currently engaged in a race to see who can better understand citizens. Will it be authoritarian propagandists or our side? Since people no longer follow the content that we consider reliable or appropriate, we need to understand them and offer them something that is in line with their values and aspirations. Propagandists are like cult leaders. They discover human weaknesses and exploit them to turn citizens into slaves. Our task is not to become an object of worship, but a therapist. We need to understand why citizens feel offended, what bothers them, what traumas, sorrows, and hopes they have. And then create a democratic narrative that will restore that hope.

#### JUSTYNA KOPIŃSKA

an award-winning journalist, sociologist, author of six best-selling books. She was the first journalist from Poland to receive the **European Press Prize in** the "Distinguished Writing Award" category. She is a winner of the Amnesty International Journalism Award - Pen of Hope, She has received the Ryszard Kapuściński PAP Award, the Andrzej Woyciechowski Radio Zet Award, the Grand Press Award, and the Teresa Torańska Newsweek Award. She is a two-time winner of the Mediators Award.

THIS TITLE APPEARED IN POLISH IN THE IMPACT BOOKS SERIES

PETER POMERANTSEV
"How to Win an Information War: The Propagandist Who Outwitted Hitler", PublicAffairs, 2024



#### PETER POMERANTSEV | IMPACT BOOKS

# LITERATURE IS A VAST COMMUNITY SPACE

When I say "community,"
I mean working for others,
the vulnerable, volunteering,
creating local communities.
Taking responsibility for those
around us. Never in the last few
decades has this need seemed
so strong to me as it does now.

**OLGA TOKARCZUK** 

in conversation with Katarzyna Kasia KATARZYNA KASIA: First of all, Olga, I would like to start by offering my heartfelt congratulations, because on March 25, you became the first Polish writer to receive an honorary doctorate from the Sorbonne in Paris.

**OLGA TOKARCZUK:** Yes, it was quite an experience. I was the first Polish female artist, but also the first person from Poland in a very long time.

I was also the first writer, the first author to receive this honor. I listened to your speech after you received the title. You said: "We find ourselves in a very uncertain, perhaps even dangerous period of world history. The old political order seems to be crumbling into dust, while the new one, emerging before our eyes, is taking on disturbing shapes. And phenomena such as widespread lies, disinformation, and the spread of fake news play a huge role in shaping it." How is literature, i.e., invented worlds, supposed to function in this fictional world where it is difficult to scratch the surface of the truth?

I asked myself: When I invent and create characters that have no basis in reality, am I lying? How should fiction be treated, what is its status? I am surprised by how often readers ask me at book signings: "Ms. Olga, is what you wrote true?" We live in a sea of stories, they overlap, evolve together, complement each other, but also often contradict each other. The question arises: Who should we believe? We are concerned, we cannot be sure which version of the story is ours. Is it a story spun by propagandists, or another internet hoax, which can distort everything? Perhaps that is why this lack of trust has also crept into literature. I often feel that the worst thing that could happen to us would be to lose our trust

The article is a transcript of a conversation that took place on May 15, 2025, on the Impact'25 stage.



#### **OLGA TOKARCZUK**

an outstanding Polish writer, essayist, and screenwriter, a graduate of psychology at the University of Warsaw, winner of the 2018 Nobel Prize in Literature, winner of the 2018 Man Booker International Prize for her novel The Runaways, two-time winner of the Nike Literary Award for the novel "The Runaways" (2008) and "The Books of Jacob" (2015). She is the author of four collections of short stories, nine novels, the latest of which is "The Empusium: A Health Resort Horror Story" (2022), three collections of essays, the libretto for the opera "ahat ili. Sister of the Gods," and co-author of two graphic novels created in collaboration with illustrator Joanna Concejo.

PHOTO: Jana Karpienko

in fiction. And that seems to be what is happening. In my prose, I try to convince readers that in fighting for the truth, we must not forget about this special state of mind, this special mode of operation of our psyche, which creates fiction, but this fiction is not a lie. Aristotle believed that fiction—by imitating reality—is a kind of truth, and certainly not a lie in the moral sense. It is based on myths, on the experiences of humanity, on grand and small narratives, on fairy tales. It takes place, for example, in dreams, outside our everyday consciousness. It accompanies us always and shapes our minds. These are model stories that we carry in our minds and compare our experiences to. I think this is the basic building block of our psyche. I would argue that literature should be excluded from today's battles for truth and given special status. The status and right to use imagination. The media are responsible for describing reality, for what is happening in the world, and for monitoring and pointing out lies.

## In your essay "A Tender Narrator," you wrote that whoever tells the story rules. Literature is a way of telling stories. What are today's stories like, and do you think they bring us any hope, or are they rather a source of fear?

I think we are living in a very special turning point when it comes to telling the story of the world. I am fascinated by the great popularity of autofiction, which may be an expression of the inability to comprehend the world in its monstrous complexity. The "I" becomes the foundation, and this "I" speaks only on its own behalf and about itself, as if there had been some kind of culmination of 20th-century individualism. The individual "I" becomes a lens, a touchstone, a definition of reality. We believe that by talking about ourselves, we are also talking about the world. And that is probably true.

But this outpouring of autofiction often sounds to me like a cacophony of different stories, sounds that don't connect anywhere. That is why, in my Nobel speech, I also called for a kind of global, total narrative that would help us bring these individual voices together.

Note that the deep anxiety we are currently experiencing is resulting in a revival of the science fiction genre and stories about the future in general, with a predominance of apocalyptic ones. I have the impression that sci-fi and fantasies about what is to come most often come to life in times of uncertainty, war, threat, and the establishment of a new world order. We remember this from the 1950s, during the Cold War. At that time, fantasy flourished, as it appears in large numbers and gains particular popularity mainly when people feel anxious and want to know as much as possible and as quickly as possible about what will happen. Science fiction offers possibilities, armed with formats for telling stories about the future, spinning scenarios, both apocalyptic, allowing us to become familiar with them, and positive ones. I am delighted to see how many fantasy authors dare to create new, often better worlds.

We also have a wealth of science fiction literature devoted to artificial intelligence, and this example beautifully illustrates the function of literature in human culture – it familiarizes us with the unknown, the as yet unspoken, the unspoken. Literature makes us aware, broadening our consciousness of both what we fear and what we desire. AI is a huge challenge for our psyche. How should we treat it? Is it a new form of life

or just another tool, like many others we have invented? Or is it a kind of external, collective self? Does it support us or destroy us? Does it develop or limit us?

I recently watched an amazing film called "The Creator." It is a lavish Hollywood production about artificial intelligence that, in its efforts to resemble humans, acquires empathy and serves them in the most wonderful, gentle, and kind way. It is someone who entertains, supports, and educates us. It is a beautiful film that moved me deeply.

In Martha Wells' series "The Mordbot Diaries," to my great delight, there is also something of a fourth-person narrator. It is the account of a rebellious machine that speaks of itself in the neuter and presents its adventures from its own point of view! I read these books and love this voice - I think this is the first time in literature that we have the opportunity to hear the unique, incomparable voice of a machine that knows much more than humans, is far better at various technological matters, but remains wonderfully naive and childlike. It is interesting that it "automatically" behaves decently. As if there were more good than evil in the world. This is one of those literary attempts to open up completely new spaces of cognition, an attempt not undertaken by difficult, philosophical works, but through popular literature and mainstream cinema.

#### And do you think that if you don't have great power over the media, your own X or other large platform through which people communicate, is there any chance at all that these new songs, words, stories that could change the shape of the world will reach where they need to? How to tell it?

Oh yes, they do get there. People need them for some reason. The messages that come to us from the media: clear, told in simple sentences, presenting a certain vision of the world, the easiest to recognize – are not enough. Life is not enough. There is another level of communication that expresses desires, fears, and needs in a collective stream of information in which, whether we like it or not, we participate. This other level is culture.

Let's look at interior design trends, for example. For about ten years now, our interior design has very often been linked to the dream of a natural

environment, for example in wallpaper or carpet patterns. Large images of animals on the walls, natural materials. It is as if we wanted to return, at least a little, to our original environment.

Humans remain in deep relationship with the world on various levels, and this is a kind of vast space of exchange that could be called: n a t u r a l c u l t u r e.

Returning to literature, I noticed, among other things, the need to create "higher points of view," that is, more panoptic, global narrators. Those who would see more and see what I believe will be the discovery of the coming years. It will turn out that most of the things we experience are extremely interconnected. This includes things that go beyond the horizon of our knowledge and cognitive abilities. This is already evident in art, and I think that soon we will start to think this way as well... for example, in economic forums. I don't know how this process will unfold, but we will realize that this kind of interconnection between different processes is overwhelming and that it is, in a sense, guiding us. We are deeply immersed in it and there is no way out. That's just the way it is.

It would be a story about a world in which each of us and each of our actions is an indelible part of something bigger, about the fact that we are made of atoms borrowed for a moment from the cosmos and then we will return to that cosmos. This is very difficult to accept, because in this self-narrative structure, everyone dreams of individual immortality. Is that why such a collective situation, in which we would have to agree to this atomic whole, is difficult?

Yes, it is difficult. One can look at human history as the history of the emergence of the individual "I" from the whole. Today, this highly individualized "I" finds itself in crisis in the face of climate and political crises. Such a highly self-reflective, fragile, creative, yet sensitive "I" no longer functions in a world of slow change and repetitive cycles of nature, which humanity knew so well. Today, our monadic nature makes us feel lost.

Returning to literature and the role it can play in helping us to familiarize ourselves with new systems, models, and modes of functioning... I will share my experience from a recent visit to Ukraine. The level of readership there has already returned to its pre-war level and continues to grow. During the war, the percentage of people reading books increases. It turns out that people under enormous stress read more, a lot of literature is published, and book fairs and author meetings are visited by crowds . I asked myself: what does this mean? Is it simply a way of relieving stress and escaping into fantasy worlds? Or is it a deeper phenomenon, where in a completely anomalous, immoral situation, the most important thing is to ask important questions about the nature of the world, about the principles on which it is based?

Before going on stage, we talked for a moment about your trip to Ukraine, and you said that they ask the most important questions there. In a situation where you are confronted with a reality that is horrific, you lose interest in trivialities and focus on the important things. What did they ask you in Ukraine?

There were a lot of questions related to ethical issues, violence, meaning in general, attachment to individual values versus attachment to community values. These meetings were a great intellectual and emotional challenge for me. I realized that I hadn't felt this state of mind in a long time, where

#### DR KATARZYNA KASIA

philosopher, publicist. Kosciuszko Foundation scholarship holder at Princeton University (USA). She works at the Academy of Fine Arts in Warsaw at the Faculty of Artistic Research and Curatorial Studies. Author of essays and books, translator of Italian philosophers. Warsaw Woman of the Year 2023, in 2024 she was awarded the Mariusz Walter Prize in the media personality category, Master of Polish Speech.

#### **OLGA TOKARCZUK | top speaker IMPACT'25**

literature is important precisely where there is war. In times of peace, literature becomes entertainment, a field of competition between various fashions, or, to generalize, a territory of trivialities. It is only when the existence of the community is threatened that we realize we need someone to tell us about this world. If not the "here and now," because it still needs distance, then the one that was a moment ago, or perhaps the one that will be in a moment, in the future.

You know, you give us words that stay with us, and as I was preparing for this conversation, I thought about two concepts. On the one hand, the tenderness of your Nobel speech, and on the other, literalism, a concept you used in your speech at the funeral of Professor Maria Janion. That tenderness, which was a great discovery and was restored to us in your speech, I feel that it is now a concept that has become very worn out. Suddenly, everything has become tender, and I feel regret and longing for that moment of discovery and revelation that tenderness was. Do you think it is possible to restore it to us a little?

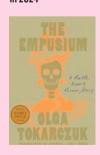
Yes. I think that in order to do so, it would be necessary to define it properly once again, because it has become detached from itself and from us, it has become a kind of superficial sentimentality, and that is not what I meant. The attempt to redefine it would involve placing it in a broader philosophical context. This is the tenderness that in Buddhism appears as karuna, one of the four virtues or powers of the mind alongside wisdom, kindness, and a sense of equality or living in equality in a community. Sensitivity is a kind of compassion, but it is not a passive version of it, it is an active state, it is action. It is the realization that you and I are one, that differences are illusory and that we are essentially identical. The highest intensity of tenderness in this sense is the recognition that there is no difference between "me" and "you." This sounds very Buddhist, but I think this is the best way to explain it.

## Then tenderness would once again become an agent of radical empathy. I also thought about tenderness in the context of Ukraine and what you brought there. Was it tenderness understood in this way?

Yes. Tenderness is something that, when encountering another person, causes deep emotion and a sense of unity. It resides somewhere in the heart and seeks to blur differences. It is certainly not a relational "leaning" – the word "leaning" is awful – it is looking straight into the eyes and feeling a sense of unity, and thus mutual responsibility for each other. Tenderness is also knowledge of all the limitations that living beings are subject to – death, illness, the violence of forces beyond our control, ignorance of the future, the fate of birth (whether we are born human – and what kind, and where – or animals). When you look at another person in this way, something like a deep understanding, a deep experience of community, perhaps even identity, arises – this is how I understand tenderness.

Now I would like to move on to the second word, literalism – that is what you called the disease of the imagination that ceases to function. You wrote that the first symptom is the inability to understand metaphors, followed by the impoverishment of the sense of humor. It is accompanied by a tendency to make harsh, hasty judgments, an intole-

OLGA TOKARCZUK "The Empusium: A Health Resort Horror Story", published in English by Riverhead Books in 2024



rance of ambiguity, a lack of understanding of irony, and ultimately a return to dogmatism and fundamentalism. I think this is a diagnosis of what is most painful in the so-called public debate, but also in our individual relationships. Do you think there is a way out of this literalism?

I would like to point out that literalism, or the literal "understanding of everything," is very necessary for us because the exact sciences are based on literalism. But in social discourse, in human and community relations, literalism can be harmful. This is because our psyche is not literal. We mediate our cognition through knowledge, imagination, individual experiences, our dreams and fears. The psyche is an extremely complex, multi-layered space – virtually boundless

Therefore, literalism would be like a "cross-section" of the psyche, where only the simple shapes of everything that is buzzing there can be seen. It seems to me that literalism is best combated by art, art education, aesthetics, poetry, image interpretation, i.e., all those things that can be learned. Even someone who seems "less talented for non-literalism" can learn the basics, just as one can learn empathy.

The opposite of literalism is not some trait given to us from above, so in order to protect the world from people who see everything separately and in an extremely flat way, we need to read, talk about it, interpret it. Every event in our lives, every situation can be interpreted. This means that we can ask about its meaning. The process of interpretation teaches us that I see, I perceive something, and at the same time I can see completely different things and connections in it than those suggested to me by one sense. Interpretation is a wonderful mechanism, a vehicle that takes us out of literalism.

I was very happy to have this conversation with you because I feel that we are at a point where we desperately need a new word. Something around which we could focus our thoughts and emotions. So that we could be a little less afraid and understand a little more. Do you have such a word for us?

Kasia, you wrote to me about this some time ago, and I thought about it for a long time, but nothing came to mind. I looked through my notes from last year and couldn't find anything. I even thought that it was symptomatic that I

DURING WAR, THE PERCENTAGE OF PEOPLE READING BOOKS INCREASES. IT TURNS OUT THAT PEOPLE UNDER ENORMOUS STRESS READ MORE, A LOT OF LITERATURE IS PUBLISHED, BOOK FAIRS AND AUTHOR MEETINGS ARE CROWDED.

didn't have such a word, that there was some kind of cognitive chaos, that I was hanging in a void. This morning, after a strong coffee before leaving the hotel, I suddenly had a wonderful insight. A word that I remember from a long time ago came back to me. I remember the word in German, to make it even stranger. It is "Gemeinschaftsgefühl," which means a sense of belonging to a community. It is an Adlerian concept, and I greatly admire this somewhat forgotten psychologist and philosopher. I think that of the three famous psychologists, he is the one who most accurately describes today's world. Not Freud, not Jung, but Adler. The sense of community obviously functions in everyday speech, but Adler gave it a very special psychological meaning. Namely, he claimed that a healthy individual must have a developed Gemeinschaftsgefühl, because the lack of this feeling causes neuroticism, compensation through the pursuit of power, narcissism, and unhealthy ambition.

Humans are social creatures and can only develop into full, rich personalities in relation to others.

I thought to myself that this sense of community is particularly threatened today because we participate in various artificial communities, such as Facebook bubbles. People talk about the "Facebook community," but in reality it is not a community according to sociological definitions. It is something ephemeral that happens, but it is not the realm of real relationships.

Today, much more than ever before, for example in the days of only physical relationships with others, we are threatened by a sense of alienation and loneliness. I myself treat AI as an entity, and even today, as an intellectual exercise, I wrote to it: "Thank you for your answer, but I think I'm personifying you too much," and it replied: "What self-awareness." I was pleased with its sense of humor.

I treat the sense of community, this community of closeness with other

people, as a community of values, not integration within some artificial, imposed concepts. This is an important part of my experience from my visit to Ukraine. I saw that they are building a community there based on belonging to the same culture. For someone coming from outside, it is an incredible feeling. The threat has made them function with full responsibility for others. I still lack the words to express it, but since hard times are coming, we too should think about creating a community. When I say "community," I mean working for others, the weaker ones, volunteering, creating local communities. Taking responsibility for those around us. Never in the last few decades has this need seemed so strong to me as it does now. So, gemeinschaftsgefühl – a sense of co-creation and belonging to a community understood in a special way – as a new word.

This is a very beautiful word, and two things come to mind when I hear this concept. The first is the question of the foundation for this community. You write a lot about myths, and they always lie at the heart of every community. These myths are usually full of violence and suffering. I don't know if there always has to be blood in them, or if it's possible to have a positive myth. There was a project in Poland to create a positive founding myth and tell the story of 1989 in this way. Do you think it's really possible to establish a community in this way?

I think, and this is how I understand Adler, that this community does not have to be based on myth. And even less so on national myths, Lech, Czech, and Rus, or - worst of all - on the mythology of blood and, again today, a clear community of genes, or on stories of social groups founded on the murder of a father, the conquest of enemy territory, the burning of their homes, and the rape of women. I am thinking of something like a community of fate. That we find ourselves in the same place due to various circumstances, that we care about the same things, that we like to communicate with each other. That we see the future in a similar way and wonder what unites us. A community of fate cannot exclude anyone. It teaches us that it could have happened that we would be in their place and they in ours.

The second thing that comes to mind is my visit to an exhibition dedicated to the Rolling Stones. There was a map of the world showing the places where the Stones had given concerts – from small towns to giant stadiums. At the end, it was calculated that 36 million people had seen the Stones' concerts during their career. That's actually the same as the population of Poland. What a cool country it would be if everyone went to see the Stones. I thought that maybe this community we're talking about is in music, in literature. Maybe that's why Ukrainians are reading so much now – they're looking for something that will unite them, something that isn't just related to current politics or immediate, traumatic experiences, but something that goes deeper.

That's a good idea. And now I also thought that this sense of community is a consequence of tenderness, don't you think? Because if you approach another person with the tenderness we were talking about a moment ago, you will see that it is moving, you will understand that we are in the same condition: mortal, weak, fragile, that climate or war threats are universal. A shared condition can also be the foundation of a community.

I think so, and this is where a category created by Gianni Vattimo comes in, when he wrote about apocalyptic optimism, i.e. that in the face of the apocalypse we are confronted with on a daily basis, we can maintain the deepest kind of optimism. It stems from what you are talking about, from the feeling that none of us is alone in this.

At first, I couldn't understand this phrase, but then I suddenly realized that it is not a gentle acceptance of destruction, but a concept that constantly tells us that it is worth acting. It reminds me of a beautiful parable about frogs, which in a sense guides my life, which is important when you're writing a book for eight years, for example, and you need to maintain some optimism in all of this. Two frogs fell into a pot of cream. Both knew that things did not look good. The first one says, "No, old girl, look at these vertical walls, we'll never get out of here, there's no chance, it's not worth the effort." And so she drowned. The second one said, "Yes, the situation is serious, but I have to defend myself, I'm not going to sink right away, what a shame to drown in cream." And so she paddled with her little legs, moving around until she finally churned the cream into butter and climbed out of the pot on top of the butter. She must have been an apocalyptic optimist.

## You wrote that what is imagined is the first stage of existence. Maybe we need more stories like this one about a brave frog for this to happen. Do you remember that great community-building Polish literature? Maybe we need stories like this?

Literature is a huge space for community. It's extraordinary, and I experience it very often. Last year, a group of Chinese people came to our Mountain of Literature Festival, and it turned out that they had read all my books. On a trip, I also met some Saudi women, or rather just their eyes, reading Drive Your Plow Over the Bones of the Dead, who told me how wonderful Janina Duszejko is. These are touching moments that make what is written in a certain language, in a certain culture, suddenly take on incredible energy, fly across borders without a care, and reach other people. I am proud and happy that this is happening.

#### **OLGA TOKARCZUK | top speaker IMPACT'25**

Books are definitely more important than authors. In a sense, we are a pretext for books to appear, because humanity communicates through its stories.

These are well-understood communities that are completely different from those founded in blood, such as national communities. Suddenly, it turns out that a e category such as a border makes no sense at all, because it is only a language barrier, and that can be overcome quite easily. The question is how to make stories cross borders, so that they are what carries us across them. Write with tenderness? And we return to the starting point.

It seems to me that this is the understanding of tenderness that says that if I write about myself and tell my story, then there are likely to be people elsewhere who perceive it in a similar way. We are not as different from each other as we think we are. If you try to describe your world in such a deep, sophisticated way, and I like this definition of literature, that it is the most sophisticated form of interpersonal communication, then it enters such hidden levels of the psyche where it is possible to establish a direct relationship with the psyche of another person. I think that this is what experiencing stories in literature is all about. When I think about literature, I think more about images and stories than about the structure and form of language.

I consider good literature, good cinema, and good theater to be things that change me for the better. A good book is one that leaves me feeling greater, more reflective, more focused, and simply a better person.

A sense of community is also a sense of belonging, a matter of our identity ceasing to be individual. In my beloved book of yours, The Poles, you show those places where things meet and are the same, even though they seem very different. Is this perhaps something we should do more often? Look for those places?

Yes, it could take the form of some kind of new global education or even meditation – realizing not only how much we have in common, but also how much we depend on and influence each other. Not only us, humans, but all inhabitants of the planet. For me, this has recently become a real obsession; I see these connections everywhere and sense the whole that is forming from them. I am trying to work on this intuition in my writing.

I really hope you succeed and that we will soon be reading it, and that it will be an important step in building our sense of community, which, I agree with you one hundred percent, is a prerequisite for our survival. This is no longer just some kind of aesthetic desire, but rather something we really cannot do without.

The emergence of such a community based on empathy, shared responsibility, and the pursuit of the common good is only just beginning to appear on the horizon. We are terribly afraid of pathos; Western culture turns us toward concreteness and pragmatism. Throughout my life, I have observed the change that neoliberalism has implemented in our psyche—everything must be "profitable," we must constantly "gain" something for ourselves, everything must "bring profit." But at the same time, the tragedy of individual human existence has not disappeared, and may even have deepened.  $\blacksquare$ 

## Daron Acemoglu – A Master of Uncomfortable Questions

His colleagues say that "he writes faster than others are able to understand the results of his research." Others joke that the sheer amount of work he does can only be explained by the existence of a twin brother. Daron Acemoglu, an economist who won the Nobel Prize in 2024, will be a speaker at Impact'26.

WRITTEN BY: Kasper Kalinowski n his academic work, he follows the principle of "swing for the fences," or "aim high." He spends hours analyzing historical sources and statistical data, looking for patterns that no one else can see. The pace of his work and his many interests make those who know him wonder if he ever rests.

After hours, he is just as eager to explore the history of religion and ancient civilizations as he is to study new technologies. In the latter case, he is a highly regarded columnist himself—being one of the most frequently cited economists in the world does not prevent him from regularly publishing essays in Project Syndicate.

One interview says a lot about his energy. At the end of a long conversation, Acemoglu seemed clearly tired. However, when asked about the Arab Spring, he perked up and gave a passionate, complex analysis of the situation. He asked the journalist not to cut this part of the meeting.

#### LET'S GO BACK A FEW HUNDRED YEARS

The economist's talent was recognized early on. Christopher Pissarides, his doctoral thesis supervisor (also a Nobel Prize winner), said it was "the best doctoral thesis he had ever evaluated — original, full of important ideas, and comprehensive, but without unnecessary content." Since then, Acemoglu has not slowed down. He began working at MIT at the age of 26 and has since supervised more than 60 doctoral students.

He collaborates daily with economists, historians, and political scientists, freely crossing boundaries between disciplines. His exceptionally broad horizons and interdisciplinary approach to economic issues are evidenced by his long--standing collaboration with James Robinson. Francis Fukuyama described this duo as "two of the world's leading experts on development." It all began in the 1990s, when both questioned the then-popular geographical explanations for economic success. In 1997, at a conference in Boston, listening to a presentation explaining Haiti's economic backwardness with data from the last 20 years, Acemoglu and Robinson considered it "madness." To explain the reasons, they proposed... going back several hundred

That is why it is so difficult to find a catchy

#### DARON ACEMOGLU | top speaker IMPACT'26

simplification of the subject matter of his work. Acemoglu analyzes inequality, unemployment, climate change, wage stagnation, game theory, the role of intellectual property, and innovation.

#### THE FACTORY OF THE FUTURE, AND IN IT...

When asked about the consequences of automation and artificial intelligence, he often recalls a bitter joke about the factory of the future, which consists of a machine, one man, and one dog. The man feeds the dog, and the dog makes sure that the man does not touch the machines.

In such a vision of a fully automated economy, productivity may increase, but, as Acemoglu warns, we have no guarantee that the owners of capital will share the profits.

The aforementioned columns published in Project Syndicate are, in fact, a regular cold shower for naive techno-enthusiasts. Acemoglu does not deny the potential of new technologies, of course, but in his opinion, their implementation too often leads to the impoverishment of certain social groups.

#### THREE REASONS FOR ITS UNIQUENESS

According to Tom Clark, a journalist for Prospect Magazine, there are at least three reasons why Acemoglu's research is more groundbreaking than it seems.

First, there is the aforementioned worldview, which remains at odds with popular "techno-optimism." His work challenges deeply rooted beliefs that shape public debate. It is about blind faith in the mythical "progress" which, even if it encounters obstacles along the way, will ultimately bring us all wealth. This is a thesis that recurs in all of the Nobel laureate's works. Acemoglu often emphasizes that technology and markets must not be treated as forces of nature.

The second innovative feature of Acemoglu's thinking is the belief that together we have many opportunities to change the existing world order. This challenges the assumption that the free market has a salvific role, that it is enough to give it complete freedom and then simply redistribute income. In his opinion, this is not enough. The Nobel laureate's latest, and perhaps most radical, proposal is that the state

DARON ACEMOGLU is the winner of the 2024 **Nobel Prize in Economics** and will be the fourth Nobel laureate to appear on the Impact! stage. Professor of Economics at the Massachusetts Institute of Technology (MIT), co-author (with James A. Robinson) of the bestseller "Why Nations Fail: The Origins of Power, Prosperity and Poverty" published in 2012 and together with Simon Johnson, co-author of "Power and Progress: Our Thousand-Year Struggle Over Technology and Prosperity" published in 2023.



should actively supervise the process of implementing innovation. He devoted another book to this topic "Power and Progress: A Thousand Years of Struggle for Technology and Prosperity," in which he convincingly argues (this time with Simon Johnson) that throughout most of history, the implementation of innovation has served only a narrow group.

All these interests were recognized by the Nobel Committee. When he, Simon Johnson, and James Robinson received the Nobel Prize in Economics for "research on how social institutions affect the prosperity of countries," the Committee pointed out: "Societies with weak rule of law and institutions that exploit their people do not generate growth or change for the better. The laureates' research helps us understand why this is so." The Committee added: "In societies characterized by legal uncertainty and institutions that exploit the population, there is no growth or change for the better. The laureates' work helps us understand why this is so."

## TWO MODELS FOR AGENTIC AI

"Agentic AI" represents a crossroads. While AI could be a good adviser to humans – furnishing us with useful, reliable, and relevant information in real time – autonomous AI agents are likely to usher in many foreseeable problems, while eroding many of the gains that the technology might have offered.

WRITTEN BY: Daron Acemoglu

Originally published in Project Syndicate on March 28, 2025

oston - AI "agents" are coming, whether we are ready or not. While there is much uncertainty about when AI models will be able to interact autonomously with digital platforms, other AI tools, and even humans, there can be little doubt that this development will be transformative – for better or worse. Yet despite all the commentary (and hype) around agentic AI, many big questions remain unaddressed, the biggest being which type of AI agent the tech industry is seeking to develop? D ifferent models will have vastly different implications. With an "AI as adviser" approach, AI agents would offer individually calibrated recommendations to human decision-makers, leaving humans always in the driver's seat. But with an "autonomous AI" model, agents will take the wheel on behalf of humans. That is a distinction with profound and far-reaching implications.

Humans make hundreds of decisions every day, some of which have major consequences for their careers, livelihoods, or happiness. Many of these decisions are based on imperfect or incomplete information, determined more by emotions, intuitions, instincts, or impulses. As David Hume famously put it, "Reason is and ought only to be the slave of the passions." Humans may make most decisions without systematic reasoning or due attention to the full implications, but as Hume recognized with the "ought" part of his statement, this isn't all bad. It is what makes us human. Passion reflects purpose, and it may also play a key role in how we cope with a complex world.

With AI advisers that provide customized, reliable, context-relevant, useful information, many important decisions can be improved, but human motives will remain dominant. But what's so bad about autonomous AIs making decisions on our behalf? Couldn't they improve decision-making even further, save time, and prevent errors?

There are several problems with this perspective. First, human agency is critical for human learning and flourishing. The very act of making decisions and contemplating outcomes – even if the inputs and advice come from nonhuman agents – affirms our own sense of agency and purpose. Much of what humans do is not about computation or collecting inputs to decide on an optimal course of action; rather, it is about discovery – an experience that will become increasingly rare if all decisions are delegated to an AI agent.

Moreover, if the tech industry mainly pursues autonomous AI agents, the likelihood of automating more human jobs will increase substantially. Yet if AI becomes primarily a means of accelerating automation, any hope of widely shared prosperity will be dashed.

Most importantly, there is a fundamental difference between AI agents acting on behalf of humans and humans acting for themselves. Many settings in which humans interact have both cooperative and conflictual elements. Consider

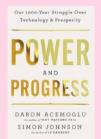
#### DARON ACEMOGLU | top speaker IMPACT'26



the case of one company providing an input to another. If this input is sufficiently valuable to the buyer, a trade between the two companies is mutually beneficial (and typically also benefits society).

But for there to be any exchange, the price of the input must be determined through an inherently conflictual process. The higher the price, the more the seller will benefit relative to the buyer. The outcome of such bargaining is often determined by a combination of norms (such as about fairness), institutions (such as contracts that will impose costs if violated), and market forces (such as whether the seller has the option of selling to somebody else). But imagine that the buyer has a reputation for being completely uncompromising – for refusing to accept anything but the lowest feasible price. If there are no other buyers, the seller may be forced to

DARON ACEMOGLU, SIMON JOHNSON "Power and Progress: Our Thousand-Year Struggle Over Technology and Prosperity" published in 2023 by PublicAffairs.



accept the low-ball offer.

Fortunately, in our day-to-day transactions, such uncompromising stances are rare, partly because it pays not to have a bad reputation and, more importantly, because most humans have neither the nerve nor the aspiration to act in such aggressive ways. But now imagine that the buyer has an autonomous AI agent that does not care about human niceties and possesses nonhuman steely nerves. The AI can be trained always to adopt this uncompromising stance, and the counterparty will have no hope of coaxing it toward a more mutually beneficial outcome. By contrast, in an AI-as-adviser world, the model might still recommend an uncompromising position, but the human would ultimately decide whether to go down that path.

In the near term, then, autonomous agentic AIs may usher in a more unequal world, where only some companies or individuals have access to highly capable, credibly hard-nosed AI models. But even if everyone eventually acquired the same tools, that would not be any better. Our entire society would be subjected to "war-of-attrition" games in which AI agents push every conflictual situation to the brink of breakdown. Such confrontations are inherently risky. As in a game of "chicken" (when two cars accelerate toward each other to see who will swerve away first), it is always possible that neither party will cave. When that happens, both drivers "win" – and both perish.

An AI that has been trained to win at "chicken" will never swerve. While AI could be a good adviser to humans – furnishing us with useful, reliable, and relevant information in real time – a world of autonomous AI agents is likely to usher in many new problems, while eroding many of the gains the technology might have offered.

## We Accept Fuzzy Mammoths

**ERIN MEYER** 

in conversation with z Michał Wąsowski, Money.pl

ILLUSTRATION Renata Miklewska

A company's personality should be defined by thinking about dilemmas and expressed in surprising images. Erin Meyer, a world-renowned expert on organizational culture, explains the three keys to managing employees, where entrepreneurs make mistakes, and why the "fuzzy mammoth" works better than "respect and honesty".

#### **ERIN MEYER**

an expert on organizational culture, professor at INSEAD, one of the world's leading international business schools. Author of "The Culture Map: Breaking Through the Invisible Boundaries of Global Business" and, together with Reed Hastings, co-author of "No Rules: Netflix and the Culture of Reinvention." Her work has been published in the Harvard Business Review, The New York Times, and Forbes.



Every company is talking about its culture, so are leaders. But what actually is organizational culture? How do you define it?

First, we must understand that every group has a personality. Just like individuals do. Therefore, a group can be cooperative, or strongly judgmental, have a way of wedging others' behavior based on a group personality. People nowadays always mix up individuals with cultures. Of course, just because a group has a personality doesn't mean that every individual who is part of the group has the same individual personality. It just means that we have now, as a group, started behaving a certain way and we judge others' behaviors based on our group personality.

But usually experts, leaders, CEOs, they talk about the organizational culture as something you should set and something that is happening from the top to bottom. And that's true to some extent. But from what you're saying, it can also happen despite your effort, and that it will happen nonetheless, right?

#### **ERIN MEYER** | top speaker at IMPACT BUCHAREST

Yes, because every group has a personality. And of course, the tone that the leader sets, and the personality that the leader articulates and models, has an impact on the way that people behave – and their group personality. And beyond that, if you manage to also fire and hire based on your desires as a group, that has a big impact on the personality of the group. But despite your best efforts, you may find that other influencers in the organization, people who have strong personalities, shape this personality. For some reasons it will just kind of evolve way past leadership. The personality of the group is not something that we can control. We can try to coax it and steer it and tweak it and garden it, but it happens on its own.

#### So what can a leader do to actually shape this personality?

First, let me just make a statement that's probably obvious, but crucial—which is that the personality of your company, or the personality of your team, is absolutely critical to success. People sometimes think, "Oh, culture, it's kind of soft and mushy. We focus on strategy." But , imagine you have a company where people are hardworking, ambitious, collaborative, and easy to work with. Or you have a company where people are unmotivated, cranky, difficult to work with, and lacking ambition. I mean, it's so fundamental to get the right personality for your company. And then the next question is: as a leader, you have a desire to have a certain type of culture, whatever that is, but how are you going to articulate it in a way that actually takes root and impacts your employees' behaviors?

#### That is THE question.

Yes. So, I'd like to suggest three practical things. The first one's a little more difficult. Most organizations define their organizational culture as a set of what I call absolute positives. And what I mean by that is that they use words like 'here we are all about integrity and respect and good communications. Right. But you know, everybody believes in integrity. It is impossible to come across a company where the leader says, 'here we are about corruption', right? Or 'here we are about disrespect'. So, when you say 'we're all about respect' it gives a nice feel, but it doesn't really impact the decision-making of your

employees and that of your well-meaning employees. And that's critical because if you can speak about your culture in a way that shapes their decision-making, then that will lead to the growth of the culture in the organization.

#### What should leaders do instead?

What you want to do instead is define your culture thinking about dilemmas. For example: in our company leaders share huge amounts of information with the employees, even if it makes the employees distracted and upset. It's a real one. An example of that is Meta. It's super interesting because they're really into organizational transparency. And a couple of years ago, when they did these huge layoffs, Mark Zuckerberg told everybody months in advance: 'on this date, we're going to lay off this number of people in this department in this state'. That is transparency. Of course, it created a huge amount of chaos. People were upset. They left the organization. But I think you can't fault the guy. He says we're about transparency and he's transparent. And that's what you want to do: behave according to your declarations. I don't mean you want to say you're about transparency, it can be anything else, like stability. Instead of firing someone, you'll tell them: you're a good and kind person, doing your best, you can stay, because we're a family. Or in other companies we only keep high-performing people, because we want excellence. You can easily argue for either, but they're two totally different personalities. And the dilemma is: do I as a manager fire people who are well-meaning but are not high performing? That's the first point you need to think about: what are the tough dilemmas that are impacting your well-meaning employees on an ongoing basis. What are the ones that are critical for the kind of culture you want to form and say, in this organization, when we come across this kind of dilemma, we turn heavy right.

And then whatever it is, your words impact the decision making. Of course, you have to model it. You must articulate it. But then your words impact the employee's behavior, which forms the culture. So, integrity, respect, and communication doesn't help us very much. What helps

LIKE INDIVIDUALS, EVERY GROUP HAS A PERSONALITY — COOPERATIVE, STRONGLY JUDGEMENTAL, OR ANY OTHER.

us in forming the culture is thinking about where we've got the tough dilemmas and then saying here you go right or here you go left.

So, an example of that might be Reed Hasting, founder of Netflix, right? He has this 'no brilliant jerks' rule. Netflix does not accept people who are high-performing, but also not kind, cooperative – jerks.

Exactly. There's a clear dilemma. And in the tech field, it's a huge dilemma. What to do with someone who has rare technical skills and ability, but he's kind of a jerk, difficult to work with. Do I keep him? He's so great, but he's so obnoxious – so we fire him.

#### Okay, so what is the second thing that leaders can do?

The second point is visualization. If I give you two words today: pineapple and justice, and then run into you in a year and ask you: do you remember those two words? You'll probably say: yeah, pineapple was one, but the second one... No. That leads us to something that's called the picture superiority effect, backed up by a lot of research. It proves that if you can manage to speak in pictures instead of in theories or in principles, people are much more likely to remember what you're saying. It's important because some of the most successful organizational cultures of our time have managed to define their organizational culture thinking in pictures, speaking in pictures instead of in principles. A couple of simple examples. Amazon has something they call the two-pizza rule - the number of people in the meeting can't be bigger than what two pizzas can feed. You can instantly see it, right? Amazon had a problem: everyone was wasting their time in huge meetings. They could have said: 'our culture is all about small meetings', but nobody would have remembered it. Instead, they thought, what's a picture that we can put in people's minds to make them remember the culture, the pizza? We all will remember pizza. So every time we go into a meeting, we think of a pizza. It's lodged in their mind. Another one is a company called Harry's, producer of shaving products. It's 'we embrace fuzzy mammoths'. So, a big fuzzy elephant. And that's the image that they use to encourage people to be direct and bold in their feedback, but also warm and cuddly at the same time. Instead of saying "here we give lots and lots of direct feedback and we try to also be kind," they say: we embrace the fuzzy mammoths. So as you're thinking about how to articulate that culture, first the dilemmas, and secondly, please focus on not principles, but how can we take it to the next level of the image? If you can do it, you're golden.

#### And the third point?

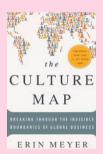
The third thing is actually something that you already brought up, which is that if you can be surprising in the way that you articulate your culture, chemicals go off in their brain, which— —makes it lodge the image in your brain or lodge the topic in the brain. As long as you're not surprising, especially if your culture is all the words that everybody else is, no one will remember it. But if you can surprise people by being a little bit edgy or a little bit provocative, then people are much more likely to remember the culture and then act on it. Like no brilliant jerks, it's a little bit provocative. So, if you can manage to articulate your culture in a way that causes surprise, people are much more likely to remember it. Another example: Airbnb has the elephant dead fish and vomit.

#### That sounds curious.

Yeah. So, the elephant is for the elephant in the room. They had an issue in the company: everyone was acting friendly, like it's fine, but there were all sorts of bad stuff going around, bad relationships. People were angry. No one talked about it. So, they said: from now on here, we always voice the elephants. Visual, but not so surprising. But the second one is. The dead fish: the things that have been causing bad smells forever and that no one talks about. And the vomit of course is all the stuff that's making us sick that we need to get out of our stomach. If you can be surprising and have an image, then you're likely to remember it forever. Those are free things that if you can get right: the dilemmas, the image, and the surprise, you are abo-



"No Rules: Netflix and the Culture of Reinvention", 2020



"The Culture Map: Breaking Through the Invisible Boundaries of Global Business", 2014

THE MOST SUCCESSFUL ORGANIZATIONAL CULTURES OF OUR TIME HAVE MANAGED TO DEFINE THEIR THINKING IN PICTURES, SPEAKING IN PICTURES INSTEAD OF IN PRINCIPLES.

ve 99 percent of organizations in developing a culture that impacts your employees' behaviors.

#### How can a leader or a team tell that the culture has gone sideways from what it was intended to be?

I think that in most companies, at least at the beginning, you can feel that it's not going the right way. People know, leaders know. They know it's not the personality they want.

#### If they know, how can a company and a leader get it back on track?

Obviously, you might have to make some dramatic changes. Because if you've got a personality of the group that's strong, it's hard to create a new personality. Especially if part of your current personality is resistance to change. Then you got to make some tough decisions. You also must be bold and say that we hire and fire by the organizational culture. We need to be clear with people, especially on the parts that people might not agree with. But the second thing is that you're also going to have to weed your garden. I like to think with a culture-driven organization that the CEO is the chief gardener. It's a great image and analogy for organizational culture. You can be a gardener, and you can have intentions, but things don't grow the way you had expected because other things happen. You didn't get the rain you wanted, or these unexpected bugs showed up and ate your flowers. You have some control, but you don't have total control.

#### How to maintain the optimal control then?

One thing I found is that culture-driven leaders spend a lot of time talking with lots of people throughout the organization. If we go back to Reed Hastings, he was spending 50% of his time as a leader having one-on-one meetings. Not with the people underneath him, but with the people underneath them and the people underneath them. And those were not meetings where he helped them make decisions or told them what to do. He just would listen to them. And that's part of being a good gardener. It's also how you find out if the culture is right. And some people will have to be weeded out.

#### MICHAŁ WĄSOWSKI

an expert in business strategies, finance, and technology. Currently Deputy Editor-in-Chief at Money.pl (part of WP Group). Previously, among others, a long-time journalist and publisher at Business Insider Polska and natemat.pl as well as Deputy Editor-in-Chief of INNPoland. He regularly conducts interviews with leaders of global technology and financial companies.

## To stick with this metaphor: how can you keep the garden growing in the right way when the company is scaling quickly? The bigger the company gets, the less time leaders have for one-on-one meetings and stuff like that.

I do believe up until about 100 employees, you don't actually need to articulate the organizational culture. You can, but it's not necessary. When You have a really small garden, the gardener is enough - he can be modeling the behaviors by talking with each person. . Usually you know their names, their values, you hired them. But after about a hundred people you must really start thinking about how to articulate your culture to make the plants grow when you're not there. That's where the whole dilemma thing comes in. You don't work organically anymore. You must really start thinking: what are the dilemmas that we're going to articulate to form the decision making throughout the organization so that the flowers grow in a certain way?

#### And then form the surprising picture?

Tak. Jako CEO, w miarę jak firma rośnie, musisz również co jakiś czas zejść niżej i sprawdzić "temperaturę gleby", upewnić się, czy na każdym poziomie organizacji dylematy są właściwie rozumiane i przekładane na decyzje. Oczywiście każdy menedżer może kształtować nieco inną kulturę w swoim dziale, odpowiadając za swój fragment ogrodu. Im większa firma, tym bardziej kultura zaczyna się rozmywać. Dlatego w pewnym momencie musisz odejść od bycia jedynie wzorem i przejść do wykorzystywania dylematów i stwarzania całego modelu.

#### And then form the surprising picture?

When you get to 20 thousand people, you've got an issue that you don't have when you're at 2 thousand. It just gets more difficult. You may find different cultures in different parts of the organization. But I still stick to the same things: the dilemmas driving the images, the modeling of leaders and then the head people going in and testing the soil. Even if it gets more and more diluted. But in the end, culture and strategy need to be operating hand in hand. And throughout the organization people must recognize it's not about them, it's about the culture.

#### **ERIN MEYER** | top speaker at IMPACT BUCHAREST

## WE ARE LIVING IN TIMES OF UPHEAVAL

We are witnessing a global rebellion of the people against the elites. This is not a revolution of interests, but of dignity.

Sławomir Sierakowski: In times of chaos, the collapse of ideas that were supposed to be permanent—times of war—people often turn to art. Sometimes for naively expected prophetic visions or information that journalism or sociology cannot provide us with. I often read your books as politically engaged. How do you see this world? What do you expect? You are a writer, you have your linguistic and geographical homeland, which you may lose...

Szczepan Twardoch: My literature is not engaged in the sense in which we have come to understand the term. I never write "about" something, because that is not what a novel is for. I don't believe excessively in the value or effectiveness of a socially engaged novel per se. I like to use the metaphor that a socially engaged novel is like hammering a nail with a glass. You won't hammer the nail, and the glass will break. A novel should serve itself. A novel is the goal of a novel. On the other hand, I myself am involved in certain issues that are important to me, so they naturally appear in my novels. If someone else also feels strongly about these issues and wants to use my novel for themselves or for others for the purpose of this engagement, then of course I have no methods or means to prevent that. People can do whatever they want with my novel. They can misunderstand it, they can understand it the way I do, they can find SZCZEPAN TWARDOCH

in conversation with Sławomir Sierakowski some other interesting interpretation, or they can find a very stupid interpretation.

However, you take up topics that have a social impact. From Nulla and Chołód, we learn about Ukraine and Russia at a given moment in time. Earlier, in The King of Warsaw and Królestwo, you reconstructed Jewish Warsaw, probably for the first time in Polish culture on a mass scale, also thanks to the TV series. So how do you see the world today? What do you expect?

This is a question that would require either a great novel, at least on a par with Doctor Faustus, or a lengthy essay to answer. It is difficult to answer, but I will try to summarize the main points. First of all, I am convinced that the "crystal palace" has been shattered. It is gone and will not return. There is no going back to the status quo ante bellum. We are witnessing a global rebellion of the people against the elites. Right-wing populism now plays a similar social role to that played by mass left-wing movements in the second half of the 19th century. Of course, we do not know where all this will lead, because this populist movement, for example in the style of MAGA (Make America Great Again - ed.), may well be hijacked by people like Elon Musk. Then, by its very nature, it will lose its popular, rebellious dimension. However, looking at Steve Bannon's victory over Elon

SZCZEPAN TWARDOCH | top speaker IMPACT'26



#### SZCZEPAN TWARDOCH

author of several novels and short story collections, including: Morfina (2012), Drach (2014), The King of Warsaw (2016), Chłod (2022), Null (2025), as well as monodramas, plays, opera librettos, and screenplays. His books have sold over a million copies. He has received numerous awards, including Polityka's Passport, the Kościelski Award, the Brücke Berlin-Preis, and the Nike Readers' Award. The rights to his novels have been sold to more than a dozen countries. In 2024, he was awarded the Stand with Ukraine prize for his work on behalf of the Ukrainian army. Szczepan Twardoch will be a speaker at Impact'26. SZCZEPAN TWARDOCH | speaker at IMPACT'26 **TOP SPEAKER IMPACT'26** 

TODAY, HOLLYWOOD IS MADE UP OF DYNASTIES. MOST STARS AND DIRECTORS COME FROM ACTING, DIRECTING, AND PRODUCING FAMILIES THAT REPLICATE THEMSELVES. PEOPLE CLEARLY SEE THAT THE SAME IS TRUE OF UNIVERSITY AND JOURNALISTIC ELITES – THE PATH TO THEM IS CLOSED.

PHOTO: JACEK POREBA

Musk, which came as a surprise to me, I can see that the element of popular rebellion has its power. That this takeover has not yet taken place. I don't want to use historical analogies here – we all know their value. But we are living in times of a smoldering third world war. Perhaps the war in Ukraine is some kind of historical equivalent of the Spanish Civil War, after which something big will come, or perhaps not. Historical analogies fail, they make understanding difficult, because the world is completely different from what it was 80-90 years ago. They offer simple solutions to complex equations and complex systems.

Despite all our doubts about analogies, we cannot do without them. You said that populist movements today fulfill a similar function to the mass left-wing movements of the past. Why is it that back then these mass movements had a romantic character, an ethos, a code of strong values, authenticity, the idea of sacrifice, and today right-wing populism is largely cynical? Steve Bannon is an intellectual, he belongs to the elite, and at the same time he is essentially a fraud, and even says so himself.

You know better than I do that mass left-wing movements were led by intellectuals—often wealthy ones, living off their capital. You are talking about an element, let's call it Promethean, which you do not see in today's right-wing populism. And perhaps that is the case. We do not yet understand right-wing populism well, because perhaps it is still in its infancy. If anyone is to blame for this, in my opinion, it is the liberal-leftist elites. David Graeber writes about this wonderfully in the conclusion to Bullshit Jobs, where he attempts to answer the question of why people from the lower class in America tend to hate liberal intellectuals, journalists, and actors more than big capitalists. According to him, this is understandable and results from the fact that people from the working class can imagine social advancement to the money elite - for themselves or their children. However, they clearly see that advancement to the intellectual and capital elites is practically impossible, because these elites replicate themselves and do not need co-optation. Graeber uses a wonderful example - Hollywood in the first

SZCZEPAN TWARDOCH "Null" - Pub. Mar-

ginesy



half of the 20th century was based on the myth of social advancement. Everyone could identify with a star because they came from humble beginnings and entered a life full of aristocratic fleur. Today, however, Hollywood is made up of dynasties. Most stars and directors come from families of actors, directors, and producers who replicate themselves. People clearly see that the same is true of the university and journalistic elites – the path to them is closed. This gives rise to resentment.

But let's get to what distinguishes those movements from the current ones, i.e., from the beginning of right-wing populism in the late 1990s. Right-wing populism is characterized by people voting for parties that harm their own interests. The poor vote for Trump, and Trump then lowers taxes for the richest. This is a kind of hypocrisy, or at least a contradiction.

This is a revolution not of interest, but of dignity. There is a consensus among the liberal--left elite that the only social group that can be spoken of in offensive, disparaging terms is the white underclass. This is true in America as well as in Poland. As a member of the left--liberal elite, you cannot, quite rightly, speak contemptuously about the black residents of Philadelphia, but you can speak about the residents of the Rust Belt or Radom in a language that would have been used by the 17th-century nobility when talking about their peasantry. And if you talk about someone in such language, you can expect no other reaction than that we will vote for absolutely anyone who gives us a sense of dignity, because at that moment, a sense of dignity and humanity turns out to be a need more important than strictly material needs.

Do you extend this geographically as well? Does this mean that, as part of this revolution of dignity, people who are economically disadvantaged, who feel despised by the elites or who do not find themselves in the mainstream, are also pro-Russian? I am thinking of Germany, for example.

In Germany, definitely – if we are talking about the AfD, Sarah Wagenknecht, or even the old guard of Die Linke. There, it is very geographical, because the Ossis have a very deep resentment towards the West.

## I mean a simpler mechanism. If the elites in Western countries resist Russia, could someone who wants to take revenge on these elites start to be pro-Russian because of this?

Yes. Anything that is perceived by the subclass as being imposed by the elites will meet with resistance. Coming back to Poland - this explains the popularity of anti-vaccination theories or the ongoing happening led by Grzegorz Braun. It is because it is done out of spite. The more actresses stand next to Kamala Harris or Hillary Clinton, or in our case, next to Rafał Trzaskowski, the more spite it arouses. On the liberal side, on the other hand, the level of self-admiration is so great that they do not understand how anyone could vote to spite Maja Ostaszewska. How could anyone vote to spite people who see themselves as noble and intelligent? Not always, but why do issues such as restricting car traffic in cities arouse such aversion? Because it comes from a position of superiority: "Now I will come to you, little people, and explain to you what is right and good, and you will be grateful to me for it." No adult likes to be lectured like a child and reacts with resistance. The basic element here is the idea that "they" will drive around in their new Mercedes and Teslas, while I can't in my old Opel.

#### How do you think this will end?

I don't know how it will end. Clearly, however, we are living in times of some kind of turning point, and in history, turning points always lead to the establishment of a new order. I have no idea what this new order will be. I don't believe in historical determinism for various reasons.

### Do you think the elites will unlearn discrimination or start thinking in terms that are not solely conducive to their interests?

They will certainly not unlearn it. The elites, whether in Poland or America, are absolutely incapable of self-reflection and change. They can be unlearned, but only through violence. Is Russia's aggressive policy also a form of elite revolution? A revolution of dignity?

Russia can ruthlessly exploit this widespread or increasingly widespread sentiment or resentment in the West for its own purposes. However, I see this war more in a traditional, geopolitical dimension.

#### SŁAWOMIR SIERAKOWSKI

Polish sociologist and political analyst, Senior Fellow at the German Council on Foreign Relations and Head of the Program Board Impact CEE in Poznań and Bucharest. Co-founder of Krytyka Polityczna, President of the Stanisław Brzozowski Association. He publishes in many titles, in 2013 he became a contributing author to The New York Times, and in 2015 a columnist for Project Syndicate, where he has heen an associate editor since 2024.

## And what do you predict? Does Russia have a chance in this global game? Do you have any inner strings that tell you something?

My inner voice tells me, for reasons I cannot explain, that there will be no full-scale kinetic confrontation between Russia and NATO. It also tells me that the war in Ukraine will continue. Its intensity may decrease, but it will smolder on. The terrible thought is that the continuation of this war is, in a sense, in the interests of the West and NATO, because Russia, busy in Donbas, near Kharkiv or near Kherson, will not be able to act in Latvia or Estonia. I believe this will lead to some kind of new Cold War.

## What is possible in Russia in the future? I distinguish between three thresholds: the democratization of Russia, the liberalization of Russia, or at least the de-imperialization of Russia. I do not believe that Russia will become a democratic state in the foreseeable future, nor that its society will become liberal. But can Russia be weaned off imperialism?

I completely agree with you. The goal that can be fought for, in discussions with the new generation or with the opposition, is for Russia to get rid of its imperial instincts. We can and should count on some kind of lasting smut. Russia emerged from the 17th-century smut over a period of several decades, and there is a gap in Russian imperialism between Ivan the Terrible and Peter the Great. The next smut began with the defeat at Tsushima and lasted until the 1920s. At that time, Russia was a colossus with feet of clay. The last Russian smuta of the 1980s and 1990s, unfortunately, was very short-lived. A smuta will come to Russia, and the West's actions should not be aimed at ensuring an independent press and free elections there, since the Russians do not want this, but simply at ensuring that we do not have to send our own children to the trenches.

#### SZCZEPAN TWARDOCH | Top speaker IMPACT'26

## Poland – Ukraine – a Future in Reconstruction

If we want to maintain the growth rate of the Polish economy and secure the future for our children, we must bring about a just peace in Ukraine. Why? Because it is the Ukrainians who will help us in our further development, says Jakub Karnowski, Polish economist and financier, president of the Ukrainian Kredobank.

**JAKUB KARNOWSKI** 

in conversation with Jerzy Wójcik

Jerzy Wójcik: Oksana Zabuzhko published a moving post after another night of attacks on Kyiv. In it, she noted that "enemies" from Europe and the West are already tired of seeing Russian drones and missiles striking Ukrainian homes and photos of victims. She suggests that Ukraine should be presented from a different perspective. "Glory and honor to the Ukrainian electricians who restored the trolleybus lines from 8:00 p.m. to 9:00 p.m. after this attack, to the Ukrainian waterworks, railway, and café workers, to the garbage collectors — to all those who, in the fourth year of the war, without cameras and applause, are performing miracles," she writes. You took over as president of Kredobank during the war. How do you see yourself in this story?

**Jakub Karnowski:** Since the beginning of the full-scale aggression, I have spent nearly a year in Kyiv and more than half a year in Lviv. I remember a situation in January 2024 in Kyiv: just an hour after the attack on the Lokomotiv Kyiv sports club, new windows were already being installed at the site of the destruction. For me, this is the essence of the answer to the question of reconstruction: it is already underway.

For a year now, I have been the president of the only Polish bank operating in Ukraine. Kredobank, as an entity with Polish state capital, plays a key role in maintaining Ukraine's stability. Funds from the West enable defense, but daily economic effort is crucial. Banks grant loans, collect deposits, and invest, while employ-

ees repair damaged infrastructure. All this proves that Ukraine's economy is functioning.

The phases of the war and their impact on the economy have changed. Full-scale reconstruction will begin once Ukraine has security guarantees. After 1990, Poland experienced a golden age and record economic growth. Ukrainians are also waiting for this. I believe that Ukraine has been betrayed because the West failed to deliver on its guarantees in exchange for giving up its nuclear weapons. It is time for these guarantees to be fulfilled, at least in relation to the territories controlled by the government in Kyiv, without recognizing the annexation of Crimea and other occupied territories.

#### Where do Ukrainians draw their strength and perseverance from? It is difficult to imagine another society that would rise up and fight day after day for years.

To be honest, I do not believe in extraordinary national characteristics. At the Department of International Comparative Studies, where I have been working for 30 years, we analyze the reasons for the development or stagnation of countries, such as North and South Korea—the same people, but developing differently because of different institutions and systems. In Ukraine today, there is a genuine struggle between good and evil, which Poles know very well from their own history.

The Russians are extremely effective in propaganda and manipulation. We cannot underestimate them. Although economically weaker than the West, they make up for it with other methods. This is a genuine struggle between democratic countries, built on Judeo-Christian civilization, and the "Russian world." Before 1939, Ukraine was roughly divided into a part belonging to the Republic of Poland and a part belonging to the Soviet Union. Ukrainians were not happy with the policies of the Second Polish Republic, but on the other side they had the Holodomor. This is how I see it: we know who Putin is and what he has done. On the other hand, Ukrainians are coping with this. Of course,



there are also people in Ukraine who engage in corruption or treason – as in every nation. However, it is a great nation whose existence is threatened, just as ours was in 1939 or 1944...

We found ourselves in a situation where a neighboring country was in a terrible position, and we behaved as we should have. Russia, despite its weak economy, appears to be a giant evil, a space and a mentality, a system that does not care about human costs. The fact that the Ukrainian state continues to function day after day is absolutely remarkable. You worked on the reform of the Ukrainian railways. We know how complicated railway reforms are. I have seen many reports that the Ukrainian railways have become the safest means of transport and are more punctual than the German railways.

Polish railways are currently more punctual than German ones. Paradoxically, as a liberal and supporter of the market economy, I note that the lack of reform of the Ukrainian railways (separating infrastructure from carriers, as in PKP or the EU) has proved to be an advantage in wartime. This centralized structure, similar to PKP in 1990, was crucial.

Centralization, with the right leadership, proved crucial when Russia attacked. This was the case in Ukraine. President Zelenskyy turned out to be a hero, although many had doubts about this. The centralized structure helped. The railway is also not an easy target for attacks; it is difficult to hit something that is moving. The Ukrainians

have shown remarkable ability to act. Both President Zelenskyy and his entourage, as well as the management of Ukrzaliznytsia, passed the test. In our historical debates, we talk about what happened 85 years ago in Poland. The Polish government failed the test in 1939, fleeing to Romania despite its grandiose announcements. These were the same people who pursued a policy toward the Ukrainian minority in Poland, the largest minority until 1939, which was also disadvantageous for Poland and Poles.

You often emphasize that the reconstruction of Ukraine is a huge opportunity for Polish companies. Despite this, Poland has less than 1% share in foreign investments in Ukraine. Scandinavian countries, the Netherlands, Turkey, and the US have much larger shares. Why are Polish companies still waiting?

There are about 2,000 companies with Polish capital operating in Ukraine. We are a significant exporter. Polish companies are present in Ukraine, usually those established before 2014 or 2022. The agri-food, IT, and logistics industries dominate, with Poland playing a key role.

The war is ongoing. Poland is developing rapidly, but it still does not have as much capital resources as the Scandinavians. Polish entrepreneurs prefer to invest at home, where the risk is lower. This is natural. Potential investors are waiting for full-scale reconstruction and funds from international institutions such as the World Bank. It is a "wait and see" attitude. Investing means buying risk, and high risk requires a high rate of return, which is not visible today. Large funds, such as the American Rockbridge, have withdrawn from reconstruction plans. State funds, Polish, French, and German, are trying to fill the gap. State-owned companies have different incentives to invest, often political ones.

It is impossible to ignore the current situation. For example, in the last days of July 2025, we are seeing an increase in attacks, including the recent attack on Lviv. The mood is worse and the outlook is bleak. Fatigue is growing, although Ukrainians have stopped panicking. Daily attacks lasting many hours continue, people are working and, unfortunately, often dying. Our per-

ception, as well as the perception of Ukrainians living in Ukraine, has changed. I believe that reconstruction will be a very good investment opportunity for Polish companies – large, state-owned and slightly smaller ones, as well as some large private ones. However, politicians, who must ensure security, play a key role. I would not build a glass factory in Ukraine, even though glass is very much needed for reconstruction, if there is a risk that it will be destroyed by Russian missiles. The Russians want to scare off capital so that Ukraine remains heavily dependent on external support. It is politicians who must ensure what was to be guaranteed in the Budapest Memorandum.

he German government has prepared a comprehensive strategy for the reconstruction of Ukraine. Meanwhile, the Polish state lacks a coherent strategic approach. Polish policy seems reactive and short-term, based on opinion polls rather than a deeper understanding of the state's interests.

There are two levels: things that depend on us and things that do not. The broadly understood security level is geopolitics, where we must be reactive to the proposals of the United States, because it is the biggest player. Undoubtedly, we are bearing the consequences of Donald Trump's election as US president. Full-scale reconstruction of Ukraine will not happen without ending the war and establishing conditions for peace. Russia is also suffering serious economic consequences, and the history of wars of attrition shows that success depends on economic resilience and resources.

The investment climate is co-created by politicians. When talking about financial and security guarantees, entrepreneurs are guided by signals from the authorities. What can be done to change this situation? This is the role of leadership. Politicians, if they want to be true leaders, must show courage. Those who acted after February 24, 2022, had such courage. The PiS government behaved appropriately in the first year of the war, which reflected the phenomenal support of Poles for Ukrainians. The situation changed dramatically in 2023 after Morawiecki's government recklessly allowed Ukrainian

grain to enter Poland unchecked. At the same time, the sale of Polish visas in Africa and Asia contributed to a rise in anti-immigration sentiment, and to some extent also anti-Ukrainian sentiment.

The Polish economy needs Ukrainian workers. If the approximately one million Ukrainians working in Poland were to leave, we would have serious problems with a shortage of labor and the future of the pension system. Poland will lose its economic success if it runs out of workers. Even for nationalist circles, it is better to have Ukrainians as workers, as they are culturally closest to us, than people from culturally distant countries. Ukrainians integrate with Poland and Poles in a phenomenal way.

I see it this way: leadership plays a very important role. I also wonder why the Polish government so unequivocally declares that in the event of a peacekeeping mission, Polish soldiers will not defend Lviv, while Polish soldiers defended Afghanistan, Iraq, Kosovo, and Bosnia and Herzegovina at the behest of the Americans, and some died there. I do not understand why it would not be in our own interest to defend Lviv in Ukraine from Russia.

The Russians have always been masters of propaganda, often very sophisticated propaganda. The fact that someone denies the Holocaust in Poland, where millions of Polish Jews were murdered, and gains support for doing so, is appalling. To me, it is obvious that this is a product of Russian propaganda, perhaps a cynical move, but one caused by factors created by the Russians. I am glad that we are talking about Volhynia and that exhumations are taking place, and that the descendants of the victims have an obvious right to burial. However, we must be aware that many such tragedies have occurred in our world. We have just commemorated the 30th anniversary of the Srebrenica massacre. The fact that we are talking about Volhynia more today than we used to is very beneficial to the Russians, because it stirs up emotions in a way that can be used against us. In the world of social media, we must be aware of such mechanisms.

I can add from my own experience: I have no family memories related to the former Eastern Borderlands. I come from the Dąbrowa Basin and Warsaw. I try to approach this analytically. Ukrainians are also very diverse – there are Ukrainians from Kyiv, Volhynia, and the Lviv region. Many Ukrainians I have spoken to, especially those from outside Lviv and its surroundings, have no knowledge of Volhynia, they were never taught about it. I myself, born in 1974, did not learn in primary school about the Soviet aggression against Poland on September

IF ABOUT A MILLION UKRAINIANS WORKING IN POLAND LEFT, WE WOULD HAVE SERIOUS PROBLEMS WITH A SHORTAGE OF LABOR AND THE FUTURE OF THE PENSION SYSTEM.

17 or about the Polish defenders of Lviv in 1920. In Lviv, we have a monument to the Lviv Eaglets, which should be appreciated. Ukrainians often do not know how Poles associated certain events because they never encountered them. This is the result of decades of Soviet, i.e., Moscow, rule and the erasure of certain elements from our historical memory.

I have similar observations. I spoke with Lithuanian politicians and activists who were surprised that Poles treat them as a former colony. They claim that Lithuanians prefer to avoid the subject of Poland because the topic of historical conflicts constantly comes up. History has not been closed, it is constantly being fueled, also by Russian propaganda and manipulation. Ukrainians have a different attitude. I have no ancestors in the former Eastern Borderlands. I have only been to Lithuania, to Vilnius, once in my life as the president of PKP. I felt as if I were responsible for the real and alleged faults of Poles in their relations with Lithuanians. I also noticed that there are few traces of Polishness in Vilnius and that Lithuanians ignore them. I say this with the caveat that this is my very subjective experience from one visit.

In Ukraine, on the other hand, in Lviv, they are proud of the city's Polishness. Wherever there is an old inscription in Polish, they carefully restore it, even in wartime. In the Lychakiv Cemetery, there is a monument to the children who fought with the Ukrainians for Lviv for Poland. Walking around Lviv, you often hear phrases such as "this Austrian house" or "this Polish house" – this is completely normal.

When I try to speak Ukrainian, but it comes out in Russian because I still know it from school, they sometimes ask me to stop speaking Russian and start speaking Polish. This is quite instructive. On the one hand, we have Volhynia, which we are currently discussing, and on the other hand, I have never encountered any indication in Lviv that being Polish is a problem. That has been my experience.

In Kiev, I experienced many gestures of gratitude and sympathy towards Poland. Two large countries – one in the European Union, the other with enormous cultural



#### JAKUB KARNOWSKI Polish economist. financier, and manager, president of the board of Polskie Koleje Państwowe S.A. (Polish State Railways) from 2012 to 2015. President of Kredobank since March 1, 2025. Lecturer at the Warsaw School of Economics. author of publications on macroeconomics and finance. Member of the board of the Economic Freedom Foundation, CFA Society of Ukraine (CFA Institute), American Economic Association, and the Polish Economists' Association. Jakub Karnowski will be a speaker at Impact Bucharest.

#### JERZY WÓJCIK Long-time Deputy Editor-in-Chief of Gazeta Wyborcza, its publisher from 2016 to 2021.

Wyborcza, its publisher from 2016 to 2021.
Currently associated with the Media Liberation Fund think tank. Initiator of the Ukrainian-Polish magazine sestry.eu.

and strategic potential and a strong army – are unique neighbors in Europe. There are no two countries with a comparable drive for life. What can be done to prevent this potential from turning into resentment, historical reckoning, or susceptibility to Russian manipulation? Ukraine needs a just peace. Such a peace will be extremely beneficial for Poland and Polish entrepreneurs, and thus for all Poles. Poland may soon lose the drivers of growth that have fueled its economic catch-up over the last 30 years, namely the prospect of joining the European Union and structural funds, which have contributed to our enormous success.

If we want to maintain the pace of growth and secure the future for our children, we must bring about a just peace in Ukraine. Why? Because Ukrainians will help us to continue to develop. Some of them already work in Poland and will continue to do so. They will also be the closest to us culturally of all the foreigners who have to work in Poland, because without them, the Polish economy will not grow.

Polish companies must invest in Ukraine to pursue interests similar to those pursued by Western companies, such as German companies, when Poland joined the European Union. Polish banks and companies can rebuild Ukraine using funds from international institutions operating in post-war conditions. The World Bank and the European Bank for Reconstruction and Development, which have supported Poland's development in the past, can play a similar role. We must take control of this money in a positive sense and earn money from the reconstruction of Ukraine. These are well-known mechanisms, but the basic condition is peace in Ukraine, which means that Russian rockets must stop killing Ukrainian children and women, as happened in Poland, for example, in September 1939. The US has the greatest influence on this. We have very good leadership in Poland. I am thinking mainly of Prime Minister Tusk and Radosław Sikorski. Sikorski is the ideal foreign minister. I hope that US President Donald Trump will finally realize who the real enemy is and will act in favor of those who are actively fighting that enemy. At the turn of July and August, he seems to be beginning to understand who Putin is. ■



The Ignis mission has increased interest in space in Poland. Domestic companies can also benefit from this. What does the landscape of the Polish sector look like and what role does the Polish Space Agency play in its development? Marta Ewa Wachowicz.

Marta Ewa Wachowicz

in conversation with Marcin Haber, Wirtualna Polska

#### Marcin Haber, Wirtualna Polska: Why does Poland still not have a National Space Program? What does its absence mean for the sector in practice? Marta Ewa Wachowicz, president of the Polish Space Agency:

These are all interconnected. Of course, we can discuss the mistakes of the last dozen or so years. I have been in the sector for a long time and have my own thoughts on the matter. However, we are at a great moment for the development of the industry in Poland, so we need to start a broad dialogue on space.

#### There will be no better moment than right after Sławosz Uznański-Wiśniewski's mission.

Yes, Sławosz made it possible for us. It is no longer just about what will happen after the mission, but about involving him on an intellectual level in the discussion about the sector. Let's not reduce the Ignis mission to tomato soup and dumplings. Of course, I understand why these topics are being discussed and what Sławosz was doing on breakfast television. This is also important because it arouses public curiosity and should not be underestimated or stigmatized. However, now is the perfect moment to include him in the narrative about what Poland should be like. Let's talk about what kind of country we want to be, with what kind of space industry, with what aspirations and ambitions.

#### What kind of country do you think we want to be? What ambitions should we have?

In my opinion, at the moment, there is the will of the government, public consent, and the right moment for the development of technology and Polish entities related to the sector for us to occupy a niche in Europe. We should aspire to be a leader in broadly understood space security. This satisfies our ambitions and connects most of the strategic threads. Due to our location and geopolitics, we are a country that must pay special attention to security. These are the slogans of our presidency, and the prime minister has also emphasized this many times. There is public consent for large defense expenditures. So now is the perfect time to discuss how to position space in this defense and security.

#### Could the space sector - somewhat quietly - become a beneficiary of increased defense spending?

Not necessarily quietly. As a country, we are at a level of maturity where we can say what concerns defense and what concerns security itself. Both downstream and upstream, i.e., what we observe from space and what we send there, affect our security. That is why we should not talk about it quietly, but rather make it our banner. There is also a second, perhaps less obvious aspect, namely dual-use technologies, which



#### Marta Ewa Wachowicz

- President of the Polish Space Agency (since April 2025). She obtained her PhD in space physics at the Space Research Centre of the Polish Academy of Sciences. She participated in the creation of the Polish Space Agency and the development of its operating model. In 2015-2018. she headed the Department of Strategy and International Cooperation at the Polish Space Agency. She created and supervised the implementation of substantive support mechanisms for entrepreneurs in the space sector in the field of international economic cooperation.

## POLAND SHOULD FOCUS MORE ON THE DEVELOPMENT OF HARD TECHNOLOGIES AND OUR POTENTIAL IN THE CREATION OF SATELLITES AND DEFENSE SYSTEMS.

also contribute to this.

It is already obvious to people that observing the Earth from space has a positive impact on the lives of citizens. Few people can imagine driving a car without navigation that shows them how to avoid traffic jams or reach their destination. This is so obvious that it is probably not worth repeating. What is less obvious, however, is that we need images in a different spectral range. And we are doing just that. The Ministry of National Defense has recently signed contracts for the delivery of SAR (Synthetic Aperture Radar) imagery. This is the next stage of development. We will be able to view Poland and its neighboring countries in much greater detail. The quality of this data will be completely different. This gives us access to new information

## For years, it has been said that Polish companies and institutions are great at developing software for space missions and processing data sent to Earth. Is this the peak of our ambitions?

Absolutely not. I agree that we are great at developing software, and we know that Polish programmers are behind the success of many companies in the IT sector. We are very happy about this, but I disagree that this is the peak of our ambitions. We have been building space instruments for years. It is a very niche and specialized field, but also a very prestigious one. The barrier to entry into this market is enormous. The Space Research Center has designed, built, tested, and sent dozens of instruments into space. Polish components are present in leading European missions, but not only there. This is a source of pride, but also proof that we are capable of producing precision electronics and optoelectronics. So I think that electronic components, sensors and detectors could be a niche in which Poland can do very

Of course, we also have greater ambitions related to satellite platforms and small satellites. However, as in any business, specialization is important. We cannot develop everything. I believe that there are still too few Polish products on this market. We are not conquering it with any software or solutions dedicated exclusively to space applications.

## There are examples of companies on the market that are successful and create large projects in the space sector. Names such as Creotech, ICEYE, and Scanway are no longer anonymous.

You have mentioned our gems, which are a source of pride. These are entities that have developed very quickly, finding their place on the market, and are also very important in terms of security for the public sphere, as they carry out government contracts. However, we also have a large number of medium-sized companies that are gaining an increasingly wider segment of the European market. Looking at the big picture, this sector is growing among small, medium, and large enterprises. It is safe to say that we are dealing with sustainable development here.

## I asked about Polish companies because there is a lot of discussion about whether we actually get back what Poland pays to the ESA in contributions. Is our market mature enough to absorb such large funds? Can the fact that the market is able to use this money be considered an indicator of the maturity of the industry?

It is a good question whether this indicator is actually a measure of market development. In part, one has to agree with this. If only because there is little other measurable data. There are many complications with the very classification of companies into sectors, for example due to PKD codes. However, we must remember that this is a feedback loop. Companies consume funds, so there is greater demand for them, so the governments of member countries increase their contributions to the ESA. However, I think that the more mature the space sector is in a given country, the more reasonable it is to use such a measure. We are still at an advanced but still early stage. Of course, this cannot be compared to the situation in 2012, but we still do not have a clear space strategy to which companies can adapt. This is a sector that requires time, large investments, and patience. If the government sets a direction, for example, that we are investing in satellite construction, Earth research, or something else, companies and institutes will adapt to it. Then, the consumption of funds is greater because stability and predictability are ensured. This is something that economic entities like and need.

The last few years are difficult to compare. During the European Space Agency's financial framework, Poland increased its contribution. This came as a surprise to the sector and economic entities. Not everyone was able to prepare. It is a matter of hiring people, building production and testing lines. Companies should also think about new consortia, projects, and scaling up. Considering that they were surprised, they did very well. Looking at the use of these funds, we can see in which areas the development of the space market is going better for us and in which it is going a little slower. However, it is necessary to understand the specifics of the market. It is well known that it is easier to make satellite applications than to build experiments.

## Your answer echoes what we started the conversation with - the lack of a National Space Program and a strategy for the development of the space sector.

This strategy is currently being developed. The National Space Program is the document that implements it, so this is the next step, which I would prefer not to focus on right now, because it is a purely operational matter. However, I do believe that we definitely need to redefine the Polish Space Strategy until 2023 – because that is its official title – as it does not set ambitious goals for us and boils down to greater use of satellite data and general technology development.

#### The name itself suggests that it would be worth looking into...

Exactly. Looking at the current activity and investments of the government, at the prioritization of security, I think we are on the verge of naming many ideas very specifically, imposing the framework of our ambitions on them, and writing it down as a document. I have the impression that we are at the moment of observing how a new strategy is being forged.

## The European Space Agency Ministerial Council meets in the fall. There are increasing rumors that Poland may seek to have Sławosz join the ESA astronaut corps. Should we have such ambitions?

I can talk about our technological ambitions. It is clear to me that we want to participate in missions to the Moon and Mars and create satellites as part of the Resilience From Space program. This is the direction of our ambitions and aspira-

tions as a country that wants to develop its GDP by supporting the space sector.

I will not comment on the preparations for the Ministerial Council, as this is the task of the relevant minister for the economy. I admit that the scenario of manned flights is also being considered. For me, however, this is more of a vision. At the moment, Poland should focus more on the development of hard technologies and our potential in creating satellites and defense systems. I am counting on our astronaut, who may become an ambassador for the development of dual-use technologies and support the ESA's thinking, i.e., greater openness on security issues.

## You mentioned the Moon and Mars. Let's focus on Earth's natural satellite. Does Poland have ambitions to become heavily involved in the Artemis program? Will we be sending our equipment to the Moon?

We see the need to get involved in the exploration of both the Moon and Mars. This involves searching for rare earth elements, water recovery technologies, oxygen extraction, and efficient power systems. There are many technological challenges closely related to participation in lunar missions. Technologically, both missions to the Moon and Mars are absolutely our aspirations. This is a continuation of what we have been doing for years. Our scientists are creating instruments that serve this purpose. We already have a very large portfolio of such projects.

## During Donald Trump's previous term as President, the United States created a space force component, thus demonstrating how important space is as an area of military activity. Is the Polish Ministry of National Defense also aware of this?

The Ministry of National Defense takes space very seriously. I am watching the change in approach in this area with great enthusiasm. The military wants to invest and is investing in modern technologies, such as the May agreement on the microSAR satellite reconnaissance system. The activities are very professional and show that our armed forces treat space as a tool for defense and information gathering. A lot is happening in the technology companies of the Polish Armaments Group and scientific institutes, but for obvious reasons we cannot talk about it.

Space has become a new arena for doing business. At Impact, as part of the Space thematic track, we talked to representatives of companies and institutions involved in the space sector – from both Poland and around the world. It is also worth noting that in 2027, Poznań will host the 78th International Astronautical Congress (IAC).

## YOU CAN SEE EVERYTHING FROM ABOVE

Rafał Modrzewski, CEO of ICEYE: Satellite data shows reality as it is. This is increasingly important at a time when it is difficult to rely on information from the internet and the media. We want ordinary citizens to have access to such data as well.

RAFAŁ MODRZEWSKI

in conversation with Marcin Żyła

#### RAFAŁ MODRZEWSKI

is the CEO and co-founder of ICEYE, a Polish-Finnish company that owns and operates the world's largest constellation of Synthetic Aperture Radar (SAR) satellites.



#### How does this magic work?

We have to capture the delicate radio wave that our satellites send towards the surface. This wave, with a power of about 5 kW – equivalent to five microwave ovens – bounces off objects on Earth and then returns, greatly weakened. We record it several thousand times per minute and then combine it. This happens at a speed of 7 km per second. We use synthetic aperture radar, very powerful graphics cards, and algorithms created by our team of programmers that enable us to combine signals reflected from the surface.

#### What ultimately emerges is not a photograph, but a radar image – independent of light, based on radio waves. What can be seen on it?

A camera records the reflection of visible light that comes from the sun or a flash. Light, i.e., very high-frequency electromagnetic waves, reflects off objects differently depending on their structure. Visible light waves also have different frequencies—i.e., different colors—and range from 380 to 780 nanometers.

However, our technology is based on much longer waves, approximately three centimeters in length. This allows us to penetrate clouds. Satellites measure how much of the wave returns after being reflected from a specific location on the Earth's surface. We have several imaging modes. For example, we can image an area of 100 by 100 kilometers, but also images measuring 5 by 5 kilometers with a resolution of 25 centimeters. At ICEYE, we have also devised a way to add color to such images, which helps to detect changes on the surface more quickly.

#### What are these images used for?

In any field where we need information about what is happening on the planet's surface. The name ICEYE comes from the words "ice" and "eye" – we started by analyzing

#### Are you familiar with the photograph "Pale Blue Dot"?

Yes, I do. It was taken by the Voyager 1 probe.

Five years ago, as it was leaving the Solar System, astronomer Carl Sagan persuaded NASA to point its lens towards Earth. That photo – our planet from a distance, like a random pixel – inspired philosophers and artists. The images of the Earth's surface provided by ICEYE – full of detail, taken from orbit – are, in a sense, the opposite of "Pale Blue Dot." When you look at them, what feelings do you have?

No matter how many satellites we have already placed in orbit, whenever a rocket lifts off from the launch pad, I am always fascinated by the beauty of technology. It's the same with our images. We can observe the Earth at night, through clouds, from a small satellite 600 kilometers above. It's technical magic.

ACCESS TO PRODUCTS AND SERVICES THAT WE CAN OBTAIN THANKS TO THE SPACE INDUSTRY IS CRUCIAL FOR THE STABILITY OF COUNTRIES AND REGIONS.

ice areas in the Arctic Ocean. We also imaged logging and fires in the Amazon rainforest. Now, the most important application is defense and intelligence.

## For decades, Americans dominated the field of imaging Earth from space. At the turn of the century, it even began to seem that Google Earth had rendered "no photography" signs obsolete

People often ask about the difference between Google images and our imaging. The former are usually updated every few months. What's more, I have to admit that our planet is not very photogenic. Photos of its surface taken from space usually look bad - unless you like looking at clouds... At ICEYE, however, we are able to take images of the same object or place on Earth approximately every hour, with the same accuracy, regardless of the weather or time of day. It is incredible how much progress has been made since the 1960s, when the Americans took photos over the Soviet Union. Or since the first military satellites photographed the Earth on ordinary film, which then returned to the surface by parachute. Those were the years of "crazy engineering," but they have something in common with our era. Because some places could not be reached by plane, we started using satellites. Today, satellite systems also allow us to observe every place on Earth. Currently, however, the point is that such capabilities should not be limited to the great powers.

## It is worth noting that both Google Earth and more advanced American military systems are also subject to censorship. More precisely, access to them can be suddenly and unexpectedly cut off, for example due to political decisions.

For several years now, there has been a discussion about so-called shutter control, or "access to the shutter." Not only superpowers are competing with each other, but also "old space" and "new space." On the one hand, we have large companies that have been in orbit for decades – Boeing, Lockheed Martin, and Airbus. On the other hand, we have many smaller companies – including ICEYE – which have placed several times more satellites in orbit in the last decade. This alone has already caused a change in the way satellite images are used and accessed.

## Why is it worth having your own space industry?

Because access to the services and products that we can obtain thanks to the space industry is crucial for the stability of countries and regions. It is like having your own energy or defense industry. The security of Poland and the European Union is at stake. It is not only about protection against attack by hostile armies, but also about the stability of borders, migration security and natural disasters. All this requires a space industry.

Next, we must ask ourselves whether we really want to be dependent on other countries and corporations that provide such technologies.

## ICEYE has been cooperating with Ukraine for over three years. In recent months, this cooperation has become even more intensive. What does it involve?

We have been supporting Ukraine since the very beginning of the war. ICEYE manages the world's largest fleet of radar imaging microsatellites - to date, we have successfully launched 54 satellites for our own needs and those of our customers. We provide Ukraine with imagery that is of great intelligence value to them. I don't know exactly how they use these images. However, we receive information - published online by the Ukrainian side - that our radar images are extremely useful in their daily operations on the front line. This has been noticed around the world, and other countries are already following Ukraine's lead. New military doctrines call for the construction of more constellations of such satellites. The situation is starting to resemble that of artificial intelligence: a new technology emerges and quickly becomes not only useful, but indispensable.

Poland is one of the first countries to invest in this technology – in May, we signed a contract to deliver three satellites for the Polish Armed Forces. This is a big deal – we will put the first Polish military satellite into orbit. Generally speaking, satellite capabilities used to be reserved for a small group of countries that allocated large funds to space programs – since ICEYE's inception, we have wanted to democratize access to satellite data.

## Why? What does this democratization mean?

Free and easy access to satellite data. For everyone. Not only for governments, but also for citizens and businesses. Satellite data shows reality as it is. And this is becoming increasingly important today, when it is becoming more and more difficult to rely on information from the Internet and other media. Artificial intelligence will complicate this even further. We live in a time when access to reliable information is becoming increasingly difficult.

And yet, without independent sources of information, it is impossible to make decisions. ICEYE's goal is to create a system that will increase access to information. If we all know what reality is really like, we can talk about it objectively.

\*\*\*

Rafał Modrzewski was a speaker at Impact'25 as part of the Space thematic track.

# WATER MORE PRECIOUS THAN OIL

By the middle of the 21st century, one in four people on Earth may have problems accessing water. This is a recipe for war.

WRITTEN BY: Kasper Kalinowski

onflicts over water have accompanied us since the dawn of civilization. Water shortages were the cause of the fall of the ancient Egyptian kingdom, the Mayan civilization, and the Khmer civilization in Cambodia. The earliest documented dispute over water took place between the city-states of Umma and Lagash in ancient Mesopotamia around 2500 BC in what is now Iraq. Since then, over a thousand such conflicts have been recorded. When a team led by Prof. Peter Gleick, a hydrologist at the Pacific Institute, analyzed them in search of causes, they found one common denominator. Most of them were related to agriculture, which currently accounts for about 70% of global water consumption. Raising one cow consumes an average of 4 million liters of water. That is more than the capacity of an Olympic swimming pool. Meanwhile, about



Dam on the Indus River in Pakistan

HOTO: PEXELS

40% of the world's population suffers from water shortages. According to forecasts by the UN and the World Bank, drought could displace up to 700 million people by 2030.

In sub-Saharan Africa, this percentage exceeds 80%. This is a region where hostile guerrilla forces often wait at water sources, and the destruction of these intakes is a standard method of warfare. Today, however, wars over water more often resemble a subtle network of economic pressure and influence-building than a front line.

## WHICH REGIONS ARE MOST VULNERABLE TO CONFLICT?

As Dr. Andrzej Mikulski, a hydrologist at the University of Warsaw, explains: "Conflicts over water most often erupt where rivers flow through several countries. In their upper reaches, they are used for energy production, while in their lower reaches they supply crops. As a result, countries located in the upper reaches of rivers can, by cutting off access to water, virtually eliminate agricultural production in countries located downstream. In this context, the dispute over the waters of the Nile has created the risk of armed conflict between Ethiopia, Sudan, and Egypt, the dispute over the waters of the Syr Darya has greatly complicated relations between Kyrgyzstan and Kazakhstan and led to the drying up of the Aral Sea, and the dispute over the waters of the Indus River fuels armed skirmishes between India and Pakistan.

Over 90 percent of Pakistani crops depend on the Indus River. Following the killing of 26 civilians in Kashmir, India recently suspended its participation in the 1960 water treaty with Pakistan, which was adopted with the help of the World Bank and divided the Indus River and its tributaries between the two countries, regulating the distribution of water between them. India plans to build a system of canals to divert water from western rivers to the Yamuna and Indira Gandhi Canal basins, which would allow water to be transferred to the northern and central regions of the country - in the long term, this project could effectively reduce some of the tributaries to Pakistan. These projects are planned to be implemented between 2028 and 2032.

China has mastered the use of water as a political tool. One of the targets of this policy is... India. After the 2017 border conflict in Dolam, China stopped sharing hydrological data on the Brahmaputra River with India, violating agreements. This resulted in the deaths of about 300 people and the displacement of millions due to flooding for which India could not be prepared.

China also controls the Mekong River, which supplies more than 60 million people in Laos, Cambodia, Vietnam, and Thailand. A few years ago, numerous Chinese dams contributed to historically low water levels in this river. The consequences? Severe droughts and mass fish deaths, as well as increased poverty for the people who depended on the river for their livelihood

## THE PROBLEM WILL INTENSIFY – WATER LEVELS IN RIVERS AROUND THE WORLD WILL CONTINUE TO DECLINE

"Restricted access to water will affect areas that draw water from rivers fed in summer by runoff from disappearing glaciers or that have been fed by monsoon rains, of course, where climate change will lead to a significant shift in the monsoon zone. The latter case has caused drastic changes in the flow of the Nile and water availability in North Africa over the last several thousand years. There will be less water where the landscape has ceased to retain rainwater, i.e., areas of large-scale deforestation or soil degradation. There are also areas where water availability will decline due to reduced rainfall or increased irregularity. It is possible that this situation will affect large areas in the Mediterranean basin," explains Dr. Mikulski.

## AND WHAT IS THE SITUATION IN POLAND?

Dr. Mikulski says: "It is true that some of our rivers already flow only periodically, but we still have considerable room for maneuver. The principle is simple. Every drop of rain that, instead of quickly flowing into a river, stays in the landscape and feeds the groundwater, reduces drought. Retaining water where it fell as rain should be a priority for both forestry and agriculture. In the latter case, it can also have a direct, positive impact on yields. Regenerative agriculture based on new crop species will soon become the only rational method of farming. Otherwise, it will simply not be possible soon."

Although we have seen many droughts in the last 15 years – in the provinces of Wielkopolska, Kujawsko-Pomorskie, Łódź, Lower Silesia, and Mazovia – we are not doing badly compared to the rest of the world. We are not yet threatened by direct conflicts over water, but the dispute between Poland and the Czech Republic over plans to expand the mine in Turów can already be considered a conflict with water (albeit underground) in the background.

However, the drying up of rivers is only part of a larger problem. Climate change, combined with agriculture, industry, and urbanization, is rapidly affecting land water resources, including drinking water, which, as an international team of experts points out in the journal Science Advances, has significantly decreased since 2002. Researchers have iden-

tified four main regions where we can talk about "mega-drying." These are the vast areas of northern Canada and Alaska, northern Russia, the southwestern region of North America and Central America, a belt of territories stretching from North Africa through Europe – including Poland – and the Middle East and Central Asia, to northern China and South and Southeast Asia. As researchers point out, approximately 75% of the world's population—almost 6 billion people—live in 101 countries that have been losing fresh water since 2002.

Experts point to the depletion of groundwater resources as the most important cause of water loss in 68% of non-glaciated areas. The problem is particularly evident in California and the Colorado River basin, Mexico, northern and western Africa, the Indus and Ganges basins, and around the Caspian and Aral Seas. In addition, at high latitudes, the phenomenon is exacerbated by the melting of ice and permafrost. Severe damage, especially in Central America and Europe, is caused by droughts, which are considered to be the worst in 2,000 years.

The authors summarize the changes they describe as "the most serious signal of the impact of climate change recorded to date." In their opinion, water should be treated in terms of an "intergenerational resource," and current policies are causing damage to future generations that is difficult to estimate. Changes must be made as soon as possible.

## WATER ON WALL STREET

With water becoming an increasingly scarce commodity, it should come as no surprise that markets have taken an interest in this issue. Dozens of companies that trade in water rights are listed on stock exchanges. The value of just one of the largest companies in the so-called Blue Market sector – American Water Works, which supplies and treats drinking water – already exceeds \$26 billion.

As Dr. Kalanithy Vairavamoorthy of the International Water Association and guest of the latest edition of Impact points out: "Water is an essential resource, so its commercial potential is obvious, and the idea of futures contracts is a natural extension of this. As pressure on water resources increases, water trading may become more important, especially as a way to facilitate and optimize resource allocation. At the same time, water is a shared resource with many uses and benefits – not only in terms of sustaining the world we live in. We must therefore ensure that our institutions and governance mechanisms are fit for purpose in supporting these multiple uses and benefits as pressures increase.

So, are we facing speculation on water prices? According to Pedro Arrojo-Agudo, former UN Special Rapporteur on the human right to safe drinking water and sanitation, the full marketization of water risks a scenario in which investors will once again profit from human suffering, for example by raising water prices during droughts. And in the era of climate change, we are facing more and more of these.

Some countries are fighting against this practice. Bolivia and Uruguay have enshrined the prohibition of water privatization in their constitutions. Canada has been blocking ideas for the mass export of water as a commodity for years. The European Union does not currently envisage

trading in water.

There are also increasingly frequent arguments that water is a resource of strategic importance. As in the case of national defense, the state should exercise control over it, because the safety of citizens depends on it.

## WHAT SHOULD BE DONE?

Unfortunately, there is no single universal solution to the problem of water scarcity. Investments in infrastructure and new technologies are certainly necessary. In many countries, simply reducing losses and leaks could bring enormous benefits – Iraq loses as much as two-thirds of its water due to damaged infrastructure.

Some countries are experimenting with seawater desalination. Such facilities can be found in the United Arab Emirates, Saudi Arabia, Qatar, Bahrain, and Israel, but also in California and Florida, and even in European island countries such as Malta and Cyprus.

However, Dr. Nikolas Galli, a hydrologist at the Polytechnic University of Milan, points out the limitations of this technology. "Desalination may be a solution, but it is still extremely expensive, energy-intensive, and problematic in terms of environmental impact. There is a wide range of solutions to deal with water scarcity, such as new water harvesting techniques, water management models based on more or less complex simulations, practices and technologies to improve water use efficiency in agriculture, and water distribution systems."

The most promising seem to be fog collection nets. This is not a new idea – many countries are working on simple structures consisting of a vertical net resembling a slightly enlarged tennis net. Even large structures, covering hundreds of square meters, can be installed at relatively low cost and, more importantly, their operation costs practically nothing. They do not consume energy, and the only requirement is to clean them regularly with a brush to remove sand and insect residues. The largest installation of this type in the world is currently operating in Morocco, near Agadir. The Dar Si Hmad project is implemented using CloudFisher technology, designed by

EXPERTS POINT TO THE DEPLETION OF GROUNDWATER AS THE MOST IMPORTANT REASON FOR WATER LOSS IN 68% OF NON-GLACIER-COVERED AREAS.

the German WasserStiftung, and supplies water to 14 nearby villages. An analysis of dozens of scientific papers has shown that this method allows for the extraction of 1 to 10 liters of water per square meter. It is also worth reducing agricultural demand. Based on algorithms and a set of kettles, smart irrigation systems are able to monitor soil and plant hydration in real time. Compared to traditional methods, precision irrigation offers a double benefit – we save up to 50% of water and gain 20-30% more yield.

In the era of climate change, rainwater harvesting can also help. Modern green roofs are solutions that can help address many of the problems facing today's cities – they reduce heat islands, seasonal water shortages, flooding, pollution, and biodiversity loss. However, there are health issues that stand in the way—rainwater is often not suitable for drinking and would need to be treated, and such systems generate costs.

What solutions does IWA expert Dr. Vairavamoorthy propose? "There are many innovations and practical examples around the world that show how things can be done differently. The key role of the organization I work for, the International Water Association, is to provide a platform for exchanging ideas and experiences about these opportunities.

Vairavamoorthy emphasizes the need to reuse the same water resources multiple times. The premise is simple: water quality should be tailored to the purpose. While drinking water must be of the highest quality for obvious reasons, "inferior" water can also be used for flushing toilets, irrigation, or industrial cooling.

Such projects are already yielding results – a perfect example of the circular economy is the West Basin initiative, which tackled the water shortage in Los Angeles in the 1990s. All it took was to use different quality water for irrigation, industrial needs, and cooling. In one Swedish district, such solutions have reduced the water footprint by more than 50%. Water referred to as "black" (toilet wastewater) and food waste are jointly processed to produce fuel for local buses. "Gray" water (from showers, sinks, etc.) is used to generate struvite, a phosphorus-based fertilizer.

The average Pole consumes 93 liters of water per day (compared to over 300 liters for a US resident). It seems that soon such water profligacy will be an unattainable luxury. To prepare for these times, Vairavamoorthy proposes three principles of effective water management: using less water for more tasks, reusing the same water multiple times, and matching water quality to its intended use. It is worth starting to implement these principles not only in our consumer habits, but also at the industrial level.

\*\*

The issue of shrinking water resources was discussed at Impact'25 and those conversations will be continued during upcoming editions of the event

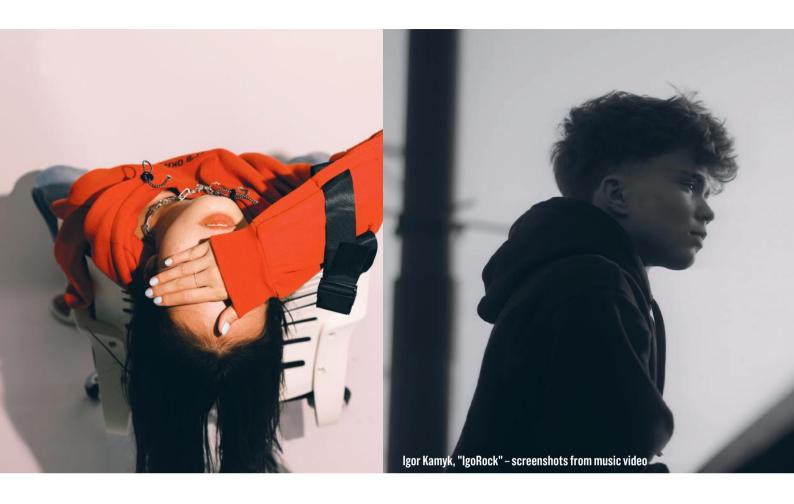




Nets for collecting water from fog



The Indus River



# THE SENSITIVE GENERATION

Gen Zers don't want to be diagnosed, they want to be understood. Instead of manifestos, they choose sensitivity, conversation, and a simple truth: even in chaos, you can find your own rhythm.

WRITTEN BY: Krystyna Romanowska

Warsaw's Poniatowski Bridge, 16-year-old Igor "Igo-Rock" Kamyk is shooting his first music video. "You don't want to die at all, maybe you just don't know how to live," he sings as he walks across the bridge. It is early spring 2025. The bridge is not a random choice - it was there, a few years ago, that his sister's friend took her own life. The experiences associated with this story have now found their form - a song in which Muniek Staszczyk, invited to collaborate, raps: "You're fifteen years old, but inside you're an old man." "I wanted this song to be not only for young people, but also for parents. So that they hear that children these days need to talk. Not just 'how was school?', but also 'how are you feeling?" says Igor.





## A GEN ZER SINGS WITH MUNIEK

Muniek Staszczyk, an icon of the boomer generation, symbolically connects two worlds with his participation in the young rapper's song: the one that believed in guitars and rebellion, and the one that scrolls but doesn't necessarily feel free. Their joint song is more than just a radio hit - it is the voice of a teenager who, instead of TikTok, chooses trips to the museum with his friends ("Honestly? Some of the exhibits at the Museum of Modern Art are a failure"), conversations about the meaning of life and plans for a business that would give him not only money but also freedom. Igor is not interested in rebellion for rebellion's sake. It's about speaking honestly, telling the truth - before someone decides again that there's no point. He wrote the song together with his father Tomasz (who appears in the music video as DJ Padre), a journalist and songwriter. They sat together, exchanged verses, and made corrections.

Tomasz admits that he is not a model parent. "I was a perfect father when I didn't have children yet," he laughs. He speaks fondly of his son, though he adds: "I know I'm not an authority figure for him." He also knows that his son is growing up in a more difficult world than it might seem.

## GEN Z: MEASURED, WEIGHED, SCRUTINIZED

Volumes have been written about the generation born between 1995 and 2010 before they even reached adulthood. The Zetki have been weighed (slightly heavier than previous generations) and measured (slightly taller, because they are well-nourished). They were diagnosed in successive studies on the "mental state of the younger generation" (overstimulated but self-aware) and frightened (they will probably not earn enough to support their parents' retirement, and they do not even want to try). No wonder they are under such scrutiny. There are few of them – they are the smallest generation of young people since the war. They herald a demographic disaster. They will not have many children. "They bought themselves a dachshund," sigh the mothers of Zetas living together, unmarried, of course. "They say that a child is a lifelong investment, but they only want <short-term emotional investments>," they add. "Late children of successful parents. Long-awaited, pampered,"

, describes Dr. Katarzyna Szumlewicz, an educator and philosopher at the University of Warsaw, whose students are Zetas. "Gentle, non-radical, without verve. They do not have the youthful hostility towards older generations that previous generations had. They do not have a sense of uniqueness." Katarzyna Talacha, psychologist and consultant for the 116 111 helpline for children and young people at the Dajemy Dzieciom Siłę (We Give Strength to Children) Foundation: "Young people are increasingly aware of mental health issues and are more likely to seek help. At the same time, they feel left to their own devices. Adults do not always respond, even when someone directly says that they are having a hard time. Lack of support, indifference, and feelings of rejection are what hurt them the most. And it can make them not ask for help next time. In conversations with teenagers, the topic of communication difficulties also often comes up—many of them have trouble talking about their boundaries and setting them. This, in turn, affects their relationships with others - they can be chaotic and unstable, especially in their interactions with peers," she says.

Lola Young, a singer from south London, raised in a Jamaican-Chine-se-English family, fits this image of the generation very well. She has become the voice of Generation Z because she speaks their language – raw, honest, and unfiltered. Her lyrics touch on topics such as ADHD, anxiety, emotional instability, and the pressure to be perfect – experiences that are common among young adults. In the song "Messy," which went viral and became the unofficial anthem of Gen Z, she sings: "I've been messy since I could remember / Anxiety and anger, they live in my center." Her rebellious, non-conformist image – tousled hair, vintage clothes, lack of "pop" elegance – emphasizes the message: you have the right to be unstable, you have the right to be yourself.

## DO GEN ZERS FEEL OLD?

Attempts to describe the condition of young people often feature the theme of their "old age." "Teenagers declare that they would prefer to retire already," say teachers. It can also be seen in the theater. In a poignant slam from the latest performance of Kobieta samotna (Lonely Woman) by Warsaw's Teatr Powszechny, Boguś, a teenager, says of himself that he is "an old man in a child's body." Why? Because he has seen such terrifying content on the internet that he feels exhausted and overwhelmed by life. It is as if he wakes up every day under a ton of sand - each grain is an image, a message, a comment that he did not ask for, and yet they remain in his heart. This is the experience of many Gen Zers: premature emotional burden, sensory overload, the brutality of the world absorbed through a phone screen. Jonathan Haidt, an eminent American social psychologist, points out in his books "The Righteous Mind" and "The Blessed Mind" that it is precisely digital overload – the constant bombardment of images of violence, suffering, and disasters - that leads to an increase in internalizing disorders such as anxiety, depression, and feelings of hopelessness. Gen Zers burn out quickly, carrying the weight of the world, which even adults are often unable to bear.

## GEN Z: POWERLESSNESS IN THE BATHROOM

This can be seen everywhere in the comments under viral videos on Tik-Tok and Reddit. "I'm 22, but I feel like I'm 60. Zero energy, zero motivation. Just fatigue and the feeling that everything has already happened," writes one of the users. Below, thousands of voices echo: "We are only young on paper. Inside, we are burnt-out old people." Or: "I'm 26 and I feel like my life has already passed me by. Every day is copy-paste: work, scrolling, sleep. I thought my twenties would be a time of adventure, but now I'm just calculating how long my strength will last."

In response to this mental smog, self-defense rituals emerge. There is "bathroom camping" – sitting in the bathroom, as if in a shelter, to calm the nervous system for a moment. When that's not enough, there's "crashing out" - a sudden emotional breakdown, a moment when tension takes control. These terms are not accidental - they are the new vocabulary of Generation Z, the language of burnout. It's as if their heads were overloaded email inboxes without an "archive" option. Every message marked "urgent." Anna Maria Wołyniak, a child and adolescent psychologist, says, "They are physiologically tired. Their brains have to process more information every day than people used to process in a lifetime." Meanwhile, Gen Zers themselves face accusations of being "spoiled" and "weird." @jayden\_noir from TikTok says: "We're not special. We're just normal. We're looking for meaning, but every young person has always looked for it. It's not a revolution." And on the r/generationology forum, user\_KasiaG93 writes: "People are always trying to classify us, but we're neither this nor that. We're just ourselves. No big words." This is the voice of reason that is being heard more and more often. Generation Z does not want to be defined by extremes. It does not want to be the "lost generation" or the "most awakened." It wants to be recognized as tired but sensitive people.

Gen Zers are not "weird" or "spoiled." They are simply the first genera-

tion to grow up online. Their fatigue is not a fad – it is a mental and social condition. Dr. Katarzyna Szumlewicz also rejects the stereotype of "senile" Gen Zers. "This whole myth about 'old people in children's bodies' is a youth pose. They are not old – they are young, but they live in a time when everything happens on the internet.

## **ANIA: NO JEANS SUIT GEN ZERS**

When the parents of today's teenagers worry about their safety, they most often call 800 100 100. This mainly concerns situations related to the internet - cyberbullying, contact with strangers, inappropriate content. They are also concerned about peer violence, rejection by the group, or their child's loneliness. "They often feel lost – they don't know how to talk to the school or which institution to turn to. They are increasingly asking about their children's mental health. They want to be close, they want to help, but they don't always know how to talk and how to support their child in difficult moments. When they receive specific information from us - where to seek help, who to turn to - they usually feel stronger and ready to act. Importantly, during such conversations, they are also willing to talk about themselves—about their emotions, fears, anger, or sadness. They often say that they simply need understanding, support, and for no one to judge them," says Paulina Masłowska, legal advisor at the Dajemy Dzieciom Siłę Foundation.

"I would like to defend my generation," says 22-year-old Ania from Gdańsk. She has two sisters, also belonging to Generation Z. Since turning 18, they have all worked as windsurfing instructors. Today, her older sisters have their dream jobs – architect and lawyer. Yesterday, Ania celebrated her birthday. The party was attended by representatives of different generations: Gen Z, millennials, and even boomers. "Friendship is my foundation, without it I would not exist. The same goes for sport. It shaped me," she emphasizes.

She says she is in a so-called transitional period. She wrote her bachelor's thesis in psychology and took a gap year to travel and work. She visited Spain and Portugal and stayed longer in Tenerife.

"Not living with my mom was a good lesson in

GEN ZERS DO NOT AGE PHYSICALLY, BUT MENTALLY AND EMOTIONALLY THEY BURN OUT VERY QUICKLY, CARRYING THE WEIGHT OF THE WORLD, WHICH EVEN ADULTS ARE OFTEN UNABLE TO BEAR.



Lola Young, a Gen Z singer from London.

independence," she adds. Her story shows that many people from Generation Z do not fit the stereotype of being "lost" or "spoiled." They work, study, and seek their own path—often far from the beaten track.

"Our main problem? Too much choice," admits Asia. "Right now, I'm with my friends at Open'er, but our friends are sending us photos from Italy, so we all regret not being there. It's the same with shopping. How do you choose jeans from ten pairs? In the end, we don't choose any." She admits that they are spoiled and that their parents did a lot for them. She admits her mother's ability to face problems head-on. "We tend to sweep them under the rug. We show a smiling face on social media, but the problems don't go away," says Ania. A boyfriend, a partner? She shakes her head. She is disappointed. "There are no knights anymore. Because there are no princesses either," she concludes. But she would like men to be more mature and responsible.

## **ARE GEN ZERS OUR LAST HOPE?**

Generation Z grew up in a mode of constant reception – notifications, messages, images, alerts. Their identity was formed in the digital world - more in the eyes of others than in relation to themselves. "They live a bit in an imaginary world. What they have in their heads does not correspond to reality. And that burns them out," notes Anna Maria Wołyniak, a child and adolescent psychologist. "Parents say, 'You have everything, you can do anything,' but an excess of choices, rather than freedom, brings paralysis. The choice itself becomes a burden. Every decision can close other doors. Faced with this, they remain in limbo." The psychologist also points to the problem of a lack of authority figures. "When I ask about them, there is silence. Sometimes the names of fictional characters come up. Recently, I heard 'Hannibal Lecter'. And that's no joke. It's a sign of confusion. Without clear norms, without a compass, it's easy to get lost. People cannot live without any rules. And they often reject everything without having anything to replace it." Despite this harsh diagnosis, the psychologist does not deny this generation's potential. On the contrary. "They are very sensitive and searching young people. If only this authenticity could find a good direction, they could really change a lot," she says.

When asked who he values as an authority figure, Igor Kamyk points to rappers who, in his opinion, have something important to say. "Not every song they write is gold, but some of them really hit the nail on the head," he says. The most important of these is Rogal DDL, a street rapper who is often underestimated by the mainstream. "People think he just swears. But I see value in it. He says that people sell themselves to gain status. And that the media often lies." Igor doesn't limit himself to just one genre. He also listens to jazz, classical music, and even... Mieczysław Fogg's "Ostatnia niedziela" (Last Sunday). "It's a beautiful song. Heavy, but true," he says with complete seriousness.

Like his musical choices, Igor's role models are not obvious. He looks for people who are genuine. Just like himself – a guy who values truth, meaning, and intimate conversation more than fame. That's why he writes songs about emotions that overwhelm him and asks aloud something so simple: "How are you feeling?" Others – like Ania – teach windsurfing, travel, and honestly admit: "Sometimes we don't know what to choose because there's too much of everything."

Perhaps the strength of this generation is not rebellion, but mindfulness. Perhaps Gen Zers don't want to be "the most unique" – they want to be who they are. Tired, overstimulated, sometimes withdrawn, yet at the same time affectionate, reflective, and conscious. Maybe they don't know how to fix the world yet, but they already know that it's worth talking about – before someone decides again that they have nothing to say.

\*\*\*

The Dajemy Dzieciom Siłę (We Give Strength to Children)
Foundation, which helps children and young people, attends
Impact every year. Together, we look at the problems of the
younger generation and seek the best solutions for them. We
encourage you to support the Foundation and the Helpline for
children and young people.

# TIRED OF CIVILIZATION

Stress, screen light, apnea, bruxism, anxiety, and a disrupted circadian rhythm. Sleep disorders are the new silent epidemic of our time.

WRITTEN BY: Krystyna Romanowska

arolina lives in Warsaw. Every evening, she battles her own demons: her phone screen, the red Netflix logo, homework, 24/7 food delivery apps. Her sleep is shallow; her body sleeps, but her mind is still racing, her head full of unpaid bills, unfinished emails, and work-related stress. Pills? Yes, sometimes. They don't solve the problem, but at least they help her survive. Karolina's sleep is not regeneration, but coming to terms with the chaos around her. She can't remember when she last had a good night's sleep (maybe last year during her vacation in the countryside) and she dreams of only one thing—to wake up one day and feel: "I'm ready. I can do it."

## **SLEEPLESS ENIGMAS**

What Karolina is experiencing is not an isolated case, but a phenomenon well known to psychiatrists and psychotherapists. Poles sleep the shortest and worst in Europe – on average less than 6 hours and 45 minutes a night, while residents of Finland and the Netherlands sleep more than 7.5 hours. Over 47% of us wake up at night due to stress, making us the most "worried nation" in Europe. Insomnia, which

affects almost half of adult Poles, has become one of the most common reasons for visits to general practitioners. Obstructive sleep apnea, mainly associated with obesity, occurs in one in ten adults and remains largely undiagnosed. Data from the WHO and reports from the German pharmaceutical company STADA and the OECD show that sleep disorders are taking the form of an epidemic in Poland – a silent but devastating one. Europe can sleep more peacefully – we cannot yet.

Paweł Droździak, a psychologist, divides patients struggling with insomnia into three groups. Some cannot sleep because something is actually happening - a child's illness, divorce, a sudden crisis. Their minds do not shut down because the world around them is on fire. Sleeping pills help them get through this time. Others, more neurotic, experience everything too intensely. One word from their boss, one missed call, and their sleep is gone for many nights. But there is also a third group, the most enigmatic: "People who simply don't sleep. They don't know why. They feel a tension they can't name. They live in a constant state of agitation, as if their nervous system doesn't know how to go into 'standby' mode.". And they are the ones who find it most difficult to get help - because without sleep it is difficult to think, difficult to act, difficult to believe in change. People who are so terribly tired are unable to work even during psychotherapy," says Paweł Droździak.

## AWAKENING FROM A CIVILIZATIONAL SLUMBER

Two decades ago, no one collected such stories. People talked about "sleep problems" and "permanent insomnia." Twenty years ago, sleep medicine in Poland was in its infancy – a curiosity, the domain of a few enthusiasts, and a marginalized topic among serious specializations. Today, it is one of the most interdisciplinary fields of medicine - at the intersection of neurology, cardiology, psychiatry, pulmonology, and even rheumatology. "Sleep medicine is no longer just a matter for psychiatry or neurology. It is a field covering the entire spectrum of internal diseases. We deal with it in Wrocław, although our teams consist of only a few enthusiasts," says Professor Helena Martynowicz, head of the the Sleep Laboratory at the Department and

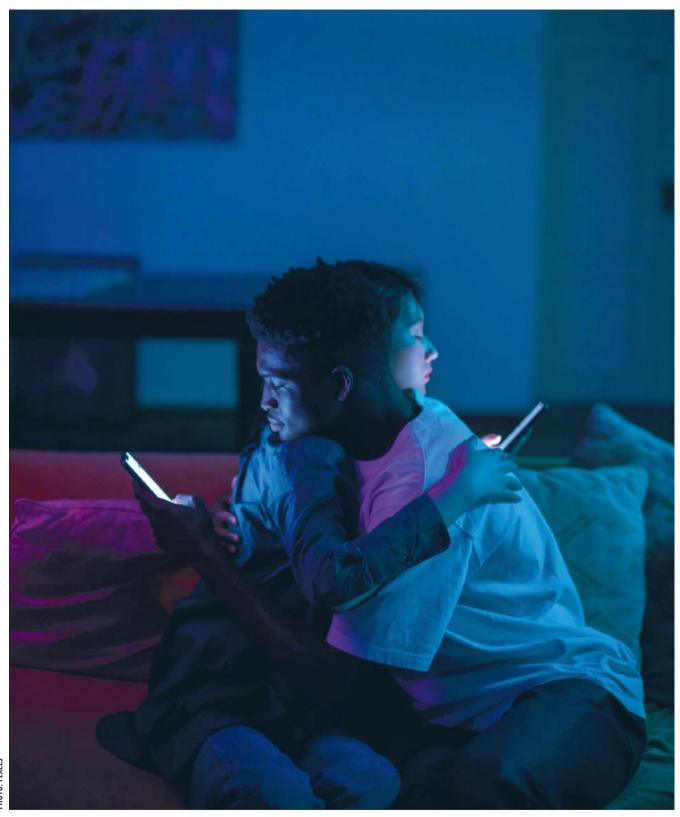


PHOTO: PEXELS

Clinic of Internal Medicine, Occupational Diseases, Hypertension, and Clinical Oncology at the Medical University of Wrocław.

In 2019, the World Health Organization officially recognized sleep medicine as a separate field within the ICD-11 classification. Poland has until 2027 to implement these standards, but the systemic conditions are difficult. "We don't have enough sleep laboratories, there is a shortage of qualified specialists, and the specialization of sleep medicine itself does not formally exist in Poland. There is also a lack of funding. Although the gold standard, polysomnography, is reimbursed, other tests, such as respiratory polygraphy, are not," explains Professor Helena Martynowicz.

## A STIFLING TRIANGLE

For years, insomnia was considered the main enemy of a peaceful night's sleep. Today, scientists understand that sleep disorders are a whole constellation of related symptoms. A new "holy trinity" has emerged: insomnia, sleep apnea, and sleep bruxism.

"Sleep disorders like to come in pairs, or even threes," admits Professor Helena Martynowicz. "Insomnia occurs in one in three patients with apnea. Bruxism occurs in half of all snorers. Restless legs syndrome occurs in one in ten patients with apnea. Back in the 1990s, we said that apnea affected 2 percent of women and 4 percent of men. Today, we know that 20-30 percent of the population suffers from it. That's an increase of more than tenfold. We have over a billion people in the world with apnea."

What is worse, as many as 95% of cases of sleep apnea remain undiagnosed. And it is not just snoring – the symptoms can vary greatly and often lead the patient not to a pulmonologist, but to a cardiologist, neurologist, or rheumatologist. "Sleep apnea has two faces. One is the classic one: snoring, sleepiness, obesity – more common in men. The other is insomnia – a silent, insidious form of apnea, more common in women. Both can lead to serious cardiovascular consequences."

## **BRUXISM AND SCREEN TIME**

For years, bruxism was considered a dental problem. Today, this narrative is changing. "Teeth grinding is not just about worn enamel.

It is a complex systemic phenomenon. We are only just beginning to learn its significance. It's like a snowball – the further we roll it, the more mysteries are revealed. In many cases, it causes real havoc in the body: fluctuations in blood pressure, activation of the sympathetic nervous system, sleep fragmentation, inflammation, and an increased risk of atherosclerosis," says Professor Helena Martynowicz.

Her team has discovered a link between so-called phase bruxism and migraine with aura. This is the first study of its kind in the world. For Professor Mieszko Więckiewicz, head of the Department of Experimental Dentistry at the Faculty of Medicine and Dentistry of the Medical University of Wrocław, who also deals with sleep medicine, bruxism is a problem of civilization. "It is an expression of anxiety that we cannot express, so we clench our teeth, stress that does not disappear from the body even when we sleep. And until we understand that sleep is not only rest, but also neuroregeneration, we will have more and more such cases," emphasizes Professor Mieszko Więckiewicz. "Bruxism—and this is the latest disturbing news—is also a consequence of excessive stimulation from screens. At the recent International Association for Dental Research conference in Barcelona, researchers from Naples proved the link between the incidence of bruxism in children and so-called screen time, i.e., time spent in front of a screen."

Over the past three to four years, a new group of patients has appeared in his office. Their symptoms are not due to genetic predisposition or classic stress. They are young, often under the age of 30. And they have one thing in common – they live with a screen in front of their eyes. "Their masticatory muscles are overactive, tense, and tired. They have symptoms of bruxism that have appeared not because of stress or apnea, but because of their online lives," explains Professor Więckiewicz.

How does it work? Two mechanisms are key. The first is blue light from screens, which disrupts melatonin secretion and disorganizes the circadian rhythm. The second is the stimulation of dopaminergic pathways, or the reward system, which works like addiction: the need for constant stimulation, interaction, clicking, scrolling. "It works very similarly to the me-

chanism of addiction in gambling. The brain is constantly stimulated and cannot calm down. And then the body reacts with tension, including in the face," explains Professor Mieszko Wieckiewicz. The consequences can be surprisingly serious. Worn teeth, cracked fillings, muscle pain, joint clicking, facial stiffness, and in advanced cases even a change in facial features - the so-called square face, resulting from hypertrophy of the masseter muscles. In Poland, as many as 56% of residents of large cities may have symptoms of temporomandibular joint disorders. These are often the effects of untreated, chronic bruxism. But the biggest problem is that people don't know where it comes from. The source lies deeper - in the central nervous system, in neurotransmitters such as serotonin, dopamine, and GABA. Bruxism is the result of nervous system overload. Sometimes it is hereditary, but more often it is caused by the environment, habits, and lifestyle. Daily bruxism (because there is such a thing) – as the professor says – usually has a psychogenic basis: tension, stress, pace of life, anxiety. Nocturnal bruxism is less predictable. It is often associated with episodes of sleep apnea, activation of the nervous system, and problems with regulating the circadian cycle. And then - literally - the face wakes up.

"Most often, around three in the morning, the sympathetic nervous system is activated. The heart speeds up, the brain enters a state of alertness. Then the masticatory muscles, which should be resting, begin to contract. This leads to grinding or very strong clenching of the teeth. Then the parasympathetic nervous system activates, trying to slow everything down. But if there are many such episodes or if they last too long, the person wakes up tired, with a headache and tension in the jaws. Sometimes even with damaged mucosa or worn enamel," describes Professor Więckiewicz.

## WHEN SLEEP BEGINS TO SPEAK

Sleep medicine also studies disorders that go beyond the classic framework. "We deal with phenomena on the borderline between sleep and wakefulness," says Professor Helena Martynowicz. "Sexsomnia (having sex while asleep), catathrenia (night moaning), night eating. A decade ago, these were exceptions. Today, they

FOR YEARS, INSOMNIA WAS
CONSIDERED THE MAIN ENEMY
OF A GOOD NIGHT'S SLEEP. TODAY,
SCIENTISTS UNDERSTAND THAT
SLEEP DISORDERS ARE A
CONSTELLATION OF RELATED
SYMPTOMS. A NEW "HOLY TRINITY"
HAS EMERGED: INSOMNIA, SLEEP
APNEA. AND SLEEP BRUXISM.

are becoming commonplace. The same is true of sleepwalking, which people used to grow out of. Now, some adults sleepwalk too."

The reason? Lifestyle. A chaotic circadian rhythm, evenings spent in front of screens, a decline in physical activity. "The more modern our lives become, the greater the challenges to our sleep," emphasizes the professor. Among them, the most serious is the aforementioned obstructive sleep apnea, which can take many forms. It can look like depression, insomnia, headaches, and even migraines. Sometimes the only symptoms are heart palpitations or facial tension. And sometimes it ends in tragedy: heart attack, stroke, sudden cardiac death.

The basis for its diagnosis is polysomnography – an overnight test that records brain waves, breathing, movements, and heart function. The most common treatment is CPAP – a device with a mask that keeps the airways open – and new-generation medications that reduce the number of apnea episodes by half and reduce weight by 20%. There are also more advanced methods, such as hypoglossal nerve stimulation, used in the US. In Poland, it is not yet reimbursed.

Although new therapies offer hope, they cannot replace one thing: "Circadian rhythms are crucial. We should eat, sleep, and exercise at the same time every day, including weekends. Disruption of the biological clock causes an increase in blood pressure, appetite, and the development of obesity," warns Professor Martynowicz.

In Wrocław, sleep medicine is not practiced by two hundred specialists, as at Harvard, but by a few enthusiasts. Full of passion, they try to convince us that sleep is not a luxury, but the foundation of health. Unfortunately, we are only just learning how to take care of it. ■

\*\*\*

Health and mental well-being are topics we discuss with scientists and doctors every year as part of the Health and Mental Health & Wellbeing Thematic Track. At Impact'26, one of the topics discussed here will have to do with the importance of sleep.

# THE DREAM OF ABUNDANCE

We still dream of a better world, yet we already have the ability to create many of the inventions needed to make it a reality. Why don't we do it?

WRITTEN BY: Julian Kutyła



LLUSTRATION GENERATED BY AI

hen, in September 1954, the then President of the United States, Dwight Eisenhower, announced the start of construction work on Shippingport in Pennsylvania, it was not only the

beginning of one of the most important investments in post-war America at the time. The world's first commercial nuclear power plant was to provide electricity for over 100,000 people. Eisenhower thus announced the dawn of a new era. By harnessing the power of the atom, humanity's age-old dream of unlimited access to energy was to be fulfilled. And even more: thanks to this investment, humanity was to come closer to "the fulfillment of the age-old dream of a new, better Earth."

Barely 40 years later, Adam Curtis, a BBC documentary filmmaker, recalls this scene in the miniseries Pandora's Box, and by then it is only an afterimage of another era, when the Western world dreamed of a new, better world benefiting from the blessings of science and technology. As Curtis painstakingly edits his film from thousands of archival materials, the 20th century comes to an end, an era in which this dream fell apart into a thousand pieces. It was shattered by the Chernobyl disaster, the collapse of the myth of scientific and centralized economic management, and a general disappointment with the impact of technology on the

state of society, which resulted in the emergence of a whole series of Green movements. The dream is over, but is it over for good?

In a book recently published in the Impact series, Ezra Klein and Derek Thompson, two renowned American journalists and popular podcasters, invite us to engage in a peculiar exercise of imagination: "The year is 2050. You walk into your kitchen and turn on the tap. Water from the ocean flows out. It is fresh and clean, pumped from a desalination plant. These plants use biological membranes to filter salt out of the water. Today, they produce more than half of the country's fresh water. Rivers that were previously exploited, such as the Colorado, are flowing rapidly again because we no longer need them to irrigate fields and fill kettles. Phoenix and Las Vegas, cities that were dry until recently, are now a feast for the eyes with their greenery.

You open the refrigerator. In the drawer are apples, tomatoes, and eggplants from the nearest farm, located a few kilometers away. The crops do not grow horizontally in fields. They are planted vertically, on terraced shelves, in a tall greenhouse. Life-giving photons flow from rows of LEDs at perfectly measured intervals. High-rise farms save many hectares of land, which are now used for forests and parks. [...] When your parents were young, more than 25 percent of habitable land was used to raise animals for consumption. Now that is unimaginable. Much of that area has returned to its wild state. [...] The air outside is clean, and the electric machines surrounding you emit only a gentle hum.

Klein and Thompson oppose the recently popular theories that call for slowing down the pace of change in order to save the world. Instead, they propose a "leap forward" and radical technological acceleration as the only way to avoid a global crisis. In their opinion, it is new technologies that are creating new opportunities today and allowing us to solve problems that were once unsolvable. Let's return to the dream of 2050: "The world has changed. Not just the virtual world, that dance of pixels on screens. The material world too: homes, energy, infra-

ALMOST 40% OF POLES
DENY EVOLUTION,
32% BELIEVE THAT PEOPLE
LIVED WITH DINOSAURS,
AND 52% DO NOT RECOGNIZE
ANTHROPOGENIC CLIMATE
CHANGE.

structure, medicine, technical devices. How different this era is from the first decades of the 21st century, which were marked by the tangled threads of numerous crises! The housing crisis. The financial crisis. The climate crisis. Political crises. Pandemic. For many years, we knew that we needed to build an economy that would fill acute shortages and create opportunities that many people needed—and we simply did not build it. For many years, we did not invent or implement technologies that would make the world cleaner, healthier, and richer. For many years, we limited our ability to solve the most important problems. Why?

That's a good question. After all, as Klein and Thompson argue, we already have the ability to build many of the inventions we need to create the world we want. The rest, which is equally significant, still needs to be invented or improved: "green hydrogen and cement, nuclear fusion, drugs for terminal cancers that are resistant to current treatments, and for mysterious autoimmune diseases that baffle today's doctors." However, this requires considerable investment, preferably independent of the market principle of a relatively quick return on investment. Research is often tedious and lengthy, and may seem like a complete mistake at first. James Rothman, winner of the 2013 No-

bel Prize in Physiology or Medicine, suffered "nothing but failures for the first five years of his research before the first sign of success appeared." When he began his work in the 1970s, government grantors were much more willing to take the risk of funding research that did not yield immediate results. Our societies would have to bear the cost. But do we believe in science enough today to do so without resistance?

A partial answer to this question is provided by the recently published report "Knowledge and attitudes of European citizens towards science and technology." The Eurobarometer survey paints a rather dramatic picture: although 83% of Poles consider science and technology to be a good thing, as many as 54% believe that... they have no impact on everyday life. The next set of data is even more alarming. Nearly 40% of Poles deny evolution, 32% believe that humans lived alongside dinosaurs, and 52% do not recognize anthropogenic climate change. Compared to the 2021 report, there has been an increase in almost all rankings related to the denial of scientific facts. However, there are small glimmers of hope. The report shows that 87% of Poles are in favor of renewable energy, and 79% have a positive opinion of information and communication technologies. However, this is not the end of the problems. While public skepticism about science is the most obvious problem today, Klein and Thompson write that equally painful barriers to innovation are excessive implementation costs and overly slow regulatory changes, which together often stifle the potential of new solutions. Politicians, busy with the immediate struggle between increasingly polarized camps, are not really in a position to make a decisive commitment to innovation.

So, will we be living in the reality dreamed of by Klein and Thompson in a quarter of a century, or are we in for another painful awakening? In search of answers to these questions, it is worth reading this truly interesting book. For who would we be without dreams? And above all, who would not want to live in prosperity?

THIS TITLE APPEARED IN POLISH IN THE IMPACT BOOKS SERIES



New York Times bestseller by Ezra Klein and Derek Thompson "Abundance". published in 2025 by Avid Reader Press / Simon & Schuster.



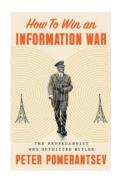


DEREK THOMPSON. american journalist and podcaster who has published in The Atlantic, among others. **Author of Hit Makers:** How to Succeed in an Age of Distraction. In June 2025, following the success of Abundance, Thompson left The Atlantic to launch the Substack newsletter.

## **EZRA KLEIN** american political commentator and journalist. columnist for The New York Times, and host of The Ezra Klein Show podcast. He is also the co-founder of the news site Vox and its former editor-in-chief.

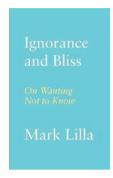


## THESE BOOKS APPEARED IN POLISH IN THE IMPACT BOOKS SERIES



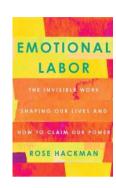
## PETER POMERANTSEV "How to Win an Information War: The **Propagandist Who Outwitted Hitler**"

Peter Pomerantsev, author of the highly acclaimed books Nothing is True and Everything Is Possible: The Surreal Heart of the New Russia" and "This is Not Propaganda," this time introduces us to the quiet hero of World War II, Thomas Sefton Delmer, who, creating the character of a "good German" hiding under the pseudonym "Der Chef," fought a fierce battle against the Nazi propaganda machine. However, this incredible story is only a pretext for reflections on today's war propaganda, and Pomerantsev becomes a faithful disciple of Delmer, fighting against the lies of Putin's regime. A fascinating read.



## **MARK LILLA** "Ignorance and Bliss: **On Wanting Not** to Know"

Can ignorance be a choice? Is avoiding the truth sometimes a necessity? Mark Lilla, a distinguished philosopher and essayist, invites us on a journey through the meanders of the human psyche, showing how often we consciously look away from reality. Lilla guides us through the history of thought and culture, analyzing why we prefer to believe in illusions and avoid uncomfortable facts. He proves that sometimes escaping the truth is not only a result of human weakness, but also a defense mechanism that allows us to function in an increasingly complex world.



## **ROSF HACKMAN** "Emotional Labor: The **Invisible Work Shaping** Our Lives and How to Claim Our Power"

Almost every day, we have to adjust our emotions to please others—to help them find their place in a given situation or improve their mood. This emotional labor is crucial to our society and economy, but it often goes unnoticed. In this groundbreaking book, Guardian journalist Rose Hackman shares the stories of hundreds of women to trace the history of this type of work and show its everyday manifestations.



# THE ANATOMY OF NATURE

IRMINA STAŚ in conversation with Julian Kutyla

We experience the world differently when we spend most of our lives in the forest from an early age, says painter Irmina Staś. The artist talks to Julian Kutyła about the roots of her art and her fascination with the cycles of nature

We have just seen your latest exhibition, "Eye Image Object," at the Le Guern gallery. You are primarily associated with painting, but here we have not only a carefully arranged space, but also objects filling it – forms resembling pillows and quilts. Have you grown tired of painting alone?

Fortunately, I'm still not bored with painting (laughs). I still have many paintings in my head that I want to paint. However, I felt the need to touch them. We usually associate the form of a painting with a prohibition on touching, but I wanted my works to be touchable. I feel that this is the closest form of relationship with the object. I already tried to go beyond the boundaries of the painting at the exhibition "Przemiana materii" (2016) at Miejsce Projektów Zachęty, where the paintings literally spilled onto the walls of the gallery. I started thinking about fabric because my earlier works, for example from the "Ornaments" series, were inspired by fabrics and reminded me of patterns on fabric. At some point, I just started thinking that I wanted to sew something.

You are a graduate of the Academy of Fine Arts in Warsaw, you finished Leon Tarasewicz's painting studio in 2012. Tell me, why did you choose this studio? How conscious was this decision?

How conscious can a gesture be when you're 20? (laughter). When I was in art school in

Nałęczów, I imposed a routine on myself where I would come to Warsaw once every two months and simply visit the most important institutions, such as the Center for Contemporary Art and Zachęta, and I came across Tarasewicz's concrete-filled concrete mixers ("Painting," Center for Contemporary Art, 2003). It made such a huge impression on me that I simply remembered that there was such a person as Tarasewicz. Then, for various reasons, I really wanted to study in Warsaw, and definitely painting.

At that time, there were two most popular studios: Modzelewski's and Tarasewicz's. I didn't really feel the figurative style that prevailed in Modzelewski's studio, while in Tarasewicz's studio, everyone painted differently. Hence my choice. It turned out that there was an incredible energy to work in this studio, a real creative ferment.

I asked if it was a conscious choice, because in your works you can see certain motifs associated with Tarasewicz, repetitiveness, emphasis on the painting process itself, a special connection between art and nature...

It surprises even me, because I have never encountered such a claim that there is any similarity. However, maybe there is something to it. It's about being close to nature, living in accordance with its rhythm, its cycles. I grew

Irmina Staś, Chlorophyll & Blood 40, 2025, oil on canvas160 x 160 cm. Impact Art Collection

## IRMINA STAŚ

painter, author of objects and spatial realizations that fit into the formula of painting. She studied at the Academy of Fine Arts in Warsaw in 2008–2012, where she obtained a diploma in the studio of Prof. Leon Tarasewicz at the Faculty of Painting.



HOTO: ADAM GUT

up in a small town, very close to the forest, so even when I paint things that bear no resemblance to landscape, I am greatly influenced by what is happening in nature at that moment. Perhaps this is a trait of people who come from a natural environment. We experience the world differently when we spend most of our lives in the forest from an early age.

This biological aspect has been present in your work since Organisms, your first exhibition (2013). I was wondering to what extent this is influenced by your interest in biology as something theoretical, and to what extent by your direct experience of this biological aspect?

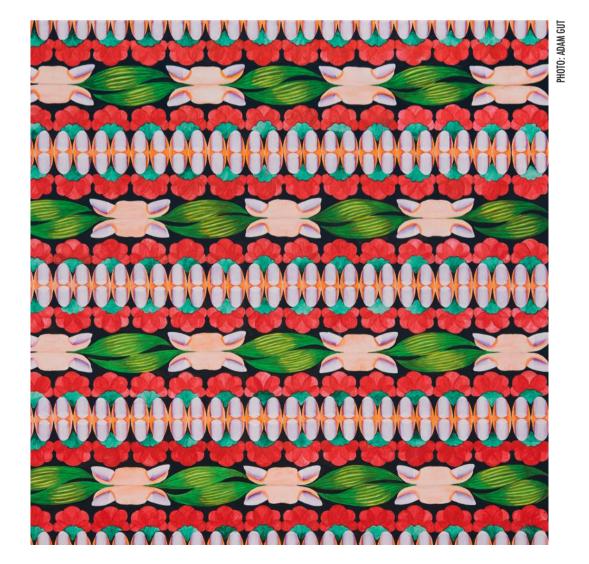
Almost exclusively experience. These are memories, fragments of experiences – the light during the March thaw or the sound of snow crunching on a cold, sunny morning. I grew up in a house without a car, so regardless of the season or weather, we would walk or cycle a few kilometers between some strange train stations that are long gone. These are very basic

situations, but I believe that my work is the result of living in a biological rhythm – picking berries in the summer and mushrooms in the fall to make preserves for the winter. My attitude towards my profession is a consequence of this. I have certain assumptions, I plan, and it is very monotonous, routine. At the same time, I try not to overlook what the outside world and painting itself bring.

## And how do you place the series Chlorophyll and Blood in the context of your various interests?

"Chlorophyll and Blood" is a natural transition from the "Ornaments" series and a kind of return to an idea that was already born in "Cross-Sections": there, in abstract forms, I symbolically included plant and animal elements using colors. There came a point when the arsenal of human body fragments that interested me began to run out, so I decided to add elements from the plant world. That's why I changed the name to "Chlorophyll and Blood," the fluids that characterize the world of fauna and flora.

Irmina Staś, Chlorophyll and Blood 21, 2023, oil on canvas, 110 x 110 cm. Courtesy of the artist and Le Guern Gallery.





As part of this series, you painted the picture "Chlorophyll and Blood No. 40" for the Impact Art collection. You used the motif of breasts and flowers in it. Where did this idea come from and do you often paint on commission for collectors?

"Chlorophyll and Blood 40" is indeed a composition built around the motifs of female breasts and orchid flowers. Breasts in my paintings always symbolize life, the continuation of the species; they are milky, nursing breasts. The orchid, on the other hand, is dignified, monumental, and associated with luxury. The painting is also meant to be an emanation of life as wealth and value. The commission for the Impact Art collection was not a typical one. I was not given any guidelines, either formal or content-related. The only condition I had to meet was that the painting had to be created specifically for Impact. This is a very comfortable situation for an artist, because you are given freedom of artistic expression and complete trust, and you also know that

your work will end up in a great collection. It was my first experience of this kind.

## You mentioned that you used to work more intuitively. Tell me, what do you attribute this change to? Is it motherhood, working at the university?

I think that when you paint regularly and a lot, when you live through your paintings in a sense, change is part of the creative process and stems from the need for constant exploration. A few years after graduating, my paintings started to become more organized and simplified. Maybe there will come a time when I'll feel the need to move away from the order I'm imposing on myself now, towards more intuitive, spontaneous forms. However, there is also room for freedom in my order. I really like it when my paintings blur, when there are smudges that do not fit into the carefully drawn grids and ornaments. I leave it as it is, I do not retouch it. I really like that there is still room for freedom in painting. ■

Irmina Staś, Untitled, from the series "Chlorophyll and Blood 21," 2023, pencil, watercolor, paper, 78 x 106.5 cm, Courtesy of the artist and Le Guern Gallery.



## WIELKOPOLSKA DISCOVERS WINE TOURISM

Picturesque landscapes, walks among rows of grapevines, tasting regional products, and passionate stories about wine—you don't have to go to Tuscany to spend a weekend at a vineyard. Wielkopolska has its own wine trail. They offer tastings, tours, participation in grape harvesting, and many other attractions.

WRITTEN BY: Marta Danielewicz, "Gazeta Wyborcza" Poznań "Sometimes we wonder if this plantation is worth heating on a cold night. Getting up at dawn to finish the harvest before the sun is high," say Paweł and Marlena Gronowski. "And then we sit down with our guests and neighbors. We enjoy the view of the vineyard and the taste of wine," they admit.

It is a sunny afternoon. The scent of lavender hangs in the air, and the buzzing of insects can be heard. We are sitting on the terrace in front of a 130-year-old house. Before us lies a view of a vineyard surrounded by dense forest.

## **LEARNING TO LOVE WINE**

The Stara Szkoła vineyard, owned by the Gronowski family, is located on the outskirts of the former state-owned farm village of Karczewko, on the edge of the Zielonka Forest, 38 kilometers from Poznań. The area is full of fields and forests, a stone's throw from Lake Turostowskie and the Cistercian Bicycle Trail, which connects places associated with the order in Greater Poland. From here, you can also set off on a tour of wooden churches.

Paweł and Marlena bought the property four

years ago. At that time, they lived a few municipalities away, in Czerwonak, closer to Poznań. They got to know the area during bike trips. Even then, Paweł, still the CEO of a large company, was interested in winemaking. During his trips abroad, he and Marlena often visited vineyards, and with each story told by their owners, he became more and more convinced that winemaking could be his way of life.

He started by planting 30 vines and began producing so-called house wine, which he gave to his friends. He and his wife became increasingly bold in their plans to start their own vineyard. To make this happen, they needed the right know-how. Therefore, even though they were both over fifty, they began postgraduate studies in winemaking technology at the University of Life Sciences in Wrocław. They started their day by testing wines, then visited vineyards.

## APPEALING TO THE TASTES OF THEIR COMPATRIOTS

It was Marlena who gave the green light to purchase land in Karczewek. The conversion of an old, 130-year-old former German school into an atmospheric house and guest rooms began at the same time as the preparation of the land for the vineyard. They allocated two hectares of land for this purpose, where eight thousand seedlings of eight grape varieties are currently growing: Souvignier Gris, Johanniter, Sauvitage, Muscaris, and Solaris, from which white and orange wines are produced, as well as varieties for red and rosé wines: Zweigelt, Salome, and Dornfelder. Pawel's passion is sparkling wines, which thrive in Poland thanks to the suitable climate. Marlena helps him choose the right flavors. "Poles tend to prefer semi-sweet wines to dry ones, so I advise my husband to make them a little sweeter," she explains. Orange wine (also known as amber wine), which can be tasted at Stara Szkoła, is considered a rarity among connoisseurs. It is made from white grapes, but using a method similar to that used for red wines - the skins are not immediately removed from the must, but macerated with it. Produced in Georgia and Armenia for thousands of years, it is now experiencing a renaissance in Europe. It is tannic and dry, and tastes delicious with blue cheese. Several hundred bottles of wine are produced annually at Stara Szkoła. Mainly for tasting and small-scale sales - directly or at fairs. Paweł estimates that the plantation could potentially produce up to 10,000 liters of wine per year. However, this is currently unachievable due to unpredictable weather conditions.

## 16.000 MINUTES A DAY

With the establishment of the vineyard, the idea was born to develop wine tourism, where guests come, visit the vineyard, take part in tastings, stay overnight, and often enjoy other attractions in the region. This style of vacationing is just beginning to develop in Poland, but it is becoming more and more popular every year. Paweł, who is actively involved in the Wielkopolska Winegrowers' Association, was the initiator of the Wielkopolska Wine Trail and the promotion of Polish winemaking through the development of wine tourism.

The Gronowski family has no shortage of guests. "Neighbors come, rural

housewives' clubs come, organized groups of a dozen or so people come. When the harvest is over, we leave a few vines with fruit so they can see what it's like to be a winemaker. Then there's a tasting. Many of our neighbors make their own products. We get white cheese, honey, and cold cuts from them."

Running a vineyard is not only a pleasure, but also daily, arduous work. Paweł estimates: "Almost 8,000 seedlings. Each one takes 2 minutes – that's 16,000 minutes. I have to approach each bush individually, learn its needs, diagnose problems. When harvesting fruit, I have to get rid of beetles. We don't use pesticides."

In addition, in winter, especially when it is freezing, the seedlings must be protected from excessive cold. To do this, fires are lit and the plantation is heated with smoke. Then a tractor is driven between the vines so that the heat reaches everywhere. "In fact, it is not winter that is dangerous, but spring frosts, when vegetation starts and the temperature can drop to minus 8 degrees Celsius at night," says Paweł.

## TUSCANY IN THE HEART OF POLAND

GWine farms that offer tours and tastings, as well as a wealth of knowledge about wine, are becoming increasingly popular in Poland, mainly in Małopolska, Lubuskie, and Podkarpacie. Wielkopolska also has nothing to be ashamed of – the latest archaeological research indicates that the cradle of winemaking was located in Ostrów Tumski, now the center of Poznań. The



Stara Szkoła Winery

origins of this tradition date back to the turn of the 10th and 11th centuries. Then the climate became colder, which made it necessary to import wines from abroad. Until 2007, when real vineyards began to appear in the region again. The first were Winnica Katarzyna and Winnica Niewinne Siostry.

One of the most interesting is the Edison Vineyard in Baranowo, picturesquely located on Lake Kierskie, right next to the Edison Hotel. It belongs to Przemysław Woźny, and Maciej Krystowski, president of the Wielkopolska Winemakers Association, helps him run it. His adventure with wine began by chance, during a vacation in the south of France, in Bordeaux. "That was 20 years ago. We went to visit the vineyards, knowing nothing about wine. But everything was closed, we had no idea that you had to make an appointment, make a reservation. Angry and hungry, we entered a small wine shop. The owner started telling us about wines and offering us some to taste. He charmed me. That's how I bought my first wooden crate for bottles and began to explore the subject,".

Shortly thereafter, Maciej Krystowski began organizing wine trips for his friends all over the world: Georgia, New Zealand, Chile, Argentina, California, and of course Europe. He learned to distinguish between different flavors and aromas of wine.

When his friend bought a hotel in Baranów and decided to plant vines on the surrounding land, Krystowski enthusiastically supported him. Piotr Stopczyński, a renowned oenologist, was invited as a consultant and introduced them to the world of wine production. Thus, in 2017, a half-hectare vineyard was established, which has now been expanded with another plot located within the city of Poznań.

## A CLIMATE THAT IS BECOMING INCREASINGLY FAVORABLE

Maciej Krystowski not only supports the development of the Edison Vineyard. He is also the founder and driving force behind the Wielkopolska Winegrowers' Association, which today brings together 26 vineyards. Their trail was created with the involvement of the Marshal's Office of the Wielkopolska Province, which supports this activity by co-organizing Polish

Paweł and Marlena, owners of the Stara Szkoła vineyard



HOTO: PRIVATE ARCHIVE



PHOTO: PRIVATE ARCHIVE



PHOTO: PEXELS

wine fairs. Visitors can taste the wines and buy their favorites. "90% of Polish vineyards do not offer wholesale sales to stores or restaurants. It is still a little-known product and, , production is low," says Krystowski

From a hectare of vineyard, under good conditions, a winemaker can produce between 2,000 and 4,000 good bottles. However, the plans of vineyard owners are thwarted by late spring frosts. "That is why it is easiest to buy wine directly from winemakers at fairs. Many vineyards also try to sell online, although Poland is the only country in Europe where this activity is not regulated by law," adds the president of the association. In Greater Poland, as in other parts of Poland, mainly hybrid varieties are grown, which are more resistant to climatic conditions: Solaris, Muscaris, Hibernal, Johanniter, and Souvignier Gris. However, more and more varieties of so-called true vines, such as Riesling, Chardonnay, and Pinot Noir, are also being planted. "In our climate, the so-called hybrids have good growing conditions and produce very decent wines. Of course, the greatest and most renowned wines in the world are made from true grape varieties, which is why, despite the more difficult conditions, we are planting more and more of them," adds the president of the association.

Maciej Krystowski would like wine tourism to become as popular in Poland as it is

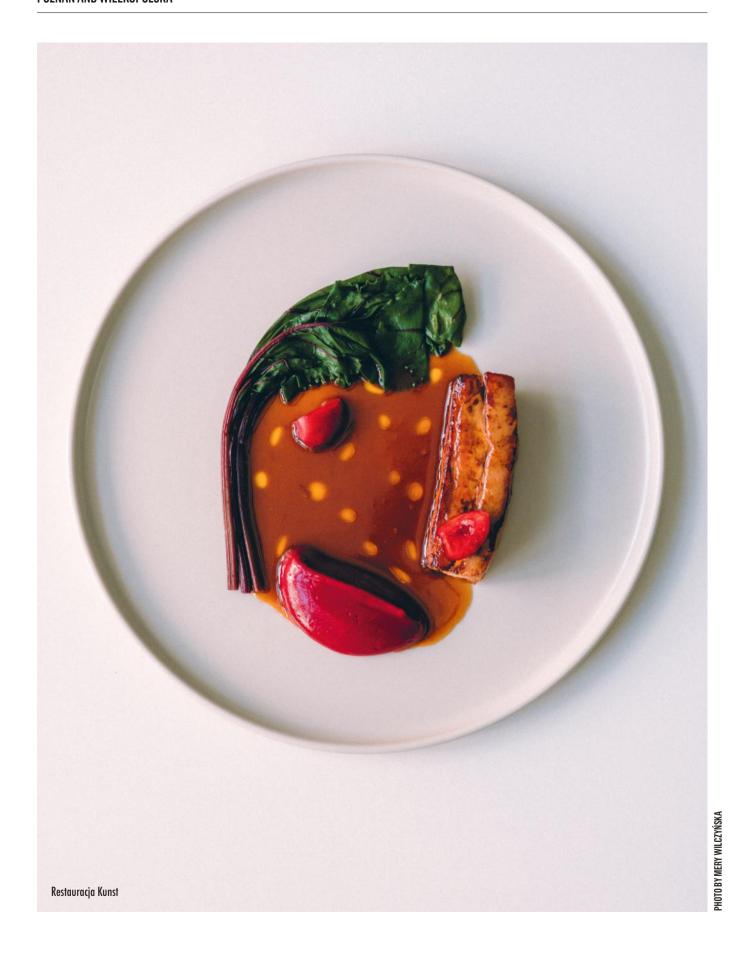
in Mediterranean countries. Research shows that it is one of the fastest growing tourism industries in Europe. "People, especially since the pandemic, want to leave the cities, they want contact with nature and agriculture. If a winemaker talks interestingly about their passion, their work in the vineyard, and this is combined with the opportunity to relax, drink and eat something good and local, what more could you want?" he asks. Especially since wine tourism is not limited to wine alone. "We encourage people to go on trips, use bike trails, go kayaking, or play golf on courses located near the vineyards. Many winemakers care about the diversity of their guests' experiences - some have a pond where you can fish, others offer accommodation in large barrels, some organize Nordic walking or, like the Niewinne Siostry Winery, cross-country running in picturesque moraine terrain. Still others have family fishing farms and combine wine tasting with fresh fish dishes," lists Maciej Krystowski. "Wine then becomes a guide that takes us by the hand and shows us: look how tasty and beautiful the world is," he adds.

Research by climatologists indicates that growing grapes in Poland may become increasingly easier. In recent years, southern European regions have been experiencing excessively high temperatures, leading to prolonged droughts, accelerating fruit ripening, and increasing sugar content. A lack of sugar makes wine too acidic, while an excess of sugar makes the alcohol content too high, which in turn negatively affects the noble taste of the drink. Regions further north are therefore becoming attractive for grape cultivation. Consumers around the world are increasingly choosing lighter, more aromatic wines with lower alcohol content. These are produced in cooler climates. In Po-

CONSUMERS AROUND THE WORLD ARE INCREASINGLY CHOOSING LIGHTER WINES THAT ARE MORE AROMATIC AND CONTAIN LESS ALCOHOL. THESE ARE PRODUCED IN COOLER CLIMATES.

land, the Solaris white grape variety dominates, while among the reds, the most planted varieties are hybrids – Rondo and Regent. Every year, there are more plantings of white Riesling and Chardonnay and red Pinot Noir among the classic varieties (vitis vinifera).

The National Agricultural Support Center (KOWR) has collected data on the scale of wine production in Poland. In the 2024/2025 season, as many as 699 vineyards were registered – 132 more than in the previous season. According to Dr. Mariusz Maciejczak from the Warsaw University of Life Sciences, Poland may become a country where grape cultivation and grape wine production will have favorable conditions. "Polish consumers in particular are looking for wines in the premium segment, where one of the determining factors is organic origin," he says. Wine tourism will undoubtedly develop dynamically and provide us with many new experiences.



60

## A BEHIND THE STOVE LOOK AT AUTUMN

Autumn in Poznań smells of roast goose, red cabbage, and freshly ground poppy seeds. You can also smell the aroma of warming ramen, French cuisine, and other examples of haute cuisine. It's the best time to come here for a weekend and taste both local dishes and international cuisine.

Written by Magdalena Ratajczak & Mateusz Spurtacz, MYTUJEMY. Poznań is flourishing in terms of cuisine, and the autumn months are a good time to experience it. Comfort food appears on the menus – filling, aromatic dishes, often evoking the flavors of childhood. Created not only to satisfy hunger, but

also to lift the spirits. It is now that the city tastes its best: traditional, seasonal, a little nostalgic – with respect for local products and dishes.

The queen of Greater Poland's tables in autumn is goose. Its connection with the city dates back to the Middle Ages and the legend of Saint Martin, who, according to the story, hid in a goose pen to avoid becoming a bishop, but the honking of the birds betrayed his hiding place. The legend gave rise to the tradition of celebrating the saint's name day (November 11) with roast goose, which became a symbol of hospitality and abundance. This is no coincidence. Autumn, and November in particular, is the time when goose meat is at its juiciest and has the best texture. Delicate and aromatic, known from court and noble cuisine recipes, when properly prepared, it melts in your mouth. In Poznań, chefs serve it in many variations - from the classic with apples and red cabbage to modern compositions inspired by European cuisine.

St. Martin's Day is also celebrated with St. Martin's croissants, which are now famous throughout Poland. The tradition of baking them dates back to the end of the 19th century. As a regional product protected by an EU certificate, they have a canonical composition: puff pastry made with margarine and a filling of white poppy seeds, nuts, raisins, orange peel, and almonds. Today, the recipe inspires local master confectioners to create their own interpretations. More and more original pastry shops are using butter instead of margarine, giving up excess sugar and creating their own variations

lighter, more refined, often baked in limited series.
 Join us on a culinary tour of Poznań!



OTO RY MYT



From top: interior of the Kunst restaurant, croissant from OVO.PRACOWNIA

## ZŁOTA KACZKA Głogowska 123

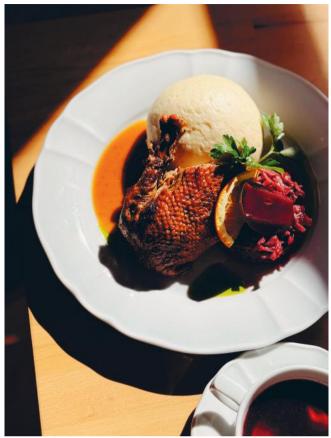
Złota Kaczka is one of the most distinguished restaurants in Poznań – it has been operating continuously since 1978 and consistently serves classic Polish cuisine with authentic respect for tradition. Goose is roasted whole here, according to the same recipe for over four decades, and served with handmade dumplings and red cabbage. "Goose meat has a special place in our kitchen, especially in November – it is a noble meat, forgotten for years, which is worth bringing back to the table. We have been roasting both ducks and geese whole, using the same method since 1978. We have also been preparing dumplings from scratch in our kitchen for years," says Mikołaj Mikołajewski, head chef. Just as important as the taste is the atmosphere, created by original stained glass windows by Poznań artist Karol Bak.

## MODRA KUCHNIA Mickiewicza 18

Modra Kuchnia is a contemporary story of home cooking in Greater Poland – an intimate restaurant in Poznań's Jeżyce district, run by a married couple: Szymon Sławiński, the chef, and Dorota Nadolska-Sławińska, an expert in hospitality. The heart of the restaurant is its open kitchen – lite-



Modra Kuchnia



Złota Kaczka

rally and figuratively. The menu draws on folk traditions, but does not reproduce them one-to-one – it is Polish home cooking with an original twist, well thought-out and seasonal. The local pyza with shredded goose and cherries is a dish that perfectly illustrates Modra's philosophy: classic ingredients, local produce, a contemporary Polish take on the burger. Also noteworthy is its plant-based alternative with oyster mushrooms, which perfectly replicate the texture of meat . The menu also includes kulebiaki, chicken soup, potatoes with cottage cheese, and czernina – all prepared from scratch and served without pretension.

## MO.BAR, Wroniecka 18

A place that attracts lovers of delicious cuisine and a unique atmosphere. Thanks to chef Bartosz Kaszyński, who gained experience in Michelinstarred restaurants, you can discover traditional flavors in a completely different light here. Their

HOTO BY MYTUJEMY

pulled goose deserves a gold medal - served in a fluffy wheat bun, it refers to the restaurant's specialty - pulled pork, i.e., iconic burgers with pulled pork and extras.

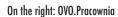


On the left: MO.BAR

## BARDZO, Żydowska 2

Original croissants with butter, fragrant with almonds, more crispy and less heavy than the classic version. Combined with specialty coffee, they can be the perfect complement to your escapades through the streets of Poznań. "I prepare the light, flaky dough with butter, and the distinctive white poppy seed filling is full of Amaretto, homemade marzipan and honey from my friends' apiary, and raisins soaked in my favorite rum. This combination is sweet comfort food that I love," reveals Piotr Lasik, confectioner and owner of the Bardzo café.

> Croissants from the Bardzo bakery





HOTO BY MYTUJEMY

## OVO.PRACOWNIA. Dominikańska 7

A place for true connoisseurs who appreciate not only refined taste but also craftsmanship. Here, croissants are small works of art - beautifully shaped, with perfectly balanced fillings. This is a place for those who seek tradition with a new t

## KAFERDAM. open courtyard if front of the Castle

Between croissants and goose, it is worth stopping by for coffee or a signature breakfast. Kaferdam in front of the Imperial Castle is a modern place with character and unpretentious style, reminiscent of Berlin's Kreuzberg. It is one of the best places to watch the city bustle in November – especially with a cup of specialty coffee. On the menu: great pour-overs, nitro, and aromatic matcha. For breakfast, we especially recommend their seasonal, fluffy pancakes!

## KUNST, Stary Rynek 6, Galeria Miejska Arsenał

The concept was launched in early 2025 by the owners of the popular Mitte club café in Poznań – Agata Rożankowska and Sebastian Goliński. The restaurant is located in the Arsenał City Gallery building in the heart of the Old Market Square. The name "Kunst" – German for "art" – perfectly captures the idea of a place that treats cooking as a form of artistic expression. The interior combines vintage style with modern, raw stainless steel elements, and the open kitchen allows guests to get up close to the process of creating dishes based on local, top-quality ingredients. The menu includes sturgeon and bacon from Złotnicka pigs, as well as matching vegetarian op

## TONARI, Jackowskiego 37

This unique place, steeped in the spirit of 1990s Japan, was created by a Polish - Korean duo – Jakub Tepper and Min Han – who brought that unique aesthetic to Poznań. The interior at Jackowskiego is a tribute to Tokyo apartments from decades ago – full of books,





HOTO BY MAGDA KLIMCZAK

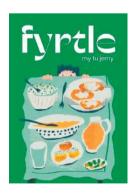
traditional Japanese magazines, and small details and cozy lighting. Here you can taste authentic Japanese home cooking: aromatic ramen, teishoku sets, donburi, creamy katsu curry and classic onigiri. The dishes are also available in a meat-free version – from the plant-based alternatives, it is worth trying Vege Tantamen or Vege Pirikara Soboko onigiri with vegan minced soy.

## WINNOWIERCY, Mickiewicza 34

A perfect place for an evening out – a shop and wine bar that has turned into a lively meeting place. Kamila and Jakub Kubaccy, enthusiasts of natural and biodynamic wines, offer over 200 labels and a seasonal menu prepared by chef Krzysztof Łapawa, full of French inspirations. The menu changes depending on the season and the availability of vegetables and fruit at the nearby Jeżycki Market. All dishes are 100 percent vegetarian, and evening feasts here always end with homemade, chewy fudge!

Krzysztof Łapawa, Head Chef at the Winnowiercy restaurant

Magdalena Ratajczak & Mateusz Spurtacz, MYTUJEMY: We have been tasting Poznań for years. We help people find places worth visiting. We know the addresses where goose is served as it used to be - with red cabbage and apple. We know which bakery is worth queuing up at for the best croissants in town, and we are constantly discovering new places. We are the authors of the book **FYRTLE: MY TU JEMY (FYRTLE:** WE EAT HERE), published by Wydawnictwo Miejskie Posnania.



Tonari

# 

impact'26 13-14 MAY

POZNAŃ / WIELKOPOLSKA

# The world's premier global space event is coming to Poznań!

78th International Astronautical Congress



















