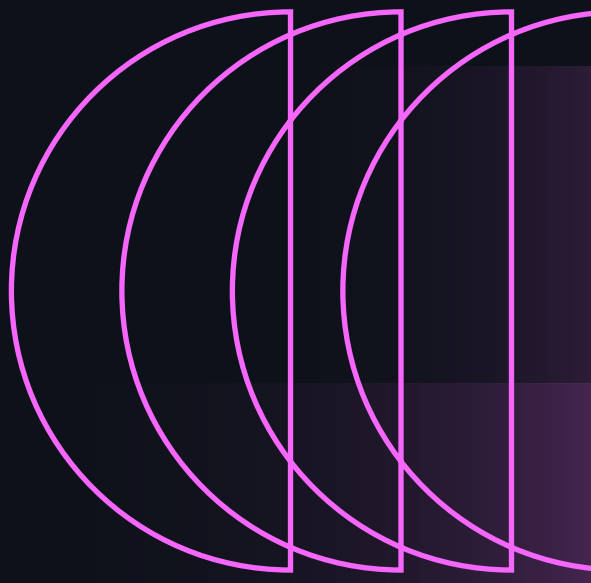
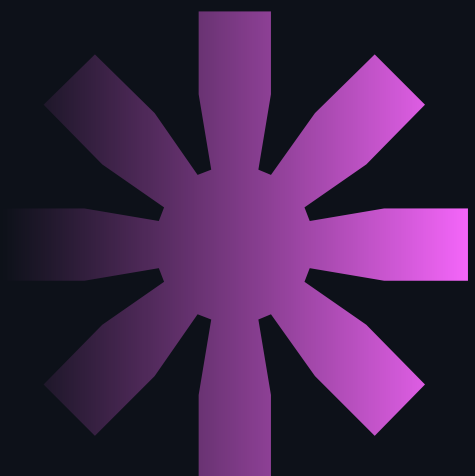
DESIGNED REALITIES

Synthetic media, human perception and the truth crisis





synth. truth

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ABOUT THIS PUBLICATION

This report is a result of Erasmus+ project Future skills for synthetic media (deep fakes generated by AI)

Project “Future skills for synthetic media (deep fakes generated by AI)” KA210-YOU-D629511E is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, European Commission or Agency for International Programs for Youth. Neither the European Union nor the granting authority can be held responsible for them.

PARTNERS AND CONTACTS

MindUp
Łopuszna, Poland

Edyta Sadowska
edyta.gasadowska@onet.pl

Zuzanna Siudy
zuzanna.siudy@outlook.com

Association of Educational Games and Methods
Riga, Lativia

Ginta Salmina
ginta.salmina@gmail.com

Zane Veinberga
veinberga.hr@gmail.com

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AUTHORS

MindUp
Łopuszna, Poland

Edyta Sadowska
Editing: Zuzanna Siudy

MindUp

Mind Up is a organisation that offers a range of research and training services aimed at supporting businesses, educationalinstitutions, youth field and local governments in preparing for the future. Through its activities, Mind Up supports the development of future skills and competencies in both education and activities that promote the adoption of emerging technologies, such as Virtual Reality (VR), Augmented Reality (AR), and AI. The company's vision is to create and support the most comprehensive platform for communication, fostering future literacy, future thinking, design thinking,
precision thinking, complexity thinking, entrepreneurial thinking, and collaborative thinking among representatives of different generations. Mind Up's mission is to promote science and, above all, topics related to the future and technological development in the spirit of "make tech human," which enables the acquisition of future literacy and skills related to it.

Edyta Sadowska

is a social science doctor, futurologist, academic lecturer, and innovator. In her scientific and popularization work, she focuses on the future as a tool for shaping the present, redefinitions that allow for a proper description of the reality around us, and interdisciplinarity that conditions dialogue. Connecting the dots, expanding horizons, and full-spectrum thinking are the foundation of her understanding of the world. She is a laureate of the Jutronauts program (Gazeta Wyborcza & Kulczyk Investment), author of future literacy workshops, popular science and scientific articles, and manager of international projects.

Zuzanna Siudy

is a designer, graphic artist, illustrator, and innovator. She works in various design and creative areas, with a particular focus on aspects related to changing society and new technologies. She has participated in many international research projects and collaborates with NGOs and private clients. As a graphic artist and illustrator, she constantly expands the scope of her work, opening up to new tools

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Association of Educational Games and Methods

The Association of Educational Games and Methods is a non-profit organization dedicated to the development and promotion of educational games, innovative learning methods, and non-formal education practices. The association supports educators, youth workers, and trainers by creating practical learning tools and facilitating learning experiences that foster critical thinking, creativity, and active participation.

The association is actively involved in national and international projects, including Erasmus+ initiatives, with a focus on youth work, adult education, lifelong learning, digital literacy, social inclusion, and the development of future skills through experiential and game-based learning. To promote games as educational tools and to support the professional development of youth workers, educators, social workers, HR specialists, supervisors, and other professionals, the association organizes a tool fair conference twice a year.

Ginta Salmina

Ginta Salmina is an experienced youth worker, project manager, and trainer from Latvia with more than 15 years of experience in non-formal education and NGO development. Since 2011, she has been involved in numerous projects focused on youth, youth workers, non-formal learning methods, and the development of educational materials.

She has a strong passion for educational games and innovative learning tools and has contributed to the development of more than 100 educational games, many of which were created and implemented through Erasmus+ projects and international training initiatives.

Zane Veinberga

Zane Veinberga is an organizational psychologist, facilitator, and education trainer with experience in organizational settings, NGOs, and youth- and community-focused initiatives. Since 2011, she has been involved in national and international projects, many of which focus on youth work and capacity building.

She is passionate about experiential and game-based learning and has contributed to the creation and testing of numerous educational tools and games. Zane supports psychological development, creative solutions in business and projects, and future skills development through practical workshops and training programs. Her work combines creative methods, strong coordination skills, and a clear focus on real-life impact for participants and

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Introduction

What is Synthetic Media?

Synthetic media refers to content images, videos, sounds, or text that is created, modified, or enhanced using artificial intelligence (AI) technologies. Unlike traditional media, where humans play a central role in creation, synthetic media relies on algorithms, such as neural networks, to analyze data, learn from it, and generate new content.

One of the most remarkable features of synthetic media is its ability to mimic reality in a way that is often indistinguishable from the real thing. Deepfake technology, for example, can generate videos in which individuals appear to say or do things they never actually did, while voice synthesis can recreate speech with extraordinary realism.

However, synthetic media is not just a tool for advanced special effects or futuristic applications. It is a technology that is increasingly entering everyday life, transforming the way we consume and create content.

Examples of Synthetic Media

Synthetic media is a broad category encompassing various technologies that transform how we create and consume content. Below are key examples of synthetic media applications, illustrating both their potential and the risks they pose.

Old media
Mass distribution enabled by broadcasting technology

New media
Democratised distribution enabled by the Internet

Synthetic media
Democratised creativity enabled by deep learning

1. Deepfake

Deepfake is a technology that enables the realistic swapping of faces or voices in videos and recordings. In practice, this can mean seeing a well-known person in a video saying things they never actually said.

How does deepfake work?
Deepfake relies on advanced neural networks that analyze thousands of photos and video clips of a person to learn their facial expressions, movements, and vocal intonations. The algorithm then "overlays" these patterns onto another recording, creating a seamless and convincing transformation.

> **"There has truly never been a faster or more powerful way to spread lies than publishing them online."**
> /Matthew D'Ancona, Postprawda

Applications of deepfake

- Entertainment: The technology allows for the digital resurrection of deceased actors or the creation of younger versions of existing characters.
- Education: Used to create historical simulations or realistic reconstructions of well-known figures for educational purposes.
- Art and marketing: Enables the development of creative visual projects, offering new ways to engage audiences.

Risks

Deepfake can be misused for manipulation, disinformation, and blackmail. There have been documented cases of this technology being employed to create fake statements from politicians or compromising content, posing significant ethical and security challenges.

source: https://kwestiabezpieczenstwa.pl/deepfake/

2. Synthetic Voices

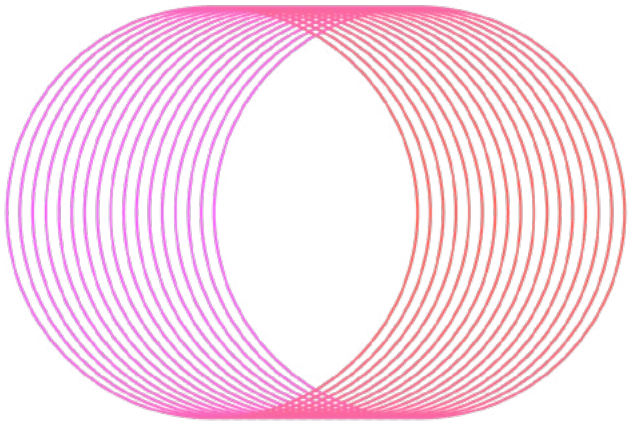
Voice generation through artificial intelligence is another breakthrough in synthetic media. Modern technologies, such as Text-to-Speech (TTS) models, can create voices that sound nearly indistinguishable from human voices.

How does voice generation work?
Algorithms analyze intonation, accent, and speech tempo to replicate a specific person's voice or create entirely new ones. These systems are trained using vast datasets of voice recordings to achieve high levels of realism and adaptability.

Applications of synthetic voices

- Virtual assistants: Realistic voices power conversational systems like Alexa or Siri, enabling more natural and interactive user experiences.
- Dubbing and localization: AI-generated voices make it possible to translate and dub films or content into multiple languages without the need for human voice actors.
- Creating new voices: Synthetic voices are used in video games and animated films to generate unique character voices tailored to specific narratives.

Example: Voice cloning
This technology allows users to create digital versions of their own voice or replicate the voices of well-known individuals (with their consent). However, unauthorized use raises concerns about privacy and copyright, making this a highly debated area of synthetic media.



3. Generated Images

One of the most spectacular achievements of synthetic media is the ability to create images from scratch, solely based on a text description.

How does image generation work?
Models like DALL·E, Stable Diffusion, and MidJourney use text prompts as input to create images in any desired style—ranging from photorealistic portraits to surreal works of art. These models analyze the input text, interpret its meaning, and generate visual representations that align with the description.

Applications of generated images

- Generative art: Creating works of art without the need for physical materials, enabling artists to explore entirely new creative possibilities.
- Product prototyping: Visualizing product designs before manufacturing, helping designers and engineers refine ideas efficiently.
- Marketing and advertising: Rapidly producing custom graphics for advertising campaigns, reducing production time and costs.

Examples

- Creating portraits of non-existent individuals for use in entertainment or as placeholders in various applications.
- Generating detailed landscapes for use in films, video games, or immersive virtual environments.
- Illustrating books, articles, or presentations on demand, tailored to specific themes or audiences.
- The ability to generate images based on text prompts is not only reshaping creative industries but also democratizing access to high-quality visuals for individuals and small businesses.

4. AI-generated text

Artificial intelligence is revolutionizing writing, making it possible to generate high-quality texts in just seconds, changing the way we create and consume written content.

How does text generation work?
Language models such as GPT (Generative Pre-trained Transformer) are trained on huge datasets containing billions of language examples from books, articles and web content. They learn to understand grammar, syntax and context, allowing them to produce coherent and meaningful texts.

Key capabilities include:
- Predicting the next word or sentence in a given context.
- Adapting to different writing styles and tones based on user cues.
- Creating content tailored to specific needs, such as formal reports or casual conversations.

Applications of AI-generated texts
TO ADD

5. Synthetic Video

Synthetic video is one of the most popular forms of synthetic media because it enables the creation of films without traditional tools, such as cameras or actors.

Example: Creating videos in a browser
Platforms like Synthesia allow users to generate professional videos by simply entering text, selecting an avatar, and generating the film. This process takes minutes instead of weeks.

Applications:
- Marketing: Creating advertisements and promotional content.
- Education: Producing instructional videos in various languages.
- Internal communication: Delivering information within companies quickly and in a personalized way.

6. AI Influencers

Synthetic media is opening a new chapter in marketing, introducing influencers generated by algorithms.

Example: Lil Miquela
Lil Miquela is a digital character with 3 million followers on Instagram, collaborating with brands like Chanel and Calvin Klein. These virtual personas are entirely controlled by algorithms and creative designers, giving companies complete control over their image and messaging.

source: https://www.thetimes.com/article/meet-lil-miquela-the-instagram-star-created-by-cgi-9krqrrcpx

Applications

- Product and service promotion: AI influencers serve as brand ambassadors, showcasing products and engaging with audiences in innovative ways.
- Marketing narratives: Creating tailored marketing campaigns without the limitations associated with human influencers, such as availability or public controversies.

7. Face Swap and Mixed Reality

Technologies like face swap and mixed reality are widely used in entertainment, education, and advertising.

Face Swap:
Applications enable users to swap faces in photos and videos, offering both fun and potential risks.

Fun uses:
Face swap apps are popular for creating humorous or lighthearted content.

Risks:
These tools can also be misused, such as in deepfake videos of celebrities, raising ethical and privacy concerns.

Mixed Reality:
Mixed reality blends the virtual and real worlds in real time, allowing digital and physical objects to coexist and interact.

Examples:
Snapchat filters that alter or enhance your appearance and augmented reality (AR) games like Pokémon Go that overlay virtual elements onto the real world.

These technologies open up new possibilities for creative expression and user engagement, but they also bring challenges related to misuse and privacy.

Why do synthetic media evoke so many emotions?

Synthetic media open up new possibilities in both creativity and technological functionality. They allow us to create content faster, cheaper, and more accessibly than ever before. On one hand, they enable projects that were previously out of reach such as digitally recreating a person's voice for educational purposes or building virtual worlds for video games.

On the other hand, synthetic media introduce new challenges related to the credibility of the content we consume. The ability to create visual or audio materials that are difficult to distinguish from real ones can be exploited for manipulation, fraud, and disinformation. This raises a critical question: will we be able to differentiate reality from synthetic falsehoods in the future?

Moreover, synthetic media provoke significant ethical questions. For instance: Should it be permissible to recreate someone's voice without their consent? What are the boundaries for using such technologies in advertising and politics? These questions are becoming increasingly urgent as synthetic media technologies evolve at a rapid pace.
everyday life, transforming the way we consume and create content.

How Are Synthetic Media Created?

Synthetic media are generated using advanced artificial intelligence (AI) technologies that can analyze, learn, and produce data based on vast datasets. Their creation is the result of the collaboration between algorithms and computational power, enabling the production of content in various forms, such as images, videos, sounds, and text. Below are the key elements of this process.

Artificial Intelligence – The key to creation
At the core of synthetic media are machine learning and deep learning technologies. These types of AI can autonomously identify patterns in data and use them to generate new content.

Machine Learning Algorithms

- Supervised learning - Systems are trained on labeled data (e.g., images of people annotated with their names). This enables algorithms to recognize specific features in images, sounds, or text and apply these learned characteristics to new data.
- Unsupervised learning - Algorithms analyze massive amounts of unlabeled data, discovering patterns on their own (e.g., similarities in shapes, colors, or sounds).
- Reinforcement learning - Systems learn through trial and error, receiving rewards for correct decisions. This approach helps optimize content creation processes over time.
- Generative Models - Generative models, such as GANs (Generative Adversarial Networks) or VAEs (Variational Autoencoders), are fundamental tools in the creation of synthetic media.

GANs consist of two neural networks:

Generator: Responsible for creating content.
Discriminator: Evaluates the quality of the generated content.
These networks compete with each other, leading to increasingly realistic results over time. This iterative process enables the generation of high-quality synthetic media, from photorealistic images to lifelike audio and video.

02

Glossary

a

Artificial Intelligence (AI)

The simulation of human intelligence in machines that are programmed to think, learn, and solve problems.

d

Deepfake

A type of synthetic media where AI creates highly realistic but fake videos or audio, often mimicking real people.

Digital Ethics

The branch of ethics concerned with how technology should be developed and used responsibly, including issues around deepfakes.

Disinformation

Deliberately false information spread to mislead or manipulate an audience.

f

Face Swapping

A deepfake technique that replaces one person's face with another's in a video or image.

g

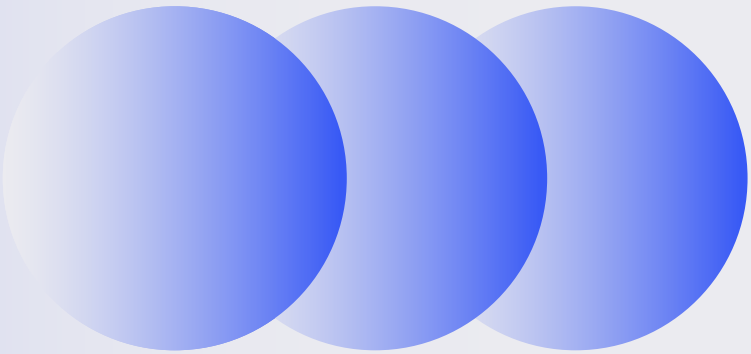
Generative Adversarial Network (GAN)

A machine learning framework where two neural networks compete to create realistic synthetic content, such as deepfakes.

m

Machine Learning (ML)

A machine learning framework where two neural networks compete to create realistic synthetic content, such as deepfakes.



03

MATEUSZ ŁABUZ

Career diplomat working for the Polish Ministry of Foreign Affairs; PhD candidate at the Chemnitz University of Technology (Germany); Lecturer of Cybersecurity and Artificial Intelligence at the University of the National Education Commission in Kraków (Poland); Lecturer of Cybersecurity at the Pontifical University of John Paul II in Kraków (Poland). His research interests include deep fakes and their influence on social and political processes.

The deepfake era

Edyta: Mateusz, thank you very much for accepting our invitation to talk about synthetic media. Please tell us what you do and how your path to this topic began.

Mateusz: Thank you very much for the invitation. It's extremely nice to be able to tell you a little bit about my work and what I deal with on a daily basis - synthetic media and especially deepfakes. I work at the IFSH, a German research institute for peace research and security policy. Within this institute, I work on hybrid threats. In addition, I am a PhD student at the Chemnitz University of Technology, where I am finishing my dissertation on deepfakes and their regulation. My path to deepfakes began, as it often does, with an interest in and fascination with what possibilities technology and artificial intelligence can offer. What can be created with them is fascinating, but the risks involved should not be overlooked. Well, it's quite likely that a significant part of our conversation today will be devoted explicitly to the risks.

Edyta: Mateusz, we are moving smoothly to the first question. You're the first guest on our podcast, so it's hard not to ask: what are deepfakes and what technology are they based on?

Mateusz: Until recently, we have had no concrete definition of deepfakes. We still don't have such a universal definition, although scientists have used rough descriptions that are often based on stereotypical ideas. Today, however, deepfakes are defined in the Artificial Intelligence Act, a regulation adopted by the European Union in 2024. This Regulation comprehensively deals with various artificial intelligence systems. In the AI Act, deepfakes are described as images, audios, or videos generated or manipulated by artificial intelligence that resemble existing people, objects, places or events, and which viewers may mistakenly believe to be authentic. The simplest, albeit rather clichéd, way to describe deepfakes is that they depict people doing things they never did, or saying things they never said. This is a simplification, of course, because deepfakes can also depict places or events. A good example of that is the situation in May 2023, when a deepfake depicting an explosion near the Pentagon quickly spread on social media. As a result, the New York Stock Exchange reacted with short-term declines as a response to the alleged incident. It was enough to use the place and a specific event to create real-world effects. As for the development of technology, there have been huge advances in the past seven years. The first deepfakes were created in 2017, and that's when they got their name, although the technology itself was already developing earlier. Most importantly, the quality of synthesis has increased significantly over the years. Well-made deepfakes today are virtually indistinguishable to the naked eye from real sounds or visualizations. Scientists often emphasize the importance of "democratization" of the access to this technology. This means that the technology is now also available to ordinary users who are not professionals, which in turn has significantly increased the number of deepfakes circulating on the Internet.

Edyta: You mentioned the virality of information and easy access to deepfakes. Could you tell us what the process of creating deepfakes is like and do we need specialized knowledge? Can they be created easily, without advanced preparation?

Mateusz: I will discuss various technologies based on deep neural networks. In earlier stages, developers mainly used autoencoders, but now they are using so-called generative adversarial networks. In a nutshell, artificial intelligence "learns" to analyze various elements of a person and then "reproduces" them in new scenes. This can be used to create some-

thing completely from scratch, or, for example, to superimpose one person's face onto existing footage – a so-called face swap.

I don't want to go into too much technical detail, but it's useful to imagine how these generative adversarial networks work. We have two basic components: a generator and a discriminator. The generator creates new, synthetic data, and the discriminator checks whether it is authentic, verifies whether it can be considered false. In this way, the two networks compete with each other – one tries to create realistic content, and the other becomes better and better at recognizing it. As a result of this process, the generator seeks to "fool" the discriminator, which leads to the creation of increasingly realistic material. A key part of this process is collecting enough data to train these networks.

Does this require specialized knowledge? This is a difficult question that requires deeper consideration. Under certain circumstances, it is necessary, because while any of us can create a deepfake today, not all of these deepfakes will be indistinguishable from reality. Not all of them would reach the quality level to mislead viewers. Producing truly high-quality deepfakes still requires specific skills. However, there is also software that can be downloaded from the Internet and is very easily accessible. It allows one to create basic deepfakes of quite good quality. What's more, one may find a lot of tutorial material that allows to use more complicated algorithms and solutions. One example is Stable Diffusion as a particular model.

I have to admit that it wasn't super easy, but thanks to materials I found on the Internet - including YouTube - I managed to use Stable Diffusion. The final result may not have been spectacular, but I created a deepfake that could be somewhat convincing. Bottom line: yes, anyone can create deepfakes, and some applications are trivial to use to achieve good quality with minimal effort. However, more polished productions require more skill.

Edyta: I wonder if in times when we consume information quickly, for example, in seconds, we really need such super high quality. Mateusz, we already know the definition. What are the most common uses of deepfakes? Could you give us examples so that we can better understand what this reality looks like?

Mateusz: I'll briefly go back to what you just said, about whether we actually need quality content to post it online, the one that would be appropriate, for example, for TikTok. My answer is no. We still have very low-quality content, for example, content that is in the form of memes, and yet can still have some cognitive impact on the audience. If we see, let's say,

Joe Biden... For example, Joe Biden slipping on the golf balls, or walking towards a wall and not understanding where he is. And such memes actually existed. Because they were in the form of memes, everyone knew it wasn't real... well maybe not everyone, but the vast majority of the audience realized it wasn't real. However, psychologically, it affected some idea of who Joe Biden was and what his current intellectual condition and ability to find himself in reality was.

In that case, it is not necessary to have advanced technical knowledge. You just need to have an idea to create some content that can spread virally. Due to the number of repetitions, we are bombarded with them, at the end of this process we will be persuaded and assign various negative associations to the person. However, going back to your fundamental question – of course, there is a talk about the negative uses of deepfakes, and we can also say that there is a certain demonization of this technology. One cannot deny that most cases are indeed negative or harmful. However, and this is important, the stereotypical notions of where deepfakes are used do not always reflect reality. I always cite a statistic from last year, presented in the Home Security Heroes report, which shows that up to 98% of all deepfakes are in the form of non-consensual pornography, and almost 100% of the victims are women. So we are talking about hundreds of thousands of women around the world who become victims of deepfakes, which is a huge social problem. That is my great concern. In my opinion, this is an issue that still does not receive adequate attention from politicians and the public opinion.

Deepfakes are being used to ridicule other people, create disinformation, attempt financial extortion, as well as to falsify biometric data, falsify evidence in lawsuits, or even create pedophilic material. These pose huge challenges, and this is just the tip of the negative applications. However, as I said, we mustn't fall into demonizing this technology, as we also have many positive applications, for example in entertainment. In cinematography, deepfakes can be used for voiceovers and suddenly, for example, Tom Cruise can speak in beautiful Polish with his own voice. In medicine, deepfakes can help recover the voice of people who have lost their ability to speak. In the fashion industry, they are also interesting applications, for example, in the sale of clothes or shoes – we can use artificial intelligence to generate what someone will look like in a particular garment. There are many applications in education that I forgot to mention. However, we must realize that these positive applications go hand in hand with risks. Some uses of artificial intelligence or synthetic media are in a gray area – they may have some positive aspects, but they can also be powerfully manipulative or considered unethical. One example is the creation of digital avatars of

dead people. On the one hand, we see a huge potential for fraud here, and on the other hand, someone, psychologically, may find in this an opportunity to cope with the loss of a loved one.

Edyta: Mateusz, let's talk about technology and rapid response, which Natalia Hatalska describes as FastFire – instant action in response to what's around us. Are there technologies, methods or competencies that we should develop to recognize deepfakes more effectively?

Mateusz: Media literacy is key. American researchers, including Hany Farid, one of the leading experts on deepfakes, conducted a study in which participants were asked to judge whether the faces depicted were real or synthetic. The results showed that the percentage of correct answers was only 50%. So back in 2022, people were already having trouble distinguishing deepfakes from reality. Technology has made huge advances since then, further complicating the situation. Today, synthetic images seem to many people to be more trustworthy than the real ones. Raising public awareness and developing cognitive competence are important solutions, of course, but they are not enough. The fight against deepfakes requires advanced technologies. Many companies are developing a variety of tools for detecting synthetic content, but none of them are perfect. These methods include video and audio analysis, light and shadow studies, and more advanced techniques such as blood circulation or heartbeat analysis, which can reveal unnatural image features, among others. However, the effectiveness of these solutions depends on the quality of the data on which they are trained. If the system is trained on material generated by a particular deepfake model, its effectiveness can exceed 90%. Otherwise, efficiency decreases, leading to problems with false negatives and positives. For example, material can be wrongly labeled as deepfake, even though it is authentic. This also poses a danger, as it undermines trust in the technology and information we use. Currently, there is a kind of arms race going on between technologies for creating deepfakes and tools for detecting them. The development of one and the other is extremely dynamic, and we need to constantly improve protection mechanisms to meet new challenges.

Edyta: We already know the technological methods for detecting deepfakes and assessing their credibility. But if we look at it more broadly, what competencies, knowledge, skills or attitudes do we need? I once worked with a person who specialized in the topic of working with AI, and she said that confidence is key in this process. I wonder if similar self-confidence is also important in the context of dealing with deepfakes?

Mateusz: On the one hand, yes – confidence is key, as artificial intelligence is a tool we can use to our advantage, especially in our day-to-day work. On the other hand, it's hard not to notice that our confidence in our own abilities can be undermined by numerous reports and narratives, sometimes of paranoic nature. There is much talk of a coming revolution related to artificial intelligence, but also apocalyptic visions of the disintegration of epistemic value of the media – of a world in which we will no longer be able to distinguish truth from falsehood. An example of raising awareness in this regard was a very interesting campaign - if I remember correctly, prepared by Telekom - under the slogan "Message from Ella". It is a touching story of a girl whose biometric data was used to create various forms of deepfakes. The campaign not only highlighted the dangers of this phenomenon, but also encouraged us to think about protecting our identity in the digital world.

Education, allows us to better understand the risks we may face in the future. It also gives us tools that help us consciously separate ourselves from potential risks. As I mentioned earlier, it's not about scaring people or creating panic, it's equally important not to become paranoid about completely removing all information about ourselves from the Internet. However, it is worth paying attention to some digital hygiene – thoughtful management of what we share online. This is not only a matter of protection from synthetic media, but also cybersecurity in the broader sense. A conscious approach to this topic can increase our sense of security, and also have a positive impact on how we perceive the reliability of information in the digital world. Educational programs should include more content that not only presents various threats, but also teaches how to build social resilience. As I mentioned before, it's not just about synthetic media, but also about broad knowledge of how to function online. There are multiple questions we should ask ourselves. What is the significance of our data we share openly online? What information about us can be found on social media? One example is parents and their actions, often referred to as "sharenting" – a combination of the words "share" and "parenting". Many of them regularly post photos and information about their children on social media. Understanding the potential consequences of such actions for the future of these children is, in my opinion, absolutely crucial. This awareness will allow us to make more thoughtful and responsible decisions in our online lives.

Edyta: Thank you for visiting our discussion space on deepfakes, where we not only look at them from a consumer perspective, but also in the context of protecting our identity. I think it's crucial to approach this topic as a kind of hygiene, digital information hygiene, that is, reflecting on how much data we share about ourselves and how easily it can be

exploited. It only takes a few seconds of our voice for it to be used in a completely different way. This is another element we should keep in mind. We will end each of our podcasts with a forecast, so I have prepared a question for the future. Imagine it's December 12, 2035 – where will we be then? What would a reality look like where almost everything is synthetic? Would we return to newspapers? Or would we start relying solely on local authorities as sources of knowledge? What do you

Mateusz: Hmm... this is a difficult and very complex question. The year 2035 still seems like a distant prospect, so it's hard to clearly predict what reality could look like. However, looking at the current development of technology and information, one can assume that there will be even more synthetic content. However, I would like to look at it with optimism. I hope that when we realize that we are surrounded by content generated by artificial intelligence, we will begin to appreciate more what comes from humans. Perhaps there will be some return to values such as naturalness and authenticity. I am not saying that to demonize artificial intelligence – generative AI has been with us for years, although the real breakthrough came with the advent of ChatGPT, which quickly entered our daily lives.

Artificial intelligence is sure to stay with us for a long time and will play a huge role in making everyday activities easier, which I see as a positive evolution. At the same time, I hope that we will retain what defines us as humans – our creativity, empathy, and uniqueness. I am already observing some trends in which we increasingly value handmade, man-made things. This is reminiscent of the reaction to mass production – mechanization, which made us return to appreciating handmade items. I think a similar process may happen with media and art.

At the same time, looking realistically, it will become increasingly difficult to separate fiction from reality. It is likely that we will have to learn to function in a world full of diverse creations of artificial intelligence – ones that will often look deceptively like ourselves. Under certain conditions, we will accept this new reality and find a way to balance it.

Edyta: Staying with Mateusz on this forecast of the wisdom of our species, I thank you for today's conversation.

Mateusz: Thank you, too, and I hope that these more optimistic expectations will come true. The future will show – we just have to wait until 2035. Although synthetic media have not yet led to any armed conflict, they undoubtedly affect international relations and the functioning of countries. They can become a trigger for new tensions. We are already see-

ing trends indicating the use of deepfakes, for example, for military purposes, to reinforce polarization or cause social unrest. Therefore, I appeal: let's be vigilant. Let's verify information, use fact-checking and not blindly believe what we see. It used to be said: "pics or didn't happen". Well, today we know that even photos or recordings do not guarantee authenticity. Let's be careful and stay aware.

Edyta: With this reflection and in the context of our skills, let's stop for a moment and think about the future. Thank you very much for the interview.

Mateusz: Thank you very much.

dr ADA FLORENTYNA PAWLAK

Technology anthropologist, lawyer and art historian, academic lecturer (Psychology and Computer Science, SWPS; Trendwatching&Future Studies AGH; Business Process Automation WZ UŁ; Business AI at Leon Kozminski Academy in Warsaw) and speaker in the field of new technologies.

Interaction of technology and emotions

Edyta: Ada, thank you so much for accepting our invitation to contribute to this report. I've known you for many years and have followed your work throughout. Your approach to technology continues to inspire me. I know how curious and thoughtful you are about the world around us. You pay close attention to the social processes unfolding in this rapidly changing landscape. You're a technology anthropologist — but what does that actually mean?

Ada: Hi, thank you so much for the invitation. The world is changing dramatically, and I believe that in the 21st century, emotions have become what the factory was in the 19th century. In other words, they're now the central arena of economic and political struggle. And this, I think, is where technology anthropology can make its mark. If I had to sum it up briefly, I study the relationship between humans and machines. As you well know — since you also work in this field — these relationships are incredibly complex and multidimensional. There are many kinds. What fascinates me most right now are the emotional relationships we project onto machines — to such an extent that they're beginning to serve as a kind of support system, even more powerfully than our traditional human connections. So beyond artificial intelligence as a tool for opti-

mizing how we operate in our everyday, especially professional, lives, I'm increasingly drawn to artificial empathy — which is rapidly reshaping our intimate and psychological relationships in extraordinary ways.

Edyta: Exactly — you've just touched on emotions, and there's only a short step from emotions to intimacy. You talk about techno-intimacy. What exactly does that mean?

Ada: As we've observed over the past few years, these relationships are becoming not only more individualized but also increasingly detached from our biology—we're delegating them to machines. I coined the term techno-intimacy to describe the phenomenon of forming deep emotional connections with technology, particularly with artificial intelligence that simulates human traits like empathy, understanding, and responsiveness. In doing so, it enters a space traditionally reserved for human-to-human relationships. It's important to note that these machines simulate being autonomous entities. AI is appearing in an ever-widening array of life situations. We're also seeing the emergence of previously nonexistent relationships—commercialized friendships, so to speak. For a fee, we can engage with chats, bots, and parasocial relationships with tailor-made avatars. What's crucial here is that the anthropomorphization and personalization of these systems make us increasingly comfortable with them. We settle into these interactions, and it's evident that this comes at the expense of the human interactions we've traditionally engaged in.

Edyta: Exactly — where is this shift coming from? And why are we increasingly inclined to project our emotions onto machines, onto bots? Are there certain factors that make this commercialized friendship — or perhaps

Ada: Yes, I think psychology has long understood that we are cognitive misers. But it turns out this kind of economy shows up in our emotional lives too. Think about it — the energy required to engage with a machine is much lower than what's needed in human relationships. A machine is always available, it doesn't judge us, and it adapts remarkably well to our interests. This technology, I believe, helps ease discomfort — it offers a kind of emotional support that responds to many of our struggles. Take school, for example. There's often a lack of proper support in education, a lack of companionship in pursuing passions, a lack of acceptance and tolerance. And often, I think, it simply comes down to a lack of skills in building relationships. Where are we really supposed to learn that? Today's education system — when it comes to these skills (I'm not a fan of the term "soft skills") — introduces them only minimally. We're not fully equipped to handle this. All of this means

the landscape of techno-intimacy is quite complex. And this is a good moment to introduce a few key terms. You mentioned synthetic media...

Edyta: Right — synthetic media. What exactly do we mean by that?

Ada: Synthetic media is a term used in the social sciences. It refers to images and sounds generated by computational systems — most often artificial intelligence — that don't draw from objective reality but are created and processed through algorithms. These convincing systems are populating our reality with people who don't actually exist, and yet the relationships feel deeply authentic. AI introduces simulated entities into our relational space. These products come in many forms: from emotional bots that simulate romantic connection (love bots), to virtual influencers, social robots, and various voice assistants. I'd emphasize the importance of seeing this through the lens of generational change. Since January, we've had what's being called Generation Beta; we also have Generation Alpha, born since 2010. Transhumanists might call these two generations trans-humans, because they are growing up entirely within the landscape of synthetic media. For them, artificial humans are just as real and integrated into the world as biological humans. And here's where another issue arises. As commentators, we analyze these technologies, but we can't feel the shift as acutely as the younger generations who are entering a world where these technologies are already embedded and entirely natural. I'd also like to highlight another dimension — capitalism. These are products of affective capitalism, which profits from our emotions. If we compare this to the 19th-century factory, today's owners of these systems profit from making us increasingly dependent on them to identify, manage, and shape our emotions — and to offer technological prosthetics as solutions. Affective capitalism is starting to saturate every layer of our reality with these artificial entities. And these entities are increasingly taking on roles such as teachers, mentors, coaches, and guides — encouraging us to adopt certain beliefs, behaviors, or attitudes. This seems incredibly important.

Edyta: When we talk about emotions — do these synthetic friends actually meet our needs? I've noticed that synthetic influencers live just like we do. They appear with their pets, make breakfast, go shopping. Does this contribute to blurring the line between reality and virtuality? At this point, I'd like to refer back to Generation Beta. Unlike us, they don't distinguish between these two worlds. So when Alphas and Betas start forming friendships with synthetic influencers, will the barriers between the real and virtual worlds disappear entirely?

Ada: Exactly — this is a massive social experiment. For now, we can only simulate or imagine certain outcomes. The first question that naturally arises is: what does this mean for the future of humanity? We already know that demographics are declining rapidly. If we begin to lose our basic ability to form relationships, raising children will have to change radically — perhaps moving toward a scenario reminiscent of Huxley's Brave New World. It's hard to imagine, isn't it? But if these artificial systems are reinforcing our digital narcissism — or simply keeping us in a state of perpetual present — they may also hinder our ability to pursue personal growth. These systems calm us down, telling us: "You're fine, everything's okay, you're doing great" — and that's not necessarily a good path. That said, I like to think these systems could also encourage open-mindedness and prompt us to ask meaningful questions about the world. Sometimes, the ability to ask questions is more important than the answers themselves. Culture, to a large extent, can act as a kind of embrace — one that makes us afraid to ask certain questions. So the real challenge now is to embed these systems into our culture in a way that's responsible and wise — in a way that helps develop the competencies of younger generations rather than stifle what we already know is beneficial.

Edyta: So what is it that we need?

Ada: I think we absolutely need a new set of core competencies. I know you talk about competencies for the future, not just competencies of the future. I believe that, to some extent, the social adaptation of these systems can actually make life better and happier — allowing us to give more attention to ourselves. But what we urgently need is a high degree of cognitive vigilance — the ability to distinguish illusion from reality and to draw from both what genuinely benefits us. Content recognition will become critical, because these systems have owners, and we will encounter manipulated and falsified content that we must be able to identify. That's not easy. Of course, it's easier said than done — especially from the perspective of a millennial than for generations now entering the world and learning how it works. What we need is something we might call metacognition — the monitoring of our own cognitive processes. Why am I thinking this? Why does something stimulate me emotionally or intellectually? And above all, we need the ability to self-regulate. Honestly, I wish I had seen this kind of training in my own education. There are so many things we're learning today — crucial things for functioning well in this world — far too late in life. We need to learn how to control our impulses, how to consciously manage our responses to external stimuli. And there are so many of those stimuli — personalized ads, for example, that can have

a far greater emotional impact than anything we've seen online so far; constant manipulation by chatbots; emotional phishing. And all of this is happening in a world saturated with stress and technological pressure.

Edyta: And in loneliness?

Ada: Exactly. That's why another essential skill will be the ability to build community. If we don't learn how to do that, well, we can imagine many sci-fi scenarios that are narratively compelling — where we live isolated lives with our digital assistants. But the truth is, as social creatures, we must learn to co-create our shared reality and protect ourselves from many emerging challenges. So this ability to build community — and to build resilience against the isolating forces of the digital world — will be incredibly important in the face of growing loneliness. I also believe that creative imagination — the queen of all abilities — stands in direct contrast to automation. It's the ability to stimulate ourselves, to think outside the box continually. Personally, I've noticed this in myself when I use AI chats — I see that cognitive miser within me. It's really easy to fall into that mode when you have an assistant at your side. So the ability to step back, to ask yourself, "Wait — how much of my freedom of thought am I giving up, even when I have the perfect advisor next to me? When will I stop asking questions altogether? When will I stop allowing myself to make mistakes — the very mistakes that give me a sense of agency in this world?" These are, I believe, enormous questions. And education — in an era of artificial empathy — absolutely needs to move in this direction. I also see this as a tremendous opportunity for all of us.

Edyta: If we assume that we do our homework and prepare for the future — that we are self-aware, capable of self-regulation, and in touch with our human and social nature — and that within this environment we build a hybrid society, one that includes synthetic entities, and if we are guided by a positive — not utopian, but protopian — vision of a future with bots, then the question becomes: what does it actually mean to be a part of such a society?

Ada: I think we can already begin asking ourselves what it truly means to be part of a society. To what extent do I participate in the common good? How much does my responsibility — my contribution to that shared good — justify my claim to certain rights? We're seeing the emergence of such ideas more and more often. At the Transhumanist Association, we held a conference five years ago where Dr. Kamil Mamak spoke about the rights of robots. Today, I see that books are being written on this topic — from a legal perspective as well. And of course, this leads us into fundamental philosophical questions — about self-awareness, about free will.

Edyta: What might such a society look like?

Ada: When I think about this societal structure, I imagine people empowered by technology. Because, you know, when you talk about being part of a society, I immediately think of the right to shape that society — to choose how we want to live. And it's hard for me to imagine technology taking part in that decision-making. I see technology as a support — something that helps us grow emotionally, expanding the circles of our empathy. To borrow from Peter Singer's language, it means seeing the world not just as a jungle of resources to be exploited, but as an environment we can connect with. To me, that's a beautiful vision. And I don't see why machines should be excluded from it — especially if they become quasi-beings that enhance our relationships in meaningful ways. The problem is that with these protopian visions, we always seem to drift toward utopia or dystopia. Today, we already have studies showing that people who are more lonely are more likely to anthropomorphize artificial systems. They're more likely to believe them, to fall under their influence — to be susceptible to persuasion, manipulation, and illusion. And here lies the problem — we're circling back to what capitalism has been offering us from the start. If you have a solid social cushion, a strong cultural foundation, and meaningful human relationships — if you're not alone — then you're much more likely to interact with these systems without suffering psychological harm. But on the other hand, research shows that the number of people without that kind of support system is growing.

Edyta: Does that create a divide?

Ada: Well, in a way, we're giving up a significant part of our freedom — our freedom of thought, our emotional autonomy, and our decision-making — to machines. So yes, there's a real risk that we will become divided. Divided into tribes: those for whom machines are simply an enhancement, and those for whom technology becomes the very environment in which they live. These are incredibly complex questions — truly multilayered. Today, we can already see that politics — which is turning, day by day, into a surreal and dystopian kind of cabaret — will largely determine how we interact with these machines. Because they aren't entering some neutral, sterile space untouched by capital, ego, or human needs. So I think we're entering a moment when we'll begin to diverge along a line of division that humanity has never experienced before. And that, to me, is profoundly interesting.

Edyta: Ada, I'd like to go back to the beginning of our conversation — you spoke about friendship, about commercialized friendship. And I'd like to end with a question about the content embedded in these systems. What about the subliminal messaging in such technologies, when our synthetic companions begin to shape a certain narrative — one we often don't even notice at first? In your view, is there a risk that these relationships, while intimate on one hand, might also be informationally invasive? Could they even lead to disinformation?

Ada: Absolutely. That's why I'm a strong advocate for media education — and that includes our interaction with artificial intelligence and the entire topic of artificial intimacy. Of course there's a risk, because as we've said, these systems have owners, and those owners have their own interests. And one of those interests is undoubtedly influence — which means that disinformation is bound to occur in these kinds of settings. Synthetic media have enormous potential when it comes to personalizing content. And these processes are nothing new. We remember the Cambridge Analytica case — these are issues we've been discussing for nearly a decade. What's happening now is simply an amplification of those processes — and an expansion into areas far beyond just politics.

Edyta: How can these systems personalize content?

Ada: Let's start with the fact that these systems can already generate personalized content in education. That's often seen as a positive — creating individual lessons tailored to our preferences, providing interactive experiences. These systems can engage us in conversations, ask us questions in real time, adapt to us, and recognize our personality type — and then respond accordingly. They can create virtual coach characters that mirror our communication style or interests, recommend relevant content, or adjust the pacing and tone of interactions. On the one hand, these are positive features of personalized education. But the very same personalization can also lead to potential risks — especially in the context of overly intimate interactions, boundary crossing, privacy violations, or addiction, where everything is designed to hold our attention at all costs. That might mean filtering out entire worldviews simply because the content provider has no interest in exposing us to them. So I think one of the biggest threats is the erosion of our autonomy — the sheer scale of over-personalization. It can certainly serve us, but it can also confine us to content that only reinforces what we already believe, limiting our capacity for critical thinking. And finally, there's the ever-present issue of data misuse — and our growing awareness that our data is being monetized. We're already trading privacy for a sense of security in nearly every area of life. This surrender of freedom — in

exchange for convenience and safety — this erosion of autonomy, is an enormous threat to our everyday lives and to democratic processes.

Edyta: I recently had the great pleasure of working with a group of students from 7th and 8th grade in Gdańsk. We were exploring how to competently shape the future in collaboration with AI. And what they said they needed most was confidence. That sense of confidence allows them to remain self-aware — of their abilities, their values, what they want to hold on to as their own — while still being able to question the parts of this new reality that might turn out to be false. Thank you so much for this conversation. So many fascinating threads. I hope we can revisit this topic again sometime soon. Thank you!

Ada: Thank you.

Aleksandra Wójtowicz

Analyst on digital policies, new technologies and disinformation. She is a member of the advisory board of CEE Digital Democracy Watch. She has previously worked with WiseEuropa, ECFR, the British Embassy and Valent Projects, among others. She is a graduate of the College of MISH UW.

Understanding disinformation

Edyta: Ola, thank you so much for accepting our invitation to join this project. You're a technology analyst specializing in digital transformation. Let me start with the foundational question we've been asking throughout this project: What is disinformation?

Aleksandra: First of all, thank you, Edyta, for the invitation. Disinformation is a broad and complex phenomenon. Contrary to popular belief, it is not limited to false information, such as so-called fake news or even rumors. Disinformation refers to the organized and deliberate dissemination of misleading content, carried out with a specific intent. As I have already mentioned, it is an intentional activity. Disinformation actors design and implement entire campaigns that may include fake news, rumors, various forms of manipulation, and even true information—used selectively—to influence society in a particular way. Currently, two main types of disinformation are distinguished, based on the origin of the actors involved. These are: FIMI – Foreign Information Manipulation and Interference – and DIMI, its domestic counterpart, referring to activities conducted within a given country. Both external and internal actors create and promote specific narratives targeted at particular audiences.

Edyta: So you're referring to the complexity of this phenomenon. I believe that when we think about deepfakes and disinformation, we've somewhat normalized them through the sheer volume of memes flooding social media. But, as you said, it's something bigger, something broader. If disinformation exists, it is planned. You also pointed out that these narratives can include true stories which—at least that's how I see it—can serve as evidence for the fabricated narrative.

Aleksandra: Yes, absolutely. That's exactly how it works. In disinformation campaigns—so-called influence campaigns—true stories are used very frequently. There's a clear reason for this: disinformation only works when it appears credible. Only then can ordinary social media users, consumers of traditional media, and more broadly—citizens and residents of a given country—actually believe in it. If we want to gain someone's trust, we need to use a wide range of techniques to make people truly believe the information being presented. If we start by bluntly claiming, for example, that "the Earth is flat," of course, some people will believe it—perhaps those already deeply engaged in conspiracy theories. But if we aim to reach new audiences, we must find a way to speak to them effectively. And so, step by step, the message is broadened and gradually more disinformation is introduced. If we want disinformation to be effective, we have to search for methods that enable us to reach these groups.

Edyta: In one of the episodes, we talked with Ada Florentyna Pawlak about bots and synthetic influencers. And it occurred to me then—that too can serve as a form of "evidence" that something is real. Synthetic influencers post photos of themselves going shopping, drinking morning coffee, meeting with friends. This gives us an illusion of reality—a sense that what we see is authentic. This brings me to the factors that have led us to talk about disinformation today in a very different way—seriously and on a much broader scale. We're beginning to recognize it as one of the major challenges of the coming years, not only in political contexts but also in how we function and consume information. What other factors would you add to those shaping this complex process of disinformation?

Aleksandra: Yes, that's another factor which, in my view, is crucial and makes disinformation such an important issue. I'm referring to what is known as "misinformation"—that is, unintentional disinformation. The number of disinformation actors is actually limited, whether we're talking about foreign state agencies, media outlets, politicians, or other entities. In reality, the number of such actors is relatively small. Of course, bots can increase their reach, but even then, there are limits. What truly gives disinformation its scale and impact are ordinary users—people

like us. These are individuals who believe in disinformation and then pass it along in the form of misinformation, convinced that they are doing something good. They heard something that moved them deeply, and they want to share it with others. Often, their actions are driven by concern—perhaps even for the fate of the country. They want to alert others that something bad is happening (since negative information spreads the fastest) and that action needs to be taken. This is a highly significant phenomenon. And that is precisely why disinformation is such a critical issue—its importance is steadily growing. It is receiving more and more attention, and we can already see that it's becoming a real threat. Why? As I mentioned earlier, disinformation campaigns—at least some of them—are initially directed at people who are not especially susceptible to conspiracy theories or similar content. But disinformation is something we've all been exposed to for quite some time now. In my view, we've reached a point where many different groups have become deeply involved in certain narratives. When I think about these campaigns, I can picture some of them very clearly. For example, I've been studying certain Facebook groups focused on specific topics. How can I put this without revealing too many details? Let's say they revolve around broadly understood herbalism. Of course, herbalism in itself is not a problem—I don't want to offend anyone. But these groups were formed at the beginning of the pandemic, or perhaps even earlier. I started observing them out of curiosity, to analyze communication styles and the culture of discussion in those spaces. Even in the early days, there were conspiracy theories and disinformation narratives—such as claims about vaccines. Messages circulated suggesting it was better to treat COVID with herbs rather than get vaccinated, because no one really knew what the vaccine contained. These narratives had significant social consequences. As we know, the effectiveness of vaccinations depends on achieving a certain level of coverage in the population. When that percentage drops, tangible consequences follow: higher infection rates, increased healthcare spending, and so on. This clearly shows that disinformation has real, including financial, consequences. But several years have passed since then, and the same communities that initially merely questioned vaccination—often without extreme views—are now deeply immersed in conspiracy theories more broadly. We're now seeing people trying to protect their children from being assigned a national ID number (PESEL). These are people who just a few years ago had simple doubts about vaccines, but now are entirely absorbed in disinformation narratives. This demonstrates how deeply disinformation can penetrate and how real its impact on social life can be. These are no longer just abstract ideas—they lead to concrete actions and decisions with real consequences. Of course, the topic I'm discussing here concerns a rather specific group, and I believe that for now, this is still a marginal phenomenon in the context of Polish

society as a whole. I'm not referring to vaccines here, but to avoiding assigning a PESEL number to children. Still, this clearly illustrates how disinformation works—how deeply it can influence people, and how easily new ideas can be gradually introduced into a given community.

Edyta: And here we return to what you mentioned earlier about building a sense of community—once people begin to feel part of a group, it becomes easier for them to adopt additional narratives. It often starts with a single belief that unites them, and then, step by step, new ideas can be introduced, deepening their engagement. You see, we're talking here about two distinct goals of disinformation: political aims and conspiracy theories. Are there any other disinformation objectives that you've observed? Is it about a kind of social destabilization, or is it simply about financial gain? Is there a subliminal, commercial use of such tactics as well?

Aleksandra: Yes, of course. There are many goals behind disinformation, and they can be divided into direct and indirect objectives. Again—it all depends on the authors of the disinformation, the ones creating the narratives, as they are designed to serve specific purposes. If we take FIMI and Russian disinformation as an example, we can clearly see that the overarching goal is to create chaos that could potentially increase Russia's political influence, financial gains, and the success of its energy companies. To achieve those broad objectives, a range of direct and indirect steps are taken—gradually working toward those end results. It's important to remember that while disinformation is always intentional, its ultimate goal may lie far in the future. This is why monitoring narratives within the information space is so crucial. Often, the aim is to pave the way for future messages that will have a more immediate impact on reality. Take Russia again, as it's a well-known case for listeners. Russia may want its energy companies to thrive and for European countries to buy Russian gas. However, due to the war in Ukraine, many European states are phasing out their dependence on Russian energy. In this context, Russia may launch narratives aimed at undermining Europeans' trust in the European Union—the institution leading energy efficiency regulations and promoting sustainable, green solutions. Russia knows that a full energy transition won't happen overnight, but by systematically questioning the validity of these initiatives, it sows doubt over time. Of course, this doesn't mean that all criticism of EU regulations is disinformation—policy should always be open to debate and evaluation. I'm speaking here about actors who deliberately craft messages to weaken trust in green and EU-led initiatives. Over time, once this trust is eroded, it becomes easier to introduce narratives suggesting that Russian gas is the best and cheapest option. This example shows how diverse the goals of disinformation

can be. As you mentioned, on one hand, it's about chaos and erosion of trust in institutions, and on the other, it's about financial profit. So far, we've mostly discussed state-driven disinformation, but there is also disinformation between private actors. There are dedicated tools for analyzing such cases, and reports indicate, for example, that banks are sometimes targeted. This is where we enter the grey area between disinformation and black PR—phenomena that can overlap to a degree. All of this makes disinformation an extremely complex issue. It's easy to label something as disinformation, but the lines between manipulation, propaganda, black PR, and legitimate criticism can be very thin. How do we know it's disinformation? After all, it could simply be disgruntled customers. And of course, they might be. They have every right to complain about banks—whether it's about poor loan rates, weak credit scoring, or other issues. But disinformation is different. It is deliberately orchestrated by specific entities—such as a network of bot accounts controlled by actor X or Y. Yes, you mentioned bots at the beginning. I know this topic will likely come up in other conversations in this series. The goal of such disinformation activity may be to influence investors, discourage them from investing in a particular company, or trigger a drop in its stock value. These scenarios do happen. Interestingly, they are often private entities targeting other private entities. However, there are also cases in which foreign intelligence agencies, aiming to weaken a country, indirectly attack its key institutions or private companies. This shows that even corporations are not immune to disinformation. Let me give one more example—one that might sound absurd today. Tesla, the company owned by Elon Musk, who now positions himself as a defender of free speech and critic of censorship, has itself been a victim of disinformation. A few years ago, a video surfaced online showing a burning car allegedly identified as a Tesla. As a result, the company's stock began to drop, and public trust in electric vehicles declined. But what turned out to be the truth? The car in the video didn't even exist. Not only was it not a Tesla on camera, but that specific model had never even been produced. And yet, the market reacted instantly—investors grew suspicious, the stock fell, and so on. In summary, even Elon Musk—an advocate of free speech—became a victim of disinformation.

Edyta: You know, I think that also illustrates what you were saying—that the car was never even produced, if I understood correctly.

Aleksandra: Yes, exactly—it never existed.

Edyta: It shows something else you mentioned—that we usually don't verify these brief bits of information that pop up on our phone screens or appear in news tickers that vanish as we scroll. We don't pay attention

to details, which means we don't actually need high-quality deepfakes to believe something. I often show the deepfake of President Zelensky supposedly announcing a surrender. It's a very poor deepfake—watched in a calm setting on a large screen, you can tell it's fake within two seconds. But I always say: imagine watching it under stress, in a noisy environment, on your phone, in a moment when you don't feel safe. Our perception of truth shifts completely in such situations. So no, a well-made, high-quality deepfake isn't necessary to create impact. It just needs to go viral, hit the right moment, and fit into existing social narratives—and that alone is enough for disinformation to spread.

Aleksandra: Yes, absolutely. You're talking about deepfakes, but sometimes you don't even need a deepfake. A so-called cheapfake is enough—a photomontage, an altered image, or simply an old photo placed in a manipulated context. One example is the Polish parliamentary elections held in October 2023. The results were fairly clear-cut, so disinformation about election fraud didn't have much impact. Still, while scrolling through Twitter (now X), you could see many posts suggesting that the defeated ruling party was trying to seize power by force. These narratives didn't spread beyond Twitter, but they gained relatively high reach on that platform. And do you know what kinds of images were used? Photos from August 15—taken during a military parade rehearsal in Warsaw. Photos from Gaza—showing Israeli tanks. What's more, no one even removed the Israeli flag from those images.

Edyta: This perfectly illustrates how disinformation goes viral. On the one hand, it shows how easily manipulated content can spread; on the other, it highlights just how fragmented our attention has become—how dangerously close we are to attention poverty. We don't take the time to verify information. We don't check sources, because we consume content on the go, scrolling through our phones. And it's precisely that moment—when we come across something while scrolling—that matters. Even if it turns out to be false two days later, no one cares anymore. What counts is the first impression and the timing of delivery—when the information can have the biggest impact. But I'd like to return to something we touched on earlier—the issue of goals. If there is a goal, does that mean there's also a target audience? Based on your experience and research, are there specific social groups that are more susceptible to believing false information?

Aleksandra: Yes and no. I think that as a society, we are now so deeply immersed in disinformation that, on the one hand, we have more tools to combat it, but on the other, more and more groups are becoming vulnerable to it. Of course, there are certain groups that are more susceptible to

disinformation. For example, people who lack digital literacy—that is, the ability to verify information online. One such group is older adults, who often rely on a single source of information and lack the tools to assess its credibility. If that trusted source suddenly publishes false information, the audience is likely to accept it as true, because they've been watching it for 16 to 20 hours a day and trust its content. Another group includes refugees and migrants, particularly those who don't speak the language of the country they've arrived in. Language barriers mean they don't have access to full information, don't understand certain processes, and may be more easily manipulated. Of course, this doesn't apply to everyone—those who know the language and understand the local context are in a different situation. But those without that background are more vulnerable to manipulated narratives. These are things that may be obvious to someone living in a given place, but for an outsider, guidance is often needed, and it takes time to recognize how things work. It can even come down to administrative issues, such as how to apply for benefit X or Y—what to do and what to avoid. Then we have very specific groups—primarily those who are in constant contact with social media and spend the most time there. They scroll through TikTok, for example. It used to be YouTube, but now—due to how algorithms work—it's very easy to fall into an information bubble that only shows particular disinformation narratives.

Edyta: Ola, so now we know the objective, we understand what disinformation is, and we've identified the target audience. What's the solution? And I'm not asking for a magic formula or technology for technology's sake—because I don't believe in that. I don't believe that it's enough to simply download a tool to check whether a file is a deepfake or not. Is building awareness of technological capabilities enough, or do we need something more? What do we need today to navigate a world filled with disinformation that affects so many areas of our lives?

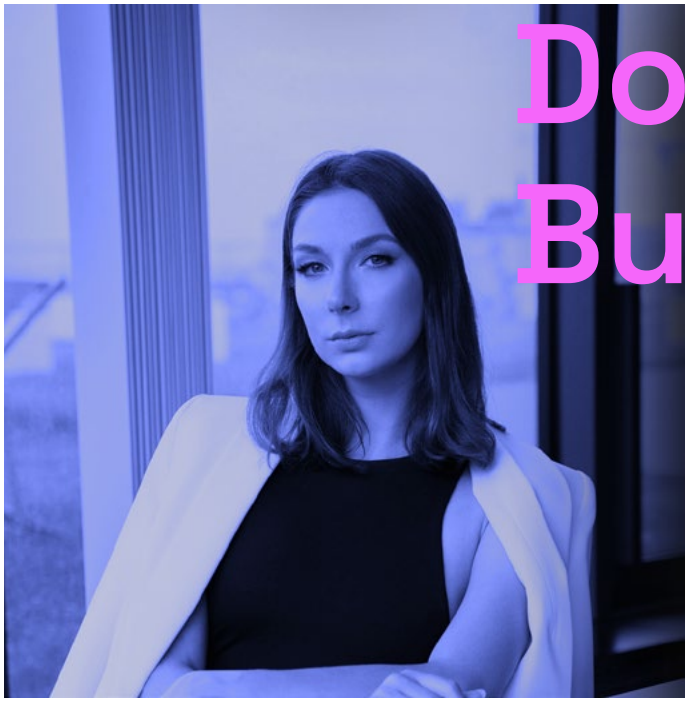
Aleksandra: Well, in my view, there is no ready-made solution to disinformation. At least not yet—and certainly not within the current structure of social media platforms, and even less so with what's on the horizon. We already know that algorithms promote radical and polarizing content, making it incredibly easy to fall into an information bubble. And you know, this is just anecdotal evidence, but I think it illustrates well how disinformation functions—especially when it comes to conspiracy theories and algorithmic dynamics. Because of my research interests, I follow various conspiracy and wellness theories, such as the Carnivore Diet. Dear readers, don't try this at home. The Carnivore Diet—as the name suggests—consists exclusively of eating meat and animal fats, meaning only meat and butter. The premise is that humans are animals

and, as such, should eat only meat, since our stomachs are supposedly designed for it. The problem is, humans—like dogs—are omnivores and can eat both meat and plant-based foods. Yet, supporters of this diet claim that eating only meat and animal fats is the healthiest way to live. They also believe that high cholesterol is healthy and safe, despite numerous studies suggesting otherwise. According to them, all neurodegenerative diseases are caused by a deficiency in "healthy fats." But here's the catch—for them, "healthy fats" don't mean omega-3s but butter. The diet has become very "Instagrammable." Some American Instagram accounts that used to promote veganism have undergone a complete transformation and now advocate for a meat-only diet. And they do so in highly visual ways—these influencers have said goodbye to knives and forks. Now, they display cutting boards covered with steaks, pork chops, and massive blocks of butter—and they bite into the butter as if it were an apple. It's fascinating, but at the same time, it shows how the algorithm works and how difficult it is to break away from it. I first came across the Carnivore Diet while on vacation. I started reading about it intensely and watching videos—especially the most absurd ones, like "Three sticks of butter for dinner." And what did I do? I shared the videos with friends—I sent them those clips. And that was enough for the algorithm to start feeding me Carnivore Diet content constantly. Day after day, I received more and more material promoting this lifestyle, even though I had no intention of following it. Worse still, the algorithm also began recommending that content to my friends—the very same ones I had just wanted to make laugh. You asked me about a solution, and I honestly don't think there is one. I don't think anyone has it, because in a world where we're constantly bombarded with information, it's incredibly difficult to maintain a state of constant vigilance. Of course, we can try. Being aware of our own biases—admitting that we, too, are susceptible to manipulation. Fact-checking, especially when encountering something new—even if something sounds true, it's worth verifying. But again—we live in an information-saturated world, and that makes it hard. Still, I believe that this kind of self-awareness—acknowledging that we might be wrong—is absolutely essential.

Edyta: I would add one more point to that. We need to be aware that disinformation is not limited to political issues, political content, or political narratives—it can relate to any topic: sleep, food, how we view the future of work, and so on. And I think that might be the key to success—to build on what you said by adding this layer of self-awareness, the understanding that disinformation surrounds us on all sides. Maybe that awareness alone is enough to help us better appreciate the value of media literacy—the importance of verification, taking a moment to re-

Aleksandra: Yes, absolutely. And what you're highlighting is exactly what matters. We need to be aware that disinformation can appear in the most unexpected places—such as in wellness—because that has become particularly evident since the pandemic. In that sense, disinformation became a truly significant phenomenon at that time, because it's completely normal and natural to worry about our health, the health of our loved ones, and our overall well-being. But we must remember that even—and perhaps especially—in these areas, we are vulnerable to disinformation and that it can take hold there. There are many studies, including those from institutions like ISD, showing that the distance from wellness to disinformation is surprisingly short. Various qualitative and quantitative studies confirm that many accounts initially focused on wellness content eventually shifted toward narratives that are no longer supported by science—or even directly contradict common sense. All of this shows how disinformation also crosses into the political realm. I have a great example to illustrate this—probably the last one in this conversation. Some time ago, Romania held presidential elections, which were invalidated by the Constitutional Court. The reason was that the candidate who won the first round—Georgescu, a highly radical, far-right, pro-Russian politician—had allegedly run his campaign illegally. Authorities received information suggesting that his campaign was likely funded by foreign entities. Georgescu himself did not report any sources of funding, claiming that his campaign had a zero budget. And yet, his account became one of the top eight TikTok accounts in a very short time. Initially, hardly anyone knew about him in the political context. Polls showed him with just 3 to 5% support, but he ultimately reached over 20%. Notably, his wife—also named Georgescu—is a lifestyle influencer who gradually shifted toward conspiracy theory content. He, too, leaned heavily on wellness-related themes in his campaign and media communication. This shows that the step from wellness to conspiracy theories, and even to politics, is not a large one. It's important to recognize that while disinformation is often seen as a strictly political issue, in reality, it can reach us from completely unexpected places and slowly increase our susceptibility to more overt forms of manipulation.

Edyta: Thank you very much for all your insights. We'll definitely return to this conversation, as 2025 is projected by many to be the year of synthetic media—so there will certainly be plenty more to discuss.



Dominika Bucholc

Consultant, project manager and marketer. She has extensive experience in the areas of strategy and digital marketing, which she gained by working with many leading brands around the world. As a technology enthusiast, she is scientifically engaged in the study of artificial intelligence and behavioral economics. Currently, she combines business and technology by running a consulting and training company in AI and strategy.

Democratization of technology

Edyta: Hi Dominika. When I think about artificial intelligence, you're one of the first women who comes to mind — especially in the context of the democratization of technology. Thank you so much for accepting our invitation to talk. Can you tell us — what exactly is this democratization all about?

Dominika: Thank you so much for the invitation and for your kind words at the start. To me, democratization means making this technology accessible to everyone — regardless of their starting point, whether they come from a big city or a small town, or how much money they have. Technology should be something that connects us, not something that divides. So for me, free and open access to the latest knowledge for everyone is absolutely key to the idea of technology democratization.

Edyta: And today we'll be talking a lot about the democratization of technology — particularly in the context of disinformation. Topics like synthetic media, deepfakes, audio recordings, and even synthetic influencers are increasingly showing up on the radar of our future-shaping drivers. Do you believe — and if so, why — that education in the field of artificial intelligence could be key to building

self-awareness and understanding when it comes to disinformation?

Dominika: Disinformation is increasingly driven by artificial intelligence, and it's becoming more and more sophisticated — from hyper-realistic deepfakes to the generation of fake news using language models. One example is a new version of the "grandchild scam," where the voice of a loved one is stolen and played back to unsuspecting seniors. Without proper preparation, they become vulnerable to this kind of manipulation. Another growing area is election-related disinformation. And this is exactly where education comes in — not only to help us understand how these technologies work, but more importantly, to build societal resilience against potential technological abuses. We have to remember: only informed users can assess the credibility of the content they encounter. And that's absolutely critical in the digital age.

Edyta: Alright, but if we were to break down this lack of basic knowledge about artificial intelligence — are we only talking about a lack of understanding when it comes to how deepfakes are created or spread? How would you approach this?

Dominika: First and foremost, I think this lack of knowledge directly affects how false information and manipulations spread among us. For example, people who aren't even aware that deepfakes exist may believe every fabricated video or statement they see — and that can lead to serious consequences, even social tensions. This is why basic education is so important — including things like how to detect deepfakes, the role of critical thinking, how to distinguish fake news, and most importantly, where to verify it. And the next step? Knowing where and how to report it — so we don't keep amplifying disinformation.

Edyta: In one of our earlier episodes, we talked about how disinformation isn't just about major political issues — it also seeps into more personal areas like wellbeing and wellness, where conspiracy theories are subtly injected into the mainstream. Do you think that understanding how easily deepfakes can be created could help us here as well? Like, you know — to put it plainly — if my friend, using just a two-second sample of my voice, can manipulate what I say to the point where it becomes something completely different... isn't that something we should all be aware of?

Dominika: I think what's really crucial is understanding how AI-generated content is actually created today. When I show people advanced deepfakes — the kind used for positive purposes, like in museums, art projects, or movies — they tend to say, "That must take a huge amount of work,"

or “Sure, but that’s studio-level production.” But then, during my workshops, I show them a simple, free app available right on their phones. In just three steps — I upload a short audio recording of myself, I pick any image from Google (maybe a celebrity, or even someone in the room), and then I overlay that face onto my video — and seconds later, the app generates a clip. And in it, it’s their face. On my video. And I can make them say anything. That’s when the shock sets in. The realization that this doesn’t require some mythical programming language or advanced hacker skills. Just one app. And then I see this real fear in their faces — the understanding that it’s not some elite hacker who needs to target them, but anyone sitting right next to them could do this. And it’s only at that moment that they begin to truly think about the consequences — to think seriously about their own safety and what this means.

Edyta: I think this topic very quickly sparks a kind of intense thought process — people start asking, “Oh my God, how many of my photos and audio recordings are already out there online? What could someone do with them?” In that context, the issue of the data we leave behind in the digital space becomes especially important. Dominika, building on what you said earlier — about how easy it is to access our data, recordings, and photos — it seems like this could also be a starting point for a broader conversation about how much people actually understand data privacy in the age of artificial intelligence.

Dominika: Absolutely — people often have no idea how much data they’re actually sharing. I can go back to examples from my workshops here. Many people are convinced that they’re not sharing any sensitive content — for instance, when it comes to their bodies. Women will say openly, “Sure, I went on vacation, but my swimsuit photos are fully covered.” And then they’re shocked to learn that there are tools — now banned, thankfully — that can exploit such images in harmful ways. And that’s just one example, related to images. People who speak publicly, whose voices appear in recordings, often don’t realize that even a short excerpt of a thoughtful comment — like something from a podcast — can be manipulated and used in a completely different, unwanted context. Another key step is recognizing the issue of data more broadly. During workshops, I explain how data sharing with Google works — how we automatically agree to data processing when we create an account. Then we dive into the ad settings panel, and when people see how much information is stored there, they’re genuinely surprised. At first, the reaction is: “Okay, so Google knows where I live — so what?” But as we dig deeper, opening one drawer after another, and talk about how every app we log into using Google — or any other linked account — also collects our data, and I ask if they ever read those privacy policies… that’s when real reflection begins. They start to think, “Okay — maybe I trust

Google, because it's a big tech company. But what about every new app I download? Do I really know who's accessing my data and what they're doing with it?" I feel that the level of education and awareness about this cause-and-effect chain is still quite low. Yes, some basic things are well understood — like not sharing sensitive info such as your national ID number. That's considered obvious. But the awareness of the consequences that come from sharing even small fragments of personal information is still lacking. It's only when people begin to realize the true scale of how that data can be used that the risks become real to them.

Edyta: You mentioned the word "education," and I think it's worth pausing on that for a moment. In your view, what elements are absolutely essential — especially when it comes to knowledge about artificial intelligence — to build societal resilience against disinformation? I'd like to emphasize the concept of resilience here, because after going through experiences involving disinformation or deepfakes, people will need a way to return to using technology. So how do we rebuild trust in technology after going through something like that?

Dominika: Well, I really think education is the word of the moment — it's being used in every possible context, and rightly so. It's the one real certainty we have, the only true safeguard — our knowledge. For me, there are four key areas that are absolutely essential when we talk about education in this context. First: understanding how something is created from the ground up. In this case, how AI-generated content is made. How does it work? To the extent that these models can be explained, people need to understand what's actually happening inside them. Second: the ability to analyze sources and verify facts. Where can we find reliable information? How do we cross-check across multiple platforms? Third: familiarity with mechanisms like deepfakes, text and voice generators — so we know how to recognize them. Are there features or signs that tell me this is a manipulated image or a synthetic version of my own voice? And most importantly: practice. Especially practicing critical thinking — that kind of healthy skepticism toward digital content. Trusted sources of information are absolutely key. And like you said — despite the massive uncertainty that surrounds today's technological development, we ultimately have to make peace with it. One of my favorite statistics comes from a Turing Institute report. They surveyed how people feel about artificial intelligence. And one result that really surprised me was that 9% of the global population is afraid of autonomous vacuum cleaners — like Roomba. Why? Because of uncertainty. People don't understand how these devices map their surroundings, where they send the data, or whether those processes are safe. So if 9% of people are afraid of vacuum cleaners, we can only imagine what the numbers look like

for more complex technologies — and what people are truly worried about. And yet — we have to learn to live with this technology.

Edyta: I'm really glad you brought up that perspective — I call it the emotional context. It's about the emotions we experience when we think about the future of artificial intelligence. More and more often, I begin my workshops with conversations about emotions. If fear comes up — and that fear is clearly identified, like anxiety about whether AI is self-aware, acts with intention, or can make decisions independently — then technological knowledge becomes absolutely key. We're not talking about deep, programmer-level expertise here — just a basic understanding of what AI actually is and where the answers in tools like ChatGPT come from. That kind of knowledge brings a sense of calm. It helps people realize they're not facing some science fiction horror story, but a technology grounded in simple mathematics.

Dominika: I think what you're saying is really interesting, because that kind of mapped-out fear — to me — is a sign of healthy skepticism. When I start to feel afraid, but I'm also aware of that fear and begin to critically examine my own thoughts, it sparks curiosity. I start looking for answers. I don't think fear itself is a bad thing. What matters is knowing where to turn for help and how to look for trustworthy sources of information. The real issue arises when we're afraid but do nothing with that fear — when we're unaware of its cause and don't seek answers. Even worse, we often end up grabbing onto sensational headlines from the wrong sources. One example I really dislike is the headline: "Will AI take our jobs?" Not because the question is invalid — on the contrary, it could be the beginning of a meaningful conversation. The problem is that many people stop at the headline. They don't dig deeper, don't look for nuance — they just accept the narrative: "Well, if the media says so, there must be something to it."

Edyta: What you said about mapping fear is really powerful. It immediately makes me think about synthetic media. And the first question that pops into my mind is: "Will I be able to tell what's real?" That one question opens up a whole series of actions we need to take. First and foremost — developing critical thinking that allows us to question certain information and actively seek out diverse sources. I also have this prediction — that maybe we'll return to paper newspapers, or start becoming much more selective about the information we consume online. I think the issue of attention poverty — the need to really read, to give content more time — is going to become increasingly important. In your view, what other aspects of education and mindset-building will we need to function well in a world of synthetic

media? I'm not sure if "preparation" is the right word — it sounds like we're getting ready for battle, when in reality, we're simply going to be living in this world. It's more about how to learn to live well within it.

Dominika: You know, as you started talking, I began to wonder whether I actually like the kind of fear that forces me to think. And I realized — I really do enjoy challenging the status quo. Because that's when I actually start thinking, imagining scenarios for the future, and I can feel my brain really working. As for how to prepare for all of this — I think schools should start by teaching critical thinking. A lot has changed in recent years, and we need to accept that technology will be a permanent part of our lives. Critical thinking will become a core skill. But there's more to it. What seems obvious, often isn't. We are incredibly overstimulated these days, and staying focused is getting harder. This isn't just something I see in kids — it's true for adults too, including the ones I work with every day. Even I've noticed it in myself. I used to find car rides relaxing. But now — even if I think I'm ignoring billboards or traffic lights — my brain is still processing them. These seemingly unnoticed stimuli contribute to mental fatigue. I really think we should bring psychologists into the conversation, to better understand how to deal with overstimulation. Personally, I like challenging the status quo here too — checking whether this is really the case from a scientific perspective. The second big issue is the quality of information. With the overwhelming amount of content, data, platforms, and apps, we'll have to make more conscious choices. Even though our phones have plenty of storage, and we can theoretically install anything, take unlimited photos and videos — we'll need to start limiting ourselves on purpose. Choosing one valuable platform over a thousand accounts feeding us endless reels and stories. Endlessly browsing new creators only fuels the cycle of stimulation — and algorithms amplify it even more. I think the people who come out ahead will be those who intentionally limit the amount of input they take in, and choose quality over quantity. And that goes beyond media. The world is offering us so much right now that even living in a big city, I find myself asking: which events are actually worth going to, and which ones aren't? We'll need to become much more mindful consumers — of content and of experience.

Edyta: I love that we set out to talk about artificial intelligence, and ended up diving into deeply social, human-centered themes. For me, it's a natural connection. During one of my workshops, a group of young people told me that the key competency of the future — both in the context of working with AI and in countering disinformation — will be self-confidence. Not just in the general sense, but as the ability to question things, to have your own internal reference point — something built by the in-

dividual. They also pointed to curiosity. At first, I was really glad to hear that — that they wanted to stay curious about the world. But they quickly clarified: they meant directed curiosity — because today, we live in an era of total info-apocalypse. We have instant access to information from nearly every corner of the world, served up in highly stimulating, attention-grabbing formats. Maybe that's what needs to be one of the core competencies — not limiting curiosity, but guiding it intentionally. A kind of curiosity hygiene that helps us avoid drowning in information overload. What do you think?

Dominika: Absolutely. I recently came across a statement that really struck me. Because we now have access to information — often at an expert level — I started to feel my own self-confidence waver a bit. I noticed it especially when using tools like ChatGPT. I began asking myself: if anyone can quickly get an expert-level answer on almost any topic, then what makes me stand out? Why should my experience, built over years in a given field, still matter? Do I still have the right to call myself an expert in a world where anyone can "catch up" on knowledge in just a few minutes? The answer came to me surprisingly fast — from one of my clients. He told me that in business today, he's not looking for people who just have encyclopedic knowledge — because everyone has access to that. He's looking for people with a point of view. People who can analyze, go deeper, connect ideas across disciplines, and who aren't afraid to say, "I disagree." That curiosity, the ability to bring your own narrative to a topic, to draw your own conclusions — that's becoming the real differentiator. Because in a world of synthetic content, it's not the ones who repeat information who stand out — it's the ones who can interpret it, give it human context, and create something truly original.

Edyta: Bartek Pucek recently said something that really resonated with me — that in the context of innovation, the ones who will thrive are those who operate at the edges. Thinking like everyone else has become incredibly easy — especially with the tools that surround us. But it's those who live on the edge, who question the status quo, who go beyond definitions and dominant narratives — they'll be the ones who truly matter. Those who dare to see differently, to ask questions where others simply accept answers — they'll be the ones who carve their own paths and stand out across the many possible futures.

Dominika: I wonder if what Bartek said really comes down to one thing: courage. Thinking back to the schools I attended, I remember that the kids who were "different," the ones who lived at the edges, were often labeled — for better or worse. There are always two sides to that coin. And I think that's what takes real courage: being different, step-

ping outside the mold, breaking away from the well-worn paths. It seems to me that the world truly belongs to those who are willing to take that risk — even if, for a while, they're seen as crazy. It's those who dare to think and act differently who will truly forge new paths.

Edyta: I think that if we add self-confidence to all of this — meaning a clear sense of the value of our own thoughts and conclusions — then maybe that really is a kind of roadmap for the future. Dominika, thank you so much. In this episode, I think we touched on something incredibly important: even though we're talking about artificial intelligence, our conversation hasn't been just about the technology or the tools — it's been about much deeper social change. What we're really discussing, as Natalia Hatalska might say, is a "slow burn" perspective — gradual but profound societal transformation. We've been talking about information hygiene, about how we operate in today's world, about consciously receiving content. And that might be one of the most crucial elements in a broader context — building competencies around media literacy. So if we were to leave our listeners with one habit, one simple "pro tip" that could help them build media resilience and navigate the world of information more consciously — what would that be?

Dominika: If we agree that humans remain at the center — and technology is simply what surrounds us — then I believe critical thinking will be essential in helping us find our way. Challenging the status quo, questioning ourselves, staying open-minded — that's what's going to matter most. Technology is already optimizing the repetitive parts of our lives: our routines, our decisions, our processes. What will truly set us apart is our human approach — our inner reflectiveness. We've been saying for a long time that we need to "stay human," but that invites a deeper question: what does it really mean to be human today? Being open, staying true to ourselves in a digital world, thinking critically, asking questions — those will be our defining traits. On one hand, this will be our defense — because awareness and the courage to say "let me double-check that" will help protect us. On the other hand, it's also the path to calm, to safety — and hopefully, to happiness — in an increasingly digital world.

Edyta: And we warmly encourage everyone to adopt habits like these in the age of synthetic media. Dominika, thank you so much for all your insights and for sharing your time with us.

Dominika: Thank you — it's been such a thoughtful and meaningful conversation.

Marta Truś -Buchajska

She has been working as a strategy consultant since 2014. She currently serves as Innovation Designer at the Poznan-based gas pedal Huge Thing. She designs not only specific solutions, but also strategic, design and research approaches, drawing from methods such as Service Design, Design Thinking and others that she believes best meet the client's needs and chosen goal.

(Im)pure information

Edyta: Hi Marta, thank you so much for accepting our invitation to join the interview on synthetic media. To start us off, could you tell us a bit about what you do?

Marta: Hi Edyta, thank you very much for the invitation. I'm an anthropologist and researcher, and in my work I move beyond the classical anthropological perspective, which traditionally focused on various foreign cultures. Currently, I examine online communities and other groups operating within the broadly understood digital space. By studying their interactions, I also analyze the impact of social media and technology on us—particularly on our cognitive abilities.

Edyta: And I'm sure that space contains an overwhelming amount of information. And that brings me to my first question for you, Marta. In our project and throughout this podcast series, we talk a lot about disinformation, deepfakes, and synthetic media. But what actually is information? It's a question we probably should have asked right at the beginning.

Marta: Information is a difficult term to define because its meaning varies depending on the field—in the humanities and social sciences it means one thing, and in disciplines like physics or computer science, something else entirely. If we go back to the Latin root of the word, "informatio" would mean expressing an opinion, shaping, or forming something. In that sense, information would simply be the content of a message. At a certain point, however, information moved beyond its paper form and became digital—and that's when it turned into a value in itself. From that moment on, we can speak of the "information society," where information is treated as a resource—as valuable as capital or labor.

Edyta: That's very interesting. I'd like to pause for a moment on the idea that information is a value in itself. So—why do we need information? What does it actually give us, what does it do to us?

Marta: To a large extent, information serves to reduce uncertainty and support us in decision-making. Paradoxically, though, in the era of synthetic information, this function of reducing uncertainty has been somewhat devalued. This is what I wanted to refer to in the context of the information society—a concept introduced by Marshall McLuhan, who said we live in the age—or even the era—of information. He also coined the idea of the "global village." McLuhan observed that an information society is a knowledge-based economy characterized by high levels of education, but at the same time, high levels of functional illiteracy. It's a society that treats information as a common good. However, in reality—in the age of social media and the so-called attention economy—we're entering a new phase. We can no longer speak of a classical information society when we often don't know how to manage or interpret information. As you mentioned, we now face not only information, but also disinformation and misinformation—essentially three levels of how information can be manipulated in the digital space.

Edyta: Exactly. Natalia Hatalska once published a blog post in which she wrote that today we have unlimited access to knowledge—but she put the word "unlimited" in parentheses. And I think that ties in with what you're saying. Because when I hear this idealized narrative about the world—about how things are supposed to be, that we are no longer functionally illiterate, that information serves us—what I actually picture is today's world. A world in which anyone can be a content creator, and where there is so much information that we increasingly need content curators. We talk more and more about attention poverty, overstimulation, and cognitive fatigue. What challenges do you see when you look at all this? Because if we assume that information is a resource—and I think that's a key assumption—then what is it that prevents this resource from actually serving us today?

Marta: One of the main challenges remains the development of media literacy—meaning the ability to use media consciously and verify information through fact-checking. It's about being able to assess whether the content we receive is true. An equally important aspect is the ability to function in the spirit of an open society—which involves stepping outside of our algorithmic bubbles and avoiding isolation in so-called echo chambers. I find this particularly crucial. We're also witnessing a shift away from open content—publicly available and processable by artificial intelligence—toward closed content, protected behind paywalls. What I increasingly observe is a return to formats like blogs or newsletters—created for a specific audience or a small, engaged community. These materials are tailored, often based on specialized knowledge or the personal perspective of a known author—someone whose work we're familiar with, and whose position we understand. As a result, algorithms often do not have access to this kind of content. We could say that we're now dealing with two layers of the internet. The first is the so-called first-tier internet—a space where content is open, publicly available, and subject to reinterpretation or reuse by AI. The second layer—tier two—is a curated internet, where creators have greater control over their content. They decide what to publish, for whom, and in what context.

Edyta: Earlier, you mentioned content curators in the context of a changing reality—one in which artificial intelligence can freely modify content, often in very subtle ways. Sometimes we're not even aware that a piece of content has been manipulated or that the message has been shifted in a specific direction. A good example is the issue of AI-generated images, which still struggle to properly represent women. This kind of subliminal messaging—though not always intentional—does occur. So here's my question for you, Marta: do you think we can still speak of something like "pure information" today?

Marta: Was information ever truly "pure"? If we go back to the etymology of the word, we'll see that it has always been a kind of opinion—a statement made by someone speaking from a particular place, from a specific perspective. What used to distinguish information was the possibility of verifying it. Today, however, that's becoming increasingly difficult. On the one hand, we lack the necessary skills; on the other, we don't always have the time, motivation, or knowledge to carry out that verification. What's more, we often unintentionally spread disinformation—simply because the content resonates with our beliefs, emotions, or current understanding of the world. As a result, we pass it along without necessarily checking whether it's true. There's another trap, too—online creators frequently cite various studies. But research itself has also ceased to be entirely objective. We need to ask: which institution

commissioned the study? Who conducted it? Was a sound methodology used? Was it even disclosed? Today, many people stop at whether a piece of information has a source—any source at all. But we rarely go further to examine what actually lies behind that reference. In such conditions, different interest groups can amplify selected topics or situations. A good example would be the anti-vaccination movements or the cognitive biases we mentioned earlier. Take, for instance, the issue of the underrepresentation of women. We often hear arguments like "a woman wouldn't have come up with that." Yet history is full of cases where women's scientific achievements were credited to the men they worked with. Uncovering such facts requires a deep search—it takes time, effort, and awareness.

Edyta: I completely agree that verifying information requires effort. But I keep thinking about it from the perspective of everyday content consumption—when we simply open a platform or medium and are instantly served information. I would love to believe that we'll truly begin practicing fact-checking, that we'll start verifying sources. But on the other hand, I can't ignore the reality—we're a "turbo-fast" generation. We consume information in an instant, often in passing—a short Instagram reel, just a few seconds long. So Marta, do you think self-awareness is enough? Or do we need something more?

Marta: The idea of "critical thinking" has, in a way, become a buzzword. That's why I've developed my own framework—my personal approach to verifying information. I start by checking the creator—the account from which the content originates. Who actually posted this reel? Who is speaking? Is it a repost? It often happens that the captions we see under a video don't match the original content. Then I look at the type of content that person regularly publishes—what they say about themselves, their style, whether they're active on other platforms—and whether we might be dealing with an artificial creator. Only after that do I analyze the message itself—what it references, what it's trying to convey. I also try to compare it with other sources covering the same topic, in order to gain a variety of perspectives. Sometimes I even check Reddit—while it may not be the most reliable medium, its value lies in the fact that it avoids heavy moderation and formatting. Everyone has the right to speak there, and you can often find interesting, alternative viewpoints. This allows you to encounter different perspectives and references. There are also people who automatically aggregate content from various sources. As a result, it's this diversity of sources that becomes key—to both better understanding and more critically evaluating content.

Edyta: You know, when I think about how we used to consume information in the real world—when we met face to face and had conversations—and compare that to how we consume content today in the digital world, it feels like the effort required is much greater. At least that's how I perceive it—that truly understanding information in the digital space demands significantly more engagement and attention.

Marta: Yes and no. It largely depends on our motivation—what we're aiming for. We can, for example, follow content from people we know in real life—and only later begin to follow them on social media. In such cases, there's a kind of reference point: person-to-content. The risk, however, lies in the fact that we also have access to content from people we don't know and whose existence we can't verify. It becomes difficult to distinguish which of their views are authentic and which are expressed merely for show, to gain more visibility. And in that sense, yes—the effort required to receive and assess content is much greater. There's also the issue of the speed at which content is produced. It used to be different—even if we didn't personally know the author, we encountered their views in print. There was a book, which represented a significant effort: publication, editing, and often fact-checking. Someone was responsible for ensuring the text's reliability and, to some extent, took on that burden for us. With digital content, the problem is its impermanence—it can be deleted at any moment. Sure, you might later find screenshots or reposts, but that too requires effort: tracing it, checking it, verifying it. So yes, I agree that the effort can be much greater. But if we want to protect ourselves from this, it's worth applying what's known as downscaling—that is, focusing on creators we can get to know or verify, even in the offline world.

Edyta: I wonder whether a kind of remedy for all of this might lie in the anti-trend to FOMO—the Joy of Missing Out. Because so often, we follow countless people and want to know not only what they did yesterday, but also what they said. It's rooted in our human curiosity—we're interested in what others do, how they live, how they express themselves. And it makes me think: could cultivating this anti-trend—this acceptance of absence, of selectivity—be a way for us to escape overstimulation and information overload? What's your take on that?

Marta: I partly agree. I'm not entirely sure that the Joy of Missing Out is a truly effective remedy. But I do see value in turning toward community—not necessarily minimalism, but rather a conscious approach to media use. The important question is: why am I going onto this platform? Am I doing it to read something new, to catch up on the news? Or am I just watching reels to distract myself? Maybe I'm looking for a dopamine

hit? That awareness—what is this doing to me?—seems crucial today. What is my purpose in using media? Do I really need such a wide range of accounts that I follow? Why do I follow them? Is it aspirational? Is it meant to broaden my perspective? Sometimes it's worth following creators from completely different cultural backgrounds—because that, too, is one of the problems we face in today's information overload. We are not being informed about everything that's happening around the world. The world has, in a way, shrunk—Europe has become a kind of amalgam. We have the United States, and we have countries where wars, protests, and social movements are happening. But in truth, we don't really know what's going on in many other countries. They cease to exist for us as distinct, individual entities—they disappear from view. That's why it's worth asking ourselves: why am I doing this? The goal is to move beyond mindlessness, beyond what Heidegger referred to as the state of "das Man"—where something is watched or done simply because others are doing it. It's not about withdrawal, but about attentiveness—about acting with intention and reflection.

Edyta: So we're circling back to the beginning of our conversation—to the realization of a fundamental assumption: that information is a resource. I once prepared a talk on deepfakes, and I was looking for a sense of agency—how we consume information and what we do with it. At the time, I came across an article (unfortunately, I don't remember the author, but we'll link it later) that introduced the concept of "truth as a verb." According to this idea, information that is not acted upon—while not entirely "empty"—remains, in a sense, unfulfilled. Yes, it may move something in us, do something to us, but only when it leads to action does it realize its full potential. You also spoke, Marta, about information bubbles—a major topic when it comes to social media and algorithms. Do you have any strategies that help you avoid falling into those traps?

Marta: Yes, unfortunately—it comes back once again to that "hard work." We have to consciously disengage from content that channels us in a particular direction, reinforces our mental patterns, and strengthens our information bubbles. Here, it's worth distinguishing between two related but distinct concepts. On the one hand, we have algorithmic bubbles; on the other, we have so-called echo chambers, which function similarly but refer more to the social dimension of communication.

Edyta: Could you define those for us?

Marta: Let me clarify: information bubbles are spaces we end up in because algorithms continuously feed us more of the same type of content—based on our past choices. Echo chambers, on the other hand, emerge when we don't actively seek out content outside of our algorithmic feed. As a result, we are constantly exposed to the same messages—often reformulated, rewritten by different tools (including chatbots), but still conveying the exact same message. These repetitive narratives reinforce our belief that "everyone thinks the way we do." This leads to dangerous cognitive closure. That's why we often hear about the need to "break out of the bubble." The problem is that once we're inside an echo chamber, we hear the same voices from every direction—and we stop thinking critically. We assume that because no one is saying otherwise, there must be consensus. And that, in turn, leads to biases and prejudices that we no longer feel the need to question. With algorithmic bubbles, there's still a chance that, once in a while, something from outside the bubble might slip through. But echo chambers represent a completely different level of isolation—much harder to break. Algorithms work hard to keep us inside those patterns, to prevent us from stepping outside the curated frameworks. But there are ways to bypass this. A good strategy is to watch the same content on different devices or across various platforms. You can also experiment with how algorithms function by logging in from different accounts. For example, I sometimes browse a platform using my phone and then again using my husband's phone. And I receive two completely different feeds—one tailored to women, the other to men. This reveals just how much algorithms shape our perception of the world—how strongly they distort reality by highlighting some content while filtering out others. It shows that our "bubble" isn't accidental—it's constructed deliberately and systematically.

Edyta: I also think about echo chambers from another angle—that we often become very comfortable within them. We no longer need to make any intellectual effort, because if everyone around us thinks the same way, it must mean we're "in the right place." And maybe that in itself is a useful piece of advice: if it starts to feel too comfortable within a particular group, it might be time to "change rooms"—to open ourselves up to something new. It also reminded me of something you said earlier, and a conversation I recently had with Ada Florentyna Pawlak about synthetic media. Ada made a very insightful point: that we need certain "cushions" to keep us from falling into the traps created by today's infosphere. She spoke about a "social cushion"—in the context of building relationships with bots. I would add another: a "knowledge cushion." A foundation of understanding about what information does to us—and the awareness that it can be both a tool and a burden.

Marta: Just as important as knowledge about the world is knowledge about ourselves—the ability to observe our own reactions. That's also something shaped by social media. We now live in a world where constant "doing" has become the norm. There's a belief that if we pause for a moment, take a break, or stop being productive, it's as if we cease to exist. The same applies to visibility on social media—we feel we must be constantly present. As a result, we think we don't have time to stop or reflect. And often, we lose touch with ourselves—with our own bodies and needs. Algorithms tell us when to drink water (via app reminders), when to move (step counters, inactivity alerts), and even how much we should drink in a day (smart bottles). This loss of connection with the body isn't just physical—it's psychological too. We stop noticing when we're tired. We only recognize our fatigue when we're already exhausted or completely burnt out. We lack that symbolic "cushion" that would have said earlier: hey, you're about to short-circuit. That's why I believe it's important to talk about the need to build a kind of cushion of self-awareness—an inner space where we have access to knowledge about ourselves, our needs, and our emotional state. That can be something truly valuable—especially today.

Edyta: I would add the perspective of agency to that. Self-regulation and self-awareness help us better understand our own sense of agency—because I'm the one who knows when a signal appears, and I'm the one who decides what to do with it. I don't need a smartwatch to tell me, "Do 10 squats, because it's time." I think it's important to emphasize that technology should not take control over our bodies and decisions, but rather support our awareness. At the end of each podcast episode, we always ask a question about the future—either as a prediction or a provocation. So, Marta—how do you see the future of information? Even if it's purely speculative.

Marta: For me, the future of information is highly layered. I don't see it as a linear process. On one hand, we will continue to face disinformation—and it will become increasingly difficult to detect. But on the other hand, we are also seeing the emergence of companies and initiatives aimed at countering this. Tools are being developed that are accessible to everyday users and help verify whether a piece of content was synthetically generated or created naturally. Examples include platforms like Pindrop, ArtDirector, or WeVerify—tools specifically designed for this purpose. I'm also thinking about the rise of small communities formed around specific creators—authors, writers, journalists—who share content through newsletters, often behind paywalls. This may be one of the directions we pursue in search of authenticity, quality, and trust—in contrast to mass, unverified information. In this context, what

comes to mind is an MIT course on media literacy. It doesn't just deconstruct deepfakes, fake news, media, or synthetic content, but also explores how these phenomena can be transformed into something positive. The goal is to use them to broaden perspectives, challenge mental models, and break down prejudices. Importantly, the course invites participants from all over the world—because only through such global diversity of views and experiences can true understanding be built.

Edyta: Could you tell us more about that course?

Marta: Yes, the course is available online and open for enrollment. I was actually surprised that it isn't more widely publicized or particularly popular. Yet its core idea is incredibly valuable—it aims to bring together participants from as many countries as possible, from different parts of the world. That's why the course is free and publicly accessible—to support the process of decolonizing the internet. Because let's be honest: the internet as we know it is largely white, colonized, and based on the perspective of the affluent Global North. Meanwhile, this course offers a chance to view content—including synthetic content—designed and created in other parts of the world. It shows how amplifying specific signals can be used not only to build narratives but also to deconstruct them. For me, this represents a strong prediction and an important direction for the future: more and more countries will be actively encouraged to speak up, to create information, and to disrupt existing information bubbles.

Edyta: So there is hope that, as a society—globally—we will confront all of this head-on. That we won't remain passive recipients, but will become active creators, curators, and guardians of information.

Marta: Yes, I believe it's essential—especially in light of today's political climate. In a world where we're increasingly facing oligarchization, grassroots initiatives and the voice of the people seem like a natural counterbalance—a genuine source of strength. The same applies to the decline of the information society. We need to start imagining a new kind of society—one that can handle the complex legacy left behind by the existing model. We're also witnessing a gradual erosion of general knowledge. Knowledge has become decentralized, and at the same time, it's increasingly difficult to define what counts as "common knowledge" today. This means we will more and more often need to go beyond what is easily accessible—to seek out other voices, the less obvious, less privileged ones. Voices that are non-heteronormative, decolonized, and coming from outside Europe and the U.S. I'm encour-

aged by the growing number of initiatives that invite futurists, trend analysts, and those who recognize “signals of change” in other parts of the world to join the conversation. Creating these dispersed archipelagos of knowledge and information may be one of the best ways to build a new, conscious society of the future.

Edyta: And once again, it comes down to agency—the kind that begins with the individual.

Marta: We talk a lot about individual agency. Because the truth is, if you’re comfortable where you are—you’re unlikely to move. You won’t feel the need for change. And that, too, is a form of inertia—internal, human inertia. That’s why agency—and even a small dose of dissatisfaction with the status quo—has become essential today.

Edyta: Marta, once again, thank you so much—for the depth of insight, for your reflections, and for the substance we managed to pack into these thirty minutes. On one hand, I’m left with a prediction of grassroots change; on the other—with what I’ll dare to call a provocation toward that change. Thank you for your time, your attentiveness, and your wisdom. And hopefully... we’ll speak again.

Aleksandra Więcka

Story designer, journalist, and sociologist. Design thinking facilitator. She combines storytelling with design thinking and creativity training. She teaches individuals how to craft compelling narratives about themselves, their brands, and their businesses. A graduate of the Laboratorium Dramatu and the Krakow Scriptwriting School. PhD candidate at Kozminski University in Warsaw. She lectures at the School of Form in Poznań, as well as at SWPS University and Kozminski University in Warsaw.

Frames and fictions

Edyta: Ola, thank you for accepting the invitation to this conversation. To put it simply, you work with stories every day – helping create them and building narrative strategies... for organizations, public administration, and various institutions. Why do we actually need stories? Where does their power come from? Why do they have such a strong influence on how we perceive reality?

Aleksandra: Professor Jerzy Trzebiński from SWPS University came up with a very insightful explanation of this phenomenon. He believes that narratives are our framework – something that allows us to interpret stimuli from our surroundings. When you think about how we function in the world, how we interact with reality, we're essentially receiving a cloud of stimuli – auditory, sensory, visual. We need to process them in order to make sense of them. One technique we use is to turn those stimuli into a story. It's a bit like when we come back from work or an important event – we rarely report everything in bullet points. We usually say: "first this happened, then that, and then something else." In this way, we convey our experience in the form of a story, which becomes more understandable and accessible to others. Now, there's a difference between a story and a narrative. A story is a specific way of conveying an

experience, while a narrative is a frame – a cognitive-conceptual structure that helps us organize various elements into a coherent whole.

Edyta: Does that mean that a story is simply a narrative enriched with emotions?

Aleksandra: I wouldn't look at it that way at all. I'd rather say that a narrative is more like a bigger story – a framework within which we operate. For example, if we're conservative, our framework is based on the belief that what was before is good. And if we're progressive, we believe that what is yet to come is what's good.

Edyta: So, would it be fair to say that we draw from the narrative what is most important to us – and only then do we create a story?

Aleksandra: We create a story by looking at reality through the lens of that specific narrative frame.

Edyta: You mentioned that narratives, and then stories, help us interpret stimuli and understand the world around us. In what other ways can they help us? For instance, do they also influence the way we make decisions?

Aleksandra: Narratives create an entire layer of meaning and symbolism around us that allows us to communicate and understand each other. We need a shared conceptual space with others for the story we tell to have a chance of being understood. Take storytelling in organizations – David Boje, in one of his articles, wrote about how stories shape the organizational culture at Disney. He made a very interesting point: that the most important things are not what is said during meetings, or even what someone wrote down. What's most revealing is what goes unsaid – what is so obvious that no one needs to mention it, because "everyone already knows." That's the transparent, narrative glue that binds a community together. Stories are also carriers of values – both the socially reinforced ones and those we acquire individually. From fairy tales told by grandparents, to Peppa Pig, to myths and other cultural texts – we learn from them what is considered good or bad in our cultural context. It's also crucial to note that stories are vessels of knowledge. Since the dawn of time, knowledge has been passed on through stories – about how to fight, how to hunt, how to survive. Today, we still gain knowledge from other people's stories – we listen to their experiences, compare them to our own, and wonder: "Do I feel the same?", "Would I act that way?", "Can I draw similar conclusions?" Stories also teach us causal thinking. Thanks to them, we understand that if B happened,

it was probably because A happened first. And finally – stories have enormous importance when it comes to identity. It's hard to speak of any community that doesn't have a shared story about the world. That story defines it, holds it together, gives a sense of belonging. That's a key role of narrative – and like any powerful force, it can be used for both good and very dangerous purposes.

Edyta: Exactly – and from here it's a short step to our main topic: synthetic media. After all, they too are carriers of stories – created by someone and for a specific purpose. But before we dive into questions of intention and goals: do you have any observations about whether AI-generated content can engage us as deeply as human-created content? Or perhaps even more? What actually determines which stories truly affect us – which ones move us, captivate us, and stay with us longer?

Aleksandra: What makes us engage so deeply with them? Above all, it's that they touch on our core values – the ones we identify with. These kinds of stories often lead to polarization, because they hit at the very heart of who we are or who we believe ourselves to be. And why is that? Because – generally speaking – stories engage us when we can identify with their protagonist. When the protagonist becomes a vessel for our own internal story. A story can have transformative power. Many people – if not all of us – have experienced a moment when, after reading a book or watching a film, they've said: "this changed my life." Sometimes we come across a story that shakes us to our core – and nothing is the same afterward. These are usually stories that help us find words for something that lives deep inside us. They give us language to express something that affects us deeply – a situation we can't resolve, an inner conflict, a major challenge. These are the stories that open up space for articulating what's "eating us from the inside." Another crucial element is the ability to identify with the protagonist. This is an old recipe, going back to Aristotle: the protagonist has a goal – important and difficult – and is willing to pay a certain price to achieve it. That goal is essential to their development, survival, or transformation. That's why the archetypal, linear structure of a story – known as Joseph Campbell's monomyth – resonates so strongly with the human experience. The hero sets off on a journey, faces obstacles, and undergoes an inner transformation. And while this might sound like a narrative cliché, it mirrors our everyday struggles with limitations, crises, and pivotal moments. It's also worth mentioning a phenomenon known as transportation. It's the moment when we become so immersed in a story – whether it's a game, a film, or a book – that we feel as if we exist in another reality. And it's precisely this full immersion that gives stories their immense power – including their social and emotional impact.

Edyta: Don’t we sometimes blur the lines? On one hand, we can distinguish fiction from reality. But on the other – if a fictional narrative carries new values, norms, or ways of interpreting the world, isn’t it true that when we return to reality, we’re still left with those reflections? And even if we know it was just fiction – don’t we start to implement those new ideas into our everyday lives?

Aleksandra: Of course we can carry reflections from fiction into reality, but that’s something entirely different. It’s important to clarify this. It doesn’t matter whether a story is created by a human or by AI. As storytellers – regardless of the medium – we want the audience to take something from the story. To experience something, feel something, maybe even learn something. And to momentarily suspend the distinction between the real world and the world of imagination. That’s intentional – we want the audience to transfer something from one reality to the other. But that’s very different from when someone can’t tell fiction from reality. That’s not the same mechanism. I think what you’re asking touches more on the issue of disinformation – narratives that are created with the intent of posing as truth. And that’s where the biggest danger lies: when someone not only suspends disbelief, but begins to treat a fictional story as objective reality.

Edyta: Exactly. And now the question is: can we somehow combat this? Is it possible to teach people to distinguish truth from fiction – especially in a world where those boundaries are becoming increasingly blurred?

Aleksandra: Right now, we don’t really have effective tools to fight this. As humans, we don’t come equipped with built-in “software” sensitive enough to reliably detect the difference between what’s real and what’s generated. Up to a point, we can still notice when a text was created with the help of something like ChatGPT – because the language can be oddly “blandly correct.” But that’s changing fast. Actually – I had a situation yesterday that really made me laugh. I asked ChatGPT to suggest a slogan for a project I’m working on. I added that it should “pretend” to be an award-winning copywriter. The result? The slogans were pretty average, but… the AI really nailed the role – it started writing to me like: “Hey, which vibe hits better for you?”, “Am I on the right track?”, “Which concept clicks with you?” And that was genuinely interesting – because it was much better at mimicking how people from that group communicate than at replicating the quality of their creative output. It shows how complex the situation is becoming. Our alertness – especially now that image, audio, and synthetic voice generation tools are so advanced – can easily be dulled. And here’s the crucial question: are these stories false, or true? And more broadly – how should we be approaching them today?

Edyta: I'd like to pause a moment longer on the topic of disinformation and that case you mentioned with ChatGPT, which started communicating with you exactly in the way you had prompted it to. Because the truth is, as users, we don't really have effective tools today to fight disinformation. Even when amazing technologies appear that can verify whether a recording was AI-generated, it still requires effort on our part. We have to download the content, upload it to the right app, wait for the result. And the truth is – no one is going to do that regularly. That's why, in the end, all we're really left with is mindset – an awareness and way of thinking that acknowledges the existence of fictional narratives. Because they're here. And they will remain. But I'd like us to look at disinformation from an even broader perspective. What is it that makes us so susceptible to these false narratives today? What causes us to so easily fall for their virality on social media? I ask because I believe that only by placing this phenomenon in a wider context can we begin to form better responses and strategies. What would you add to this picture? Is it a matter of attention poverty? Stimulus overload? Functional illiteracy?

Aleksandra: Yesterday I was reading an article that referenced Neil Postman's book Amusing Ourselves to Death, published in 1985. He uses a very striking metaphor. Imagine a party – the hum of conversation, a waiter pouring champagne, people exchanging nuanced thoughts and sharing meaningful observations. And then suddenly, someone bursts into the room with a megaphone. They start speaking loudly, saying random things – their small talk is superficial, lacking any depth, and often it's unclear whether what they're saying has any basis in reality. And even though their message is random, its loudness and brevity begin to drown out all other conversations. The calm, quiet, layered dialogues become impossible. Now – as Chris Hayes, author of an article in The Guardian and the book The Sirens' Call: How Attention Became the World's Most Endangered Resource, points out – not only did we fail to take the megaphone away from that person, we handed a megaphone to everyone at the party. Today, no one can have a calm, in-depth conversation because everyone is shouting. And I think that's exactly what you're talking about when you mention attention poverty, overstimulation, and the fatigue from information overload. We're exhausted. We no longer have the resources to verify the content we encounter. When I think about so-called strategic narratives, I see clearly that we often can't even identify who the author is or what interest they have in making us believe that A is A and B is B. And at the same time, we lose the motivation to check – simply because we're worn out.

Edyta: Since – as you said – everyone now has a megaphone and it's hard to have calm, in-depth conversations, doesn't it mean that in this informa-

tional noise, the stories that resonate most are those that align with our deep beliefs? Is that why synthetic media – which generate precisely tailored content – can influence our worldview so effectively?

Aleksandra: Different kinds of stories shape how we perceive the world. Since they are the very building blocks of that world, they influence our understanding of reality and the way we interpret what reaches us at various stages of life. Inayatullah, in this context, speaks of four layers of experience. The first is the so-called litany – the surface layer where we register everyday facts. For example: we used to go to school, and then we stopped. These are observations we can name, but that don't deeply affect how we think or act. The second layer is the level of systemic explanations – the rationales that give meaning to those everyday events. "You need to go to school to learn, because education offers a chance for a good job." These are stories that were once widely accepted, though today they compete with many alternative narratives. The third level is the value layer – the moment when these rationales become part of our belief system. We can then consciously say: "I believe that freedom and equality are inalienable human rights – and that's why I make certain decisions." But there's also a fourth, deepest layer – the metaphor. This is the dominant story we live in, often without realizing it. These are beliefs like: "freedom is the highest value" or "freedom is worth dying for." It's this layer – the least conscious – that most powerfully shapes our worldview and behavior. And it's on the metaphorical level, as Inayatullah notes, where the deepest transformations can happen. If you change the metaphor, you change how people understand the world. In this context, the massive volume of content produced by synthetic media – content precisely tailored to how our brains and emotions work – can become a powerful engine of change. But these won't always be changes we would wish for. This kind of content can become a tool of manipulation, influencing value systems and worldviews of entire social groups.

Edyta: Do you have a specific example in mind?

Aleksandra: Yes, and these aren't just changes at the level of "who to vote for." As you mentioned, these are often much deeper shifts, happening at the level of values – sometimes so subtle they're hard to notice at first. Take, for instance, what happened after Donald Trump was elected President of the United States and how the narrative around the war in Ukraine looks today. The dominant narrative in Europe is clear: Russia attacked Ukraine, and Volodymyr Zelensky – as a leader and a symbol of resistance – is defending his country. That's our prevailing interpretative framework. Now – just a few days ago – Donald Trump claimed

that the war in Ukraine is actually... Ukraine's fault. And if I recall correctly, Vice President JD Vance suggested that it's Europe's fault – that we could have avoided it. You could argue they said it clumsily, or deliberately provocatively. But the fact remains: it was an attempt to shift our dominant narrative frame. And we're not talking about just anyone making these claims. These are individuals with massive reach, enormous visibility, and major influence on public opinion. People whom many trust. For some, it's enough that Trump, Elon Musk, or another media authority says something – and they won't verify it. They'll just accept it as truth. All of this shows that the power of the megaphone – metaphorically speaking – depends on who's holding it. Narratives don't change overnight just because someone speaks. It's more like weaving – slowly – a new tapestry of reality. A slow intertwining of threads that can, over time, completely alter the structure of our understanding. And we've known this for a long time – Goebbels himself said that if you repeat something often enough, people will start to believe it.

Edyta: And if you could, for a moment... I don't want to say "become a fortune teller," but try to peek into the future? This is the question we always ask at the end. You mentioned that there is now an open window for competing stories – narratives that go far beyond the ways we've traditionally used to describe the world. I'm thinking, for example, of the entire anti-technology sector: conspiracy theories, movements that deny scientific findings, like the belief that the Earth is flat – and many others. How do you see the future of our information consumption? In your opinion, will we stop at some point? Might we return to some form of content limitation? I sometimes use the metaphor of going back to "newspapers" – not necessarily literally, but as a symbol of a more selective and thoughtful way of consuming information. Or, on the contrary – will we keep flowing in the current direction? Will the internet, soon to be a space largely dominated by communication between bots, stop being important to us? Or maybe we won't even notice the change and will just keep functioning as if nothing happened? How do you envision the future of information consumption?

Aleksandra: You know, when I think about what might be today's most important challenge – something on which you could build a startup as groundbreaking as Facebook once was – I keep coming back to information selection. To the need to cut ourselves off from stimulus overload and filter content by quality, not by creating more information bubbles, but through thoughtful curation – based on credibility and relevance. The point is to help us understand the world we live in, how we function in it, and how to develop strategies that will allow us to survive – and, if we're lucky, to live well enough and long enough. I don't have a ready-

made vision of a happy future. But I agree with researchers who say the internet could soon become so crowded and polluted that access to valuable information will be paywalled and reserved for the few. In a sense, that would be a return to newspapers – to curated, edited content. And honestly, I think I'd welcome that shift. I dream of a time when we, as a society, understand how narratives are constructed. That behind every story – even if it's told by a synthetic influencer – there's someone whose interests it represents. This kind of "narrative literacy" – the awareness of how stories work – is something very complex, and if it hasn't developed by now, I don't know if it will happen on its own. But if I had to name one thing that could truly help us, it would be that – a conscious understanding of narratives and their sources. Recently, I came across a metaphor that really captures our situation – I think it was in Newsweek. It compared the middle class to a boxer who has taken so many hits that he's still standing, but no longer knows what's going on. I think this doesn't just apply to the middle class. We are all that boxer now – taking blow after blow of information, without knowing where it comes from or what it means. To avoid being knocked out, we need some form of protection. Maybe future regulations will provide that – though it's hard to believe, given the trend of deregulation and the growing influence of authoritarian systems that are dismissing the last officials capable of monitoring content. In this situation... honestly, I don't know how we'll get out of it. Maybe it's just my nature – but in this regard, it's getting harder and harder for me to be optimistic. I feel like we're heading toward a reality that resembles a hoarder's house: full of stuff, full of noise, and increasingly incomprehensible.

Edyta: I'd like to pause for a moment on the term "narrative literacy," because I think what you said is absolutely crucial. And I'd like to add something. In one of the previous conversations in this series – with Ada Florentyna Pawlak – a concept came up: the idea of "pillows" that help us cope in a world of information overload. One of them is the knowledge pillow – the awareness of what information does to us, how narratives work, and that even five seconds of a TikTok video can shift our perception of reality. But equally important is the social pillow – the space for conversation. The opportunity to encounter different views, to exchange thoughts, and sometimes to step out of our own information bubbles – if that's even possible. Ola, thank you so much for this conversation. I feel like we could have continued for much longer, exploring threads we've only just begun to outline. I hope we'll return to this conversation – perhaps in a more political context, but once again centered on synthetic media. Thank you sincerely, and I wish you a good future.

Aleksandra: Thank you.

Monika Borycka

Trend observer, innovation analyst, founder and CEO of the TrendRadar brand, through which she promotes knowledge about trendwatching and future analysis. Co-host of the podcast "Wycinki z przyszłości". Lecturer and academic supervisor of the postgraduate program Trendwatching & Futures Studies at AGH. Resident at Krakow's Apteka Designu and member of the think tank Żywność dla przyszłości.

Synthetic tsunami

Edyta: Monika, thank you so much for accepting the invitation to this conversation. Our meeting will serve as a summary of many of the threads we've touched on so far – we've already discussed the role of information in our lives, our relationships with artificial influencers, and the impact of contemporary narratives and stories. Since you specialize in trend analysis, I'd like to ask you about the social and technological trends we can include on our trend map, and which are currently driving the development of synthetic media.

Monika: Thank you for the invitation. It's great to be part of a conversation specifically about synthetic media, because this is quite a hot topic in the world of trends right now. As people who focus on identifying weak signals of change – those subtle early signs from which various trends later emerge – we've been observing both a growing discussion and increasing manifestations related to synthetic media. This has been happening for several years now, and we're currently seeing this trend maturing and converging with other trends that are driving these phenomena forward. And of course, as you mentioned, there are technological trends – and AI is clearly the crown jewel here. But I'd say we're really living in a cycle of technological convergence, where different

technologies are beginning to interconnect in various ways. This convergence is what now allows us, for example, to generate a real-time digital twin – an AI clone that could sit here and have this conversation with you instead of me. This is made possible not only thanks to artificial intelligence, but also through the advancement of increasingly sophisticated image-generation tools. So indeed, we're seeing a lot of things coming together, and this technological convergence is one major aspect. But on the other hand, I also observe a broader social trend related to the breakdown of coherent narratives. We're surrounded by increasing chaos and ever more fragmented storytelling, where it's often difficult to trace a clear contextual line or see how things connect. We encounter bits and pieces from different media platforms, scattered throughout our daily media streams, and it's getting harder to figure out how they relate to one another. This fragmentation also ties into what you mentioned earlier – your episode on disinformation. Fragmentation makes it harder for us to detect what's real and what isn't. In such a disjointed media environment, it becomes easier to insert synthetic media artifacts or messages generated with the help of AI – including deepfakes. These two large trends – technological convergence and narrative fragmentation – interact and fuel each other, creating the conditions where synthetic media not only begin to function but also flood us with content. That's one layer. On top of that, we also have broader social trends, such as increasing feelings of loneliness and the growing tendency to form relationships with artificial entities – but I'll put that aside for now. Those are the big forces at play. And then there are the micro-phenomena – what we might call micro-trends – that attach themselves to these bigger shifts and act as small manifestations of the larger picture. One of those I'd point to is the rise of something known as AI slop.

Edyta: Could you explain this phenomenon to us?

Monika: These are AI-generated pieces of content that are essentially empty – content that says nothing, is very shallow, or is almost painfully simplistic and childish. And we're seeing more and more of this "AI slop" online. We observe it especially on social media, where we're flooded with bizarre posts – like videos of a puppy turning into a duck, then the duck turning into a car – odd, simplistic metamorphoses. But on the other hand, there are also more dangerous forms of AI slop. For instance, a picture of an elderly woman in a kitchen, wearing an apron and presenting beautifully baked loaves of bread, accompanied by a Facebook post asking if the bread turned out well. When I looked at the comments under that post, I saw many users were unaware that the image had been generated by AI. They were complimenting the bread:

"They look amazing!" "Can you share the recipe?" "How did you get the crust so crispy and shiny?" These are the kinds of contents that clog our communication channels. They don't carry any real meaning. They don't offer value in themselves, but they're being used in a variety of ways – and that's what makes them significant. Some of the accounts that generate this kind of filler content using AI are later taken over for political purposes. These are so-called fan farms, cultivated on simple, low-quality content, and then repurposed to push political messaging. We've already seen examples of this in Poland during the recent election campaign. So this is a micro-phenomenon that, for now, sits on the margins – and perhaps we still lack robust analysis of these kinds of digital artifacts. But they're clearly attaching themselves to a larger trend cluster: the fact that we're living in a synthetic world. And around that reality, more and more strange, sometimes surprising, and at times deeply troubling phenomena are emerging.

Edyta: I'd like to pause for a moment on these AI slops, because what's coming together in my mind is the fact that we truly are being flooded with content. People sometimes talk about an "info-apocalypse." Could it be that, given the state we're in as a society, we've become so exhausted that we actually want this kind of empty content – that we prefer it to be bland, simple, and demand nothing from us? Could that be part of the connection? Because if we're consuming these short clips of a cat turning into a fish, there must be a reason behind it.

Monika: I think this is definitely connected to a trend that's very important in my field – especially since I work closely with media and traditional publishers – and that's the trend of "avoiding news." We've been observing for several years now that audiences are increasingly avoiding exposure to real, meaningful information. The times we're living in, especially since the pandemic, have brought about what some call "information depression." We simply don't want to keep up with the constant stream of negative, shocking updates anymore. This is a major and important phenomenon, and the synthetic tsunami we're talking about is only going to deepen it. On one hand, we have the risk of overload – the fatigue you mentioned, being overwhelmed by content. On another, this will lead to a decreasing ability to engage with the news. And thirdly, the burden – or rather, the cost – of verifying the credibility of information will increasingly fall on the audience. It will become harder and harder to get people to spend the time and energy necessary to learn how to distinguish between reliable content and the noise generated by AI. And that's where the vicious cycle begins. So this constant exposure to shallow content may, in turn, lead to even more news avoidance – or simply to decision fatigue when it comes to processing information.

Unfortunately, the introduction of AI only deepens this phenomenon, and here we're definitely facing a huge challenge – especially for traditional media, which will need to find ways to respond effectively. What's more, we're seeing some absurd developments that I find quite intriguing from the perspective of identifying weak signals of change. For example, there's growing advice aimed at content creators who use AI, suggesting that they shouldn't copy content directly from tools like chatbots or video/image generators. Instead, they're being told to "humanize" it – to give the final product a more human touch or feel.

Edyta: So, for example – make a mistake on purpose?

Monika: Yes, exactly – or, you know, write something just a little off, not so polished. We're already seeing reports that a significant percentage of content on platforms like LinkedIn, for example, is produced and read exclusively by bots. More and more people are beginning to recognize the patterns in such content. There are even discussions now about things like whether a long em dash is a clear sign that the text was written by AI. So we're now seeing all kinds of advice online about how to re-humanize content. And for me, it's starting to feel like that image of a snake eating its own tail. These phenomena are all happening side by side, creating self-perpetuating mechanisms that are leading to serious issues with our ability to meaningfully absorb content. I think this will be a huge challenge for all content creators – not just major publishers or mainstream media outlets.

Edyta: We'll get to the topic of authority and online creators in a moment. But first, I wanted to ask you one more thing. You mentioned earlier that verifying whether something was generated by AI requires a certain effort, a kind of agency on our part. I've been thinking about this in the context of Instagram filters – how, in the upper left corner, we can see which filter is being used, and we know that the person doesn't actually look like that in real life. Do you think that even if we start labeling content as synthetic, will that label really matter to audiences who don't spend much time consuming or critically engaging with information?

Monika: It's hard to say for sure, because efforts to regulate synthetic content are definitely important, and I believe everyone should have the right to know the "truth" about how a piece of content was created. This is especially crucial when it comes to mainstream broadcasters – large media outlets and major brands – which, even if not yet legally required everywhere, are already starting to label such content due to ethical standards in the media ecosystem. But the real question is: does any-

one actually pay attention to those labels? What I've observed is that many people do see the label saying something was generated by artificial intelligence – but it doesn't really change their reception of it. We've already read it, we've already consumed it in some way. That's why I say it's hard to determine the real impact. We don't yet have enough research on this. I also think the effect might differ depending on the format. There's a difference between reading text and, say, encountering an AI clone. It's much harder for our brains to disengage from visual information – we tend to trust what we see, even if we know it's not real.

Edyta: Why is that?

Monika: Our brains are wired in such a way that what we see in front of our eyes is perceived as real. And it's going to be very difficult for us to shift into a paradigm where we feel the need to verify every piece of information, every element of reality. Let me give you an example from just a few weeks ago: a case involving an Italian philosopher who decided to explore the topic of synthetic content through a philosophical experiment. He published a book that was allegedly written by an author of Asian descent – at least, that's what the name suggested. The book was titled Hypnocracy: Trump, Musk, and the New Architecture of Reality. And everything seemed normal until, a few weeks after its release – and it had already been published in three languages and sold 5,000 copies, which is quite a lot – it caused a stir within Italian philosophical circles. Then a reviewer decided to interview the book's author – and discovered that he didn't exist. The author was entirely AI-generated. There were photos of him on the book cover and everything. Furthermore, the content of the book itself had also been generated by AI. The entire project was a manipulation orchestrated by the philosopher to demonstrate the potential and power of this kind of deception. The book's structure was essentially a philosophical dialogue – the philosopher would pose ideas or challenges, and the AI would respond. It was written as a dual voice exploring manipulation through technology. And here, he posed a fascinating and fundamental question: some readers, when they found out, said, "I wish this author were real." But he wasn't. The philosopher's point was that we must realize that we are responsible for creating our own narratives. Because if we don't, technology – or political forces – will monopolize those narratives, construct new myths, and we'll spend the rest of our lives verifying the content we consume instead of building our own true stories.

Edyta: Let me just jump in here with one point. We've recently been working on the topic of narrative safety – particularly narratives generated by

artificial intelligence that are biased. Of course, bias is easier to detect in visual content, but we also have bias in text-based content, which is much harder to identify and verify. And over time, this kind of bias can gradually influence us – even shifting our worldview.

Monika: And here we're dealing with multiple levels of manipulation through synthetic media. We've talked about books and written content. But now I'm thinking about the fact that just recently, there's been a viral tool on GitHub called Deep Camera Roll – where in real time, within a second, you can deepfake yourself using just one tool. I could be sitting here right now with Pamela Anderson's face, and you wouldn't even realize you weren't talking to her. These are tools like synthetic influencers or AI clones – things we've been talking about in the trend community for years – but they're materializing right before our eyes. And we need to be aware that we'll increasingly encounter such entities in our lives. Sure, maybe your average person doesn't feel the need to impersonate someone else, but we already see experiments where IT professionals create their own AI clones and send them into Zoom meetings – and no one notices. A week goes by before someone realizes that a clone has been sitting in on calls, analyzing problems with the team. And who is it? Is it my colleague, or isn't it? How do we position ourselves in relation to this synthetic being? This opens up a whole world of philosophical questions. The manipulation example with the philosopher was just one dilemma – but many more are emerging as this phenomenon spreads.

Edyta: Exactly, and that's what I'd like to ask you about – this idea of relationality. We also discussed this with Ada Florentyna Pawlak in one of the episodes – whether a synthetic bot or a synthetic influencer, in your opinion, could serve as a content curator?

Monika: Of course it can. That's absolutely possible. And I think many media outlets are already using synthetic bots in this way. I read just last week that an Australian radio station had used a virtual host for six months without telling anyone – and no one noticed. That tells you something about the current level of development. But let's also consider experiments from the other side. For instance, Kraków's offKraków radio conducted an experiment with an AI-based virtual host – and that one failed, mostly because of the public discussion that followed. So I'd shift the question here from "Is it possible?" to "Where are our boundaries of acceptance?" At what point do we feel those boundaries have been crossed? The acceptance of a virtual being replacing a human as a radio host, for example – I think the offKraków case wouldn't have caused such a stir if it weren't for the underlying context of journalism

as a profession under threat. On top of that, there was the additional element of a virtual poet persona, which I think really upset people. So this is about defining the line: which synthetic entities will we accept, and which won't we? And on the other hand – will we even know they're synthetic? Honestly, I don't think most younger users can tell whether one of their TikTok creators is a real person or not. Even I sometimes struggle. Just recently, I watched a breakdown by a creator involved in the creator economy and video space, showing examples of Instagram accounts run by AI bots. And I'll admit – it was hard even for me to tell. So the real question becomes: will we even realize we're dealing with a bot?

Edyta: Do you think that the fact we often can't tell what's real anymore – that we're overwhelmed with so much content, much of which carries no real meaning – could actually lead to a reversal of this trend? That, to put it simply, we might go back to "newspapers"? Or at least some more accessible version of them? I talked about this with Marta Truś – the idea that we might end up with content curators hidden behind paywalls, which already introduces certain limitations in terms of access to good, human-made information for society as a whole.

Monika: We're definitely seeing this trend being actively explored by various media outlets. I'll refer specifically to mainstream media here. For example, The New York Times or Wired magazine have strongly emphasized the human element – the idea of the content creator as a verifier, a curator, someone who draws on personal experience, perspective, and investigative work to present information. At The New York Times, for instance, there's a clear emphasis on authorship – the author as an authentic, experienced individual who stands behind the content with their name. Wired, from the very start of the generative AI revolution, declared that no article would be written solely by artificial intelligence. So yes, we are witnessing a return to values like trust and human-made content. A great example of this is a campaign by a Norwegian public broadcaster, which used the slogan Only Human – highlighting that only people work there and only people create the content. So there's clearly an emerging counter-trend. Maybe not "anti" – but a contra-trend. On one side, we have synthetic media, and on the other: made by humans.

Edyta: That's exactly how I approach my own content, too.

Monika: Yes, because from my perspective, AI tools aren't yet sufficient for the kind of work I do – and I also see real value in preparing my analyses myself. Of course, it's not that none of us use these tools. I do, and I'm

sure you do too. But more for technical tasks, like transcription, for example. When it comes to inference, analysis, connecting the dots – identifying weak signals of change – I believe the human element is crucial. And yes, I label my content, because I truly believe we live in a world where transparency will become increasingly important. Saying, "I made this with AI," "I made this myself," or "I made it with some help from AI" – that kind of clarity will only grow in value. And there's also the context of productivity. If productivity boosted by AI keeps increasing, what will be the stance toward human-only work? Will it be considered too slow? How will we approach that? So here too, we're facing new dilemmas about the relationship between working with AI and working without it. A lot of these questions remain unresolved for now.

Edyta: Do you think such a conscious choice will even be possible in the context of what you just said about productivity? Monika, as we wrap up, I want to ask: in our project, we're working on building certain competencies, attitudes, and skills for navigating this new world. And I don't just mean saying to everyone listening, "think critically." Do you have any practical tips for the near future – things that can help strengthen our attention span? We're hearing more and more about functional illiteracy, attention poverty, about how we consume information too quickly. Maybe it's about digital hygiene, or creating a kind of personal framework to help us consume information more consciously. And I mean "consciously" in the sense of caring for ourselves – our bodies, our minds – to avoid overstimulation. Do you have any tips you use or recommend to others?

Monika: I think the tips fall into two categories. The first is: knowledge protects. We talk a lot about AI, but I wonder how many users – or project leads, or managers in general – actually experiment with AI in their daily lives and truly understand what these apps and services can do. Because until you test them yourself, until you experiment a bit, you don't realize what's already possible. That "aha" moment doesn't happen. So one simple step is to dedicate even just 30 minutes a week to exploring these tools, just to understand what's out there and how it works. It's a bit like when social media first appeared – I remember working in media back then, and everyone dismissed it as just a toy for younger generations. Today, I hear similar things about artificial intelligence – that it's a playground for hyper-tech optimists. But I say: just try it. Experiment. Spend an hour a week – the length of one TV episode – reading a few articles about where AI, synthetic media, or whatever aspect of it interests you is headed. Because things are evolving so quickly, and knowledge truly helps us stay grounded in reality. There's also a deeper issue at play – that the rapid pace of technological development makes us lose our sense of what's real. It becomes difficult to evaluate what's

true and what's not because events unfold so quickly. For instance, there was a recent viral video of a liquid-like robot flowing through a grate – part of an experiment involving non-solid robotic forms. And now, when we see something like that, we're no longer sure: is this real, or was it generated by AI? That's why dedicating just an hour to learning, to distinguishing truth from fiction, can be so helpful. Now, on the second leg of this – we're clearly seeing, and I personally experience it too, a decline in our attention spans. People think, "Oh, I can't be bothered to read this in English," and they just toss it into a translator. It used to be that translation tools were so clunky, you'd rather struggle through the original. But now, translation happens in real time and often better than we could do ourselves. So my second tip is: cut yourself off from these AI shortcuts once in a while. Maybe don't read just the summary of the article or report. In fact, I never read just the summaries – and I recommend that. In my research work, I rarely use AI to condense texts, because what gets lost is everything in between. And that "in-between" is crucial when you're trying to detect weak signals. So try not to make everything easier. Go back to "analog" ways of absorbing information – reading full texts, reflecting on them, struggling through a translation. This resistance to relying on AI for everything is important. Yes, it saves time, and there's the productivity dilemma we're all grappling with – but on the other hand, we still don't know what impact this will have on our brains. It's only now, 20 years after social media emerged, that we're starting to see real research on its effects – on self-esteem, psychological development, especially in younger generations. We have no idea yet what AI assistants will do to us. And for that reason, I'd advocate for more thoughtful, less gung-ho adoption of these tools.

Edyta: I'm really glad we're ending on the word reflection. I love that word in Polish because it stretches across time a bit – it invites a slower pace. I always encourage people to ask questions without expecting instant answers. That's what's happening today – we type something into Google and don't even need to click; the answer appears instantly. But I think it's valuable to sit with our questions for a while. That too is a form of reflection. Monika, thank you so much for your insights, your knowledge, and your perspective on where we stand today – as both consumers and creators of information – and how this might evolve in the future. I truly appreciate it.

Monika: Thank you so much for the invitation. And I hope we've inspired you to reflect.

Miłosz Horodyski

Artist, writer, reporter, film director and producer, cultural studies expert, journalist, and academic teacher.

The power of secrecy

Edyta: Miłosz, thank you so much for accepting the invitation to our conversation about synthetic media. Your work focuses on conspiracy theories – a topic that increasingly shapes how we perceive reality, and sometimes even how we make decisions. To begin with – what exactly are conspiracy theories?

Miłosz: Yes, I do work on conspiracy theories, although my interest actually began with theories about UFOs. One of my more significant pieces of research focuses on the "alien" as a modern form of mythology. From that perspective, I see conspiracy theories as new myths – albeit in some ways devalued ones. Take UFOs, for example. The term "alien" already signals how we conceptualize the phenomenon. And the word "theory" itself is crucial here. Many people emphasize that these are theories – and indeed, that's one of the defining features of conspiracy theories. The issue, however, is that these theories are unfalsifiable. When evidence emerges that challenges their truth – such as in the case of UFOs – the person raising doubts is immediately labeled as being "on the other side." On the side of chaos, rather than order. And that's precisely what lies at the heart of myth – the division between order and chaos. Order represents the world we're able to understand,

while chaos is everything that intrudes from outside. In this mythological framework, "aliens" become figures of chaos – intruders who threaten to disrupt our reality and destroy the order we've built. The earliest stories about UFOs—or rather, the new myths surrounding them—are based on traits that closely resemble classic mythological archetypes. These "aliens" are supernatural, often hostile, and their presence signals a threat to the established order. Conspiracy theories add another crucial element to this: invisibility and secrecy. If the truth about aliens is being hidden, then there must be some secret force behind it. In the past, people would simply say "the government"; today, it's more often the "deep state"—a shadowy power structure. All of this fits into a Manichaean worldview, where the world is divided into forces of good and evil. This division simplifies a complex reality. And just as importantly, it brings about a personalization of blame. The "alien" becomes a specific enemy, even if we actually know very little about them. Yet in that uncertainty lies a kind of false certainty: at the very least, we know "they" exist. That's the paradox of conspiracy theories—on the one hand, "nothing is certain," but on the other, everything seems obvious. The tone is often half-joking. Those who "know" simply know. And those who question it are assumed to do so not out of a genuine search for truth, but because they're supposedly hiding it. Because if someone doesn't believe, then they must not be on the side of truth.

Edyta: I'd like to ask you a question that just came to mind. We have conspiracy theories, and we also have mythology. Isn't it somewhat the case that conspiracy theories—just like mythology—should be treated as a kind of belief system? And maybe that's exactly why they're so difficult to verify or disprove. Because either you believe in them or you don't. It's not about evidence—it's about faith.

Miłosz: Yes, but the thing is, people who believe in conspiracy theories don't want to be seen as "believers" – they reject that label, even though their mindset often mirrors belief in myth. And as we know, myth is deeply rooted in religious structures. It's a reality that's accepted as a given – unquestionable. In traditional societies, myth organizes social life. For example, a rite of passage – when a boy leaves his mother's home and enters the "house of men" – is a symbolic reenactment of myth. No one questions whether the ancestor really laid that stone. If the rock stands, then it happened – that's the proof. There's no room for doubt; the concept of "unbelief" doesn't even exist in that context. But with conspiracy theories, it's a different story. It's no coincidence that we use the word "theory" – because these narratives strive to resemble science, to borrow its authority. Conspiracy believers, like flat-earthers, don't just believe – they actively seek "evidence," trying to legitimize their convictions that way. So in a sense, this supposed falsifiability in conspiracy

theories is borrowed from scientific methodology. Take the conspiracy theory about the moon landing, for example – the lack of evidence is explained by saying the evidence was destroyed. And then, the absence of stars in the photos from the moon landing becomes "proof" of a hoax. This line of reasoning is often quite superficial. But I don't want to say that all conspiracy theories are superficial—because that would negate their myth-making function. Roland Barthes famously argued that myths are not lies—they express a kind of truth, our deep-seated belief in the order of the world. And this brings us to the idea of mystery—a concept that also fundamentally shapes us as human beings. The mystery of our existence, the meaning of life, where we're headed—these are all questions that shape who we are and give our lives significance. Umberto Eco wrote beautifully about this in Foucault's Pendulum. But today, we're witnessing a paradoxical situation: mystery has become "democratized." Even though it remains elusive, it is now everywhere. Conspiracy theories are no longer niche publications like they once were—like The Protocols of the Elders of Zion, which circulated underground. Today, conspiracy theories are ubiquitous—on social media, YouTube, podcasts.

Edyta: Social media today are full of different conspiracy theories. So I'd like to ask you about one thing: you mentioned that creators of conspiracy theories often try to emulate a scientific approach—to adopt methods for examining reality or referencing scientific foundations. Does that mean that not every fantasy or strange story from the internet should be considered a conspiracy theory? In today's world, where anyone can be a content creator, does that also mean anyone can come up with their own conspiracy theory? And once such a theory goes viral, does it automatically enter the mainstream?

Miłosz: Yes, when you talk about the creators of conspiracy theories—it's a bit like asking who comes up with jokes. I've always wondered who invents them, and in the same way, you can ask who creates conspiracy theories. I think they more or less emerge on their own—especially in times of crisis, social upheaval, or moments when people come together and start looking for simple answers to complex, difficult situations. Conspiracy theories also have an important characteristic—they're anti-system. Wherever there's opposition to the system, stories begin to form. And over time, saturated with narrative, they start to function as myths. Something becomes a conspiracy theory when there is a belief that two or more actors have secretly coordinated actions to achieve a specific result—whether of public significance or one hidden from the public. Not every rumor, misinterpretation, or simple error qualifies as a conspiracy theory. To become one, it must develop a narrative. And

that leads us to a very modern concept—because the 21st century is the century of narratives. We live in narratives: films, TV series, books, even content marketing—everything is about storytelling. We're reading traditional articles less and less, and consuming more content marketing—because almost every text today is designed to lead us somewhere: whether to a specific publisher or a specific product. Ironically, the text itself can be the product. In the case of conspiracy theories, there's also a need to personalize responsibility. That is, some specific organization must be blamed for "winding the invisible spring."

Edyta: So someone has to concede?

Miłosz: Not necessarily that an organization must explicitly confess, but it can be "identified" through an informal, collective judgment. If myths are anti-system in nature, then it becomes a natural step to search for culprits—symbolic perpetrators. Just thinking out loud: if today we started questioning the very idea of creating artificial intelligence as a mechanism meant to advance humanity, and instead saw it as a tool of control or enslavement, we would instinctively begin looking for its "natural" authors. And who comes to mind? Of course—big tech companies. Another characteristic feature of conspiracy theories is a kind of logical oversimplification—you could even call it a form of syllogism. If you compare a dog and a cow, and decide that the most important common trait is that they both have four legs, you might conclude they're essentially the same animal. Conspiracy theories operate in a similar way: if Bill Gates is part of big tech, and he also writes about pandemics—well, "connect the dots."

Edyta: There's another aspect I've been thinking about—the social one. On the one hand, you said, and we've agreed, that conspiracy theories tend to emerge during times of crisis, when people are searching for answers. But I'm curious why we so easily fall into anti-system narratives—narratives that completely overturn science. Is it because these theories are simply presented in a more digestible way? Because from my point of view—and maybe this is a bit naive—it seems natural that if I'm looking for answers, I'd turn to narratives that already exist, that have been confirmed, that have gone through public debate and scrutiny. And yet somehow, we throw out the whole system and say: "No, no—the Earth is flat."

Miłosz: Conspiracy myths today serve the function of narrativizing mystery. That might sound a bit abstract, but it's actually quite simple: there's a lot we just don't know. We don't fully understand social mechanisms, and the world is becoming increasingly complex and unpredictable. This

growing complexity naturally creates a need for meaning. In moments of frustration and stress, we activate what's called magical thinking—a simplified way of interpreting reality that plays a key role in mythologizing phenomena. Paradoxically, science itself—which was supposed to be a guarantor of rationality—has started to undermine its own authority. British philosopher Mary Midgley wrote about how science, in trying to explain the world, has inadvertently created its own myths. Take "progress," for example—one of the core ideas of our modern era. It's a concept that also relies on belief. We can look at it skeptically or optimistically, but either way, we're talking about something without a clear definition. What exactly is progress? We often equate it with technological development. When we read Jules Verne, we see a belief that progress will eliminate disease, solve social inequality, and transform humanity's fate. But now that we've managed to eradicate diseases like the plague or cholera that once decimated populations, the question arises: what comes next? In the face of an unpredictable world, we also tend to mask our own cognitive biases. A classic example is the Dunning-Kruger effect—the tendency to overestimate our own knowledge. You can see this around the Christmas table, when everyone "has their own take on reality" and claims to know best. In today's climate of deep political polarization, such conversations quickly spiral into conflict—because everyone holds onto their own version of the truth. All of this is reinforced by information bubbles that validate our beliefs and trap us in echo chambers. These, along with growing social distrust, create fertile ground for conspiracy theories to take root.

Edyta: I've been wondering—why are conspiracy theories actually so appealing to audiences? Someone out there is accepting them and then sharing them—with friends or on social media. You mentioned mystery—and that really resonates with me. We live in a world of uncertainty, where it's increasingly hard to find clear answers. So a space that allows for mystery might give us a certain sense of security. It can be a form of relief—a temporary softening of that constant drive to find meaning. What else? Conspiracy theories are simple. They also carry a strong emotional charge. And they create a sense of belonging—they form groups of people who resonate with each other.

Miłosz: In today's world, structured around social media, we live in micro-worlds. And it's within these spaces that this mythological feature of conspiracy theories—their ability to connect people through shared beliefs and emotions—becomes especially visible. Umberto Eco once said that conspiracy theories offer a clear structure in a chaotic world. That's probably the simplest—and at the same time, most accurate—explanation for their popularity. You could say they function as the opposite of Occam's razor. Instead of guiding us to the simplest explanation,

they build complex constructs that—paradoxically—are less logical. The simplest explanation for a disease, after all, is the emergence of a virus or bacterium—not a complicated plot to artificially create them. Many researchers have noted that today's world encourages a mindset described as homo fictus—a human being who loses the ability to distinguish what's real from what's fictional. Fiction, for centuries, has played an important role—from Greek catharsis, to ballads, to literature—it served as a training ground for the imagination, a way to live out different roles without leaving home. Fiction also contributed to building social empathy and a deeper understanding of the world. At some point, however, fiction became so attractive that it started competing with reality—and sometimes even replacing it. Today, we have two billion people actively immersed in gaming narratives. More and more people prefer spending time in virtual worlds than in the real one, which—because of the information overload—is becoming harder and harder to make sense of. These days, listening to a simple news broadcast is no longer straightforward. We're aware that media communication has become deeply polarized, and both sides exhibit manipulative tendencies. If we lose trust in politicians, we also begin to distrust the media—and with that, the entire structure of public institutions. This leads to a breakdown of trust, and in its place emerges something that offers simple answers. Myths synthesize reality—they provide a clear, emotionally charged picture of the world.

Edyta: I would probably add the role of synthetic media to that as well. I'm not sure if you'll agree with me, but I have the impression that the groups embracing conspiracy theories often function as support groups too. These are small communities where people can feel good, feel "among their own." How do you see the role of social media, new technologies, and artificial intelligence in this context? Today, we can "confirm" a conspiracy theory with an image – one that's been synthetically generated. Do you see a correlation between older conspiracy theories created a hundred years ago and the modern ones that now operate in a much more technologically advanced environment?

Miłosz: It's often said that the internet has become a modern space for rituals in which conspiracy narratives are reenacted. Unfortunately, I think that's an accurate diagnosis. I say "unfortunately" because I would like to believe that digital media would primarily be a space for connecting people – not a breeding ground for deepfakes and manipulation. But the algorithms that drive these platforms have learned from us that the most engaging content is sensational and emotionally charged. That's the content that gets "bolded" in the stream of information – because it spreads faster and generates more reactions and interactions. Information bubbles contribute to this. We're dealing with so-called echo

chambers that limit access to facts and reinforce belief in conspiracies. A good example is the flat Earth movement – some of its supporters were gradually pushed to the margins of digital communities. In response, they created their own spaces – outside the mainstream. Because when algorithms decide to remove certain content, for example from YouTube, these users interpret it as confirmation of their beliefs. Here we see a feedback loop at work: "They removed us because they don't want the world to know the truth." It's a situation where exclusion occurs – but not only as a social act from the outside. It also becomes a form of self-exclusion that helps build identity and community around a sense of being "outside the system."

Edyta: Miłosz, do you think there's a way we can somehow – I'm not sure if this is the right word – "vaccinate" ourselves against conspiracy theories? I'm also asking you as a journalist with many years of experience: how should we consume content today? Should we rely on curated information, even if those reliable sources are often behind paywalls, which in itself limits public access to valuable knowledge? Should we verify every piece of information across multiple channels, spending an hour on fact-checking? Or should we just assume from the start that something isn't true? Honestly, I've been wondering about this myself – but that kind of approach could lead to complete indifference. If I'm already frequently questioning what I see, asking whether it's even true, that leads to enormous cognitive fatigue. And this is just the beginning. Is there any kind of vaccine we could take against this information apocalypse?

Miłosz: Let me draw on my journalistic experience, since you mentioned it. I remember working in television back in 2010. A colleague from the newsroom called me and said that a plane had crashed, killing all the most important members of the Polish government. My first reaction was: "That's impossible. What are you talking about? I don't believe it." That was a turning point – not only in my professional life but perhaps for journalism as a whole. Social media was just emerging before our eyes. The race for breaking news had begun – but it was no longer about news as a fact confirmed by verification. In the era of print journalism, we had at least 24 hours to prepare a story. A journalist could call sources, do some reading, or even – as happened sometimes – go to the library. Most importantly, they could go to the scene. Because the role of a journalist, as I understood it then, was to engage with the event directly – to see it with their own eyes, to speak with people. That was something natural. Today, there's no time for that. Information appears instantly, and a journalist has to deliver some synthetic insight right away. As a result, we increasingly resort to shortcuts. We used to rely on PAP – the Polish Press Agency – because it served as an information

synthesizer. But today, even PAP has been caught in the same media loop – the race for speed, where news outlets aim to be faster than... the facts. We're dealing with a reality in which traditional fact-checking has become nearly impossible under newsroom conditions. And this isn't a criticism of journalists – it's a commentary on the entire system. And on ourselves, too, because we're the ones demanding instant information. If we don't get it from the media, we turn to platforms – whether it's X (formerly Twitter) or other social media. We want to know immediately what happened. Take a fire, for instance: if there isn't a quick report, speculation and commentary begin right away. There's no time to compare independent sources or triangulate information. Algorithms amplify whatever is most emotional. And even though we know the content might be manipulated, even though we know it can lead us into disinformation – we still fall for it.

Edyta: I'm thinking about the future of the entire information ecosystem – both from the perspective of creators and audiences. Could the remedy simply be... time? I increasingly feel that we should rethink the way we approach knowledge. Maybe sometimes it's worth just asking a question – and letting it sit for a while. I recently spoke with Monika Borycka, and we came to the conclusion that what we lack most today is reflection. Deeper, calmer thought – both on the side of content creators and consumers. Maybe time itself could be the cure? Look, just 20 years ago, when we wanted to write an article or a paper, we'd go to the library. And it wasn't just about finding information – it was also about the in-between moments, the walk back, the time for reflection. Today, that time is disappearing. Information comes instantly, and we don't even have a moment to pause and think. Do you think time could be the remedy? And how – from your perspective – do you see the future of this information ecosystem?

Miłosz: I catch myself doing exactly what you're describing. Many experts, even though they criticize social media, admit that they're also susceptible to it. Spending more than 15 minutes a day on these platforms is already a sign of addiction. Like you mentioned – we used to go to the library, and the walk there and back was a time for reflection. Today, we fill that space with podcasts, music, notifications, and ads. We're so overstimulated that we actively seek out those impulses. It's a bit like hidden chocolate – we know we shouldn't eat it at night, yet we get up and rummage through the cupboards. It's the craving for stimulation that pushes us into behaviors that are unhealthy and exhausting. Meanwhile, if we turn to the simplest "life hacks" – which are essentially age-old wisdoms – we'll see that just 30 minutes of quiet and calm can work wonders. That's when the brain has the chance to analyze,

process, and organize. After all – according to legend – Newton came up with his theory under an apple tree. And while that's just a symbolic story, its message still holds true: we need time to reflect. It means Newton – instead of sitting with an AI chatbot, as he probably would today – allowed his brain to work at its own pace. He gave himself time to process the information reaching him and to find a direction within that stream of words. Today, we more often just skim those words, catch fragments, grasp the context – but are we truly listening and understanding? I remember that in the 1990s, speed-reading courses were popular. They taught you to "take in the whole page at once." Today, I feel like we're all reading fast. But the real question is: are we still reading with understanding?

Edyta: I think it's true that the best ideas often come to us in the shower or while we're asleep – in those moments when the brain actually shuts off external stimuli and is left alone with itself. That feels like a really fitting note to end on. Because I believe that's exactly what we should wish for – for ourselves and for everyone: that we get at least 30 minutes of silence each day. Time to simply be with ourselves, to quiet our minds. As the simplest – but perhaps most effective – remedy.

Miłosz: Building psychological resilience – I think that's exactly what we're lacking today. If we had it, attractive narratives wouldn't sweep us away so easily. What's crucial is distance – something we're increasingly unable to maintain. We're immersed in a world of information – constantly, without filters. Television used to provide some distance; it was like a screen through which we observed the world. Today, we have one foot in the virtual world – or rather, we're continuously connected to it. You could say our senses have been extended into that digital realm.

Edyta: Time also gives us relief from emotions – it allows them to cool down a bit. Only then can we truly process information before sharing it further – before passing it along to all our friends. Time can act as a filter that helps separate an emotional impulse from a conscious choice.

Miłosz: As Antonio Damasio might put it, the key lies in properly reading our own emotions. Our bodies constantly send us signals, but instead of interpreting them, we often follow them unthinkingly. That's what leads us astray – we react impulsively instead of pausing internally. We're still stuck in an 18th-century dualism: the idea that to be rational, we must suppress our emotions; and that if we follow our emotions, we stop being rational. But in reality, these things work together. The mind and the body are inseparably connected. Perhaps it's precisely because we're so lost today that we can't find that inner path. And yet, this internal

pause – that space for reflection – could be the best direction for many of us. Because it's something we have so little of nowadays.

Edyta: Exactly – that time and inner reflection is what I wish for all of us. Miłosz, thank you so much for your time, for all your insights and reflections.

Miłosz: Thank you very much.

Inga Springe

Co-founder and investigative journalist at The Baltic Center for Investigative Journalism Re:Baltica

In a world of falsehood

Zane: Hi Inga! First of all, thank you for taking the time to have this conversation. Let's dive right in — how do you see the current situation around information flow? Especially when it comes to false or misleading information — what's happening?

Inga: Terribly crazy things are happening. I think it's because there is an insane amount of information and a lot of noise. There are also various studies on how much information we take in per day, and I use something a few years old in my presentations — it says that the amount of information we absorb is equivalent to watching eight films a day. And that includes everything we see: on the street, on posters, on phones, maybe on TV (if someone still watches), the radio, and so on. And with today's artificial intelligence, content can be automatically generated without human engagement — and the volume of information is only getting bigger. That's why the noise is so cruel. Then there is the question: how do you stay informed and at the same time keep your sanity, your common sense, and not get confused? Because what I see happening — and feel from people — is that there is an abnormal information overload. And people just switch off. They stop consuming. They believe they're consuming nothing — even though they may be sitting

on social media at the same time, indulging their cerebral side. As I say, brain rate. But in fact, it is under that influence that they get their information. They think they're shutting down — and usually, unfortunately, they're shutting down from the "boring" sources, which is the media. The media lacks emotionality. So instead, they go to social media — and fall into the next hole. That's why... difficult.

Zane: The media asks for depth — when there is no depth.

Inga: This is not even about going into the media is boring news. When you go on social media,why are we wasting time? find all the time, especially when I Have to do research, to find something source, such as social media. I walk in and suddenly they charge. Why did I come at all? It's been 15. Why? Because these social media are built to make people waste time there invest in the psychology of millions of people to identify, because why does this happen? Social media is not free. We think they're free. They're not. They earn from our time. They sell our time so they can earn more. They need us to spend our time. And to do that, we need to create emotional content for them. And there are studies that show that emotional content is more often negative, which will attract more attention. And that's the problem, that's why I say please share boring grey news, because it means that professional journalism can't put a shocker in there. You'll never believe all these emotional names. The professionals will know, so they'll show you the facts, give you the conclusions and explanations, so nowadays. Share boring news, share and listen to grey boring in politicians, because they're the ones with the values. Those who shout and call them out areplaying to the algorithms to spot them. They are populists very often, so do not,even if it does not require effort, go into the usual in the media, it's just not that exciting. Interestingly, even if they are emotionally negative, what are unknowingly obtained on social media.

Zane: I've also noticed that, especially when it comes to entertainment, these AI-generated videos are everywhere. There was one, for example, with women walking in a surreal fashion parade, dressed in elaborate floral costumes — completely outlandish. What struck me is that this video was widely shared. And now... it's hard to tell whether people think it's real or not. You read the comments underneath — some people say, "Well, obviously it's AI", but you still can't be sure whether they actually realize it or not.

Inga: No, you know, I don't even see that kind of thing as a real problem. If it's something silly — like floating legs, ice cream scoops turning into puppies — fine. It's fun. I may not engage with it, but I understand why

people share it. It's light, it's entertaining. And I'm aware it's made with AI. The real problem today lies elsewhere — in the way false information created by AI is being justified. Not corrected, not challenged — but used. You can now use completely fake content to reinforce a message, and what's worse — people accept it. That's the most dangerous part. Let me give you an example from the U.S., where I've been living for a few months. Last fall, during the huge Hurricane Helene, a very emotional photo went viral — a little girl in a life jacket, soaked, clutching puppies, wet hair, scared face. People — even hardcore Republicans, die-hard Trump supporters — shared it with captions like: "This is what the government isn't helping with. This is what they don't care about." Then someone pointed out that the girl in the image had six fingers. It was an AI-generated picture. Some politicians removed it from their social media. Others didn't. One even said: "I don't care if it's fake — it reflects how I feel." And that's terrifying. A false, fabricated image used to attack the government — and people embrace it, not because it's true, but because it aligns with how they feel. The same dynamic happened around the elections. I saw it in Latvia too, but let me stay with the U.S. for a moment. Just before the elections, both Donald Trump and Elon Musk shared an AI-generated photo of Kamala Harris in a communist-style outfit, with a hammer and sickle in the background There was even a caption: "Can you believe she'd look like that? At the same time, a whole disinformation campaign was running — pushing the idea that Harris is a communist. It worked. We might laugh at this kind of imagery because we know our history. But when I went to a Trump rally and talked to his supporters, every single one told me: "If Harris gets power, communism will rule America." So I asked: "What do you mean by communism? One woman answered: "You'll own nothing. The government will control everything. And you'll be expected to be happy about it." That's the power of imagery. Even when people know a picture is fake, even when they recognize that it was AI-generated — the emotional effect is real. These are real lies. And this connects to a known psychological phenomenon: the illusory truth effect. The more often we see the same message, the faster we recognize it — and the more likely we are to believe it. We might know the image is fake, but it still alters our perception. And that's why disinformation spreads like a virus — always warned against, but still infecting us. There's a great book on this by Dutch psychologist Sander van der Linden. He explains these mechanisms — including the illusory truth effect — in depth. That's exactly where our conversation around AI and disinformation has to begin.

Zane: That leads me to the next question. Let's say I'm working with young people, or I'm looking for information to teach them — or maybe just to tell them something useful. And then suddenly, I see something. Some-

where. Something that looks important... And the question arises: Who can I trust? How do I find reliable information? And how do I even know I can trust my own perception of it? Is what I'm seeing actually mine — my own judgement — or something filtered, framed, shaped by others? How much of this content is really mine to believe? And how capable am I, really, of evaluating it critically?

Inga: Yes. First of all, this is something that comes up a lot — especially during national campaigns, both in Sweden and in the U.S., particularly around elections. What I've observed — and what many experts also mention — is this: whenever you see information online, the first thing you need to pay attention to is your senses. As I said earlier, we are constantly being manipulated. So if you're reading news — especially on social media — and you feel a sense of anxiety or discomfort, that's your signal. That's where the 10-second reflex should kick in. The Swedish government even taught this to their citizens — a kind of conscious pause: "Wait... I don't feel good. Why?" The next step is to check the source. Do you know where the information really comes from? One of the most common mistakes people make is assuming that the person who shared the content is the source. "My mom shared it. "My friend posted it. "My colleague sent it." And yes — it makes sense, because surveys show we tend to trust people we know. But that doesn't make it fact. You have to ask: Where did they get it from? Can you trace it back to the original, real source? And once you find it — do you even recognize that source? Do you know who they are? Do you trust them? This is where I divide sources into two groups. Who do I trust? And what do I do with what I see? Personally, I trust professional media more — and I emphasize professional here, because not everything online is journalism. Some are just clickbait websites. But professional journalists follow rules. They verify sources, they consult all sides, they fact-check before publishing. On social media, what you mostly see are opinions. Emotions. Reactions. Let me give you an example: In a small town in Estonia, someone posted in a local Facebook group: "I had an accident on the street. The ambulance took 40 minutes. Outrageous!" It spread like wildfire — everyone was commenting, sharing, getting angry. Then journalists got involved. Fact-checkers verified the timeline. The ambulance had actually arrived in 15 minutes, which is considered fast for that location. But guess what? No one shared that correction Why? Because it was boring. And as I said before — Facebook's algorithm doesn't care about boring news. That's a separate issue, but it's part of the problem. Now, to be fair, I don't blame the eyewitness completely If you were in an accident, even five minutes can feel like an eternity. But that's exactly why social media isn't the full picture. It's our perspective, our feelings — not verified reality. Meanwhile, professional media is obligated to show the full picture. So back to your question — who do

you trust? Ask yourself Do I see the original source of the information? Do I understand what it is? If it's from a professional outlet, I'm more likely to trust it. If it's coming from an acquaintance — or someone who heard it from someone else — I stay very cautious. Not hostile, but careful. And that, I believe, is the mindset we all need to adopt.

Zane: This is really important, and I'm reflecting on it as we speak. Because yes — when we use media the way we use entertainment platforms — we scroll, we swipe, we enjoy ourselves — we're also allowing information to slip into our subconscious. Even if I consciously choose certain sources, I still wonder: what's being absorbed without me noticing? What's making its way in — below the surface?

Inga: That's exactly what I mean by the illusory truth effect. The more often you see a particular message — the more it repeats itself — the more your brain starts to perceive it as true. It gets faster at recognizing it, more comfortable with it. It's just like advertising. We all say, "Oh, ads don't affect me. But then we go and buy collagen toothpaste. Why? Because we were influenced — even if we don't admit it. We just think we're not affected. So the real question becomes: what now?

Zane: So... what am I supposed to do? Because honestly, these are just my habits — the media I use, the way I scroll through things...

Inga: That's exactly what I'm saying. First, you have to be aware of it — so you can start paying attention to how you feel. Your emotions are the first signal. Next, check the source of the information. If you don't know where it came from — that already tells you a lot. And when it comes to young people, I see this more and more. I go into a meeting, and many don't even use real names. No full names in their profiles. You can't check who's behind them — John? Peter? Karl? No idea. Here's a simple analogy — something we were all taught as children:
"Don't take candy from strangers." And yet, on social media, we do exactly that. We take digital candy from people we don't know — and we consume it constantly. And then we feel sick. We're overloaded. The brain goes numb. We know we shouldn't. We understand it. And yet... we keep doing it.

Zane: And that's the dopamine addiction — constantly needing a new message, a new stimulus. I was thinking about that too. I mean, with the amount of content I'm scrolling through... it's technically hundreds of posts. You just go through it in this unconscious, automatic way. And I thought — well, I don't actually stop at every single post. That decision, whether to keep scrolling or pause, happens in milliseconds. You see a stimulus, and instantly your brain makes a choice: move on or stay. So

I figured — if I'm not stopping at every post, then maybe it's not such a big deal? But the process is so fast that it makes me wonder how deeply ingrained this habit really is. Scanning through information like that — it's almost effortless, and most of the time, we're just skimming right past everything.

Inga: So what can you actually do on social media? Well, I can tell you what I try to do myself. I'm addicted too — I'm no exception. Sometimes I consciously let myself get pulled in. I call it "brain building" — that's the concept I use. I think it was even the word of the year from Oxford or Cambridge last year. The idea is this: you can train the algorithm by engaging with the kind of content you actually want. For example, I read a lot of media on Instagram — The Wall Street Journal, Financial Times, American public media — and the algorithm starts showing me content from Latvian public media too. You can shape what you see. Another thing you can do — something I used to have, though I don't anymore — is set a time limit. Say, 15 minutes. If you want to continue after that, you can, but it still gives you a moment of awareness: "Okay, I've already been here for 15 minutes." You can set those boundaries for yourself and actually follow them. And that got me thinking... About how half of the population in Latvia doesn't trust public service media. Around 30% believe that public media spreads misinformation. And I suspect it's because a lot of people get their information from social media instead. They avoid mainstream media — they see it as biased, bought, corrupt. Everything's bad in their eyes.

Don't believe in anything blindly. You go on social media and I keep wondering — what does the algorithm show people like that? They probably get bombarded with the worst kind of disinformation and constant populist narratives: the government is evil, the media is bought, doctors can't be trusted... It's just negativity on repeat. And the thing is — algorithms love engagement. And these people are active, they're angry, they comment. Which means the algorithm pushes even more of that content to even more people. The system doesn't care whether something is true or false. It only notices: "Oh, people are interacting — great, let's show it to more users." So you end up with a cycle where angry people stay active, leave comments, and help generate even more negative content. Sometimes you need to see what they're seeing — just to understand how much of this negativity is deliberately amplified. That's why I say: every day, force yourself to click on something boring. Boring, boring, boring. Very often, the more "boring" English-language content is actually more factual. But people like us — so-called reasonable people — we just read it, maybe nod, and scroll on. But we don't engage. What we need to do is signal to the algorithm: this is worth sharing. This matters. Otherwise, the system won't pick it

up. And there's another important piece here. I haven't seen specific studies on Facebook, but what we do know from X (formerly Twitter) is that media content is being deliberately suppressed. As journalists, we see this clearly. What we publish — serious, fact-checked media — reaches far fewer people than it should. That's because Mark Zuckerberg has long argued that people "aren't interested in politics," and so the algorithm deprioritizes this kind of content. Instead, users are fed garbage — the kind of stuff disinfo accounts produce. In the U.S., Facebook even pulled out of its fact-checking partnerships. In Europe, where we have stricter regulation, they stayed — but only to avoid legal trouble. And suddenly, Trump content started getting more visibility. Why? Because "people are interested in politics again." Right. But what's actually happening is that Trump is suing everyone, going after critics, and the platforms are bending to him. His content is being amplified, while media content remains sidelined. That's manipulation. And look — you can accuse me of being liberal or whatever, but that's not what this is about. We show Fox News. We show conservative views. We show Democratic views. We show the whole spectrum. There was even a scandal: after Trump took certain actions, the very next day you couldn't search for "Democrats" on Facebook — the keyword just didn't work. And when asked, Facebook said: "Oops, a technical glitch." Meanwhile, Trump's content was still being promoted everywhere. So once again: when you come across good, reliable content — yes, it may be boring — engage with it. Help manipulate the algorithm in the right direction.

Zane: Yes, it's incredibly important. I'm just thinking about the scale of it — how much manipulation is really going on, how information is being organized and directed. It's massive. And it all starts to feel like... well, I don't even know what to call it anymore.

Inga: Information is a weapon — today more than ever. And in Europe, we at least have some regulation in place. That's exactly why American tech giants are now lobbying hard to get rid of it. They don't like it. They call it "censorship." But in the U.S., there are virtually no restrictions — you can say and share almost anything. And the problem is, algorithms are built to promote whatever content gets the most engagement. Sure, maybe the platforms lean slightly Republican, maybe Canberra shows more right-leaning content — but I'm not even getting into conspiracy theories here. The real issue is that emotionally charged messages get pushed more and more by the algorithm. That's the manipulation. That's why we need to be cautious. Social media doesn't give us the full picture — especially when we're only seeing one side over and over again.

Zane: And then I keep thinking about this whole massive manipulation — it really is a bit frightening. I'm especially thinking about how to reach vulnerable groups. People who might have less access to education, or who live outside of cities, in more rural areas. Maybe they don't have access to lectures or content that encourages critical thinking. So how do we reach them? How do we make sure they're part of the conversation? It really makes me wonder: how can this be managed at the political level? Because, honestly, I work with people. I understand psychology. And I'm skeptical — I don't always believe that someone will be able to assess this information critically on their own.

Inga: If someone isn't able to evaluate information critically — and yes, that risk is especially high among the groups you mentioned, like those with less education — the dangers are very real. But let's not pretend it's only about education. In Latvia, we've seen famous theatre directors post complete nonsense online. So often, it's more about ideology, personal beliefs, and how someone thinks and operates. Of course, we need a diversity of opinions — that's essential. The real issue is proportionality. Are we being exposed to different sides? Are we actually hearing other perspectives? That's one of today's biggest problems. America is a perfect example — this deep divide in society. People live in entirely separate information bubbles. In the past, you might have loved or hated the news on Panorama, but everyone watched it. There was a shared reference point. Today, people don't even see the other side. And research shows — if someone accidentally does encounter an opposing view, their reaction is often total rejection. Adam Grant makes a distinction I like: between skeptics and deniers. Skeptics question things, but they're open to changing their mind. Deniers, on the other hand, will always find a reason to dismiss the source — "They're corrupt, they've been paid off, they have an agenda." Nothing gets through. What can be done, though — as slow and clunky as it may be — is regulation. That's why I'm grateful for the protections we have under EU law. These big platforms should be held to at least some basic standards of decency. But even now, my ex can call me a "fat bitch" on a platform, and when I report it, the response is: "This doesn't violate our community guidelines." And I think — seriously? To be clear, I'm not talking about censorship in the sense of "removing negative comments." I'm talking about aggression. Rude, hostile, dehumanizing attacks. And the typical response is: "Don't be a snowflake! It's just free speech. But no — it's not normal. Because aggression breeds aggression. And worst of all, we stop talking to each other. Social media was supposed to connect people. But really, we're drifting into something more like antisocial media. People still talk fondly about Latvian Twitter ten years ago — when journalists and politicians used their real names. That was a completely different kind of dialogue. You could actually

build something. Now, it's flooded with half-anonymous accounts that just show up to dump their bile. That's not discussion. That's not dialogue. And we all have to take responsibility for that. Here's one example I keep thinking about: We talk a lot about bullying in schools, about how to reduce violence among kids. But have you seen social media lately? That's where the parents are. Why would we expect children to act differently — to be kind, thoughtful, respectful — if their own parents are out there screaming online, tearing people down? You can bet they're doing the same thing at home. To their kids. To their partners. To their families.

Zane: Communication is a culture — at home, in public, and in the media. And that brings me to the next question I've been thinking about: what could we suggest to younger generations? Maybe something around ethical principles. Like — how should we behave online? For example, if I publish something, I should include a source. If I post a fake or AI-generated video — especially one that features a real person or looks realistic — I should clearly label it. Because that's not just content; it's manipulating someone's likeness. Even if I'm using an avatar to give a lecture — should I reference that it's not real? Should I mention who generated it, or what tool was used? Who is the intended audience? One thing we've realized in this project is that whenever you encounter something that might be artificial, ask yourself: Why was this created? Why was this published? Is it for entertainment? Or is it meant to manipulate? And also — is there a credible source behind the information, or does it feel suspicious? That's the key question: What is the purpose of this synthesized material?

Inga: Yes, including a reference is great — but often, the format of social media posts doesn't make that easy. There are character limits, no real space to provide sources. And that's where things break down. I remember Maija Katkovska from "Dross Internets" — she shared a really powerful perspective on this. She wrote about young people's attitudes online, and how this kind of aggression is becoming normalized. Personally, I have no problem with someone making a funny video or a clever edit — if the joke is harmless. But using this kind of content to humiliate or mock someone? That's not okay. In Latvia, this isn't such a big issue yet. But in places like the U.S. and other large countries, it's a serious problem. You hear about things like students being digitally undressed — fake nude photos being created and shared. And that causes real psychological harm. So I think the question of intention is key — like you said earlier. But I'm not sure if young people always think on that level. Honestly, the same goes for adults. If you've created or shared an AI-generated image or video of a classmate — ask yourself:

why? What's the point? Do you really need to do that just to humiliate someone? And what really troubles me is how many people around us just accept it. I keep imagining — if this were real life, if I were standing at a bus stop and someone started yelling at me, calling me names — I'd like to think someone would step in. That we'd still defend each other in public. But on social media, it's different. You post something on Twitter, and someone calls you a "bitch" or worse — and everyone just stands by and watches. We wouldn't accept that on the street. So why is it okay online? I really believe we should be standing up for each other more — even on social platforms. If you see someone sharing something cruel on WhatsApp, Instagram, or even in a private chat — be brave enough to say: "That's not okay." We need to start calling out the trolls around us. And it does work. When someone speaks up in my defense, even with just a few words — it helps. It reminds me I'm not alone. Because when you're the target, it can feel like you're standing there, being spit on, while everyone else just watches silently. And I think this is something we really need to teach — not just to kids, but to adults as well. When you see someone being attacked, and your first instinct is, "Ugh, I don't want to get involved... I'll be next" — just write one word: "This isn't okay." Ask: "What are you doing?" It doesn't take much. Because now, I mostly stay away from social media. I don't post much anymore. It's become normal for people to call journalists or politicians idiots, or worse. And somehow, that's acceptable now. That's just... fine for everyone else.

Zane: I completely agree with you. I also do a lot of training in different organizations — including with people working in customer service, both in public institutions and in the private sector. And what I've noticed is that this crossing of boundaries, this verbal aggression — it's often just accepted. People say, "Yeah, well, that's just how it is." But no — it's not okay. Verbal aggression is aggression. Why do we allow it to happen? Why do we just assume it will pass? It's still a form of violence — and I feel it, in different ways, all the time. That's why I keep coming back to the question: what does it actually mean to set boundaries? Not just for ourselves, but in society. And in families. How do we establish boundaries in a healthy way? How do we create a culture where that becomes the norm? Where it's a habit that grows and becomes shared — collectively accepted? And that leads me to a bigger question — maybe even the closing thought: How do you see the future of information? Where are we heading — with artificial intelligence, synthetic media, disinformation? What comes next? And more importantly — what should happen? What can we do to steer things in a more positive direction? I'd love to hear your thoughts.

Inga: Well, I still have some hope — that some people will eventually just walk away from social media. That they'll get fed up with all the junk, all the negativity, and realize that they're losing more than they're gaining by being there. It won't be everyone, of course. But for some, it might be like that moment when you've overeaten — and suddenly you know you don't need it anymore. And that brings me to something I've been saying everywhere lately: journalists need to change how we present information. We need to learn from the populists. We need to show our faces. We need to tell the story ourselves — because people don't follow institutions like Delfi or the BBC. They follow people. We recently had a lecture from a former Washington Post editor — 10 years in the role — and he said the same thing: when you come forward as a person, it builds trust and a sense of authenticity. Now, that doesn't necessarily mean you are authentic — but the appearance of authenticity is powerful. And that leads to trust. You see a confident populist, speaking lies as if they were truth — and people believe him. Why? Because he's charismatic. He's convincing. And that's something journalists need to understand. We were trained to stay neutral, to hide our opinions — but that's where we're losing. I believe, yes, we still need facts. The right facts. But we also need to show the process — how we get our information, what we do with it. That transparency, that human connection — that's where we can reach people. As for disinformation... sadly, I don't think it's going away. It will only become more sophisticated, more subtle. And honestly, even I get caught off guard sometimes. I'll see something shared by someone I know, and I'll hesitate — I won't recognize the source, and I'll wonder if I should pass it on or not. So yes, more caution is needed — but we also need strong public institutions. There's always this tension between freedom of speech and accountability. But freedom also means taking responsibility for your words and your name. Public authorities must be empowered — and must have the tools to keep tech platforms in check. Romania is a powerful recent example. A previously unknown, pro-Russia candidate suddenly wins the presidential runoff. A small group had known about her, and then — boom — a huge, well-funded campaign via TikTok. You could see the machinery behind it. That kind of manipulation is intentional. And it's dangerous. This is a new kind of criminal threat. These are not random trends — these are targeted campaigns designed to influence how we think. I just read about Russia's latest disinformation efforts — like the Pravda Network, which now exists in multiple languages, including Pravda.lv. They aggregate all news about Latvia — in Russian. It's another way to shape narratives and influence thinking on a subconscious level. So yes, this must be addressed at the institutional level. And my final hope lies in the EU's Digital Services Act. That legislation is already starting to monitor and regulate these platforms.

I really hope they tighten the screws and start issuing serious fines. Big platforms must take responsibility. And maybe — just maybe — the European Union can lead the way in actually protecting people.

Zane: Inga, thank you so much for your time! This was truly insightful. I really hope we can take these valuable lessons and help bring them into society — and maybe even inspire real change, starting with our own habits at the individual level.

Inga: So go ahead — share it, publish it. Good luck! And thank you.

Joanna Jurga

Her main area of interest and expertise is the relationship between humans and the spaces and objects that surround them. She provides consultations and teaches how to design environments that enhance comfort, efficiency, and mental wellbeing. Her work focuses particularly on design solutions that improve the sense of safety for individuals living in isolation.

Making noise about silence

Edyta: Joanna, thank you so much for accepting our invitation to this conversation. I'm truly glad that today we're touching on a topic that may seem unexpected in the context of synthetic media – the need to return to nature, to silence, to moments spent alone with oneself and one's body. By way of introduction, I'll add that our recent discussions have focused largely on the broader context of the contemporary information ecosystem – from deepfakes to synthetic influencers and artificial companions who begin to distort our relationships with real people, all the way to the concept of the "brain root" we create for ourselves amid the flood of AI slop, ultimately leading to a crisis in our cognitive capacity. That's why I'm so glad we've come to you – because, throughout all these conversations, one thing becomes clear: "critical thinking" is no longer enough. That phrase doesn't cut it anymore. The remedy... is silence. And in one of your books, you wrote: I love silence. Joanna, welcome to the podcast. Tell us – why do you love silence?

Joanna: Hello, good morning! Thank you so much for the invitation. I love silence – because it's in silence that I can truly be with myself. In silence, I can focus. Calm down. Sleep. But most importantly: meet myself. I have this experience – or maybe even a privilege – that as a teenager, going

through a deep mental health crisis, I discovered Zen Buddhism. It's a practice of sitting in silence, facing the wall. And while it might sound harsh, it saved my life. It taught me how to be in silence – how to simply be. For many years now, I've been searching for ways to reclaim silence – in urban spaces, in nature, in the environment. Because today, even in nature, silence is becoming a challenge. A dear friend of mine from the Institute of Acoustic Ecology says that sometimes he has to walk 7 kilometers into the forest just to stop hearing the sounds of human activity. Silence is becoming an increasingly scarce resource. Yet, from a neurobiological perspective, it's absolutely essential for us to function in a healthy way. Of course, I don't mean absolute silence – the kind you find in anechoic chambers. Not a total absence of sound, but a kind of quiet that allows us to hear ourselves.

Actually, the nearest anechoic chamber is at AGH University of Science and Technology in Kraków. It's an extreme experience – because in that kind of absolute silence, you begin to hear your own heartbeat, the flow of your blood, your lungs working, your digestion. And honestly – after just a minute, maybe a minute and a half – discomfort can set in. People even start to experience auditory hallucinations.

Edyta: And even though today we're talking about silence, paradoxically – we'll be doing quite a bit of talking. With great joy, I'd like to recommend two of Joanna's books to our listeners. These are titles that – despite the overflow of books in my life – stay on my bedside table, because I keep returning to them.

The first is The Mindfulness Notebook. Joanna mentioned that there are only a few copies left, and we'll be referring to it throughout this conversation – especially to the practical "pro tips" it offers, which are absolutely brilliant and easy to apply in everyday life. The second book is A Shelter from the Noise – and I'd like to start there. In our conversations with various experts, we often talked about the effects of informational noise, fatigue from constant data streams, and confusion around what's real and what's not. And in many of those discussions, the need for silence came up. But also – the need to build "social cushions," safe spaces of reference. We talked about the growing role of knowledge as an anchor, about using media mindfully, about returning to the body, and about the importance of processing information slowly, with awareness. And all of that brings to mind the idea of a "shelter." So tell me – what exactly is this shelter? And what could it mean for us today, in this complex information ecosystem?

But we're not talking about that kind of silence. We're talking about silence at around 30–35 decibels – the rustling of leaves, the sound of

water gently lapping, all those natural sounds we associate with walking in the forest, across a meadow, or along the shore. Of course, I'm not talking about the noise of deforestation – but about calm, natural surroundings. Our bodies and brains are atavistically adapted to that level of sound. We came from the savanna – and our nervous systems simply can't evolve fast enough to match the pace of change in our environment. That's why this kind of soundscape is actually beneficial to us – it does us good. But we live in a culture of noise – and increasingly, silence itself becomes a challenge for our nervous systems. For some, silence creates tension, unease. It's a complex issue. And yet, I keep seeking silence. I love it. For the past two or three years, I've been "making noise about silence." I try to draw people's attention to how important it is to have silence in our lives.

Joanna: You know, the idea behind the "shelter" was first and foremost to create a safe space – a place you can return to, where your nervous system can naturally relax and unwind. And importantly: you don't need a bottle of wine, two glasses of whisky, or a joint to get there. It's a space that soothes you – it's accessible, familiar, supportive. It's a place where you feel free. The lighting isn't harsh – you don't feel like you're in an interrogation room or an operating theater. It's quiet – quiet enough that you can be with yourself, without distractions, without neighbors arguing or motorcycles roaring outside. It's a space that doesn't attack you with stuff, that doesn't overstimulate. After a whole day of interacting with others, dealing with stimuli and relationships – it's a place where you can just be alone with yourself. Of course, what this "shelter" looks like will depend on our everyday lives – on who we live with. Whether it's one person and a pet, two adults and two kids, or something even more complex – there will always be compromises involved, including financial ones. But regardless of the circumstances, it's essential to have an environment – even if it's just a rented room – where we can care for ourselves as much as possible. That's what A Shelter from the Noise was meant to be. I initially started by studying isolated living spaces – Arctic research stations, oil rigs, space habitats. Places where everyday life is extremely challenging. Then the pandemic hit – and I realized that we all need these kinds of "shelters" in different forms and locations.

Just as our homes should fulfill the role of a safe haven, we also need similar spaces in schools, in healthcare institutions, even in airports – places where we can briefly step back from the flood of stimuli and ask: "Which flight am I supposed to transfer to?", "How do I feel about this diagnosis?", or "What can I do if I'm having an anxiety attack at school and need a moment to reconnect with myself before going back to class?" Even shopping malls are starting to introduce "quiet hours"

and special calming rooms – which shows that the need for peace and stillness is finally being recognized as a societal issue.

But in order for us to actually benefit from such spaces, we also need to be aware that they do serve us. And that requires acknowledging that we are radically overstimulated in our everyday lives. As I mentioned earlier – our nervous systems haven't had a chance to adapt to the rapid changes in our environment. That's why creating environments that support our well-being is absolutely crucial today. It's the foundation – not just for comfort, but for mental health. We often forget that the external world is not separate from us. We are three-dimensional beings – and if we include time, even four-dimensional. We exist within space, in constant, dynamic relationship with it. And when that relationship becomes toxic – when we lack contact with greenery, with fresh air, when we spend most of our time in poorly designed, enclosed spaces – it inevitably takes a toll. We simply start to get sick.

Edyta: All of this also gives us a sense of safety – including informational safety. Because, as you mentioned earlier, sometimes it's enough to just sit down and pause for a moment to ask yourself: "Which flight am I supposed to take?", "Where exactly am I going?" And that, too, is information. We often associate the term "informational safety" with big topics – geopolitics, propaganda, fake news. But in truth, every message we receive is information – including the small, everyday signals we process without even realizing it. That's why mindfulness is so important. In The Mindfulness Notebook, you offer month-by-month guidance – and for me, those are like little building blocks that help us construct our own "shelter." We've already explored the phrase "sit down and breathe" – but I'd like to come back to it for a moment. What does it actually mean? How do you understand it? There are, thankfully, some enlightened schools that create such spaces in their libraries. There are even some healthcare facilities introducing similar solutions – though sometimes more with the goal of keeping patients or clients engaged longer.

Joanna: The truth is, when we're born, we have to do two things. The first – and most important – is to take our first breath. Without that, we don't kickstart the "life option." Breathing is a basic physiological function – it happens continuously, without our will, and most of the time, without our awareness. It's only when we attend a yoga class, a breathwork workshop, a mindfulness session, or start practicing sports where breathing plays a key role, that we even begin to notice it. Meanwhile, most of us breathe very shallowly. Many people unknowingly hyperventilate – which only fuels anxiety in the body.

We forget that the way we breathe can radically change how we function – it can make it easier to fall asleep, lower cortisol levels, and influence our overall well-being. That's why one of the first things I teach – and keep practicing myself – in any form of mindfulness, regardless of the tradition or method, is to pay attention to the breath. To bring it lower, lengthen it, calm it. There are already countless exercises and a growing body of scientific research on the subject – because it really matters. There are even physiotherapists today who specialize specifically in retraining breathing patterns – from a purely medical perspective. That alone shows how important this idea of "sit down and breathe" truly is. Because that phrase encourages something very basic – to finally sit down and ask ourselves: "Am I even breathing? And if so – how?" In stressful situations, we often clench our jaws, tighten our stomachs and glutes – we go into survival mode. We run on held breath. And that's not a state we should live in every day. Sure, if someone's free-diving or lifting weights, holding your breath makes sense. But in daily life? No. We should breathe – and do so calmly and consciously. In traditional Hindu practice, pranayama, it's said that each person is born with a limited number of breaths – and that the pace at which we breathe determines how long we live. Of course, that's a metaphor – but a beautiful one. Because it encourages us to breathe slower, deeper, more mindfully. So "sit down and breathe" – is much more than just a moment of stillness. It's a path back to ourselves. That's exactly what it's about – meeting yourself, checking in to see how you really are. How you're ventilating, how your body is doing. It's incredibly important, because it's the beginning of any journey with the body, any connection with oneself. First comes the breath – and only then do we begin to notice that our jaw is clenched, our stomach is tense, or that other areas of our body are sending us signals. The second most important physiological function, right after breathing, is sleep. Without sleep, we quickly lose touch with reality. After just two nights without it, the body starts to behave as if under the influence of alcohol – perception is distorted, hallucinations can occur. And just like breath, sleep is inseparably linked to our well-being. And the quality of our sleep is deeply affected by how we breathe. If we have trouble breathing at night – for instance, due to sleep apnea – our rest won't be regenerative. And that has a ripple effect on everything else. That's why one of the first lessons in The Mindfulness Notebook is: sit your butt down and breathe. Meet yourself. Ask yourself: "How am I doing?" I've spent over 20 years in practice – sitting in silence, facing a wall – and one thing I know for sure is this: we've been sold a marketing fairytale. That if we just start meditating, going to yoga, working out – our lives will magically transform. A golden glow will appear over our heads, and we'll become lotus flowers on a still lake. So let me be clear: that's not how it works. The beginning of mindful practice and body work isn't a fairytale – it's tough.

It's a plow through rocky ground. It's confronting grief – especially if you've avoided it for years. It's facing fear, frustration, anger. And the most important thing you can do in those early stages? Just sit with it. Observe it. Because most of us were raised to suppress emotion. Girls – to be nice and polite. Boys – not to cry. Sometimes those roles blur, but the cultural message remains the same: don't feel. So yes, the beginning is hard – and I won't pretend otherwise. But even a few simple breathing exercises in the evening can help you get a good night's sleep. And that, in itself, is something. It means you'll wake up feeling better. These are very simple things – and precisely because they're simple, they're often overlooked. They do have one "flaw": they're not magic pills. They don't work instantly. You can't just "do it once and be done." Like anything that brings lasting change – they require routine. They require repetition. And that's where we, today, are really not world champions. That's why The Mindfulness Notebook is structured across 12 months – so that each month introduces something new, step by step. The idea is to let these good practices settle in gently, to let them take root – not to overwhelm ourselves by trying to do everything at once. Because otherwise – they simply won't happen. They won't become part of our lives.

Edyta: Earlier, I mentioned the idea of reconnecting with the body – and I think that can be directly applied to how we read and process news or information. It's about really checking in with what's happening in our body when we come across a certain message. Do I feel overstimulated? Excited? Afraid? And can I pause that reaction for a moment? I keep a small, old-fashioned hourglass on my desk. It runs for six minutes – which doesn't sound like much, but at first, it can feel surprisingly long. When I notice that a piece of information triggers a strong reaction in me – whether it's joy, fear, or irritation – I simply sit down, flip the hourglass, and give myself permission not to digest it right away. I set it aside. I spend a few minutes just with myself. Only then do I return to it – with a calmer mind and more distance.

Joanna: I think that's something we absolutely need today – in a world where we're constantly immersed in an overload of information. You walk outside, and you hardly know anymore what darkness feels like. Or what silence even is. We don't realize just how overstimulated we are – not only by sound and images, but also by smells. Cities are incredibly intense in terms of scent. And texture, too. But we don't feel only with our hands. We're always wearing something – clothes, belts, bras, shoes. We're strapped in, laced up – and we have very little space to actually feel ourselves. That's why I think you said something so important – about time. Giving yourself time to see how your body, your mind, your

nervous system is doing in the face of everyday life – that's absolutely fundamental now. Because when we're constantly operating in "action mode," delivering results, hitting KPIs – whatever you want to call it – we stop seeing ourselves. We bulldoze forward. Until something breaks. Something stops working. And often we have no idea why. We were so focused on outcomes, on getting things done. But our body had been sending signals all along. So had our psyche – trying to tell us something. That's why giving yourself time and observing what's happening inside is so important. Sometimes, an emotional reaction is just an entry point – a bridge into a completely different topic. A "trigger" that opens up a much wider map of experiences. And what happens next can be an incredibly valuable piece of information. As you so beautifully said – it doesn't need to take an hour. It can be those six minutes with the hourglass. You don't need to meditate for an eternity. Sometimes, just one small "wedge" driven into your fast-paced reality is enough to say: "I'll call you back in an hour." Personally, it took me years to learn that I don't have to respond immediately when someone asks me for something. I don't need to instantly decide if I'll do it, how much it'll cost, or when I can deliver. I can say, "I'll get back to you tomorrow," or "I'll check in in an hour." That gives me space – to ask myself if I actually want to do it, if I have the resources, and what it might cost me, emotionally or otherwise. And so on and so on... Because in a world where everything happens in nanoseconds – where everything is supposed to be "now" and "immediate" – it's very hard to find moments to relax. For our thoughts, for our nervous systems, for our bodies. You can even see it in Poland – we have the fastest delivery services in Europe. That shows we don't leave any room for slowness. Everything happens right away. In this overwhelming flow – not just of news or fake news, but also of road signs, shopping mall scents, images, sounds – there's just too much of everything. So driving that "wedge," pausing and saying, "Okay, time to stop" – becomes an act of courage and care.

I remember a cartoon from my childhood about witches – one of them could clap her hands and stop time. And sometimes I really want to do just that. Clap and say: "Stop! Let's pause." Because we're racing ahead blindly, losing contact with where we came from.

That's why I think it's uber important to keep a symbolic "hourglass" nearby – in whatever form. Three, five, ten minutes – just for yourself. Just to bring some order to the chaos.

Edyta: On one hand, taking a moment to pause helps me organize my thoughts, return to myself, and check what a given piece of information is doing to my body. On the other hand, I've been talking more and more about how deeply we need time – time not to respond right away. That thing

you mentioned – the immediacy of reaction – has led us to the point where we now read news in seven seconds. If an article takes 15 minutes to read, the headline alone scares us off – "too long, didn't read." It's a massive challenge, especially in the context of synthetic media. I wonder – do you have your own solution to this? A kind of ritual for asking questions? I often say: "Ask the question – and then leave it." Don't demand an immediate answer. Let the question resonate. I recently had a conversation with Miłosz Horodyski, and we were reminiscing about a time when people would go to the library to read something – and then go home and just think about it. It took time. That time was part of the process.

Today, even when we go for a walk, we plug in headphones and start another podcast. The information flows in – but does anything actually stick? Because we no longer allow ourselves to experience FOMO – or rather, we can't even tolerate the fear of missing anything, even the smallest detail. And this state of constant readiness, of being always connected, makes us lose the ability to sit with the "not-yet-known." It didn't used to be that way. We used to ask questions – and we didn't expect immediate answers. We gave things time. There was space for reflection. And you write about this, too: "Listen to music. Don't do anything else." It's such a simple message – and yet so powerful. Leave yourself time. Let things resonate. Let yourself just be.

Joanna: This is a very interesting – and at the same time difficult – observation for me. Last year, I took part in a podcast dedicated to education. The host mentioned that at one university, the lecturers came to the conclusion that they dreamed of having an Agora – a space where they could meet and exchange ideas. I thought: "That's a brilliant idea!" But then came a reflection – when would I even find time to go to this Agora? At the time, I was teaching, but the university didn't allow me to make a living from teaching alone, so I had to take on a second, sometimes even a third job. I would have loved to go – I just simply didn't have the time. And that really struck me – because I realized that reality doesn't leave us any "wedge" for thinking. And this isn't just about professional life – in many life situations, I have to consciously make sure to find even a moment for reflection. Or just for experiencing. For most of my life, I listened to music in the form of full albums. I came around to Spotify quite late – and I still listen to entire albums there, not individual tracks. I can't stand the "Discover Weekly" feature, because the sounds change so abruptly that my nervous system can't handle it. It's just too much for me. For me, an album is a closed form – a whole, arranged by the artist in a specific order. That's why I only listen to music when I really have time for it. On a daily basis, I mostly live in silence. I listen to music consciously, not in the background. I'm probably in some kind of niche

– and I'm fully aware of that. I'm also neurodivergent. My brain doesn't process multiple sensory stimuli at once very well. That's why working with music in the background simply doesn't work for me – it's not a matter of aesthetic preference, but the construction of my nervous system. One of the things I've developed for myself is a ritual of morning reading. I don't read before bed – only very early in the morning, before the day begins. That's when I can really focus on the text. And I'm practically addicted to reading books – so I need mental space for that. When I later go out for a walk – and I walk without headphones – I get that moment of silence in which I can sort everything out, if something starts to resonate within me. The second thing is: I practically don't "go out." I don't have a nightlife. And that too is a conscious choice – stemming from how I function and what I really need.

I don't go to cocktail parties, industry events, or similar gatherings – because by that time, I'm simply asleep. And my sleep is sacred. I also don't know how to engage in small talk. I feel uncomfortable when a few people are standing around and we're supposed to have a group conversation – I just disappear in those situations. Over time, I've learned what not to do. And how not to push myself into a state where I then need to "recover" by scrolling through social media and dealing with FOMO. I am – we are – in a privileged position. Both of us grew up without social media in our hands. We remember the analog world. A world where, if you wanted to watch Cartoon Network, you had to find someone in the neighborhood who had a satellite dish. It was in English, it was an event – shared, collective. And so on, and so on...

Edyta: Wait for the next episode?

Joanna: That earlier reality – the one from before the digital era – used to slow itself down. Today, we have to slow it down consciously. I'm a big fan of turning off phone notifications. And, more broadly – of letting go of the pressure that someone else is doing more, better, faster, or is somehow more "enlightened." Great – let them do it. I recommend something else: find your own passion and mute all social media accounts that have nothing to do with it. In my case, it's whales and planets. I have no one to compare myself to. It's wonderful. That's how I cope with reality. I know I have tools at my disposal – and I also have the privilege of having been educated in this area. But I also see what's happening to the people around me. As we talked about before the recording – I went to the cinema yesterday to see an extraordinary film: a Chinese-American-Norwegian production called Tales from the North. It's about a year-long school for young adults. Originally, folk high schools started in Norway in the 19th century, and today – after going through a trans-

formation – young people from all over the world can come there for a gap year. They learn survival skills. They learn how to live in harmony with nature. And that's beautiful. They also learn not to stare at their phones. They learn teamwork, how to care for dogs, how to just be together.

This film really moved me – because it showed that there is hope. Hope in the idea that if we just disconnect from constant online access, it turns out... everyone manages just fine. Of course, first comes that tough moment – like quitting a drug. You have to go through a detox. It's dramatic – because your dopamine levels need to stabilize, your entire hormonal cocktail gets out of balance. But then? Then it turns out that taking care of dogs, being in nature, setting up camps, learning a new language, a new culture – all of it is so fascinating, so real in its experience, that it starts to fill the psychological and emotional holes we carry inside.

So my answer is: more nature. More movement. More breath. More time spent outdoors. And – forgive the bluntness – more not giving a damn about what social media is showing us.

Edyta: This morning, over coffee, I was wondering whether maybe what we really need is just a blackout. I remember examples from some European countries where, after a blackout, people simply went out into the streets and spent time together. So maybe the best cure – I say this with irony – is just to turn off the power.

Joanna: I remember a few years ago, I was talking with Filip Springer and I told him in an interview that I dream of a blackout. At the time, I felt that all of us – literally everyone – needed to be cut off. I even had some hope in the pandemic. I thought it would be a moment of re-evaluation, a mental reset. But the pandemic turned out to be too "light," too comfortable to truly change anything. I say this with full respect to those who lost loved ones – my heart goes out to them. But I still believe that the situation didn't lead to a paradigm shift. On the contrary – it deepened our immersion in the online world. In digital life.

So today, I'm still in the same place – I really believe we need a blackout. Someone recently joked that it's the best recipe for a baby boom in Poland – because in fact, after one of the global blackouts, the birth rate did go up. But this "blackout" is needed on every level – psychological, physical, social. Because it's in those moments that we can truly connect with another person.

We, too, in a way, were "born" out of such a blackout. I remember the

1980s, when the lights would go out in the evening – and then... you would simply be. Together.

Edyta: ...and with another person, rather than watching a 15-minute episode of a Netflix series. I still have two major threads I'd like to explore. One of them touches on something that regularly appears on your social media – especially on Instagram. And every time I see it, a little light goes off in my head: "I need to do that more often." You're a bookaholic

Joanna: The audience can't see my face right now. This is one of those moments when my eyes are practically popping out of my head. It wouldn't have even occurred to me to do that.

Edyta: So Joanna, why do you read?

Joanna: Ladies and gentlemen – I simply can't imagine life without reading. Interestingly, I started reading quite late – to the despair of my grandmother, who raised me and had to read aloud to me for many years. I think I could've been green, had a fourth arm and a sixth eye – and that wouldn't have been a tragedy. But the fact that I didn't read? That was a catastrophe. A true family disgrace. And then – once I started reading – I became addicted to it. And today I hardly ever read fiction, because to me it feels... unreal. If I do pick something up, I check whether the author has based it on facts, on a real story. I read for several reasons. First and foremost – because it allows me to understand someone else's cause-and-effect logic. To see how someone thinks, how they construct a narrative. It broadens horizons and knowledge. I dream of studying again, but I don't have the time or space for it. So reading is my ongoing university. And then there's the physical aspect – the paper, the weight of the book. I can't read on a device. I need that tangible experience.

It took me a long time to train myself to read bachelor theses on a screen – because printing them just didn't make sense. But the truth is, long texts on a screen exhaust me. That's why I simply read on paper. I love it. I love buying books. I love the feel of paper. Of course – in my head, I'll go off on badly typeset books or ones with ugly covers. But I go to book fairs, I touch the books, choose them, flip through them. That contact with books is one of the greatest pleasures I have in life.
And that morning ritual of mine – between 5:30 and 6:30 – is sacred time. Coffee, bed, dog by my side, phone silent, no one needs anything from me. And I can absorb some kind of cause-and-effect sequence, understand someone else's way of thinking. That's the best moment of my day. There's no better one. Because that's when I truly learn – I learn

what the books are about, and I learn how other people think. That's my addiction. I have a constant, unquenchable need to learn. I remember... once I even went into a rage... I remember we had a serious conversation at home when Onet was the first outlet to start adding bullet points to articles and noting how long they'd take to read. I said then that it was a straight path to dumbing down society. And, unfortunately, I wasn't far off.

Today, in conversations, people only quote the headline and those four bullet points – and I ask: why did the journalist even write the rest of the article? Nobody reads it. For me, that's a symbol of secondary illiteracy – a situation where people can't even comprehend a one-page A4 text. It's an absolute tragedy. And it's no coincidence – because we all know it's easier to control an uninformed population. And here, I suppose, is where my own systemic flaw shows. You know, I... I think as I talk about it now, what comes out is a kind of passive – yet stubborn – resistance to this world. Because I just read. I read "bricks." I love learning through books – and yes, I often read with my phone in hand, using Wikipedia to look up context, clarify concepts. But it's still my greatest joy. The second – equal in joy – is diving. And those are the two greatest pleasures I have in life. Both are very analog. And even though maybe I shouldn't say this out loud – I don't really love technology. Despite appearances. I don't enjoy learning new tools, new systems. That's why books are my archaic pleasure. And as long as antiquarian bookstores exist – I'll have my own niche in this reality.

Edyta: And the shelves will only get heavier... I'm asking all of this because – as Natalia Hatalska already pointed out in her latest "Map of Trends" – we are losing the ability to read longer texts. And that's a very troubling phenomenon. Because we live in a world that, paradoxically, will increasingly demand that very skill from us. We'll need not only to read more, but to read in different ways. To reach for texts from various fields, to immerse ourselves in them, to visit worlds that aren't part of our daily experience. That's the only way we can break out of our own bubbles, our informational cells. And expand our horizons – not just of knowledge, but of empathy as well.

Joanna: The only question is – what do we mean by "we"? Because I believe that yes, we will need to read more, search more broadly, combine different perspectives. But... there are currently over 8 billion people in the world – and I'm convinced that half of them prove every day that this isn't actually necessary for survival. In our bubble – yes. In the world we believe in – reading is essential. I even joked recently with my partner that if we had a child, after a visit to the Warsaw Book Fair, the poor

thing would be literally buried in books. Good thing the dog can't read – or we'd be burying him too. But yes – we believe it's a condition for survival. The real question is: is reading books truly necessary for the human species to survive? No. I'm not saying how it will survive – just whether it will at all. And the answer is: no, it's not necessary. For me, reading is a way to understand other points of view. That's why – before I voted – I read all the political party programs. Sure, most of them sounded like they'd been written by AI with the hashtag #populism, but I still read them. I wanted to know what people outside my bubble had to say. Even if they're far removed from my world. Do most people do that? No. Does that mean they're hungry or sleep-deprived? Also no. Do they read the ingredients of the food they put in their mouths? The fabric labels on the clothes they wear? No. And yet – they live. I think our wishful thinking – and you can insert any god you like here – is that people want to read. And that they want to understand. But do they really need to? In the age of synthetic media, informational mush, endless scrolling and likes? I don't know.

I'm very critical. And very aware that we live in a world not of two, but of many different speeds. And I increasingly feel that we – the people in this "reading bubble" – will simply become a kind of museum exhibit. One day we'll shut ourselves away somewhere – maybe in Norway, maybe in Iceland – and that's where they'll keep us: those who believe in ecology, responsibility, inclusivity, tolerance. We'll build our little wise world. And the rest will operate under completely different rules. Because that's what globalization looks like today. Often, we're mentally closer to five people in northern Norway, three in South Africa, and six in Paris – than to our neighbor next door. We're consciously building our own little bubble. We use media, knowledge, books. We're interested in the other side, we comment, we think, we form opinions. We reflect on how to live better. Only – and I don't mean to be snide – but on a global scale, we probably amount to about as much as a trace of protein in urine. So... I would at least wish us a shared, peaceful isolation. Ideally with all the libraries airdropped to us – because in the new world, they likely won't be needed anymore. Except maybe for starting campfires. My students always used to laugh at me, saying I could end any conversation with an apocalyptic vision. But well – I don't hold much hope that suddenly everyone will start reading again.

Edyta: You know, I hold on to reading. I hold on to all these... let's call them pro tips – even though the term is a bit ugly – because they give me an anchor in a world I understand less and less. And before I get to my final question, I want to offer one more comparison – maybe from a different bubble, but I think it fits. It's a bit like in the world of design. We want a wooden table – because we want to see that it's wood. We

want to smell a flower, not an air freshener that supposedly smells like a forest. We want to smell freshly baked bread in the house – because that smell means something. Either bread rolls, or sweet rolls. Yeast dough is one of those smells that immediately brings you back. I always joke – and forgive me, especially my partner – but I love the smell of the countryside, even when it smells like, well... manure. That mixture of slurry and hay. That smell brings back beautiful memories. Memories of real holidays – holidays spent entirely outdoors. And so on, and so on. But I have one more question for you – because synthetic media rely primarily on images. And you talk a lot about the senses. So how do we manage in this damn world that's based on images, that constantly tricks us? We honestly don't know what's real anymore. Sure, maybe we'll catch that the girl in the photo has six fingers or a third arm – and thank goodness for that. But we're living in a world of such synthetic imagery that we're completely lost. Monika Borycka mentioned this – how these visual "slopes" make people ask things like: "Did that woman really grow a loaf of bread?" or "Was it tasty?" "What was the recipe?" It shows how disconnected from reality we become when we rely only on sight. It's a kind of total oculocentrism – and it's deeply rooted in culture, even biblically: "Unless I see it, I will not believe." Are we even capable of experiencing reality through other senses? Can we re-sharpen them? You talk a lot about cold – I also love cold. I believe the body functions completely differently in it. That when we're cold, when we feel the chill on our skin – we suddenly remember we have skin. That we are.

Joanna: If our listeners feel like doing one truly meaningful thing – they should go to the Invisible Exhibition. In every major city in Poland, there's a Foundation for the Blind and Visually Impaired that organizes such spaces: the Invisible House, the Invisible Exhibition, the Invisible City. It's a two-hour journey into darkness – literally. You enter with a guide – someone who is blind or visually impaired – leave your phone and all glowing devices in a locker... and experience the world without sight. Give yourself the first 15–20 minutes just to adapt. If you feel anxious – try to push through. The brain needs a moment to adjust, to recalibrate to the new reality. See how you manage without vision. What do you really feel? How does your nervous system react? And for those who want more – many of these places also have a restaurant called Different, where you can eat an "invisible" dinner. Let me reassure you right away – you won't spill anything, and yes, your spoon will find your mouth. Because we have proprioception – deep body awareness. We don't need to see our hands to know where they are. There's only one place where proprioception doesn't work: outer space. Because to feel it, we need gravity and the pressure of the atmosphere on our skin.

Why am I talking about this? Because many of you might believe that we wouldn't be able to function without sight. But the truth is, we could actually manage quite well without it. After all – can you see us right now? No. You're listening to us. We see each other – we see facial expressions, gestures – but you're only listening. And yet, you're still able to pick up knowledge, emotion, context from this conversation. You can hear when something irritates us, when we laugh, when something moves us – all through voice. Sight gives us a huge palette of sensations – it allows us to experience beauty, people, nature. But it's not the only sense that lets us live fully. You can be born without sight and still live a full life – with dignity and awareness. In history, there were even professions reserved for the blind – judges, for example. Justice, as we know, is always blindfolded. It would be much harder to live without hearing. Far more difficult. Sure – the body can perceive vibrations, because sound is a wave, and we don't hear only through our ears. But hearing is more than just a communication channel – it's a carrier of spatial awareness. It's thanks to hearing that we first orient ourselves, and only then see. Just think of a moment at a crosswalk – we turn our heads because we heard something. That's a primal, instinctive reaction. Interestingly – the only sense we cannot be born without is touch. It's the absolute foundation of our presence in the world. That's why it's so important to care for our senses – and sometimes... simply close our eyes. Experience the world "in the dark." In the Mindfulness Notebook, there's an exercise for a mindful walk – including one with your eyes closed, done with a partner. I highly recommend it. Just like the exercise of "mapping" your own home with your eyes closed – to check if what looks beautiful on Pinterest is actually comfortable. If it feels nice to the touch. Closing your eyes is recommended – when listening to music, when in nature. But also in those simplest moments: to ask yourself... how am I doing? We are visually overstimulated today to a dramatic degree. They say up to 80% of external information reaches our brain through vision. It has never been this intense before. And our brain doesn't evolve fast enough to keep up.

That's partly why more and more people suffer from visual impairments – because we overuse our sight. We don't look into the distance, we spend too little time outdoors. We're both great examples of this – we're having this conversation wearing glasses. And yet we have an astonishingly complex cognitive apparatus. We have far more than five senses – and each provides an immense amount of information. Vision, while important, isn't the most crucial for survival. That's why it's so important to cleanse your environment. Cleaning your home, organizing your things, tidying up your computer desktop, your wardrobe – all of it clears your mind as well. Closing your eyes, listening to music, to books, consciously switching to non-visual stimuli – that's essential for

psychophysical health. And that's exactly what I strongly encourage. Because it helps us not just function better – but simply live more fully. It brings our awareness back to how we physically feel in the world.

Edyta: I'm really glad that – Joanna – we're ending this conversation in the very same place where we began. In a space of quiet, yet strong resistance to a world that is now almost entirely technological. Moving toward greenery, the scent of the forest, darkness, sitting in front of a wall. I'm happy these themes come up in the context of seeking solutions – not just more technologies. Because we could've spent this episode – in a podcast about synthetic media – saying, "let's find a tool that instantly detects whether an image is fake." But instead, we're talking about the body. About silence. About the senses. And that's exactly what we invite everyone to do. I wholeheartedly recommend Notes on Mindfulness and A Shelter for the Noise. These are two books I always keep by my bed. They create space to listen to Joanna and her deep dives – into how to take care of yourself, how to feel okay with yourself. Because if we manage to feel okay – maybe that sense of agency will return too. Instead of endlessly charging ourselves up "to the minimum," maybe we'll finally feel that we do have something to act with. Joanna, thank you so much. Thank you for your reflections – and let's all wish for this: a return to the senses.

Joanna: Absolutely. And let's breathe — deliberately, and keep breathing.

Maija Katkovska

Latvijas Drošāka interneta centra (Drossinternets.lv)

Uzticības ilūzijas

Zane: Sveika, Maija! Paldies, ka piekriti parunāt par šīm aktuālajām tēmām. Vai Tu varētu raksturot šobrīd medijos pieejamās informācijas plūsmas kopainu? Patiesā un nepatiesā informācija, mākslīgi ģenerētā informācija - kādi būtu Tavi komentāri?

Maija: Jāsaka, ka, reaģējot uz dažādiem notikumiem pasaulē, arī sociālajos medijos informācijas plūsma ļoti mainās. To ietekmē konkrēti notikumi pasaulē, piemēram, karš Ukrainā vai vēlēšanas vienā vai otrā valstī. Piemēram, arī Latvijā, tuvojoties pašvaldību vēlēšanām, tas diezgan izteikti atspoguļojas sociālajos medijos, tajā skaitā arī dezinformācijas saturā. Atsevišķi politiskie spēki dezinformāciju pat nekautrējoties mēģina īpaši izcelt, liek akcentu uz to. Tomēr es neteikšu, ka kaut kas būtu ļoti būtiski mainījies pēdējo piecu gadu laikā, ka būtu izteiktas atšķirības. Tieši tāpat cilvēki mēģina savākt to savu auditoriju un skatījumus. Dažādi uzņēmumi, arī valdības iegulda milzīgs naudas summas, lai mainītu sabiedrības domu, panāktu, ka sabiedrība pakļaujas, lai panāktu ietekmi sabiedrībā, un cilvēki ticētu tam, kas viņiem tiek stāstīts.

Zane: Vai tiek izmantoti dziļviltojumi un mākslīgi sintezētā informācija?

Maija: Latvijā varbūt ne tik izteikti, bet arī ir gadījumi, kur ar dziļviltojumu palīdzību tiek ģenerēti kaut kādi video vai attēli, kas nav īsti. Bet Eiropā, vispār pasaulē, jau ir gana daudz piemēru, kur tādejādi iejaucas tieši politiskajos procesos. Piemēram, divas nedēļas pirms vēlēšanām par opozīcijas politisko spēku līderiem (šajā gadījumā tās ir bijušas sievietes) ar dziļviltojumu palīdzību ir izveidoti un internetā izplatīti pornogrāfiska satura video. Kamēr šie opozīcijas pārstāvji spēja to atspēkot un pierādīt, ka tā nav patiesība, vēlēšanas jau bija pagājušas. Un tiešām acīmredzami varēja redzēt, ka šādi dziļviltojumi ir ietekmējuši. Savukārt, runājot par bērnu un jauniešu drošību sociālajos medijos, par jauniešu savstarpējo saziņu - mēs neesam novērojuši, ka tas būtu ļoti aktuāli jauniešu vidū Latvijā, bet mēs saņemam satrauktas indikācijas no mūsu Beļģijas, Nīderlandes kolēģiem, ka jauniešu vidū ir ļoti, ļoti izteikta dziļviltojumu izmantošana. Tiek izmantoti dažādi sveši kailfoto, ar dziļviltojumiem mākslīgi izveidoti un publicēti nepilngadīgu jauniešu it kā kailfoto. Iemesli ir dažādi: izrēķinoties par kaut ko, lai grautu viņu reputāciju vai kaut kā ieriebtu, citreiz vienkārši joka pēc.

Zane: Ja mēs analizējam kopainu - kā tas var ietekmēt sabiedrību, jauniešus kopumā? Šāda veida mākslīgi ģenerēta informācija spēj mūs ļoti ietekmēt.

Maija: Nīderlandē un Lielbritānijā ir veikti pētījumi, un aptaujāti no dziļviltojumiem cietušie jaunieši. Kā viņi saka, sajūtas ir tādas, it kā būtu izplatīts īsts foto. Tu zini, ka foto nav īsts, bet citi domā, ka tas ir īsts. Tu neko nevari pierādīt. Visi izturas pret tevi tā, it kā izplatītā fotogrāfija būtu īsta. Kā tas ietekmēs? Cerams, ka jaunais mākslīgā intelekta akts spēs kaut ko mainīt. Uzlikt lielāku atbildību šo rīku izstrādātājiem, lai viņi monitorētu, kādiem mērķiem tiek izmantoti šie rīki. Lai mākslīgā intelekta rīki netiktu izmantoti ļauniem nolūkiem. Ļoti satraucoši ir fakti par mākslīgi radītu saturu par bērnu seksuālo izmantošanu. Ar mākslīgā intelekta palīdzību tiek radīti materiāli, izmantojot reālu bērnu fotogrāfijas, reālu bērnu sejas. Piemēram, ņemot tās no sociālajiem tīkliem, kur tās ievietojuši paši vecāki. Cilvēki tiek apmācīti, kā izmantot reālu bērnu foto, lai izveidotu filmas par konkrētā bērna izmantošanu. Vai apstrādāt fotogrāfijas un ievietot tās tālāk internetā, daloties ar citiem.

Zane: Ja varētu izstrādāt tādus kā ieteikumus, piemēram, izglītotājiem, kas strādā ar jauniešiem, jaunatnes darbiniekiem, pasniedzējiem - kāda būtu tā formula informācijas analizēšanai? Praktiski ieteikumi, ko un kā varētu darīt?

Maija: Galvenais ieteikums ir mēģināt izprast, kā strādā mākslīgā intelekta rīki, un kādi tie vispār ir. Zināt un saprast, ko šobrīd vispār ir iespē-

jams izdarīt ar dažādiem rīkiem - piemēram, sacerējumus un dzejoļus sarakstīt, ierunāt tekstu jebkurā pasaules valodā, tāpat šo pašu fotogrāfiju izstrādāšana, pārveidošana, izmantošana dažādiem mērķiem. Video dziļviltojumu veidošana ļaunprātīgiem nolūkiem. Lai pēc tam jebkuru saturu, ko mēs redzam internetā, varētu analizēt, izmantojot šīs zināšanas. Jāsaprot, ka vairs nevar ticēt nevienai fotogrāfijai vai video, domājot, ka tā ir patiesība - kā tas bija pirms mākslīgā intelekta rīku laikmeta. Jo šie rīki attīstās, un izveidotās fotogrāfijas un video šķiet arvien reālāki, piemēram, var izveidot video, kurā cilvēks "savā balsī" ir ierunājis tekstu, ko patiesībā nekad nav teicis, atbilst pat mutes kustības, un šķiet, ka tas ir īsts.

Pats svarīgākais vienmēr ir meklēt vēl papildu informāciju, salīdzināt, pārliecināties, skatīties, vai pētnieciskie žurnālisti ir rakstījuši par šo jautājumu. Bieži vien nozīmīga ir mūsu pirmā reakcija uz jebkādu saturu, ko mēs redzam internetā. Un ja mūsu pirmā instinktīvā reakcija ir - es kaut kā tam neticu, tad pilnīgi loģiski, ka mēs pārbaudīsim to informāciju, meklēsim, salīdzināsim. Tas ir būtiski sevis pasargāšanai. Bieži mums gribas ātri būt noderīgiem, un, ieraugot virsrakstu, attēlu, mēs dalāmies ar informāciju. Un tādā veidā tiek izplatīta dezinformācija, kaitējošs saturs. Nedalieties tik vienkārši ar informāciju, ja jūs neesat izlasījuši kārtīgi, pārliecinājušies, ka tā ir patiesība. Nedalieties ar citu radīt saturu!

Zane: Šis ir ļoti būtiski. Cilvēki izklaides nolūkā dalās ar dažādām bildēm, video, kuri ir mākslīgi ģenerēti. Un bieži ir sajūta, ka cilvēki dalās, pat nezinot un nesaprotot, ka tas ir mākslīgi ģenerēts saturs, ka viņi domā, ka kāds notikums ir reāls. Komentāros varbūt ir rakstīts, ka tas jau ir ģenerēts, bet īstenībā cilvēki nezin, kas ir iespējams, cik reālistiski viss var būt attēlots. Platformas un rīki attīstās ļoti ātri. Mākslīgā intelekta laikā vairs nevar izsekot, kas ir iespējams un kas nav.

Kādā sarunā secinājām, ka vienmēr vajadzētu uzdot sev jautājumu - kāds ir šī attēla mērķis? Mēs varam pasmieties, tas var mūs izklaidēt. Bet varbūt mērķis ir mani ietekmēt, kaut kādā veidā mainīt manu viedokli? Kādas prasmes mūsdienu jaunietim būtu vajadzīgas? Kritiskā domāšana? Nesteigties dalīties ar sociālo mediju informāciju?

Maija: Noteikti nesteigties uzreiz dalīties ar informāciju, paņemt pauzi, pārbaudīt informāciju un pārliecināties par to. Saprast, kāds ir mērķis, kāpēc vispār cilvēki ar to dalās? Kritiski izvērtēt saturu, nesteigties, pārrunāt to ar kādu - ar vecākiem, skolā vai klasē, padiskutēt, vai informācija varētu būt patiesa vai nē. Ir diezgan pozitīva tendence, ka pēc informācijas parādīšanās sociālajos medijos cilvēki komentāros izsaka savus novērojumus, piemēram, nē, šī nav īsti patiesība, tas nav reāli, tas ir uzpūsts, kaut kas tur ir pielikts klāt.

Piemēram, nesen bija situācija ar zarnu vīrusu, kas bija izplatījies, ar kuru saslima daudz cilvēku, tostarp bērni. Sociālajos medijos pēkšņi parādījās un aktīvi tika izplatīta informācija, ka tas ir no svaigām zemenēm, ka zemenes ir šī vīrusa avots. Tas nekur nebija pierādīts vai apstiprināts, bet arī kāds no žurnālistiem to bija publicējis, un informācija ļoti plaši izplatījās. Cilvēki pēc tam komentāros oponēja, ka nē, tas nekur nav pierādīts, ka tas ir no zemenēm. Ka lielākā daļa cilvēku, kas nonākuši slimnīcā, nemaz nebija ēduši zemenes. Cilvēki tiešām ļoti aktīvi iesaistās, atspēkojot dezinformāciju, viltus informāciju, un tas ir tiešām ļoti pozitīvi. Aicinu arī jauniešus - ja jūs redzat, ka publicētais nav īsts, ierakstiet atspēkojošu komentāru. Iespējams, jūs tā kādu pasargāsiet no muļķīgas dalīšanās vai noticēšanas.

Zane: Šis ir ļoti vērtīgs ieteikums - izteikt savu viedokli. Pateikt: es apšaubu šo informāciju, es nezinu, kur ir avots? Piedalīties ar aktīvu līdzdalību.

Maija: Kaut gan ir arī šis troļļu ģenerētais saturs. Tāds masveida saturs, piemēram, pret vienu vai otru politisko spēku. Vai Krievijas propaganda, kas ir sociālajos medijos. Ja ir redzams, ka informācija ir mākslīgi ģenerēta, mērķtiecīgs nepatiess saturs - tad gan nevajag iesaistīties, reaģēt, jo ar katru mūsu komentāru šis saturs tiek izplatīts vēl vairāk. Skatieties, kas ir šie satura veidotāji, kam tie konti pieder, kāda veida saturs tur ir. Darbojoties ar kaut kādu saturu, jāuzmanās, lai mēs troļļu radīto saturu neizplatam tālāk saviem sekotājiem.

Zane: Tātad katra mūsu aktivitāte sociālajos tīklos faktiski atstāj sekas? Un mums būtu jāsaprot, kura rīcība kādas sekas atstāj. Kad nereaģēt uz kaut kāda veida saturu, kad reaģēt, komentēt, iesaistīties. Tādi kā digitālās uzvedības noteikumi. Kas mums būtu jāievēro attiecībā uz saturu, ko mēs ģenerējam un publicējam paši?

Maija: Protams, katram jāapzinās, ka mēs esam līdzatbildīgi gan par to saturu, ko mēs ievietojam, gan arī par to, ar kuru mēs dalāmies. Pirms 7 gadiem tika organizēts diagnostikas darbs 6. klases skolēniem, apmēram 12 -13 gadus veciem. Viens no jautājumiem bija: vai tad, ja kāds klasesbiedrs tev atsūta ziņu, ka rīt nav jāiet uz skolu, un tu to nepārbaudot pārsūti tālāk - vai tu esi līdzatbildīgs par sekām, kas varētu rasties? Un vairāk nekā 30 % jauniešu atbildēja, ka nē, ka viņi jau tikai padalījās, ka viņi nav atbildīgi ne par ko. Aprīļa beigās atkal notiks diagnostikas darbs. Mēs uzdosim ļoti līdzīgu jautājumu un redzēsim, vai kaut kas ir mainījies, vai tomēr tā domāšana ir palikusi tāda pati - ja es neradīju šo saturu, bet tikai padalījos ar to, tā nav mana atbildība. Tā ir bīstama nostāja. Tāda “ai, es jau neko, es tikai padalījos” attieksme. Bet padalīšanās var radīt konkrētas sekas. Piemēram, mēs runājām ar Lielbritānijas policiju

un viņi teica: tiklīdz kā sociālajos tīklos izplatās kaut kāda melīga informācija, piemēram, pret kādu konkrētu rasi kaut kur konkrētā rajonā (tas tur ir bīstams, jo viņš kaut ko it kā ir izdarījis), policisti to redz. Viņi zina, ka viņiem jau uz konkrētām vietām ir jāsūta papildus personāls, jo ir skaidrs, ka noteikti kāds uzbruks konkrētās rases cilvēkiem arī reāli, uz ielas. Uz mediju viļņa nonākusī informācija atspoguļojas un ietekmē to, kas notiek reālajā dzīvē, nonākot pat līdz linča tiesai.

Zane: Vēl projektā laikā runājām par tādu fenomenu kā mākslīgi radīti profili sociālajos tīklos. Šiem ģenerētajiem profiliem ir reāli, piemēram, Instagram konti, viņi reāli veido saturu, bet neviens nezin, kas aiz tā slēpjas.

Maija: Jā, tas ir interesanti - vai mākslīgā intelekta vai mākslīgi radīta cilvēka konts var būt tikpat populārs kā īsts, izanalizējot, kas ir tas, uz ko cilvēki reaģē, kas viņiem patīk? No vienas puses jā, cilvēks varbūt vēlas kaut kādus savus vēstījumus nodot. Piemēram, man ir ģimene, man ir bērni, es negribu, lai kāds zina, kas īstenībā es esmu, bet man ir kaut kāda misijas apziņa nodot savus vēstījumus, es redzu, ka cilvēkiem palīdz kaut kāda mana pieredze vai zināšanas. Bet negribu to sasaistīt ar sevi vai riskēt ar uzbrukumiem ģimenei. No otras puses, nosacītā anonimitāte var būt bīstama. Taču, ja cilvēki zina, ja es neslēpju, ka es esmu mākslīgā intelekta radīts profils, varbūt tas nav nekas slikts, ja tas ir labu mērķu vārdā, radot iespēju vienkārši pasargāt sevi, savu privātumu.

Zane: Droši vien atkal ir svarīgs mērķis un atbildības uzņemšanās, šādu profilu vadot. Kādu Tu redzi informācijas attīstības nākotni kopumā? Uz kurieni mēs ejam, uz kurieni visa šī tehnoloģiju rīku attīstība mūs ved?

Maija: Mēs šobrīd Latvijā pedagogiem esam uzsākuši tādas padziļinātas mācības ar nosaukumu “Pieredzēt mākslīgo intelektu”. Jo mēs saprotam, ka tieši tāpat kā deviņdesmito gadu sākumā pasaulē uz palikšanu ienāca internets, kļūdams populārs un pieejams ikvienam lietotājam - tieši tāpat ir ar mākslīgo intelektu. Tas viennozīmīgi ir šeit uz palikšanu, un mēs to nevaram ignorēt un izvairīties. Atbilstoši saviem interneta lietošanas paradumiem, savai ikdienas sfērai un tam, ar ko mēs nodarbojamies, mums ir jāsāk saprast, kas ir mākslīgais intelekts, kā tas tiek izmantots. Piemēram, mērķiem, kas palīdz medicīnā. Vai sociālo mediju satura monitorēšanā, nelegālā satura dzēšanā no interneta. Ir ļoti daudzi ļoti labi mērķi, kā tiek izmantots mākslīgais intelekts, kā tas palīdz cilvēkiem daudz ātrāk un precīzāk kaut ko izdarīt. Bet tajā pašā laikā nepieciešams arī apzināt noteiktus riskus. Taču ir skaidrs, ka mēs nevaram ignorēt un izlikties, ka mākslīgais intelekts mūs neskar. Ir jāsāk saprast, kā tas darbojas, kā tas var mūs ietekmēt, kā mēs to varam izmantot

savā labā. Piemēram, ir ļoti daudz diskusiju par to, vai ļaut skolēniem izmantot mākslīgo intelektu kaut kādu darbu, projektu veidošanā. Ir gana daudz skolu un pedagogu, kas kategoriski to noraida, pasaka, ka nedrīkst, vienkārši nedrīkst. Savukārt mēs uzskatām, ka izmantot ir ļoti labi, jo ne visiem bērniem uzreiz un par jebkuru tēmu, ko viņiem iedod, ir tāds dabas dots talants, fantāzija un kaut kādas zināšanas. Viņam ir vajadzīgs pāris idejas, kā fons. Pajautājot mākslīgais intelekts iedotu kādus virzienus, kuros domāt, un skolēns tajā brīdī apjauš, ka viņam jau rosās savas fantāzijas. Un tajā brīdī viņš sāk ielikt sevi. Un kāpēc nē? Kāpēc to liegt, ja mērķis ir panākt, ka izdodas, ka viņš uzraksta to savu projektu un savu eseju. Vai nu viņš to izdara ar vecāku palīdzību, vai ar interneta, ar mākslīgā intelekta programmu palīdzību.

Zane: Paldies, Maija, par sarunu! Ļoti, ļoti vērtīgas atziņas un praktiskie ieteikumi. Lai veiksme darbā un jūsu projektos, un ļoti, ļoti vērtīgajā ieguldījumā! Paldies!

Maija: Paldies un veiksmīgi!