

*Supplementary material*

*Table S1. Examples for expertise cues.*

Category	Trust cue	Level	Example	Source
Academic education	Academic education	Macro	n/a	
		Meso	n/a	
		Micro	Benjamin Breitenbach <u>studied biomedical chemistry</u> in Mainz in 2009 including a research stay at the University of Auckland, New Zealand. <u>During his PhD</u> at Johannes Gutenberg University Mainz, he investigated nanodimensional polymer therapeutics in the field of drug delivery.	scilogs.de, 09.06.2022
Professional experience	Professional experience	Macro	n/a	
		Meso	n/a	
		Micro	Lisa Kainz is 33, an agricultural scientist, and <u>works for the animal rights organization Peta</u> in Stuttgart.	zeit.de, 24.05.2022
Qualification	Academic degree	Macro	n/a	
		Meso	n/a	
		Micro	However, <u>Professor Kai Wirtz</u> , head of the study, assumes that the phytoplankton actively migrates. In the process, it absorbs CO <sub>2</sub> in the upper water layers and can take up nutrients in the lower layers. The mini-algae need both.	bild.de, 04.08.2022
	Reputation	Macro	n/a	
		Meso	n/a	

		Micro	<u>Bernd Rendel Prize 2022 for #Geology</u> : For their promising, original #research at the beginning of their careers, the #DFG honours @DirscherlMariel & @BourgonNicolas. The prize will be awarded in September at the annual meeting @DGGV_de - Congratulations! 🙌 <a href="https://t.co/OKzkPveMtO">https://t.co/OKzkPveMtO</a> <a href="https://t.co/HHVWGsFibW">https://t.co/HHVWGsFibW</a>	Twitter (dfg_public), 27.07.2022
Professional position		Macro	n/a	
		Meso	n/a	
		Micro	“Not at all isolated cases,” says Professor Günther Ziegler, <u>president of the FU Berlin</u> . There are numerous other projects nationwide that are not being continued.	Tagesschau, 19.07.2022
Affiliation to an organization		Macro	n/a	
		Meso	In addition to the DIW, the Macroeconomic Policy Institute (IMK) <u>of the Hans Böckler Foundation</u> also warns in its economic forecast of a deep recession in the event of a supply freeze or embargo.	zeit.de, 29.03.2022
		Micro	Jörg Peltzer is Professor of Comparative Regional History in European Perspective at the <u>University of Heidelberg</u> and British Academy Global Professor at the <u>University of East Anglia, Norwich, UK</u> .	FAZ (print), 01.06.2022
Department or area/discipline of expertise		Macro	n/a	
		Meso	A study just published by five cognitive and <u>genetic researchers</u> from European and British universities investigated the causes of “aesthetic shivers”. The main question was whether goose bumps when listening to music are more a cultural imprint or a genetic predisposition.	SZ (print), 25.06.2022
		Micro	Professor Jürgen Schmude, <u>tourism researcher</u> at LMU Munich, who has studied how strongly climate change is affecting German ski resorts.	SZ (print), 29.03.2022

**Table S2.** Examples for integrity cues.

Category	Trust cue	Level	Example	Source
Independence	Client	Macro	n/a	
		Meso	However, a new study shows that this is not necessarily true. The comparison does not take into account the differences between employees. This is the conclusion of researchers at the Leibniz Institute for Economic Research (RWI), who conducted the study <u>for the Association of German Temporary Employment Companies (iGZ)</u> .	t-online, 01.06.2022
		Micro	Stefan Wuchty, actually a bioinformatician, is working on real-time prediction at the University of Miami <u>on behalf of the US Department of Defense</u> .	PM Magazin, 14.04.2022
	Funding source	Macro	<u>The BMBF will strengthen peace and conflict research with 30 million Euros over the next few years.</u> This measure had been planned for a long time, but is now being expanded once again.	Twitter, 22.04.2022
		Meso	The Macroeconomic Policy Institute (IMK) warns of serious economic consequences of a gas supply freeze. The trade union-affiliated institute, which is <u>financed by the Hans Böckler Foundation</u> , has calculated various scenarios for this in a publication to be published on Tuesday.	FAZ.net, 29.03.2022
		Micro	For years Regine Schönenberg and her PhD student Claudia Pinson from Guatemala have been researching the social consequences of the destruction of nature in the Amazon region. But now <u>their project is in danger of falling victim to the austerity measures of the Federal Ministry of Education. Funds that had already been promised have been cancelled.</u>	Tagesschau, 19.07.2022
	Interests	Macro	n/a	
		Meso	A current example are the results of a study published in the “New England Journal of Medicine” (NEJM) on the safety and efficacy of the third vaccination against COVID-19 with the Pfizer/Biontech vaccine. <u>As the methods section unmistakably reveals, the responsibility for the study was entirely in the hands of the vaccine manufacturers.</u> The two companies did not even have to bother to hide their omnipresence behind a known figure from medicine.	FAZ.net, 24.05.2022
		Micro	At the beginning of 2021, the majority of her colleagues excluded her [Prof. Wallrabenstein] from a trial <u>because of impartiality</u> .	Instagram (Doktorwissenschaft), 21.03.2022

Scientific quality assurance	Correction/Revision	Macro	n/a	
		Meso	In concrete figures from the BA, there is a pay gap of 42.4 per cent between full-time employees, who earn an average gross salary of 3.347 Euros, and temporary workers, who earn 1.928 Euros. This comparison, however, is criticized by the study authors. <u>They argue that the BA only collects its values up to the contribution measurement limit and thus the data is distorted.</u>	t-online, 01.06.2022
		Micro	Chris Graf, director of research integrity at Springer Nature, declined to discuss details but called paper mills “bad for research and the publishing world”. In addition to investigating individual cases and retracting compromised papers, <u>“we have reviewed our processes and invested in technology to help us detect attempts to manipulate our systems.”</u>	SZ.de, 22.04.2022
	(Un)Certainties (and Limitations)	Macro	The dramatizations of alcohol consumption that occur again and again in scientific articles and the media may correspond to the zeitgeist of a health culture. <u>But they do not really fit the clinical data and even contradict epidemiology.</u>	Scilogs.de, 27.07.2022
		Meso	The IMK criticizes that the model used by colleagues <u>neglects “many of the channels that we know were central to the depth and duration of the collapse in economic activity in past crises”.</u>	FAZ.net, 29.03.2022
		Micro	<u>“My model is struggling a bit right now. Since we do not yet have sufficient data on the voting behavior of the new Academy, we have not been able to adjust it so far,”</u> admits the mathematician.	FAZ.net, 21.03.2022
	Peer review	Macro	n/a	
		Meso	n/a	
		Micro	n/a	
	Continuity/ Permanence of research	Macro	n/a	
		Meso	This is what researchers at the University of Birmingham found out. For the study, <u>the data of 3818 men were observed over 12 years.</u>	Bild (print), 09.06.2022
		Micro	Mobile phone use does not increase the risk of brain tumors, according to a large longitudinal study. An analysis of the “UK Million Women Study”, <u>which has been running in the United Kingdom for more than 20 years,</u> found no evidence of an increased risk of tumors with the usual use of mobile phones. This was reported by a team led by Joachim Schüz of the International Agency for Research on Cancer (IARC) in Lyon in the “Journal of the National Cancer Institute”.	t-online, 01.06.2022

Scientific standards and processes	Legal framework for research	Macro	n/a	
		Meso	n/a	
		Micro	<u>The question is whether the federal government will play along at all. So far, climate protection interventions in the marine environment have been strictly regulated. The so-called “Hohe-See-Einbringungsgesetz” does not even allow field experiments, which is why scientists run experiments in tanks or go to the marine areas of other countries. “We would not even be allowed to bring minerals into the Baltic Sea with a salt shaker,” says Riebesell.</u>	SZ, 29.03.2022
	Working conditions in science	Macro	<u>Today, more than eighty percent of the qualification positions are temporary. As a result, even after mastering all qualification levels, the grotesque alternative awaits at the end: professorship or unemployment. And this at the age of about forty.</u>	FAZ, 01.06.2022
		Meso	n/a	
		Micro	<u>Working hours: The contract stipulates 40 hours, but I usually cannot quite manage that. If I have to finish an article or if there is a deadline for trial applications, it can also be 50 to 60 hours a week. During such phases, there are days when I work until two in the morning. But it can also be that I finish work at 2 p.m. because there is nothing else to do. There is no classical recording of working hours. Our head of department is very accommodating – as long as the work is done, he does not care when.</u>	zeit.de, 03.07.2022
	Research collaboration	Macro	<u>Science has always functioned across national borders. There has been a European scientific community since the early modern era.</u>	zeit.de, 06.04.2022
		Meso	<u>Thomas Hamacher is Professor of Renewable and Sustainable Energy Systems at the Technical University (TU) of Munich in Garching and one of the project coordinators of the “Geothermal Alliance Bavaria”, a large-scale research network that brings together scientists from the TU Munich, the Friedrich Alexander University of Erlangen-Nuremberg, the University of Bayreuth as well as the Ludwig Maximilian University of Munich and the University of Applied Sciences Munich.</u>	SZ.de, 14.04.2022
		Micro	<u>The scientists led by Peter Kolb and Moritz Bünemann, together with colleagues from Canada, have investigated so-called G protein-coupled receptors (GPCR). They transmit singlae from the outside of a cell into its interior and play a role, for example, in inflammation and the transmission of sensory stimuli.</u>	SZ.de, 16.05.2022
	Publication	Macro	n/a	

		Meso	According to data <u>published by Statista in 2022</u> , Germany, which is small in terms of area, was in third place in the production of wind energy in 2020. In first place was China, followed by the USA.	Epoch Times, 04.08.2022
		Micro	This was reported by a team led by Joachim Schüz from the International Agency for Research on Cancer (IARC) in Lyon <u>in the “Journal of the National Cancer Institute”</u> .	t-online, 01.06.2022
	Description (and explanation) of research processes	Macro	Just like ACLED, researchers all over the world <u>collect vast amounts of digital data from the internet</u> : for example, papers from authorities, media reports and activities in social networks. They not only want to document fights and violence - they want to be able to warn about them beforehand.	PM Magazin, 14.04.2022
		Meso	ICCT and Fraunhofer ISI had already published a study in September 2020, which was mainly based on data from the USA and Canada and came to a similar conclusion. The new version of the study focuses on cars in Europe. <u>The data of the approximately 9.000 vehicles comes partly from the provider Spritmonitor, where drivers can record and evaluate their fuel consumption, and partly from surveys of companies and car owners.</u>	zeit.de, 09.06.2022
		Micro	Kolb and Bünemann’s team <u>used an algorithm to search for new binding sites in the structures of 113 different GPCR proteins</u> . In doing so, they found several “pockets” that have not been used as drug targets so far.	SZ.de, 16.05.2022

**Table S3.** Examples for benevolence cues.

Category	Trust cue	Level	Example	Source
Ethical norms	Ethical norms	Macro	n/a	
		Meso	<u>Bill Gates has maintained close contacts with the Chinese Communist Party for 30 years. A recent donation is intended to help the regime bring foreign scientists and the necessary know-how into the country. This is not an isolated case; Germany's universities are also helping Beijing to become a military superpower.</u>	Epoch Times (online), 27.07.2022
		Micro	For the second part of the research – the genetic changes – I operate on laboratory animals. I use an extremely delicate glass cannula to introduce a virus into the brain that can change genes. Before I examine the brain and see to what extent it has altered, the animals have to be euthanized. That is sad, of course, but unfortunately, this is part of basic research. Due to my job, <u>I have not yet had any confrontations with opponents of animal testing. However, I have attended events organized by “Doctors Against Animal Experiments” in order to better understand the other side's point of view.</u>	zeit.de, 03.07.2022
Social responsibility	Research-related risks	Macro	The ocean could play a key role in geoengineering. The problem: <u>Even the scientific field tests are considered by many to be too risky for the ecosystem because no one can estimate the consequences.</u> The question is: How do we get scientific certainty without conducting the experiments?	Gut zu wissen, 28.08.2022
		Meso	US researchers wanted to test a technology bringing reflective particles of lime dust into the stratosphere. <u>The fundamental fear in field experiments: Aerosols could behave like rabbits in Australia. Once released, they do damage and defy any attempt to recapture them.</u>	Gut zu wissen, 28.08.2022
		Micro	Together with a team, Burkhardt had examined tissue samples from COVID-vaccinated people after their deaths and came to the disturbing conclusion that <u>the vaccination was a contributing cause of death in most cases.</u> Among the deaths analyzed by Burkhardt were also children.	Epoch Times (online), 21.03.2022

	Prediction	Macro	n/a	
		Meso	Researchers at the Yale School of Medicine <u>expect that within the next 10 years it will be possible to develop an age clock that can be used in clinical diagnostics.</u>	Instagram (Forschungswelt), 29.09.2022
		Micro	<u>Over the next 65 years, between 25 and 40 percent of these crusts will disappear</u> , says Emilio Rodriguez-Caballero, who was involved in the study and now works at the University of Almeria.	SZ (print), 09.06.2022
	Assessment of public events/current affairs	Macro	<u>If everyone did that, it would no longer be so nature-like. Then it would also be a major intervention in the climate.</u> For this reason, the scientific community has said that afforestation is also a form of climate engineering.	Gut zu wissen, 28.08.2022
		Meso	<u>The report “sends a clear warning that the energy transition is not happening”</u> , explained the Thinktank REN21, which designed the study.	SZ (print), 17.06.2022
		Micro	“Generally, <u>an energy embargo would be a political decision involving numerous considerations</u> ,” said IMK Scientific Director Sebastian Dullien. “However, <u>we want to point out that the economic and also the social consequences would most likely be grave and that the economic policy must be prepared to react accordingly.</u> ”	zeit.de, 29.03.2022
Benefit for society	Social significance of science	Macro	<u>The well-being of patients – and to some extent also of healthy people, for example when it comes to vaccinations – should be at the center of medical research.</u>	scilogs.de, 27.07.2022
		Meso	However, especially in times of war and crisis, it is true that <u>academic connectivity also gives us insights into hostile countries. In the 1950s and 1960s, for example, American scientists regularly reported to their authorities such as NASA or the Atomic Energy Commission who they had met and what their foreign colleagues were working on. This kept them up to date on the technological progress of their competitors. One should not make the mistake of thinking that science diplomacy is not influential just because it is described as “soft”.</u> It is a hard instrument.	Zeit (print), 09.06.2022



		Micro	And then even full-blooded researchers and pragmatists such as the chemist <u>Schlögl</u> reveal what drives them to the <u>interface between politics and science despite the occasionally heavy headwind. The conviction and the satisfaction of doing the right thing. The energy transition is an “existential question for humanity” that politicians should “no longer dawdle over”.</u>	FAZ (print), 01.06.2022
Discoveries and breakthroughs		Macro	<u>The discovery of the Higgs particle</u> celebrates its 10th anniversary tomorrow! A huge success, also for the German research landscape and the funding of the <u>@BMBF_Bund</u> . Public events are being offered in many places. More: <a href="https://t.co/78It7GacCL">https://t.co/78It7GacCL</a> #higgs10 <a href="https://t.co/o7pP0xDHjZ">https://t.co/o7pP0xDHjZ</a>	Twitter (BMBF_bund), 07.03.2022
		Meso	It sounds like a miracle: <u>In a colorectal cancer study at the Memorial Sloan Kettering Cancer Center in New York, 14 out of 14 participants were cured. Without chemotherapy, radiation or surgery, just with the immune agent Dostarlimab.</u>	Bild (print), 09.06.2022
		Micro	<u>Now cho ga</u> is “an incredible scientific discovery”, paleontologist Grant Zazula from the responsible authority told Global News. Hair and skin had been preserved. “If you look at her feet, she has tiny little finger and toenails that have not fully hardened.” She was about 140 centimeters long. First investigations indicated that she was about one month old when she died.	web.de, 25.06.2022
Applicability of results		Macro	n/a	
		Meso	But according to a new study, <u>environmental pollution, for example, is responsible for nine million annual deaths. This means that substances such as those mentioned above contribute to one of the greatest risks to our health.</u>	Geo, 12.08.2022
		Micro	<u>This discovery has opened up the possibility of intervention and finally gives answers to parents who have lost their child in such a tragic way. These families can now live with the knowledge that it was not their fault,</u> Harrington says of her medical breakthrough.	Bild (print), 16.05.2022

(Science-based) recommendations	Macro	<u>The influence that scientific policy advice now enjoys had become particularly clear in Corona politics – and was therefore also the subject of heated discussion.</u>	FAZ (print), 01.06.2022
	Meso	<u>“A stimulating fiscal policy that sets investment incentives” could mitigate this, judges the DIW. It is important that policymakers prepare the economy for a supply freeze in order to reduce the severity of the potential shock.</u>	zeit.de, 29.03.2022
	Micro	That the federal government is now abandoning the mask requirement in these days of all times is, in Brinkmann’s opinion, wrong. <u>“This is a bit too early. I would have found it very useful to keep certain measures in place. These clearly include testing and also the wearing of masks.”</u>	spiegel.de, 29.03.2022
Personal reasoning for benevolent behavior	Macro	n/a	
	Meso	n/a	
	Micro	<u>“That afternoon I quit my job as a lawyer and returned to the world of medical research. That day I made the decision to leave no stone unturned to solve the mystery of sudden infant death syndrome,”</u> Harrington writes on a crowdfunding page of the Sydney Children’s Hospital Foundation, which helps her fund her research.	spiegel.de, 16.05.2022

**Table S4.** Examples for transparency cues.

Category	Trust cue	Level	Example	Source
Accessibility of results	Accessibility of results	Macro	n/a	
		Meso	Here is the <a href="#">link to the study</a> .	FAZ.net, 09.06.2022
		Micro	n/a	
Comprehensible language	Comprehensible language	Macro	Science calls these “white swan events” because they are no more exceptional than white swans.	PM Magazin, 14.04.2022
		Meso	Even the most dangerous #malaria pathogen has weak points: The <a href="#">parasite Plasmodium falciparum</a> absorbs molecules from the blood that are toxic to it & which it therefore transformed into bio-crystals. Researchers @BNITM_de want to use this for new medicines. <a href="https://t.co/RML0XMOiWO">https://t.co/RML0XMOiWO</a> <a href="https://t.co/BVSMAsPwGw">https://t.co/BVSMAsPwGw</a>	Twitter, 04.08.2022
		Micro	Otherwise, as Müller, Pollak, Reimer and Schindler put it: The observable differences in the “ <a href="#">post-secondary educational decisions</a> ” of academic and working-class children are “ <a href="#">predominantly controlled by secondary influences of origin</a> ”.	FAZ.net, 21.03.2022

**Table S5.** Examples for dialogue cues.

Category	Trust cue	Level	Example	Source
Participation at public events	Participation at public events	Macro	The discovery of the Higgs particle celebrates its 10th anniversary tomorrow! A huge success, also for the German research landscape and the funding of the @BMBF_Bund. Public events are offered in many places. More: <a href="https://t.co/78It7GacCL">https://t.co/78It7GacCL</a> #higgs10 <a href="https://t.co/o7pP0xDHjZ">https://t.co/o7pP0xDHjZ</a>	Twitter (BMBF_bund), 03.07.2022
		Meso	<u>The “Science Day” is the start of seven events in the MUG’s anniversary year.</u>	SZ (print, online), 22.04.2022
		Micro	According to the study, 15 to 20 percent of patients still have symptoms, even though the infection occurred more than one and a half year ago. “This is alarming,” said Antonius Schneider, medical director of the institute and head of the study, <u>at the presentation on Tuesday in the district administration office.</u>	SZ (print), 01.06.2022
Public engagement in research	Public engagement in research	Macro	n/a	
		Meso	n/a	
		Micro	n/a	
Media presence	Media presence	Macro	n/a	
		Meso	<u>The TU did not respond to BILD’s enquiry about the allegations.</u>	bild.de, 06.04.2022
		Micro	Professor Stefan Rahmstorf of the Postdam Institute for Climate Impact Research (PIK) is one of the best-known climate researchers in Germany, <u>a popular expert on ARD and ZDF and a regular contributor to Spiegel Online.</u>	Junge Freiheit (online), 22.04.2022

**Table S6.** *Frequencies of trust cues across journalistic, populist, social, and further, (non-journalistic) online media.*

Dimensions	Categories	Media types				Total
		Journalistic media	Right-wing populist, non-mainstream media	Social media	(Non-journalistic) online media	
Expertise	Academic education	7	3	0	1	11
	Professional experience	5	0	0	1	6
	Qualification	294	27	20	62	403
Integrity	Independence	24	0	5	5	34
	Scientific quality assurance	97	7	8	41	153
	Scientific standards and processes	246	22	21	45	334
Benevolence	Ethical norms	3	6	1	0	10
	Social responsibility	78	18	1	8	105
	Benefit for society	152	13	10	42	217
Transparency	Accessibility of results	2	1	0	0	3
	Comprehensible language	6	2	4	3	15
Dialogue	Participation at public events	10	2	3	2	17
	Media presence	7	4	0	10	21
Total		931	105	73	220	1,329