How to word it...?

THE NATURE AND CLIMATE CHANGE NARRATIVE'S SHORTCOMINGS
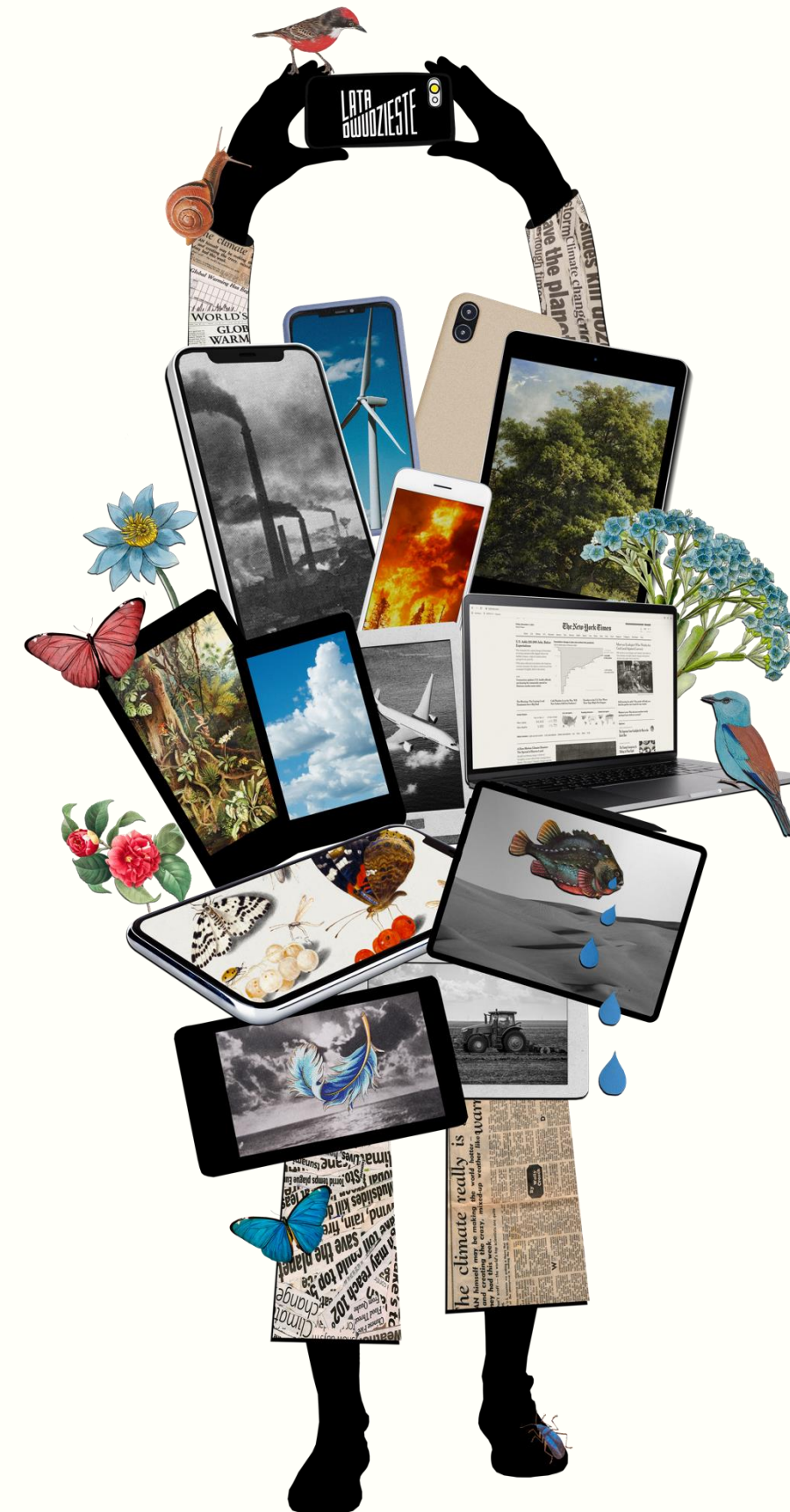
LATA DWUDZIESTE

Przyjazne dla środowiska strategie biznesowe

Ships that pass in the night, and speak each other in passing, only a signal shown, and a distant voice in the darkness; So on the ocean of life, we pass and speak one another, only a look and a voice, then darkness again and a silence.

Henry Wadsworth Longfellow

LATA DWUDZIESTE

A room in the elephant

A hyperobject is something so large in the scale of time, space and its own internal complexity that it exceeds the tools of human perception. This concept was coined and discussed in 2013 by a British philosopher, Timothy Morton. In his book "Hyperobjects. Philosophy and Ecology after the End of the World" Morton picked up the gauntlet of not only describing the properties of hyperobjects, but also finding ways to refer to them in the public debate. Thus, amongst hyperobjects we can distinguish those viscous (sticky and adhering to our lives) and nonlocal (there and then, instead of here and now). Irregularly rippled (after ten snowless winters comes one intensely snowy and governments announce the end of climate change – rings a bell?) and phased (they change, but the pace of these phases may just be too elusive to catch).

In this view, a hyperobject is not so much the well-known elephant in the room, as it is the room inside the elephant. We sit indoors, enjoy a cup of tea, the table sometimes wobbles – we manage to somehow explain this instability, while pouring spilled tea from saucers back to our cups.

According to Morton, a hyperobject could be the entirety of history, a radioactive material, the sixth mass extinction of species, and a plastic bag. They are all too great (in one scale or in all) for us to notice their essence. Do we really understand the essence of a plastic bag by throwing pickled cucumbers into it at the shop? Do we realise its prolonged duration, counted in hundreds or even thousands of years?

Climate change is, without a shadow of doubt, a hyperobject. Journalists possess a limited set of tools to address the complexity of the problem. We all every so often fail in this area. With what we have, we stand in the face of the indifference of people, the sheer stupidity of politicians, the cynicism of corporations and the short-sightedness of our own bosses, and throw our hands up in a gesture of helplessness and despair.

When I was told that this report was being written, I thought: At last! Now there will be something to refer to. I myself was forced to use the vague phrase "it is said" many times when attempting to map out a problem related to communicating climate challenges. Now I have this study in my toolbox. It reveals a huge, empty hole, a great lack, a poignant absence of a very specific topic in media discussions of the climate issue. You will easily notice this lack while reading.

So, not only is the climate change a hyperobject – the discussions concerning it are one as well. And what gives the greatest hope in this excellent report is a feeling growing with every page that we are not so completely helpless in the face of hyperobjects.

Filip Springer
Reporter and photojournalist
Co-founder of the School of Ecopoetics at the Institute of Reportage

How to word it...?

"If a cabal of evil psychologists had gathered in a secret undersea base to concoct a crisis humanity would be hopelessly ill-equipped to address, they couldn't have done better than climate change."

During the year-and-a-half since forming our agency Lata Dwudzieste, we have routinely faced the opportunity to be convinced how right Oliver Burkeman of the Guardian, the author of the above quote, was. Climate change, a result of human activity, is a fact confirmed by the consensus of scientists. World science also points to solutions that would allow avoiding worst-case scenarios of the seemingly inevitable catastrophe. So why do we just sit around without lifting a finger? Why, with the potential of technology and science on our side, do we act so sluggishly?

In our view, one of the most serious barriers in counteracting the climate catastrophe is the lack of a convincing narrative. As Lawrence Buell put it, "the climate crisis is a crisis of culture, thus of the imagination." And the imagination could be stimulated by the right story – one that could break through to societies, consumers, politicians and the business world.

In this report, we seek to capture the dominant narratives about climate change. Our Cybercontent Hunter has developed a software that has analysed the way climate change is depicted in the Western world, starting with the day pen was put to paper over the Paris Agreement in 2016, up to today. We believe it will become an inspiration for companies, cities, and governments currently racking their heads over how to convince their customers, employees or residents to understand the seriousness of the situation and take part in co-creating an economic and social order that will no longer threaten species inhabiting our planet. Human species included.

Nothing pleasant written ahead, so we'll hold back on wishing you a pleasant reading. Wise decisions, instead.

Team at Lata Dwudzieste (The Twenties)

LATA DWUDZIESTE

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I Historical outline

HOW DID WE WORK OUR WAY UP TO CLIMATE CHANGE?

Many faces of nature

NATURE CHANGES ALONG WITH US

According to social reality researchers, the industrial revolution in Western societies was possible both thanks to the development of a specific format of culture and a specific understanding of nature's role in human reality. Tracing the evolution of this concept over the centuries is crucial, as the way we understand nature directly influences our actions.

MIDDLE AGES
Nature = work of God

ROMANTICISM
Nature = touching periphery

ANTIQUITY
Nature = the entire world around us

In the history of Western culture, it was the philosophy of the Ancients that first suggested treating nature as an abstract being. According to the works of Greek philosophers, this concept concerned a whole spectrum of various phenomena. The development of such an approach enabled people to personify nature, giving it the status of a deity.

AGE OF ENLIGHTENMENT
Nature = complex system of relations

In the Enlightenment, nature completely lost its sacred status and moral qualities. Since then, it had become a collection of resources susceptible to rational management. The common approach of this period is perfectly illustrated by the words of Cartesius, who argued that people should become 'masters and owners of nature'.

POSITIVISM
Nature = the inverse of the social world

The positivists formed a radical division of the world – nature became separate from culture. This resulted in a departure from narratives that connected man with nature in an inseparable way. It was these processes that allowed the industrial revolution to flourish – they enabled an ethical and economically viable exploitation of nature.

The perception of nature was constantly modified. It ceased to be a holistic term – losing the status of "everything", it began to act as a link between humanity and the Christian God. Interference with nature (as long as it was not too invasive, then it could be considered unnatural) was treated as a form of worship of the Creator.

In the 18th century, the economic system was directly connected to improve the overall quality of life and stimulate development, and therefore was not subject to negotiations. The laws governing the market were naturalised, and the approach to the environment was influenced by escapist tendencies, with people fleeing their everyday city lives to the bosom of nature.

Ambiguous revolution

BENEFITS OF THE INDUSTRIAL REVOLUTION

The perception of nature as a being separate from man, paired with the possibility of using the energy of a steam engine, kickstarted the era of The Industrial Revolution. The Western societies' conviction of their own superiority played a crucial role in the legitimisation of the new period. Such thinking was sourced by man's ability to master inanimate powers. These views did not come out of nowhere.

- Between 1750 and 1980, the world's human population grew from approx. 800 million to over 4 billion.

- Life expectancy had almost doubled, while rapid development of new technologies had become a norm.

- Thanks to industrialisation, the average member of Western societies began to experience comforts and luxuries that were previously unattainable even for the richest people from less developed parts of the world.

- Increasing the efficiency of agriculture led to the transformation of dominant forms of economic activity – a vast number of people found employment in the industrial and service sectors.

NOT-SO-OBVIOUS COSTS

However, these achievements are based on environmental and social burdens that are often overlooked or underestimated. Neoclassical economics focus almost exclusively on the financial and material dimensions, omitting nature from the primary stream of discussion.

- More than half of all available drinking water in the world is currently used by humans.

- The scale and observed trend of increasing waste production is expected to lead to a situation in which by 2050 the mass of plastic in the oceans will exceed the mass of all the fish.

- In the last century, the size of the cultivated area has doubled. During the same period, the world's forest area has decreased by 20%.

- Since 1900, the abundance of species in the most important terrestrial habitats has decreased by 20%. Since 1970, the population of invasive alien species has increased by about 70% per country.

- One of the key areas of environmental threat that has its source in human activity is the phenomenon of global warming, which is the result of greenhouse gas emissions.
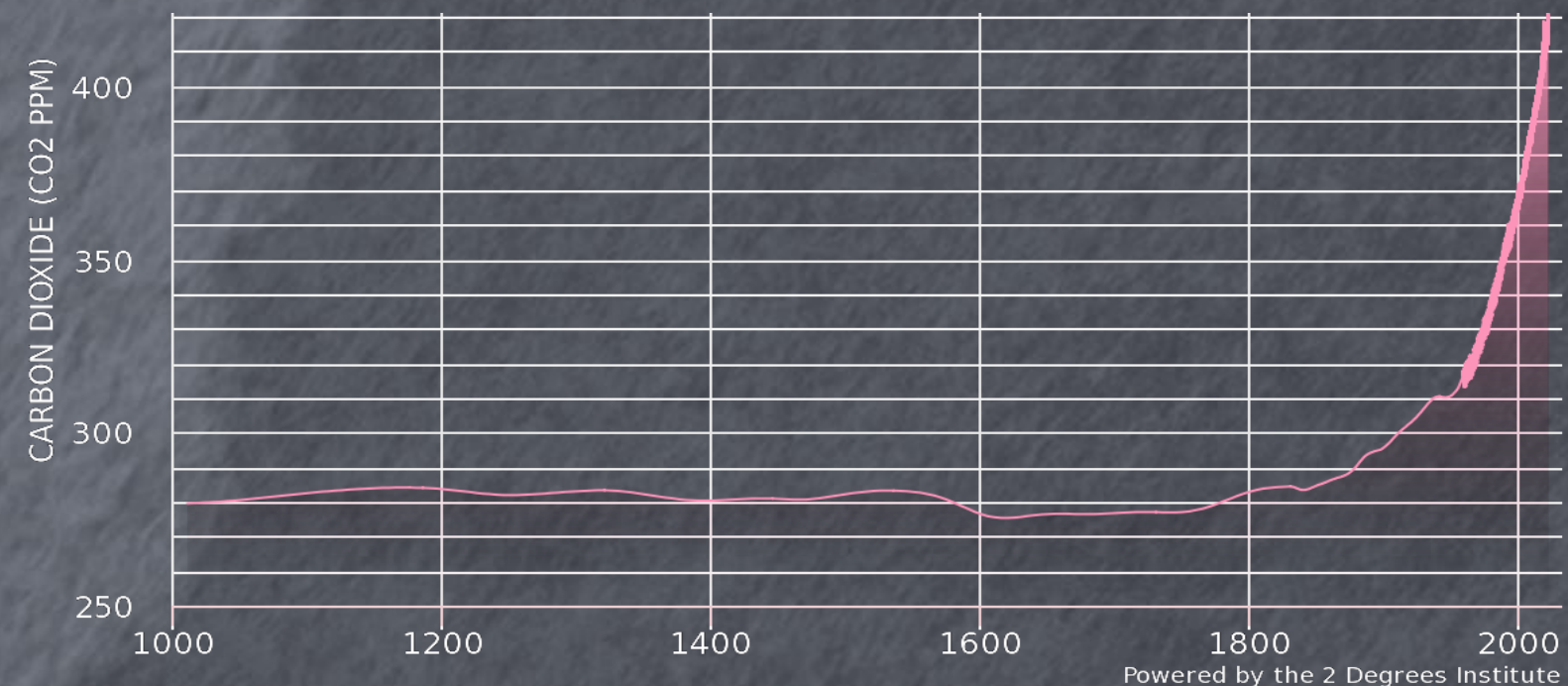
Sources: Fukuhara (2018); Crutzen (2006); Hooke, Martin, de Pedraza (2012); United Nations (2019), McKie (2017), https://www.co2levels.org/

CARBON DIOXIDE (CO2 PPM)

400

350

300

250

1000   1200   1400   1600   1800   2000

Powered by the 2 Degrees Institute

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A profound misunderstanding

The globalisation processes of the 20th century have made it possible to look at nature in the light of a single global ecosystem, for which we are all responsible. This perspective was widely popularised e.g. by images of the Earth taken from space in the 60s.

Instrumentalism and dualism as the dominant forms of relations with nature – despite the emergence of new perspectives in the public awareness – remained intact. It became possible to visualise the dangers the planetary ecosystem is yet to face, but the consequences of these threats were often seen as unrelated to the social world.

Assumptions of social imagination formatted this way are well illustrated by the last century's works of pop culture.

Silent Running, a 1972 science-fiction film, depicts a reality in which all of Earth's vegetation has been reduced to individual forests and gardens placed on spaceships. The main character is a non-conformist botanist who opposes the order to destroy the flora and is ready to sacrifice his life and that of other astronauts to save the remnants of nature.

The film conveys the message that nature must be protected because "its fruit has a taste, and it has some colour! And it has a smell! It calls back to a time when there were flowers all over the Earth! And there were valleys! And there were plains of tall, green grass that you could lie down in, that you could go to sleep in!"

There was an awareness of the impact of human actions on ecosystems, but the cultural approach still separated man and nature. Apart from the purely aesthetic values mentioned by the botanist, nature was shown to have no other values. The people in this story – despite their world being completely degraded – were able to survive thanks to synthetic food and other contemporary achievements.

The attitudes shown in the film are misguided and unjustifiably optimistic. Environmental degradation is not an autonomous process, regarding collapsing of ecosystems entirely detached from man. It is a social catastrophe that inevitably leads to wars and migration crises – environmental degradation is a challenge for humanity.

> It was the first time that any human had moved away far enough from the earth to see the whole planet. And this is what they saw... what we all saw. Our planet, vulnerable and isolated. Our home was not limitless. There was an edge to our existence.
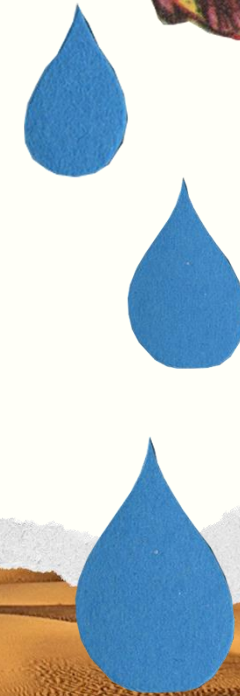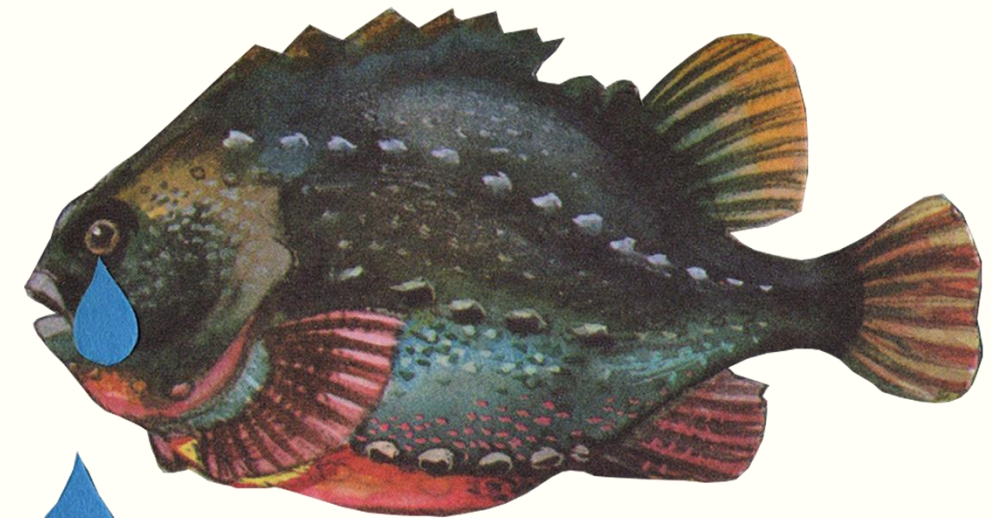>
> sir David Attenborough
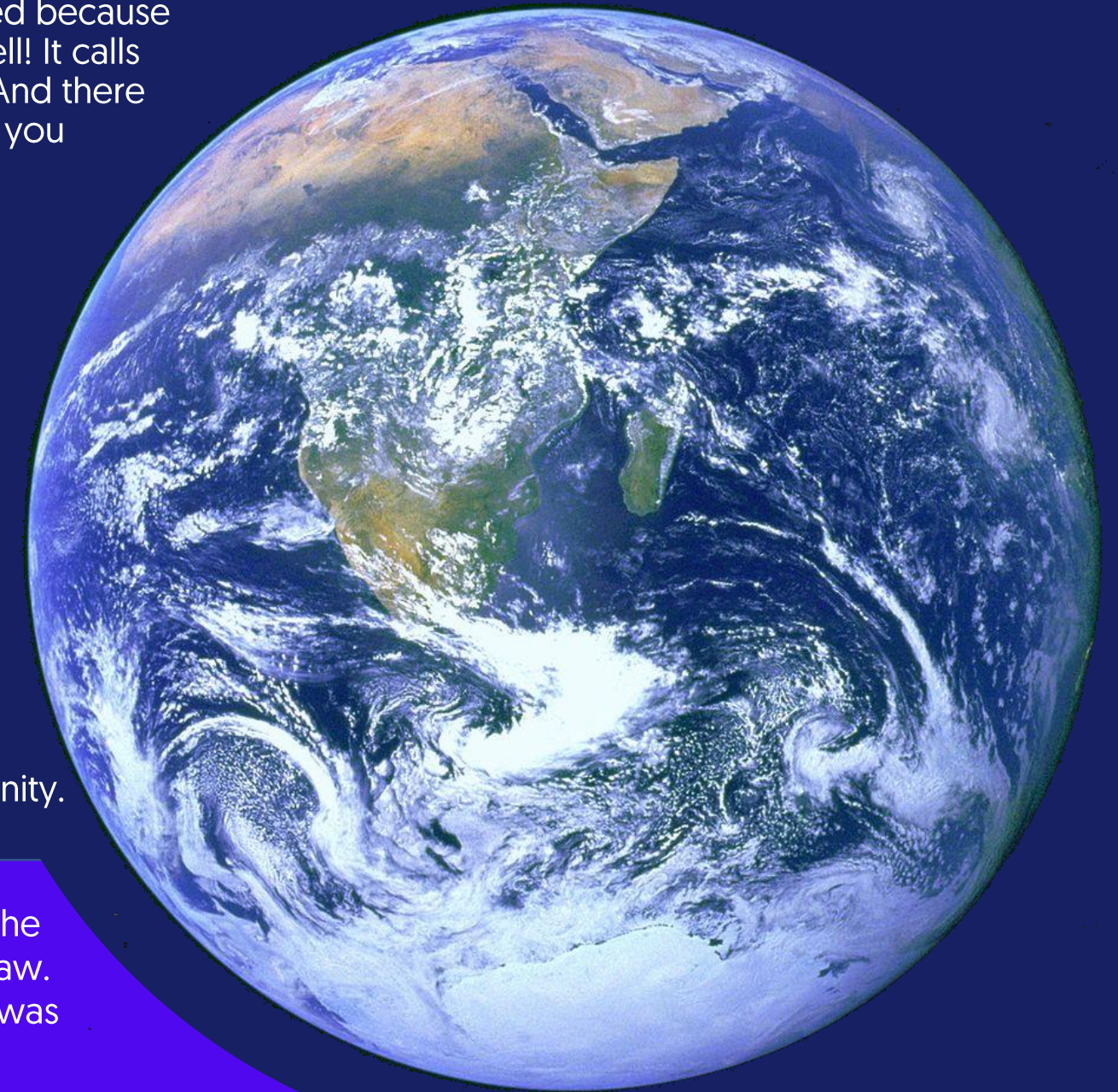
„The Blue Marble" Schmitt, 1972

LATA DWUDZIESTE

# II Key diagnoses

A CLOSE INSPECTION OF CLIMATE CHANGE

LATA OWUOZIESTE

The end of the world in culture

Sources: Chakrabarty (2014); Patel i in. (2019); Zyblikiewicz (2013); Guggenheim (2006); Bendell (2018)

Scientists specialised in nature-related fields have no problem explaining why the climate change we are currently facing is unprecedented. Their reasoning, however, will not help to understand the social crisis, which is the climate change's by-product. The development of a perspective focusing on humanity's dependence on the environment can be traced by analysing particularly high-profile media events.
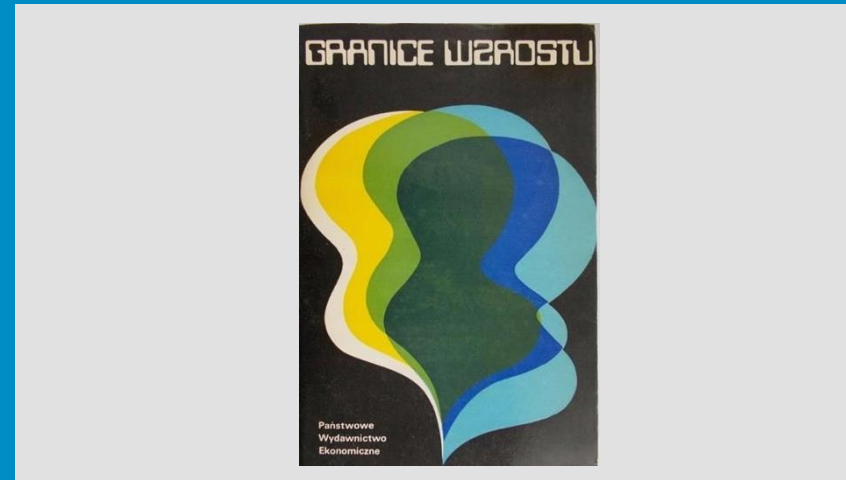
"LIMITS TO GROWTH" (1972)

"Limits to Growth" is the Club of Rome's controversial publication, which – according to some available figures – sold 12 million copies. This published in the early 70s study's main assumptions were based on computer simulation analyses. They showed that the continuation of current development trends in terms of population growth, industrialisation, environmental pollution, food production and exploitation of natural resources is likely to have dramatic consequences. Those were said to be a sharp and uncontrollable decline in population and production capacity.
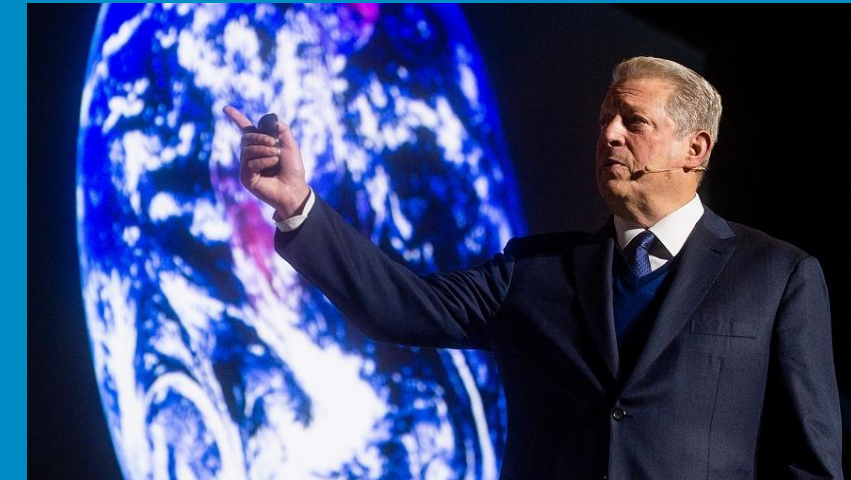
"AN INCONVENIENT TRUTH" (2006)

"An Inconvenient Truth" is a 2006 American documentary film directed by Davis Guggenheim and based primarily on a multimedia presentation by former U.S. Vice President and former presidential candidate Al Gore. The politician talks about the scale of global warming and the consequences associated with this phenomenon. It portrays the effects of melting glaciers, which directly affect the availability of drinking water in many regions of the world, and the consequences of heat waves, which result in tens of thousands of deaths each year in Europe alone. Gore points out that the warming of the oceans impacts the appearance of increasingly extreme weather events, including larger in scale and more frequent storms and hurricanes. He points out the unprecedented destabilisation of ecosystems, which results in a rising frequency of both floods and droughts.

"DEEP ADAPTATION" (2018)

Jem Bendell's article "Deep adaptation" became famous as one of the most pessimistic forecasts of the effects of climate change. The publication presents the prospect of a dramatic social collapse that is to come in the decades ahead. At the same time, according to Bendell, none of the currently proposed technological or administrative solutions, nor any of the countermeasures taken, are able to prevent a global tragedy.

"For, ultimately, what the warming of the planet threatens is not the geological planet itself but the very conditions, both biological and geological, on which the survival of human life as developed in the Holocene period depends."

Dipesh Chakrabarty

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The end of the world as seen by scientists

The average temperature on Earth is rising and will continue to do so. According to the most frequently published scenarios, this increase will most likely stop between 1 and 4 degrees Celsius. As a consequence of this warming, a number of surprises undoubtedly awaits.

Representatives of the scientific world, including experts from the IPCC (Intergovernmental Panel on Climate Change), have no doubts. The one thing that remains unknown is which phenomena will be the first to trigger a massive "domino effect" and make the comfort of life on Earth cease to resemble the conditions to which we are accustomed.

- With more frequent floods and hurricanes comes an increase in the number of cases of drowning, hypothermia and infectious diseases.

- Heat waves combined with air pollution significantly increase mortality.

- Drought-caused sandstorms carry chemical fertilizers and other harmful substances over a distance of hundreds of kilometres.

- The melting of glaciers will lead to a decrease in the availability of water in many areas, while in others there will be a deterioration in its quality.

- The loss of biodiversity will negatively affect medicine's ability to discover and produce new drugs, cause a loss of medical models, effectively leading to out-of-control diseases spreading among humans.

- Extreme weather events and rising sea levels are bound to inflict damage on the global infrastructure, which in turn will generate huge economic losses.

- The rising frequency of fires in forests and peatlands will directly threaten the health of people in their vicinity, leading to the release of toxic compounds into the atmosphere.

- Climate change will lead to large-scale population migration.

- The food security of many countries will be undermined.

Źródła: Safanov (2019); Scott (2021); Alves, Rosa (2007); Frase (2016)

Sharing the buck

Sources: Williams (2000); P. Macnaghten, J. Urry, „Alternatywne przyrody. Nowe myślenie o przyrodzie i społeczeństwie", Wydawnictwo Naukowe Scholar, 2005; Inequality.org (2021); E. Bińczyk, „Jak przetrwać w antropocenie", 2020; A. Malm, A. Hornborg, „The geology of mankind? A critique of the Anthropocene narrative", 2014; Our World in Data (2020), Chakrabarty (2014)

One of the key dimensions of the climate change is the problem of social inequality. An instrumental approach to nature allows us to treat specific groups of people equally instrumentally. According to some sociologists, the moment nature was reduced to just a set of resources was the very moment man was collaterally downgraded to a tool used by others to achieve industrial goals. This is particularly important in the context of the distribution of benefits and costs of the modern social order.

The distribution of the benefits and costs of environmental exploitation is stratified. The richest 1% of people are now in possession of 43% of the world's wealth. Charging 2,000 billionaires with a 1.5% tax would provide basic health care and education to all children in developing countries.

CO2 EMISSIONS DISTRIBUTED AMONGST WORLD POPULATION

Legend:
- The richest
- Series 2
- The poorest

% of population   CO2 Emissions
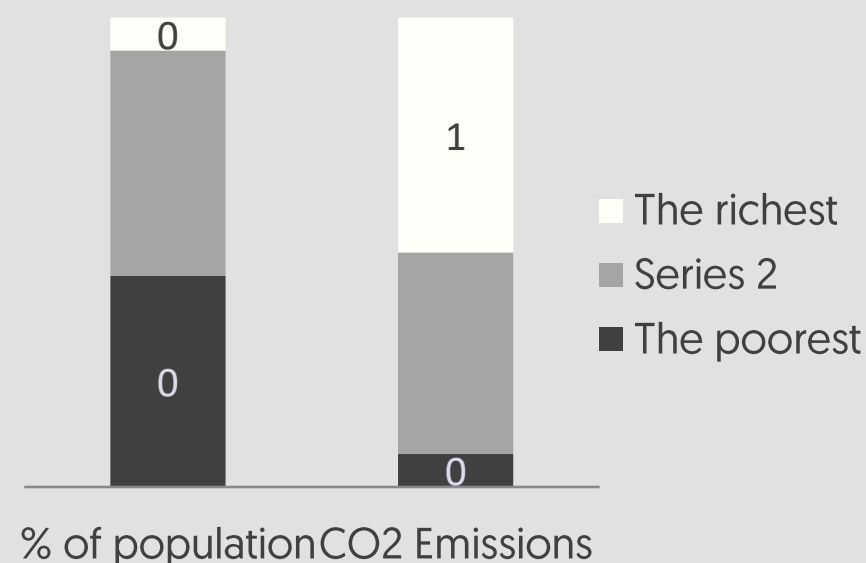
We are not all responsible for climate change, but we are all suffering its consequences. The benefits of burning fossil fuels are not identical for every inhabitant of the Earth. The present state is not an inevitable stage of human development, but a set of accepted or imposed social conditions.

It is the most disadvantaged groups that will experience the effects of climate change most quickly and severely. This will happen despite the fact that the environmental burden (measured in CO_2 emissions) resulting from the consumption habits of one American is equal to that generated by more than a hundred Ethiopians.

At the beginning of the 21st century, 45% of the poorest people accounted for 7% of global emissions, while the richest 7% generated 50% of global CO_2 emissions. Focusing on social inequalities is crucial in discussions regarding the Anthropocene, the current geological epoch dominated by human activity, because they determine the ability to exploit and transform elements of the natural world. It should be remembered that the current situation was caused primarily by the decisions of key stakeholders, and not by the abstract, industrial "destiny" of humanity.

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Business as usual

Between 2013 and 2017, the regional branch of an international food production corporation extracted nearly 4.5 billion litres of water in Pakistan – not a single drop was paid for. With the water level drastically declined, this drainage made selected areas of the country uninhabitable. According to activists, due to the lack of funds necessary to buy back the resource (now in bottles) from the company, many residents of this area were forced to drink contaminated water. At the same time, 43% of the extracted water was wasted by the corporation, and what's more, the company's management managed to justify the loss of 15% of the water loss by the purification process. However, the loss of the remaining 28% was never explained.

This example clearly shows how low is nature's position in the currently dominant hierarchy of values – the highest priority is profit.

Even Christopher Columbus, delighted with America's local nature, wrote in his diaries about the possibility of using it in industry. His words are proof that the first reflex of a European after entering an unknown ecosystem was the thought of translating nature to economic value.

According to some sociologists, the modern age has radicalised this attitude to such an extent that the relationship between man and all other species focuses mainly on profit-making. This is one of the key features of the modern market and global politics, allowing continuous economic growth despite all the signals indicating critical danger for the survival of humanity.

Our times are distinguished by the dominance and prevalence of the "economic-first" way of thinking. In this context, the value of nature is recognised only in the form of individual profit on the way of transforming the world's resources into capitalistic goods and services.

The raw materials used to generate market value are appropriated, while being rationalised as "free gifts". This allows to maintain low financial costs of production at the expense of the biophysical world.

Seeing and treating nature as cheap means that we are constantly witnessing dangerous oil spills, rivers polluted with waste from industrial plants, deforestation of tropical rainforests in favour of palm oil production and many other thoroughly unsustainable actions.

For these reasons, corporations do not bear any responsibility for the effects of global warming, despite the fact that in 2015 224 companies accounted for 72% of all greenhouse gas emissions.

However, climate change is not only the private sector's responsibility. Consumers and even governments have been found to ignore environmental costs.

The crisis is a result of many misplaced priorities. The current model of economics means that we are constantly gaining speed on the inevitable rush towards disaster. It is therefore necessary to alter the current definition of development in order to secure a sustainable future.

"Anyone who thinks that you can have infinite growth in a finite environment is either a madman or an economist."

sir David Attenborough

Ecological alternatives

Current approaches to defining the challenges and solutions to climate change need to be rethought. What alternatives are there?

POSTHUMANISM

One of the proposals for change is posthumanism. Researchers developing this doctrine believe that it is crucial to take a new look at the concept of man, or completely abandon its definition. Attention is focused on the need to put man back in the position of a mere part of nature. For example, philosophers note that 57% of the cells in the human body are not human, but bacterial. They also emphasise that space exploration would not be possible only thanks to man – in planning such projects, it is necessary to take into account all elements of nature that take part in survival. Emphasising these dependencies is to help move away from man's self-centredness and separation of social life from nature.

NEW ECONOMIES

A proposal slightly more pragmatic are projects aimed at reformatting the current economic model. This can be done e.g. by changing the way we think about development. One interesting alternative is Kate Raworth's concept of "donut economy".

Yet another idea is to change the economic social vocabulary and popularise phrases aimed at changing the paradigm, such as:

– last chance scenarios,
– cooling of economies,
– post-work,
– investments in fair emission technologies,
– concept of closed circuit,
– circular economy.

According to sociologists, using a new language is a way to create a new, different reality by provoking systemic change.

LET'S ACT NOW

There are certain initiatives that can be taken within the existing social order. According to some researchers, a good solution would be to burden the companies that contribute most to the deepening of the greenhouse effect with the costs of natural disasters. Private entities whose activities are associated with high CO_2 emissions would be forced to pay compensation to people affected by the effects of floods, droughts, hurricanes and other extreme weather events.

In 2021, we witnessed a breakthrough in the field of legal discussion about climate change – the proposals, so far hypothetical, have been reflected in reality. On 26th May, a Dutch non-governmental organisation Milieudefensie (Friends of the Earth Netherlands) won a lawsuit against the oil company Shell. The court found that the company violated human rights by deliberately acting against international climate goals. According to the judgment, Shell is obliged to reduce emissions by 45% by 2030 compared to their level of emissions from 2019.

Sources: Gajewska (2011); Bakke (2019); Bendyk (2021); Bińczyk (2020); Sanchez, Nicholas (2021)

LATA DWUDZIESTE

III Social deadlock

INTERPRETING SOCIAL PASSIVITY IN
VIEW OF DISASTER

LATA
DWUDZIESTE

Approach 1

THE CRISIS OF HUMAN HISTORY

Previous investigations show that socially grounded attitudes are the source of climate change. Understanding and addressing the effects of this crisis requires both a cultural change and redefinition of social priorities, as well as a new way of narrating climate change – one that will undermine the duality of culture and nature.

Humanity is not ready for the consequences of climate change. Despite the knowledge about global warming, which dates back to the early 19th century, so far no action that could effectively prevent its effects has been taken. Why?

One possible answer is the humanistic assumptions established in Western culture. Until recently, the aforementioned division of reality into culture and nature was completely dominant in the historical sciences, and the traditional way of understanding reality meticulously separated the history of nature from the history of man. Social scientists have so far relied on the assumption that the subject of historical study is what has been conceived by mankind. In this view, people are able to describe only the reality which they crafted themselves, while nature, a divine work, is not liable to analogous terms.

In the traditional sense, social history and natural history run parallel to each other. Climate change is forcing us to radically alter this conviction – both axes are directly related to each other.

Historians focused only on those events from the past which were invoked by human decisions. Nature was thus seen as a stable background for social events taking place in the foreground. An additional obstacle was the belief that humanity's actions do not affect nature. Until recently, it was believed that regardless of the significance of a historical event's impact, nature would remain intact. Meanwhile, as a result of the development of technology and The Industrial Revolution, people gained the status of a new geological force.

According to some historians, the brain should become one of the key tools in the fight for a more sustainable future. However, as the human history of recent centuries is centred around interchangeably questioning and pursuing freedom, the tool of choice in most modern societies is politics, which as per Chakrabarty, "has never been based solely on reason."

It is easier to address the isolated, experimental effects of climate change, than to respond to the entire structural context – that's why governments usually act symptomatically. This problem is easily noticed when looking at individual initiatives. Chinese authorities are building a concrete breakwater on the coast of the Shengli Oil Basin (less than 400 km south of Beijing) to protect oil production from rising sea levels. This phenomenon is the result of climate change, which in turn is the result of burning fossil fuels extracted, among others, near the coast in question. The above project is therefore of a temporary nature in its very core.

Source: Chakrabarty (2014)

Approach 2

ANOMIE* AND COMPETITIVE NARRATIVES

Anomie - a social condition defined by an uprooting or breakdown of any moral values, standards or guidance for individuals to follow (Wikipedia).

Discontinuing focus on the historical perspective leads to a dynamic process of modifying the obsolete norms, which in turn results, inter alia, in a widespread rejection of science. Instead, many competing narratives emerge, introducing communication chaos. This means that there is no final version and consensus on the key definitions regarding climate change – making it ever so hard to set common goals and take organised action.

The discourse's decentralised nature is further deepened by social media. The Internet blurs the traditional threshold between content producers and consumers – currently, everyone can be both a recipient and a creator of information. This led to deepening public distrust of science, which was used in the 20th century to create nuclear weapons, making it more vulnerable to criticism in anti-Enlightenment narratives.

Another factor affecting the lack of authority of scientific findings is the deliberate anti-scientific activity of private entities. A few decades ago, large oil companies began to undermine the authority of science in areas where knowledge came into conflict with generating profit.

Disinformation projects were carried out to fuel the belief in the inconclusiveness of science on the issue of climate change.

The media also face a fair share of criticism for spreading similar inconclusiveness. Climatologists note that appearances of people who maintain different levels of competence within a given topic in popular science programs, where they are commonly tagged as experts, help the recipients build a belief in the comparable quality of the information they consume.

Polarisation on the political scene should also be added to these phenomena. Therefore, multiple media materials regarding one specific event, but published on competing platforms, present it from radically different perspectives. This tendency makes reality seem to exist only in the context of a certain biased narrative, while fact objectivity slowly fades away.

"The present day has become [...] rapid, stuffed with content, images, information – in consequence, chaotic, illusory and temporary."

Witold Wrzesień

Sources: Wrzesień (2017); Thompson (2001); Macnaghten, Urry (2005); Cook, Supran, Lewandowsky, Oreskes, Maibach (2019); Ramsey (2020)
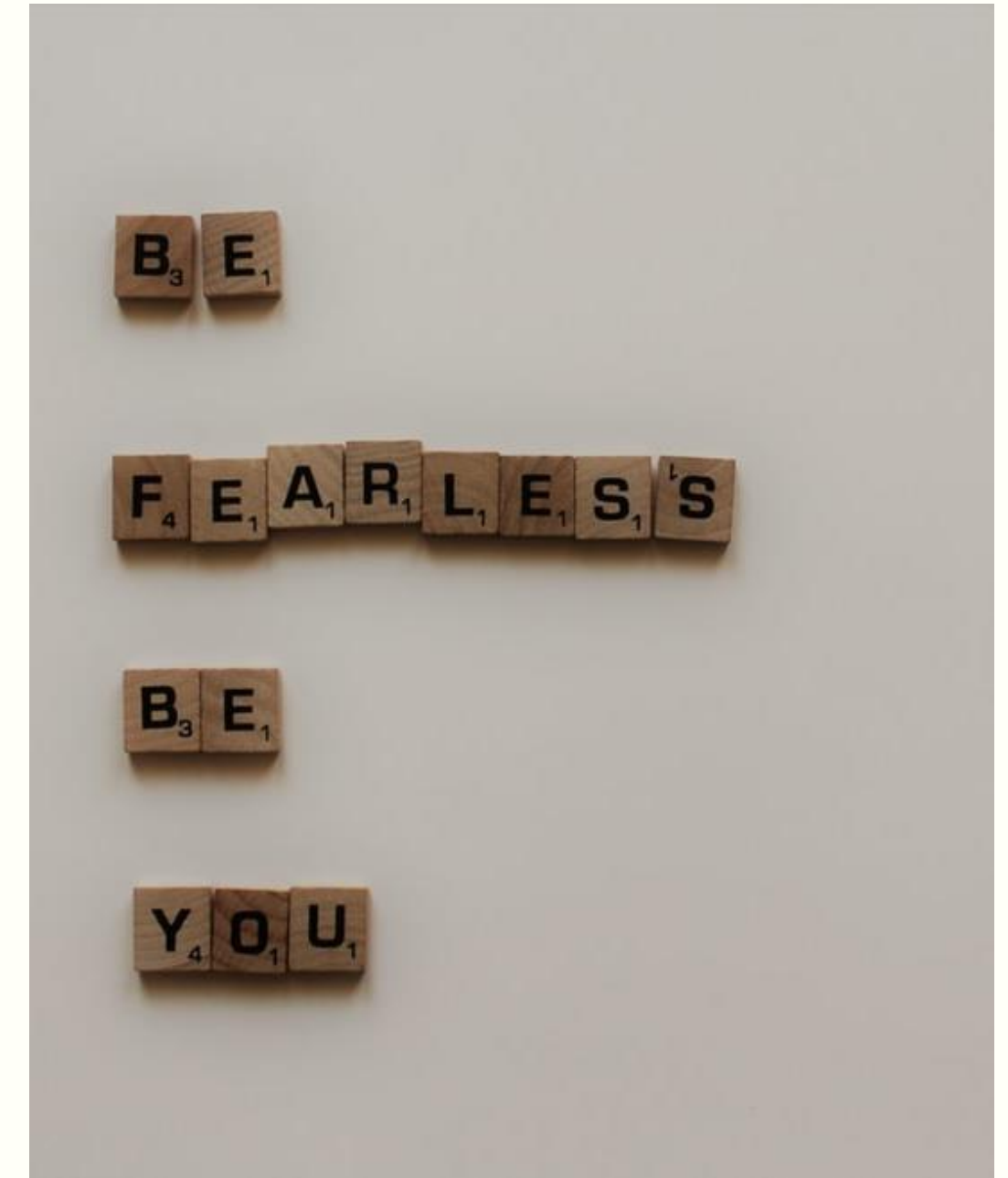
Approach 3

CONSUMER IDENTITIES

One of the main factors influencing climate change is unsustainable consumption. Building an effective response to the climate crisis requires rebuilding the dominant Western lifestyle, while redefining priorities. This is all the more necessary as the West is often mimicked by developing countries. The problem is that the market takes a central position in social life – economic development is much dearer to society than the marginalised natural environment.

Consumerism filled the void that people began to experience after the progressive moral revolution. In the 60s of the 20th century, the idea arose that culture consists of individual component parts, and further that a sufficiently large internal change within those can lead to a general systemic change.

This process, among other things, gave birth to the lifestyle-advertising market. Advertisements based around the customers' subconscious belief that choosing a given product will allow them to become a better version of themselves have gained popularity. Thus, objects began to play a significant role in the moulding of an individual's identity.

More sustainable consumption therefore seems less attractive to Western consumers – it threatens their habits and comes into conflict with their aspirations.

What's more, social risk is considered primarily through the factors that are capable of threatening the dominant identities in a given society. The risks therefore do not relate to the physical dimensions of climate change, but to the potential need of transforming the up-to-date hierarchies of values. In other words, we fear more about our lifestyle than about the ecosystems that guarantee it.

Sources: Adam Curtis (2002); Baudrillard (2006); Wise (2017); Macnaghten, Urry (2005); foto: unsplash.com

LATA DWUDZIESTE

Approach 4

CLIMATE CRISIS AS A CRISIS OF IMAGINATION

The idea aims to support the global ecosystem and enable the restoration of biodiversity in areas affected by human activities.

The current business approach, represented, among others, by Bill Gates in his book "How to Avoid a Climate Disaster", overlaps with the perspective of environmentalists: it assumes the necessity of certain technological breakthroughs while subsequently rejecting the discussion about changes in the economic development model.

Environmentalists and social scientists are not holding back on expressing their belief that the climate crisis is a crisis of imagination. Sociologists note that in works of popular culture we very often deal with so-called capitalist realism – a well-established belief that the current way of organising the world is non-negotiable. Capitalism – regardless of the fictional nature of a given film or book – is the starting point for all the social relations presented.

This reasoning becomes easily understandable when placed in the context of specific examples from life. Reforestation is a futuristic architectural project that assumes the construction of high, multi-storey, vertical buildings, consisting of concrete and structural cables, which would reproduce the physiological functions of trees.

Marcin Popkiewicz, co-author of the book "Climate Science", notes that the essential changes can be carried out without disturbing capitalism – it is not necessary to experiment with completely alternative social realities. What is required is the introduction of regulations and a change in the current economic liberalism. Profits should also be sensibly reduced in order to organise the economy in a more sustainable and environmentally sound way.

Everything seems to indicate that in the absence of readiness to change the development scheme, we are forced to implement futuristic technological solutions (requiring even greater exploitation of the natural environment in the implementation phase) or, somewhat alternatively, prepare for the end of the world. Just like in films – either the planet is heroically saved, or it faces a great catastrophe. No half-measures.
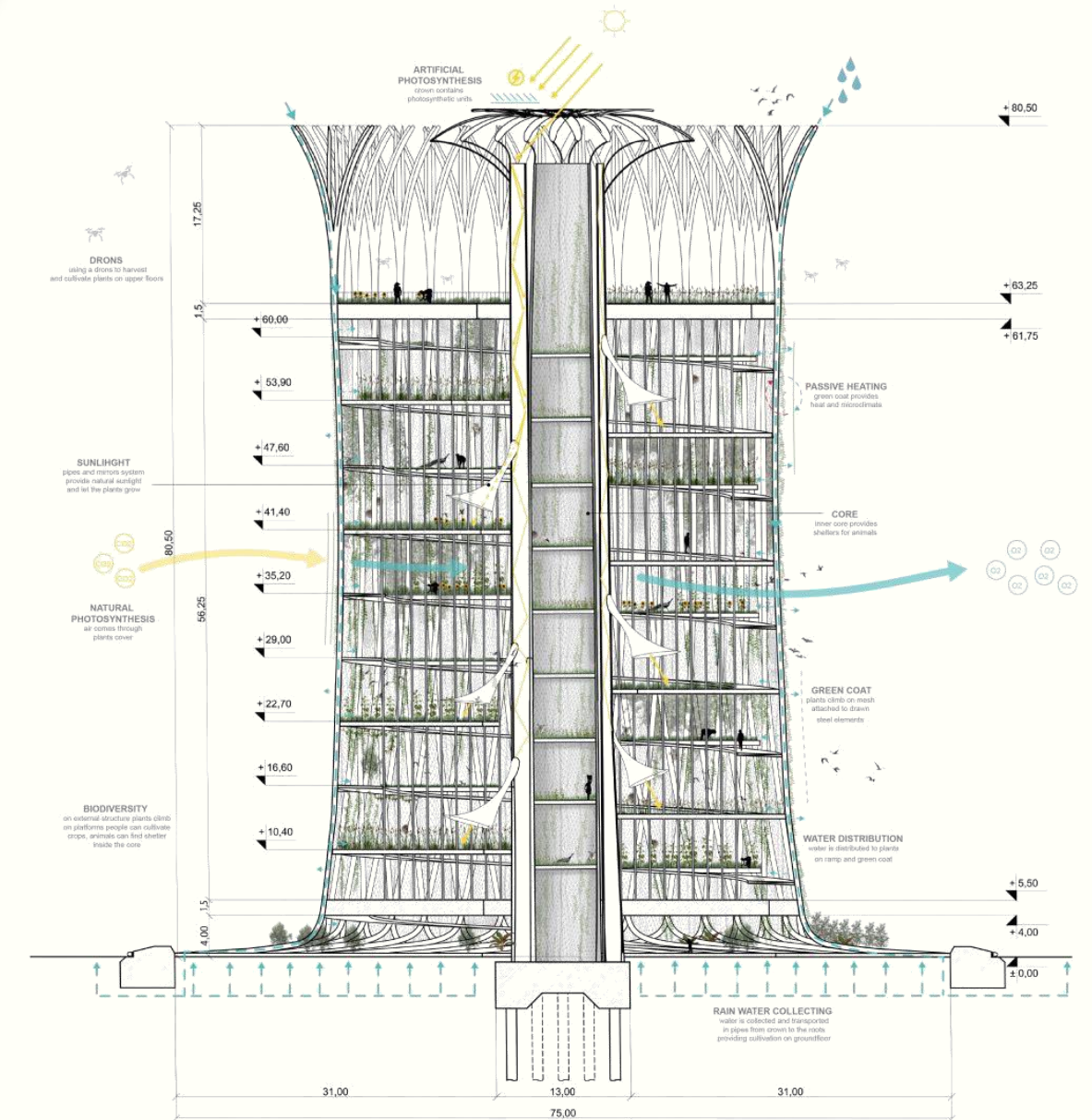
Sketch from the reForestation project – this is what ecosystem "tubes" would look like

In reality, there is a whole spectrum of possible scenarios for the future. Both ecological utopias and dystopias are certain indications in relation to which the best path for action can be determined. We are not dealing with a single climate disaster, but with its many possible versions. The version we will eventually face depends on the nature of the actions taken socially.

IV Discourse analysis

WHAT DOES THE MEDIA SAY ABOUT
CLIMATE CHANGE?

LATA
DWUDZIESTE
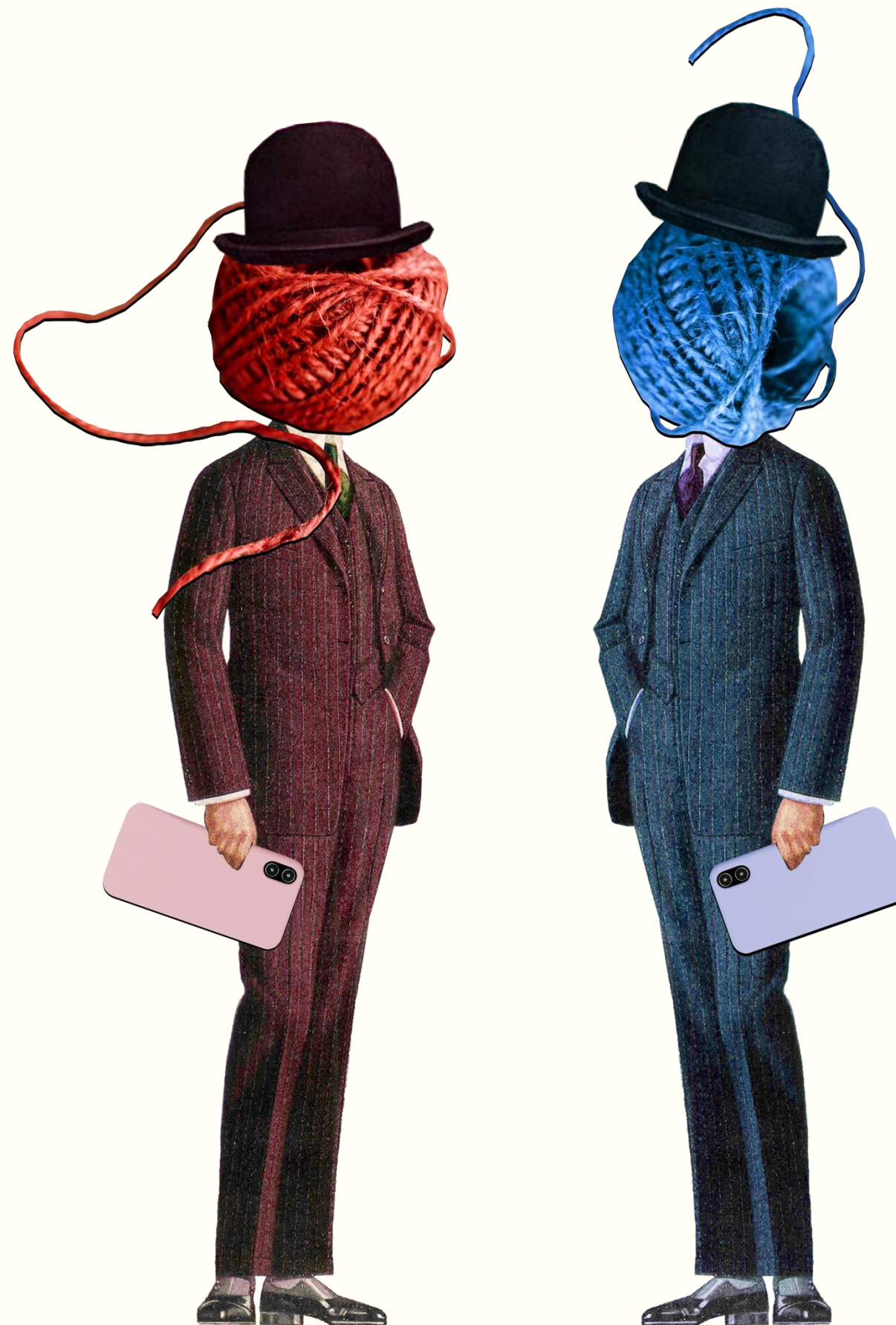
Research assumptions

CLIMATE CHANGE IN WESTERN CULTURE

The main goal of the study was to capture the way climate change is communicated in Western culture's dominant discourse. The intermediary goals were: to locate the primary threads of the story about climate change, to find factors and phenomena that have an exceptionally strong impact on the social imagination, and to verify the hypothesis regarding competing narratives built around the discussed problem.

Within the studied discourse, it was examined how it includes the dualism of climate narratives and key diagnoses from the scientific world, which emphasise the need to reconstruct social priorities, the shape of the economy and the change of cultural paradigm.

The study analysed articles on climate change published on the five most widely read, English-language (online) news pages*:

BBC – 1319 million hits per month,

CNN – 838 million hits per month,

New York Times – 433 million hits per month,

Daily Mail – 375 million hits per month,

The Guardian – 347 million hits per month.

TESTED PLATFORMS:

BBC   CNN

The New York Times

Daily Mail   The Guardian

NUMBER OF ARTICLES:

17 458

NUMBER OF TOKENS (words/text units):

18 706 950

TIME RANGE:

1.04.2016 – 31.03.2021

LANGUAGE SELECTION

The choice to study English-language platforms is due to the fact that it is the most widely used language in Western culture. It is the native language for 379 million people, while 753 million use it as a second language. What's more, 25.4% of Internet users use English.

SELECTION OF ARTICLES

The study used articles published over the past five years – starting with the second quarter of 2016 up until the end of the first quarter of 2021. Such a time perspective allows tracing the most important threads and modifications in the new discourse on climate change. The threshold marking the birth of the most up-to-date stream of communication of the discussed phenomena is the date of signing the Paris Agreement to the United Nations Framework Convention on Climate Change (22.04.2016) – an expression of recognising the importance of the problem at the transnational level.

TEXT DATABASE

The articles were downloaded in an automated way using a web-scraping program written in Python for the purposes of the following analyses.

*Data on the number of entries are from December 2020.

LATA DWUDZIESTE

Shape of the discourse

DUALISM ON PAPER

The chart above serves as proof that discussions regarding climate change are not just about the changes themselves. They are one of the main areas of interest of the platforms researched, but the entire narrative is much more complex. In order to accurately comment on the environment and its threats, it is necessary to analyse the key elements of social life.

It is also worth noting that social and environmental topics are not directly related. Slogans referring to the environment (marked in red) rarely penetrate the "social" group (marked in blue). Thus, the two key dimensions of the discourse split the studied narrative in half. It is similar for the media and scientific sources, where both topics are rarely discussed at the same time.

WHAT IS THIS?

The network graph shows 2000 most frequently used words in all analysed articles. The size of each node (point) depends on the number and weight of relationships a given phrase forms with others. The colours of individual fragments of the chart, on the other hand, represent different thematic groups, built according to the modularity indicator – it allows you to distinguish groups of words that are particularly often adjacent to each other. The chart on the right singles out the phrases "climate" and "change".
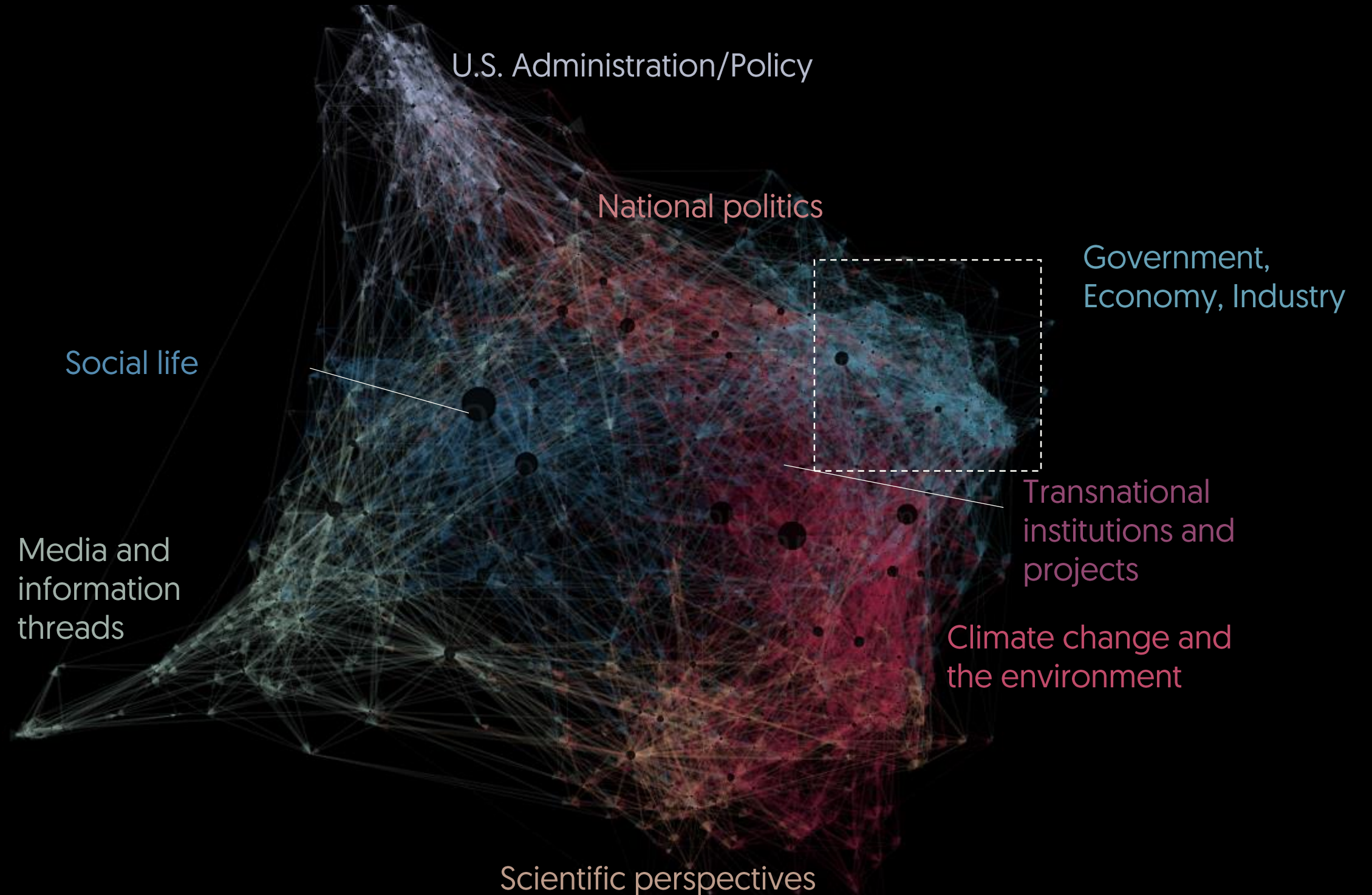
What ties us to the climate?

THE MAIN CONFLICT OF INTEREST

Phrases from a text set can be combined into clusters, i.e. thematic groups, which are represented on the chart by different colours. This way, we can pinpoint the link between climate issues and social life.

Climate dimensions (atmospheric changes and their consequences) and social dimensions are connected by two phrase clouds. The first concerns political issues, the second – scientific ones.

Noticeably more words and connections are in the bright blue group of phrases that address political, economic and infrastructural topics. Many smaller subgroups can also be noticed. One of them covers industry, emission reduction and renewable energy sources. This relates to energy and raw materials, showing physical and direct links between human activity and the climate crisis. To a large extent, attention is paid to the problems of efficiency and various forms of exploitation of the planet.

This part of the graph also illustrates how key conflicts of interest are understood. On one hand, we have pro-ecological activities, zero emission targeting or direct threats to humanity resulting from progressive climate change. On the other hand, we can point out the role of lobbying and key players of the fossil fuel market (mainly Shell and Exxon), thoroughly embedded in the topic of global warming.

U.S. Administration/Policy

National politics

Government, Economy, Industry

Social life

Transnational institutions and projects

Media and information threads

Climate change and the environment

Scientific perspectives

WHAT IS THIS?

This is the same chart as on the previous page, but this time divided into the most important thematic groups. The part of the discourse discussed on the slide is marked with a rectangle.
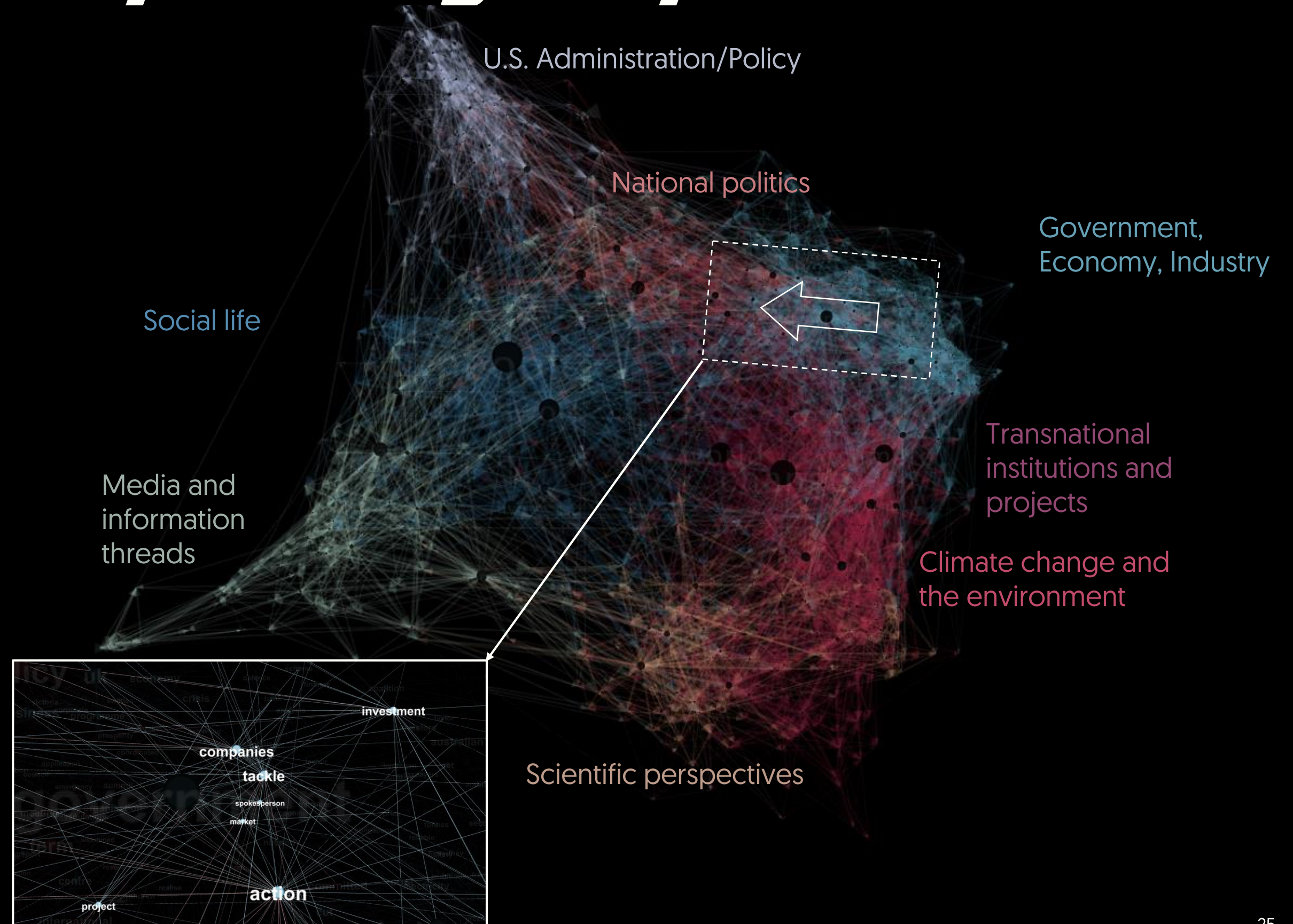
LATA DWUDZIESTE

We are defined by self-agency

ECONOMY GENERATES SOLUTIONS, NOT THREATS

Within the political thematic cloud, a certain correlation is distinguishable. The further we move away from environmental issues towards a cloud of social issue-related phrases, the more frequent optimistic prospects become. At this point, the narrative focuses on government institutions, investments, and plans. They are related to technologies, organised activities and programmes in the context of expansion or guarantee of development. These phrases are adjacent to the category of future, which is one of the most important node phrases. The economic context also appears quite often – it refers to companies, investors' economy, the financial sector and the market. At this point, we talk about agency, not about degradation. This means that the current shape of the economy does not come into direct conflict with the need to fight climate change. Where opportunities are seen – rather than threats – business and economics are more connected to prosperity and development. This is best illustrated by phrases such as "investments", "economy", "companies", "action", "transformation" or "prosperity" being direct neighbours on the chart.

U.S. Administration/Policy

National politics

Government, Economy, Industry

Social life

Transnational institutions and projects

Media and information threads

Climate change and the environment

Scientific perspectives

investment

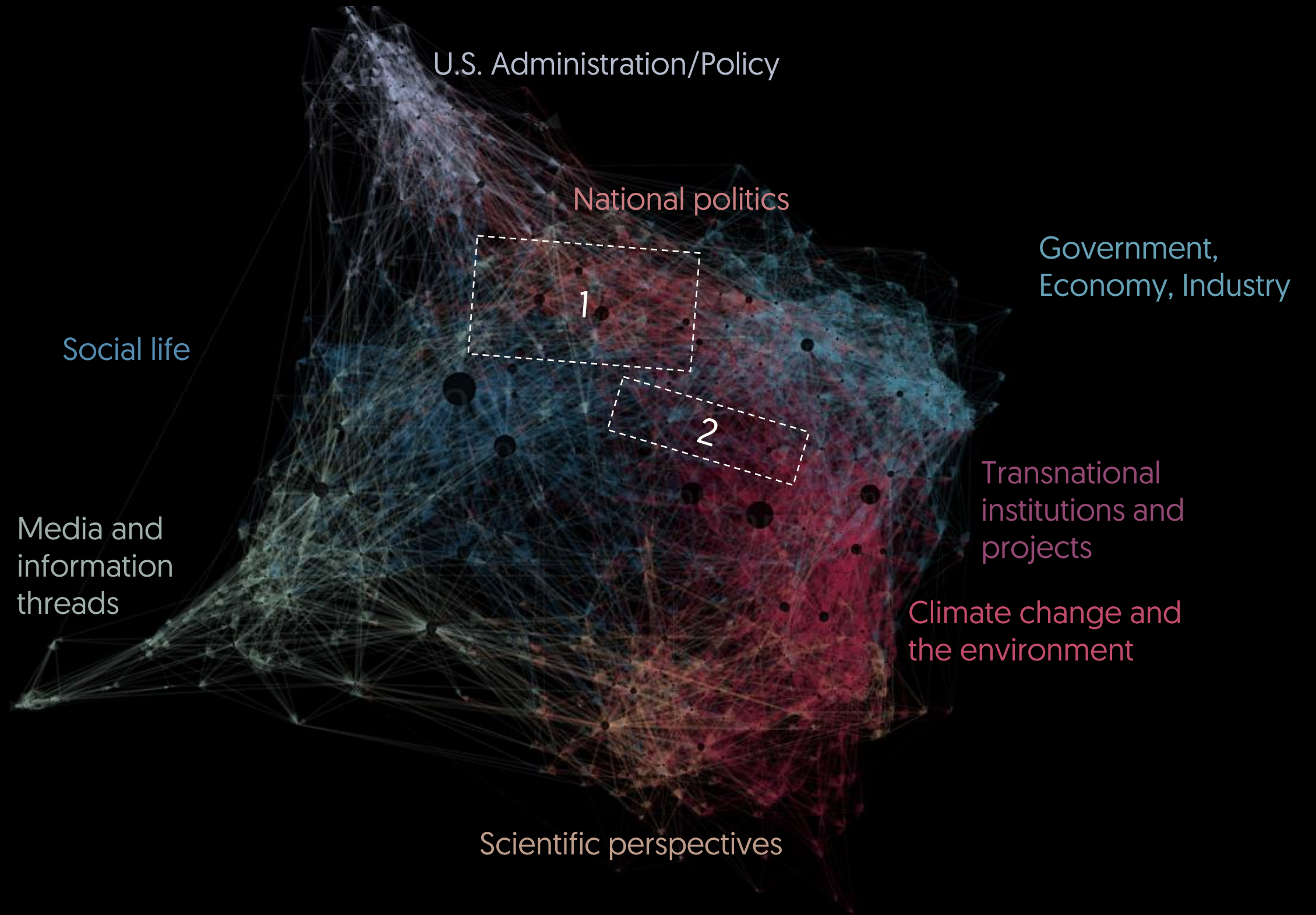companies

tackle

spokesperson

market

action

project

25

Politics and transnational institutions

NATIONAL POLITICS AND THE SCIENTIFIC IVORY TOWER

Government topics smoothly blend into a group of phrases even more directly related to the social dimension (in the graph, area 1) – it refers to national and administrative issues. Here, topics related to the activities of the main political leaders and members of the government, whose main tools are specific legislative solutions, regulations and taxes, are primarily discussed. There are also categories of joint effort, cooperation and negotiation that can lead to reforms and changes. The discourse also shows the phrase "ideology" – it is mainly related to local and national politics, which confirms the hypothesis according to which people use politics to express themselves in the social dimension.

Industrial, governmental, and national topics are intertwined with a less visible perspective that focuses on transnational actors (area 2). Climate threads are bonded with institutional threads using global tools, such as various agreements, climate conferences, globally implemented projects and arrangements concluded between individual countries.

This theme, although it can be seen as part of social agency, does not seem to concern working inhabitants of Western societies on a daily basis. This topic is discussed with a certain distance – making decisions is left to people higher up the social ladder.

U.S. Administration/Policy

National politics

Government, Economy, Industry

Social life

1

Media and information threads

2

Transnational institutions and projects

Climate change and the environment

Scientific perspectives

Scientific reality

THE LEADING PESSIMIST OF PUBLIC DISCUSSION

The second (after the government narrative) key mediator between environmental degradation and social reality is the world of science. However, society is not as familiar with this area, treating it at most as an extension of environmental topics.

A deeper analysis of the phrases appearing in this thematic group indicates that the studied media primarily show the perspective of science, focusing on the physical dimensions of climate change. You can find entries referring to natural conditions, species, wildlife, population, habitats or survival.

Interest in environmental disasters is particularly evident, mentioning floods, hurricanes, storms, cyclones, droughts, rising sea levels, a decrease in agricultural productivity or the loss of biodiversity. Combining scientific and infrastructural perspectives results in references to deforestation, fires and threats presented in a more general and abstract way, such as devastation, pollution, catastrophe or destruction.

It is worth paying attention to how scientific concepts are combined with the word "human". In this context, climate change affects humanity as a species, while the more social category of "people" is less directly related to the natural environment.

Climate change affects us only when we think of ourselves in biological terms. Everyday social life flows according to other principles, with "its own laws of physics".

In the discourse, there are also issues directly related to its media nature. This will not be further elaborated in this report, as it results directly from the selected research material (the key here are phrases characteristic for articles such as "said", "revealed", "added").

U.S. Administration/Policy

National politics

Government, Economy, Industry

Social life

Transnational institutions and projects

Media and information threads*

Climate change and the environment

Scientific perspectives

*In the discourse, there are also issues directly related to its media nature. This will not be further elaborated in this report, as it results directly from the selected research material (the key here are phrases characteristic for articles such as "said", "revealed", "added").
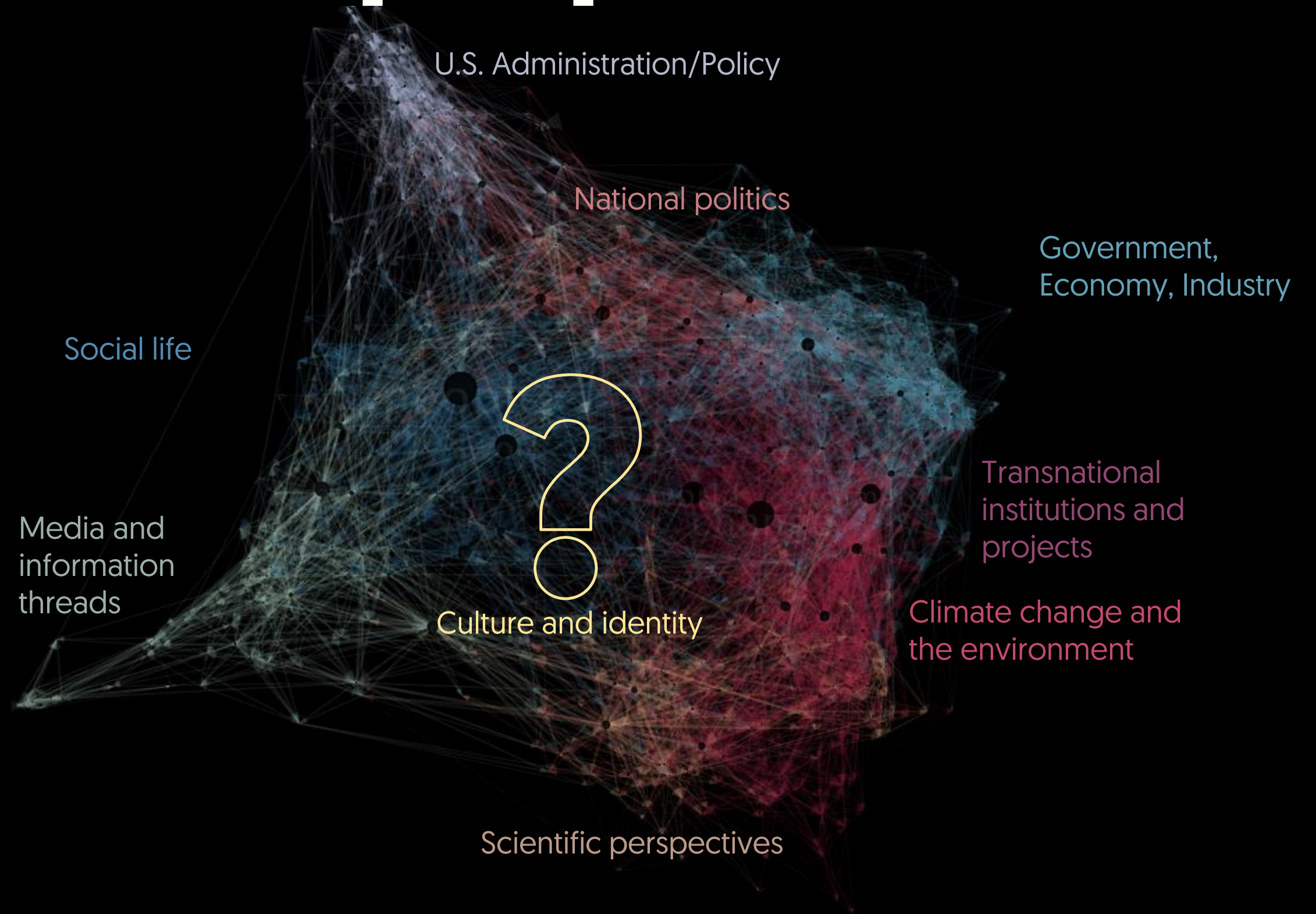
LATA DWUDZIESTE
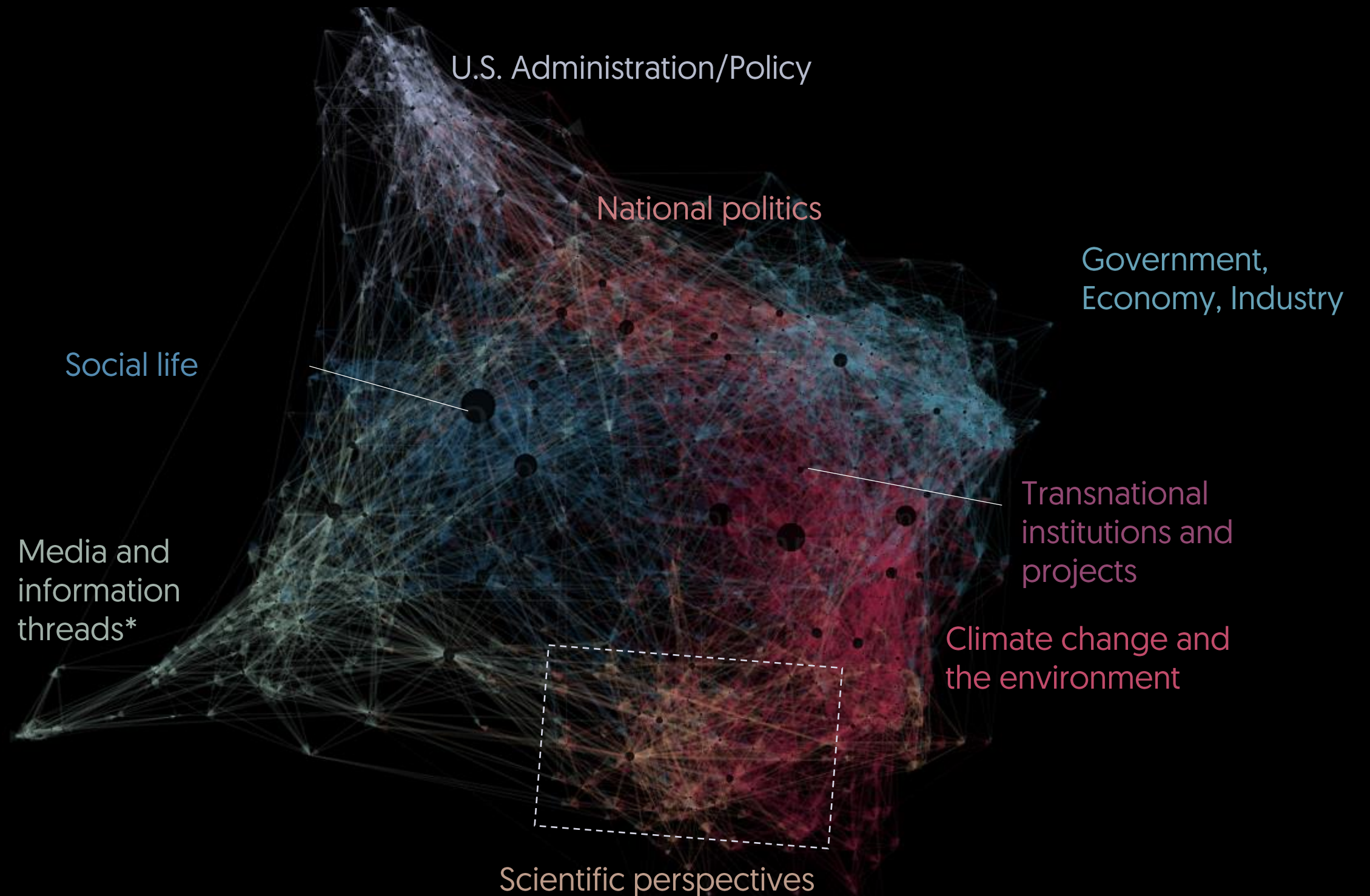
What about the cultural perspective?

THE CULTURAL PERSPECTIVE IS CURRENTLY MARGINAL

Viewing the problem via cultural and identity terms seems to be an approach less present in the prevailing media perspective, and therefore remains unnoticeable in the illustration.

The conclusions of social ecology characterised in the theoretical part are not a key theme in the analysed corpus. An individual trend pointing to the impact of new ways of thinking about social organisation is the embedding of slogans of consumption and growth in the context of both environmental degradation and uncertainty of the future. Another one is the function of diet as a geological factor influencing climate change.

This could also be indicated by the emerging postulate of systemic change (the phrase "system" connected to the "change" node). The sociological perspective seems to affect social imagination, facilitating the understanding of the multidimensional nature of the issue. At the moment, however, it does not create a coherent thematic group in informational materials. It is presented fragmentarily in various contexts of the discourse.

U.S. Administration/Policy

National politics

Government, Economy, Industry

Social life

Transnational institutions and projects

Media and information threads

Culture and identity

Climate change and the environment

Scientific perspectives

LATA DWUDZIESTE

Social self-defence

SOCIAL MOVEMENTS IGNORE TRADITIONAL NARRATIVES

The government and science, despite their clear dominance in this area, are not the only links between society and the environment. Clearly less abundant, but forming a coherent thematic group, is the cloud of phrases associated with social movements.
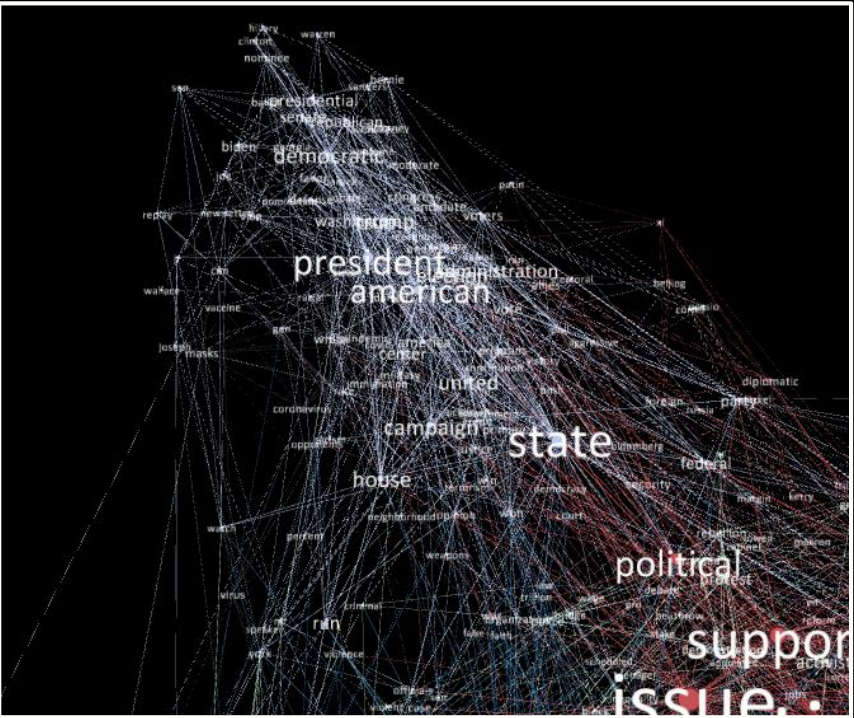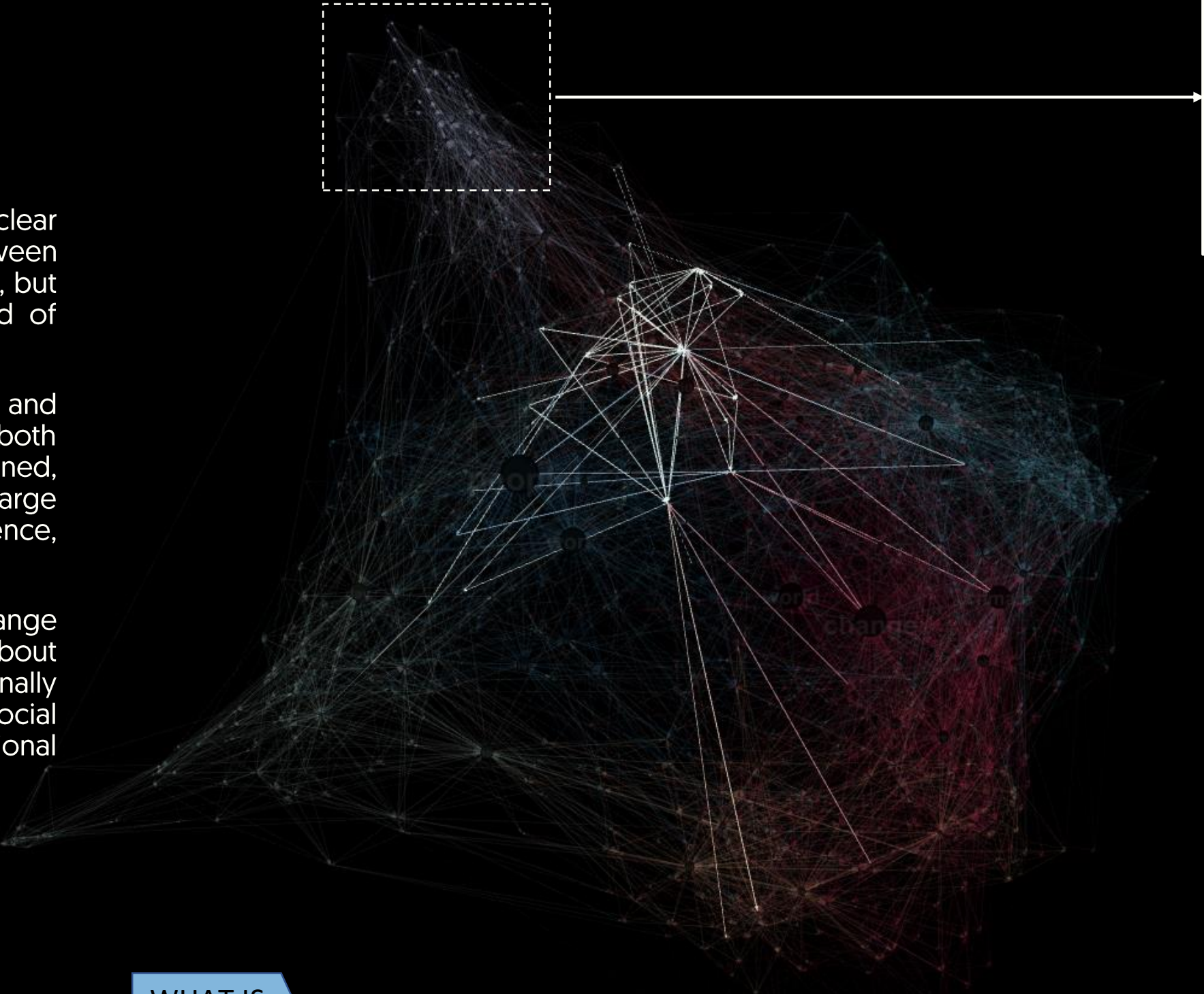
As you can see in the chart, this group links social and environmental themes, consequently integrating both these dimensions. Importantly, these phrases combined, albeit their small numbers, comprise a very large thematic scope. They refer simultaneously to science, climate, industry, government and social reality.

It seems that grassroots responses to climate change play the role of bypass – when communicating about climate change, they omit institutions traditionally mediating between natural reality and society. Social movements choose to somewhat ignore traditional categorical boundaries.

AND AT THE OPPOSITE END…

The opposite of social movements are thematic groups referring to the USA or the royal family of Great Britain, which are isolated from other phrases. There are numerous slogans referring to the American presidential election, the US administration, the Democratic Party, Donald Trump, Joe Biden and other key politicians of the country. This topic is the product of national and social issue and is at the opposite end of the network graph in relation to environmental threads. It is possible that climate issues are treated as a background for political events or as an argument in key debates.

WHAT IS THIS?

A network chart with phrases belonging to a small thematic group – social movements – are marked. In this subset, the most important phrases are "movement" (social), "activists" (Greta Thunberg), "youth", "extinction" (referring to both extinction and Extinction Rebellion) and „protests".

What does this imply?
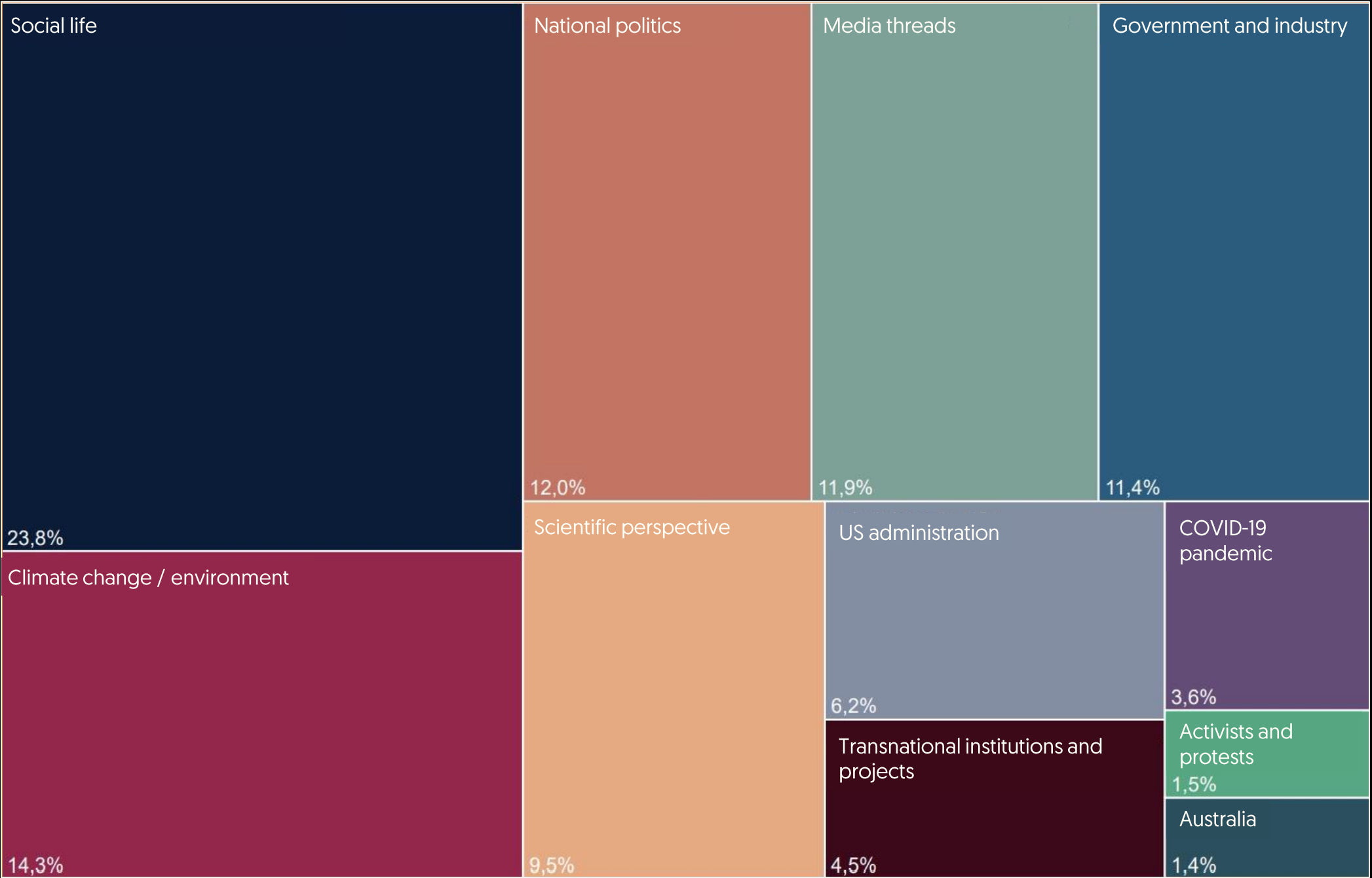
TRAPPED BY THE SOCIAL NARRATIVE

Systemic changes related to climate change, including social and institutional movements, international agreements and scientific methods, occur much more frequently on a global scale than on a regional scale. Despite this, it is worth noting that the more familiar a smaller community is with climate narratives, the more important prosperity, development or economics become. In general, this is considered a conflict between energy production and the activities of fossil fuel companies and environmental consequences. It also proves how wide the gap between governmental and scientific topics is. The government, the body used to work out solutions – while also making promises of progress and development – is therefore closer to the social world. Science, on the other hand, is more apocalyptic – it touches the environmental consequences of the planetary transformations taking place, less so resonating with the social "everyday life".

WHAT IS THIS?

A "remap" chart containing the share of individual topics among the 2000 most important entries of the corpus (what percentage of the most important entries apply to to a given topic).

SHARE OF INDIVIDUAL TOPICS AMONG THE 2000 MOST IMPORTANT ENTRIES OF THE CORPS

Social life 23,8%	National politics 12,0%	Media threads 11,9%	Government and industry 11,4%
Climate change / environment 14,3%	Scientific perspective 9,5%	US administration 6,2%	COVID-19 pandemic 3,6%
		Transnational institutions and projects 4,5%	Activists and protests 1,5% / Australia 1,4%

Two worlds — two dimensions of the discourse

Social life

Climate change and
the environment

LATA
DWUDZIESTE

Environmental dimension

CLIMATE CHANGE IS TAKEN SERIOUSLY

Analysed verbs are a good indicator of how the stakes of the discussed processes and the actions taken towards them are understood. In the studied narrative, we must address, handle and combat climate change. Among the lists containing the above phrases there are, among others, categories of global effort, the need to take urgent action, joint work or (less often) the fight for climate justice.

All these efforts are necessary in the context of reducing the impact of climate change's effects. Analysis of the most common trigrams* of climate verbs indicates that the changes taking place will affect sea and ocean levels, entire geographical areas, regions and habitats, food availability, and even an entire generation of people. What is more, they will pose a threat to people as well as to the financial sector and business.

Climate change is becoming an urgent matter – scientists and the most important actors fighting the consequences of these changes are having a say in this matter. Climate models and reports are created, international initiatives are undertaken, and postulates of radical or structural change emerge. Apart from the presence of denialists (in the slogans "hoax" or "sceptic"), these are topics that take the subject of global warming seriously.
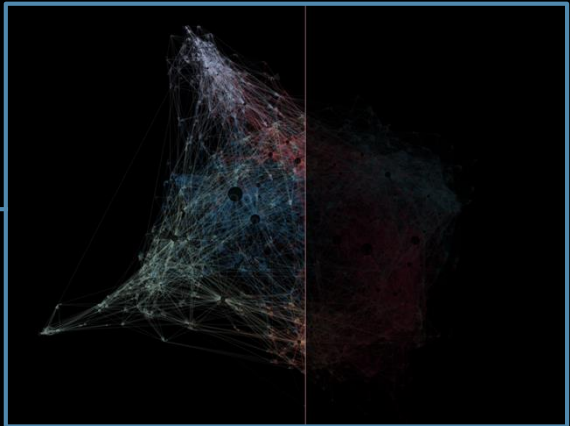

30 collocations with the highest PMI for "climate" and „change"

Group: ● noun ● proper noun ● verb ● adjective ● preposition ● adverb

The size of the combination corresponds to the PMI indicator (the connection between the words "climate" and „change" was visually reduced)

WHAT IS THIS?

A network chart showing the 30 most significant collocations for "climate" and "change". Collocations, i.e. sets of words that form a semantic relationship. In other words, the chart shows the 30 most important (with the highest PMI) two-part summaries for climate change.

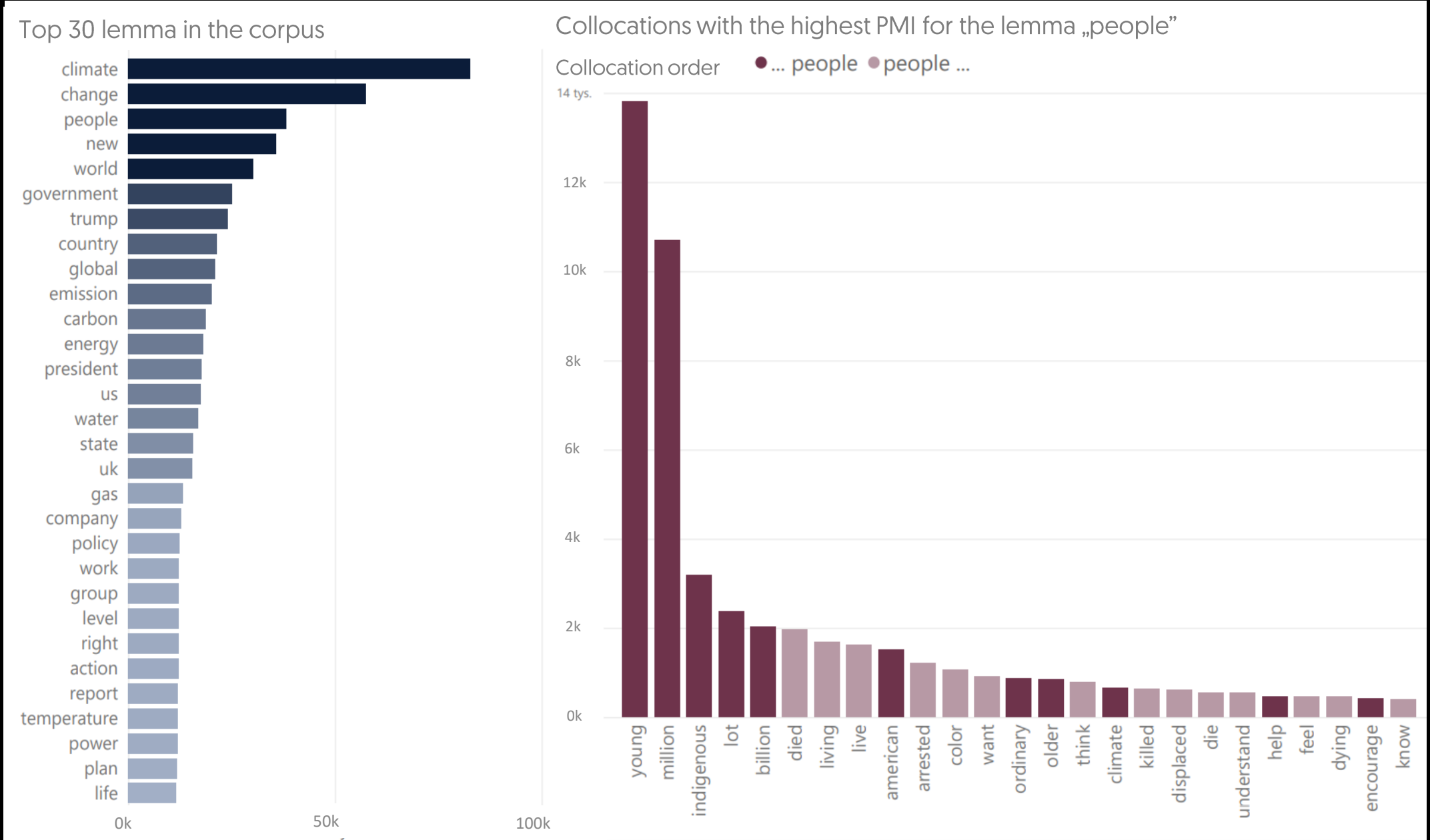*Triple semantic relationships (e.g. "tackling climate change", "taking climate action").

The dominance of topics related to international initiatives and the presence of more structural and institutional attitudes disappear against the background of other threads of the entire discourse. The discussion about climate change is only a fragment of the entire narrative, and its second pillar is social life. Stories about the planet are set in the context of human agency and experience, but the level of interest in climate change depends on the social group. According to the articles examined, climate change primarily affects young people, who on one hand are particularly susceptible to its effects, and on the other hand constitute a group that can take action, express hopes and views, as well as make demands and postulates. Such an attitude may indicate a certain narrative distance to the phenomena discussed, since the effects of disasters are not noticeable in everyday life. The consequences of global warming are to influence mainly the upcoming generations.
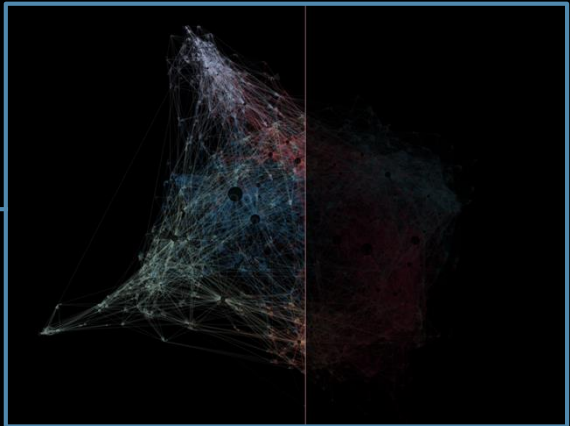
This interpretation is confirmed by the presence of phrases according to which climate change currently directly affects indigenous, poor or disabled people, racial minorities and the elderly, and clearly disadvantaged groups.

People are divided into causative, postulatory and susceptible, i.e. those experiencing the effects of environmental destabilisation. In this view, wealthy working age people of the Northern Hemisphere are perceived as still not threatened, having not yet reached a critical point.


Top 30 lemma in the corpus

Collocations with the highest PMI for the lemma „people"

Collocation order — ... people ● people ...

WHAT IS THIS?

On the left, a frequency chart containing the 30 most important topics (words in dictionary form) of the text set. The phrase "people" is marked, for which the most common co-occurring words are shown (TOP 3 collocations are "young people", "million people" and "indigenous people").

Social dimension

"EVERYTHING IS UNDER CONTROL"

The diversity of solutions, in the immediate vicinity of climate change, is dominated by threads on government and infrastructure topics. 15 of the 30 most common entries, as illustrated by the chart, relate to topics of national politics, industry, or directly to the U.S. administration. The concentration of these phrases gives the impression that, on the basis of information coming from the media, a sense of having control over climate change is created.

The popularity of phrases such as "emission", "carbon", "energy" or "power" indicates that the discourse's primary stream is focused on fighting climate change. It is carried out by changing the degree of emissivity of individual industrial and production branches. In the context of the conflict existing between the current format of development and ecosystem boundaries, the most important are tools that allow to reduce the negative effects of human activity, while continuing the current development model.
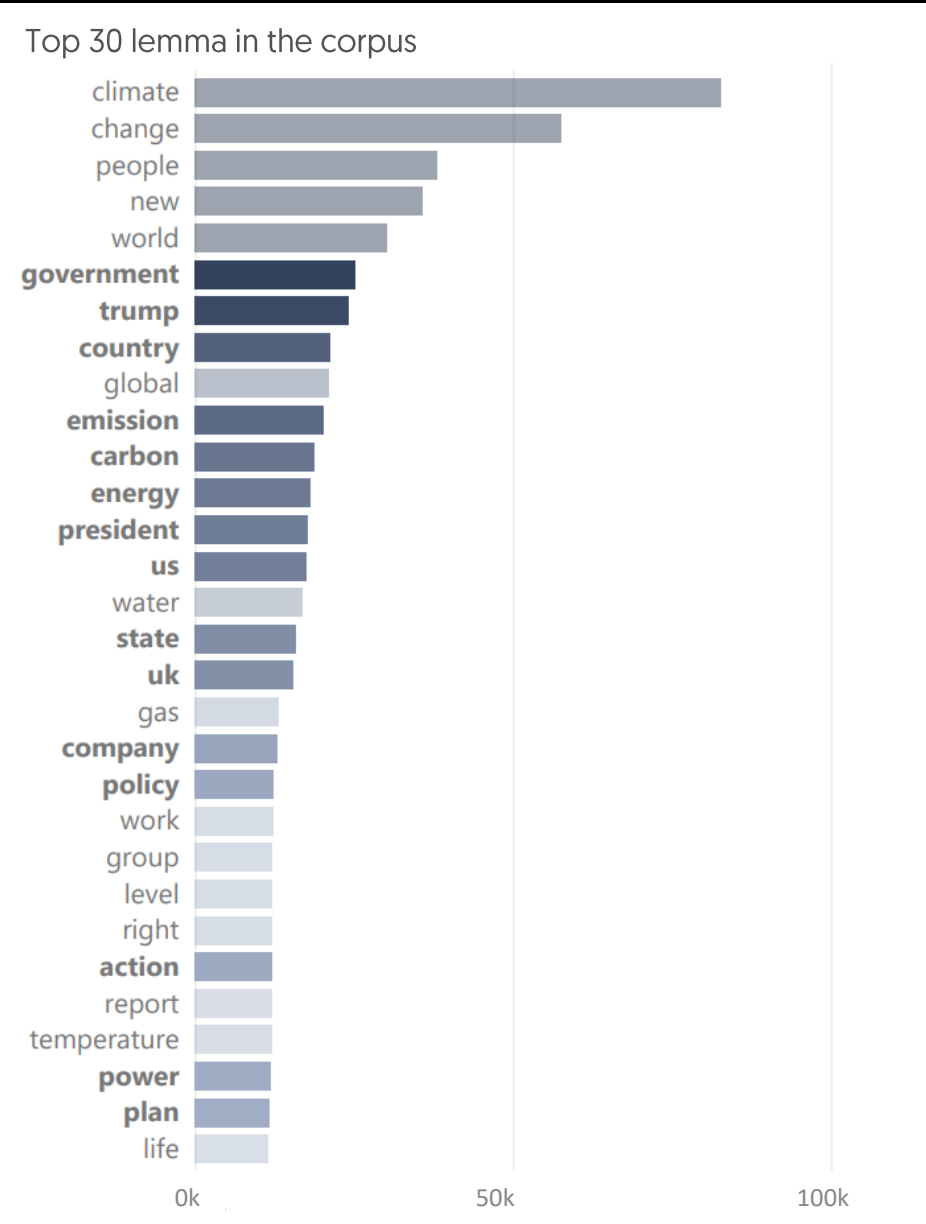
At the same time, this dimension of the discourse, thanks to the popularity of government and administrative phrases, seems to subordinate nature. Despite the fact that the phrase "climate change" was more often co-accompanied by references to tools, organisations and international agreements, the entire corpus reflects higher importance of interests of selected states and entities, and the political solutions they use.

The examined articles on the scale of the entire database (despite the presence of more structural and critical perspectives) are characterised by relatively low coverage of topics directly related to the issue of economic growth.

In the analysed set, the phrase "economy" is classified only around the 140th place.
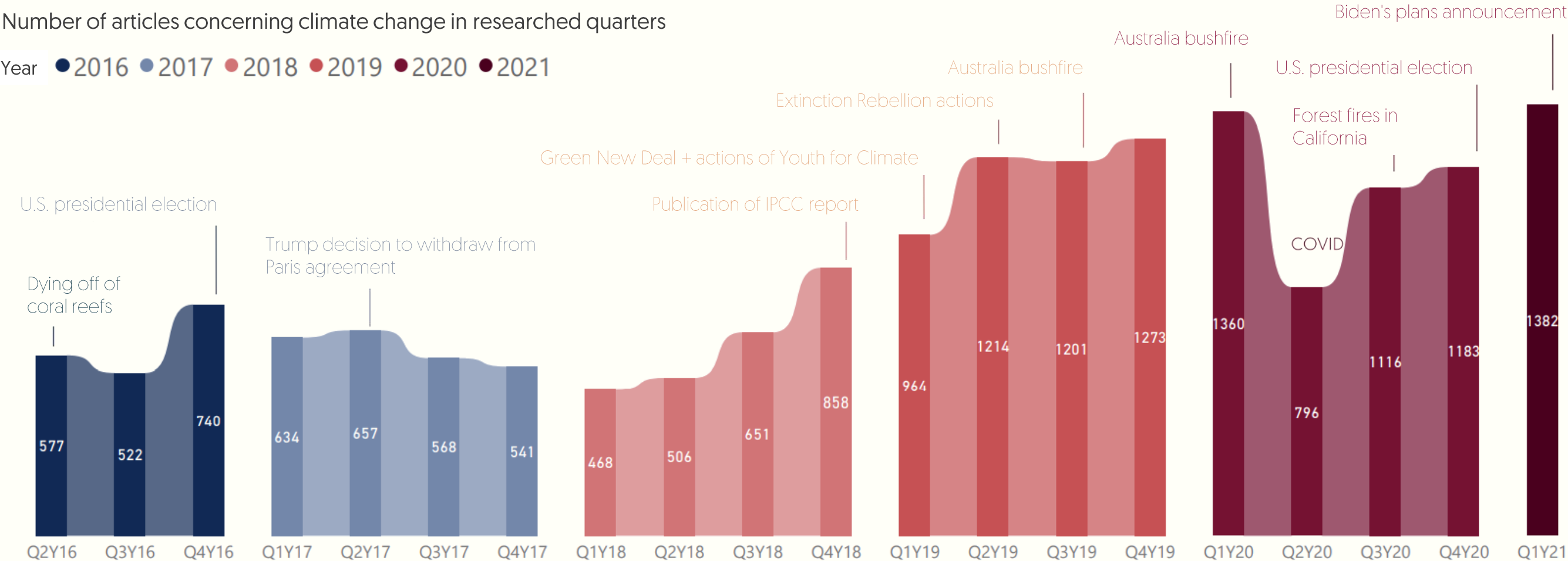

Top 30 lemma in the corpus

WHAT IS THIS?

A frequency chart, containing the 30 most important lemma (words in dictionary form) of the text set. Slogans that belong to thematic groups concerning government, economics, industry, national politics and the US administration are marked.

Changes in the climate change narrative

Research shows that the analysed discourse is fluid and susceptible to both intentional and random processes. A better understanding of the differences between the periods shown on the right and the nature of the changes taking place in the discourse is possible thanks to a comparative tool designed for this purpose. Each quarter has a corresponding list of most frequently occurring words.

This approach clearly shows that climate change is often discussed through specific events, which strongly influence social imagination. Media interest is strongly focused on the current political situation, current activist activities, key social tensions, weather conditions, as well as lifestyle trends. All these phenomena are of a short-term nature, hence the variety of leading entries on the timeline.

Number of articles concerning climate change in researched quarters

Year ● 2016 ● 2017 ● 2018 ● 2019 ● 2020 ● 2021

Biden's plans announcement

Australia bushfire

Australia bushfire

U.S. presidential election

Extinction Rebellion actions

Forest fires in California

Green New Deal + actions of Youth for Climate

U.S. presidential election

Publication of IPCC report

COVID

Trump decision to withdraw from Paris agreement

Dying off of coral reefs

Q2Y16	Q3Y16	Q4Y16	Q1Y17	Q2Y17	Q3Y17	Q4Y17	Q1Y18	Q2Y18	Q3Y18	Q4Y18	Q1Y19	Q2Y19	Q3Y19	Q4Y19	Q1Y20	Q2Y20	Q3Y20	Q4Y20	Q1Y21
577	522	740	634	657	568	541	468	506	651	858	964	1214	1201	1273	1360	796	1116	1183	1382

Current events have a huge impact on the way we communicate about climate change. What is important is both what happens on the social scene – e.g. decisions of US politicians, activist actions, important scientific events – as well as weather phenomena and natural disasters. Social attention, depending on the social context and weather, constantly jumps from one topic to another.

The decline in the number of publications in the second quarter of 2020 proves that the social tolerance for overlapping disasters has its limits. In the face of an unforeseen threat to public health and the need to completely reorganise life, topics of a more distant nature (including climate change) took a backseat.

LATA DWUDZIESTE

The West's ambiguous narratives

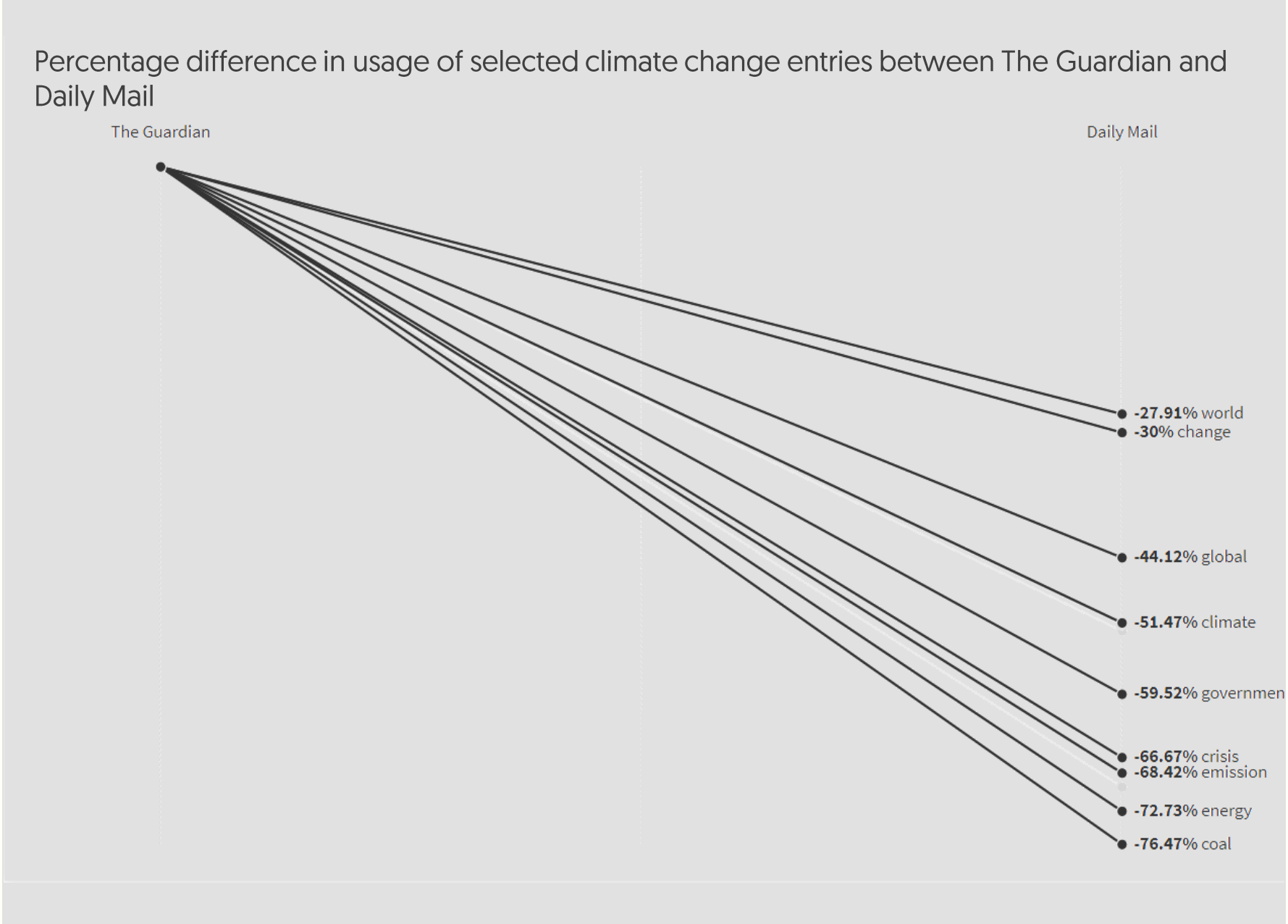**HOW POLITICAL VIEWS IMPACT THE CLIMATE CHANGE NARRATIVE**

One of the key factors shaping the way climate change is narrated is the general world-view of a given media platform. Of the five studied, four can be associated with some ideological bias. Only the BBC remained relatively politically neutral.

CNN vs. OTHERS

CNN's narrative, as an American platform with a strong left-wing bias (according to the analysis of Allsides.com), is clearly focused on polarisation. The term "climate change" occurs here much less often than in the entire database. This somewhat contradicts the common opinion that left-wing media outlets are more involved in the communication of climate-related problems. In this case, current political conflicts they tackle outnumber environmental issues. CNN introspectively devotes attention to the topic of American social tensions, which forces the topic of climate change and joint actions to take a backseat.

THE GUARDIAN vs. DAILY MAIL

The political bias of British platforms is of a different nature. The Guardian's leftism has an ecologically progressive dimension, which is reflected in their journalists' focus on the environmental and structural dimensions of the issue. Above average, they write about climate change, emissions or the need to introduce government solutions and pro-environmental policies. The Guardian, clearly more often than other media, devotes attention to those elements of discourse that characterise the conflict between social and economic development. Thus, it is more likely to focus on climate change. The strongly right-wing Daily Mail, within the indicated criteria, is almost the exact opposite of The Guardian.

Percentage difference in usage of selected climate change entries between The Guardian and Daily Mail

The Guardian

Daily Mail

- -27.91% world
- -30% change
- -44.12% global
- -51.47% climate
- -59.52% governmen
- -66.67% crisis
- -68.42% emission
- -72.73% energy
- -76.47% coal

Alternative narratives of the East

CHINA: POLITICS TAKE OVER THE SCIENTIFIC NARRATIVE

Communication about climate change in China, despite the country's media communication being presented as uniform, varies depending on the nature of the platform in question. More market-oriented media are significantly more focused on showing diverse points of view and dismantling possible conflicts of interest. They do so using sources provided by non-governmental environmental organisations.

Despite the fact that it is difficult to generalise in this case, some leading tendencies can be distinguished in China's media communication. Over the past few years, the focus of narrative regarding climate change has shifted. The scientific perspective was pushed out by the political one, with the government becoming the media's the main source of knowledge about the climate.

The topic of climate change in China is directly linked to tensions in Tibet and the complex relationship with the United States. This may cause the public to perceive the problem in political terms, instead of using science or health categories.

Researchers note that the most important dimensions of climate change discourse today are perspectives of:
– conflict (between individuals/parties/countries),
– cooperation
– focused on collective actions, goals,
– assigning responsibility
– discussing how much scope of activity individual entities have
– social interests
– narratives of experiences and emotions,
– leadership
– commenting on the activities and words of the rulers,
– the environmental and social consequences of climate change.

JAPAN: JUST LIKE THE WEST

Climate change communication in Japan relies heavily on government projects to reduce CO2 emissions, which are particularly popular amongst the Japanese society. Communication about climate change coincides with the results presented in this report. Media coverage of the changes that took place in the years 2000-2016 was highest in certain imagination-stimulating key moments, e.g. after the publication of one of the editions of the IPCC (Intergovernmental Panel on Climate Change) report or after the premiere of the previously mentioned film "An Inconvenient Truth".

Until recently, the lack of participation of Japanese social scientists in research on climate change was associated with how narrow the problem was communicated in public space. At the same time, extreme weather phenomena and the shift of seasons experienced in recent years have caused interest in the discussed problem to increase both in society and in the sociological community.

As part of the discourse, experts are trying to communicate the scientific arguments behind the reports of climate change. However, these activities do not bring the expected results, because they do respond to what people find interesting.

The Japanese society lacks of a nationwide discussion that addresses the social effects of climate change and the explains who exactly may be particularly vulnerable. Therefore, scientific research papers include postulates to include the issues of ethics, justice and bearing responsibility in the discourse.
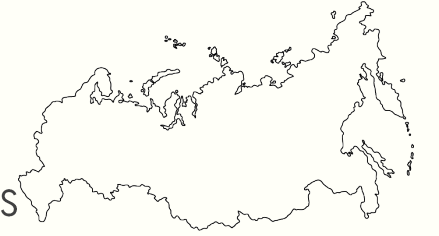
RUSSIA: CLIMATE AT THE SERVICE OF POLITICS

In the Russian media, climate change communication is directly related to national and international politics. While Russia is one of the most important players in the global coal market, its outdated industrial sector needs to be modernised. On one hand, Russia has ambitions to address key problems of the modern world, including climate change, but on the other hand, growing isolation and authoritarianism effectively inhibit the liberty of discussion about them.

For the above reasons, Russia is seen as a country where freedom is threatened, which is, among others, proved by state control over the media. In this regard, the Russian press primarily raises topics related to economics and key political events, without paying special attention to the issues of saving the planet.

In the Russian media, it is much easier to find articles detailing the activities of individual government representatives than publications devoted to key environmental issues.
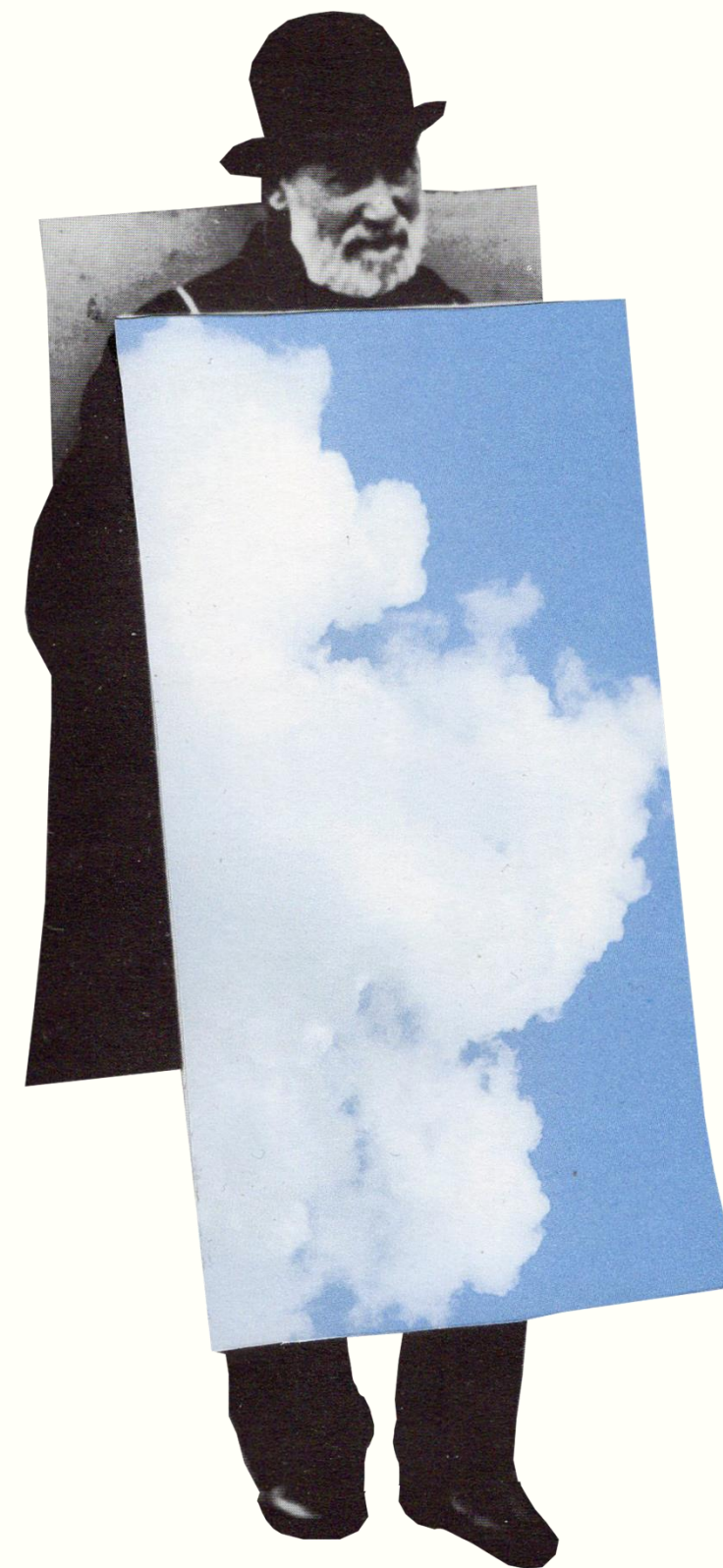
However, this situation has been gradually changing in recent years. The Russian elite is beginning to realise that the introduction of a policy oriented towards counteracting climate change is in the direct interest of the state. There is a real chance that greater interest in this topic at the administrative level will translate into greater coverage in the Russian media, thus raising social awareness of environmental challenges.

Sources: Duan, Miller (2019); Han, Sun, Lu (2017); Aoyagi (2017); Yagodin (2017); Taladrik (2014); Poberezhskaya (2017)

LATA DWUDZIESTE

V Conclusions for business

IS IT TIME TO JOIN
THE NARRATIVE?

LATA
BWODZIESTE

Utilising the gap in the narrative

From a business perspective, the conclusions of the conducted analyses may seem unattractive and impractical, at least at first glance. It may seem that the private sector, as one of the most important actors on the carbon scene, is not the best candidate for the role of the leader in ecological change.

Prioritising profit generation does not make it easier to think about growth in social, more long-term and forward-looking terms.

This forms a mental trap which, if overcome, may prove beneficial both for business and other "players" of the social world. The absence of a cultural, systemic and, colloquially, human perspective in the mainstream discussion on climate change can be treated as an opportunity to discover completely new markets.

Lifestyle advertising has already contributed to shaping a common association between goods and the lifestyle of consumers a few decades ago. Today, more people than ever identify with the demands of environmental NGOs. Addressing the identity needs of a more environmentally conscious recipient, therefore seems to be not only environmentally responsible but also potentially very cost-effective.

Creating products and business models corresponding to the postulates of modern ecological movements is part of the Blue Ocean Strategy – it creates the opportunity to venture into regions offering a very large field for development with relatively little competition.

The potential of introducing more ecological solutions to business models is visible in the huge success of companies such as Vinted, whose application is reshaping the clothing market, while competing with giants from the fast fashion sector. Looking further, the Too Good To Go app allows eateries and stores to sell food that would otherwise be wasted.

Modern digital tools allow you to solve problems and generate profits while maintaining low economic and environmental costs – all you need is the right mindset and communication.

New solutions cannot be based solely on communication. Public awareness of climate change is growing every year, but the popularity of slogans such as "greenwashing" on social media (referring to seemingly pro-ecological marketing activities that do not bring any significant changes for the environment) indicates that the current crisis cannot be solved even with the help of the best prepared PR campaigns.

There is no time to lose - this conclusion comes to mind in the context of the above information. Despite the fact that the trend of introducing sustainable solutions is relatively new, more and more companies are realising the potential of using ecology as one of their business tools. This is clear, for example, in organisations' quest for corporate carbon neutrality or large companies adopting low-carbon start-up solutions.

Introducing environmental initiatives is therefore an urgent issue not only in the context of solving a social problem but also an opportunity. For a company, for a city, for any brand that has the power to influence its customers, users, residents.

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Methodological nuances

ALL ARTICLES, BUT...

The study on climate change communication in the media was supposed to cover all articles on the subject available on the Internet (N=all). However, a preliminary examination of the research field showed that these assumptions are not possible to implement without introducing certain adjustments.

Downloading all articles on a given topic directly from the websites of selected information networks turned out to be impossible, because not all of them contain an archival database of materials that can be freely searched. For example, the BBC search engine shows only about 290 articles on a given topic, some of which are the latest publications or those that most accurately correspond to the entered query. Other portals' archives turned out to be more complete, but after a deeper analysis of the articles available at the search engine level, it turned out that not all published materials are present in the online collection.

A search for the phrase "climate change" followed by a journal name in Google News showed that some of the articles available in Google are not included in the materials made available directly by the websites. And a similar problem occurs in the opposite direction – not all materials published by, for example, CNN are available in a selected timeframe in the Google database. This inconsistency is probably due to different algorithms used to assign content to specific search queries.

Due to these inconsistencies, only those articles that can be found in the Google News aggregator were downloaded for the study. This solution is consistent with consumer habits of Internet users – about 62.6% of all searches on the web are carried out by the Google engine [Desjardins, 2018]. Assuming the criterion of the occurrence of articles in Google News, it is possible to limit the research material to the content that is most often displayed on the screens of devices of people interested in a given topic. Keep in mind that algorithms have an impact on the results you get. In two hypothetical scenarios:

1. The user searches for information by entering the phrase "CNN climate change" in Google News,

2. The user searches for information by typing the phrase "climate change" in the CNN search engine.

Available publications will differ from each other in terms of both the amount of written text and overall content. In articles that were not included in the Google database, politically related terms such as "Trump", "president", "US" or "Biden" appeared more often. Most likely, this is the result of differences in algorithms used by both search engines. Preliminary analysis shows that the Google News algorithm is a bit stricter thematically and displays articles that are more directly related to the search query. In this set, words such as "people", "world", "global" or "energy" were higher in the hierarchy. It is also likely that Google, as one of the largest Internet companies in the world, deliberately filters out materials with strong political connotations. Doing so seems rational from the company's point of view, as it reduces the risk of being involved in a potential scandal regarding the influence of key digital actors on modern democracy.

How to word it...? The nature and climate change narrative's shortcomings

'climate'	9099	6,217690933	'trump'	11798	8,856612657
'change'	6393	4,36857876	'climate'	6775	5,085900869
'trump'	6095	4,164944086	'president'	6667	5,004834428
'people'	4987	3,407805768	'change'	5313	3,988403377
'us'	4874	3,330588593	'us'	4575	3,434395907
'new'	4654	3,18025427	'new'	4117	3,090580972
'one'	4334	2,961586164	'would'	4034	3,028273899
'president'	4047	2,765468206	'one'	3540	2,65743421
'world'	3993	2,728567963	'people'	3477	2,610140889
'also'	3701	2,529033316	'also'	3264	2,450244424
'would'	3586	2,450449465	'biden'	3039	2,281339701
'years'	3525	2,408765858	'world'	2936	2,204018881
'year'	3392	2,317881926	'first'	2880	2,161980374
'like'	3328	2,274148305	'like'	2609	1,958544026
'%'	3084	2,107413874	'year'	2577	1,934522022
'could'	2864	1,957079551	'%'	2561	1,92251102
'global'	2794	1,909245903	'could'	2431	1,824921628
'time'	2424	1,656140905	'?'	2385	1,790389999
'biden'	2395	1,636594108	'state'	2302	1,728082924
'first'	2384	1,629077391	'house'	2236	1,67853754
'many'	2352	1,607210581	'time'	2199	1,650762098
'according'	2223	1,51906	'obama'	2181	1,637249721
'?'	2219	1,516326649	'years'	2157	1,619233218
'states'	2157	1,473959704	'states'	2045	1,535156203
'even'	2017	1,378292407	'clinton'	2036	1,528400014
'ancient'	2014	1,376242394	'campaign'	2005	1,505128698
'says'	1995	1,363258975	'democratic'	1981	1,487112195
'state'	1980	1,353008907	'many'	1892	1,420300996
'water'	1932	1,320208691	'sanders'	1850	1,388772111
'country'	1909	1,304491921	'two'	1820	1,366251486
'energy'	1902	1,299708556	'may'	1812	1,360245985
'health'	1895	1,294925192	'even'	1792	1,345232233
'state'	1980	1,353008907	'many'	1892	1,420300996
'water'	1932	1,320208691	'sanders'	1850	1,388772111
'country'	1909	1,304491921	'two'	1820	1,366251486
'energy'	1902	1,299708556	'may'	1812	1,360245985
'health'	1895	1,294925192	'even'	1792	1,345232233
'two'	1850	1,264174989	'administration'	1779	1,335473294
'last'	1835	1,253924922	'country'	1767	1,326465042
'finds'	1834	1,253241584	'national'	1766	1,325714354
'may'	1811	1,237524814	'last'	1715	1,287429285
'million'	1762	1,20404126	'white'	1695	1,272415533
'158'	1747	1,193791192	'former'	1680	1,261155218
'get'	1733	1,184224463	'get'	1656	1,243138715
'much'	1717	1,173291057	'make'	1644	1,234130464
'government'	1697	1,159624301	'global'	1644	1,234130464
'1'	1675	1,144590869	'donald'	1624	1,219116711
'united'	1669	1,140490842	'$'	1623	1,218366023
'$'	1646	1,124774071	'united'	1615	1,212360522
'make'	1637	1,118624031	'must'	1609	1,207856396
'told'	1635	1,117257355	'back'	1572	1,180080054
'found'	1579	1,078990437	'american'	1544	1,159061701
'national'	1570	1,072840396	'america'	1530	1,148552074
'carbon'	1563	1,068057031	'democrats'	1518	1,139543822
'around'	1523	1,040723518	'political'	1447	1,086224
'way'	1512	1,033206802	'day'	1434	1,07648606
'obama'	1507	1,029790113	'going'	1428	1,071981933
'administration'	1499	1,02432341	'much'	1425	1,069729871
'back'	1496	1,022273397	'california'	1422	1,06747778
'emissions'	1492	1,019540045	'/'	1415	1,062222299
'need'	1484	1,014073343	'energy'	1413	1,060721162
'house'	1478	1,009973316	'policy'	1408	1,056968182
'000'	1456	0,994939883	'government'	1398	1,04946130

Feel free to break the rules!

"Creating (just like discovering) always means breaking the rules. Acting in accordance to the rules is pure routine, repeating yourself over and over again – not creating." (Zygmunt Bauman)

Reach out to us to discuss how to escape routine, break some rules and convince your clients, employees or residents to make wise changes.

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LATA DWUDZIESTE
Przyjazne dla środowiska strategie biznesowe

PS. We also have a Polish version of this report. Please let us know if you need it.