






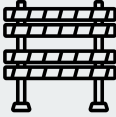






Data Divergence

Data divergence occurs when different data are used to characterize problems or the same data is interpreted in different ways—resulting in different explanations of what happened, why, the results, and the possible remedies. It can result from many sources, including misinformation or greenwashing, but also from genuine scientific disagreement or different experiences of a problem. Environmental problems are often also data problems.

 <p>Structured ignorance occurs when a person or group's lack of knowledge is systematically produced. For example, curricula funded by oil companies might not teach students about the harms of oil production.</p> <p><small>Created by Nick Blain from Noun Project</small></p>	 <p>Data cover-ups occur when available data is suppressed, modified or removed to undermine its effective use. A famous example is the tobacco industry covering up scientific data about the harmful health effects of tobacco on human health.</p> <p><small>Created by MURRAY GURMAN from Noun Project</small></p>	 <p>Divergent measurement occurs when data is collected, measured, or interpreted differently by different instruments. For example, most air monitors only test for six criteria air pollutants, so they might show good air quality if the primary problem is not one of them.</p> <p><small>Created by Andrew from Noun Project</small></p>
 <p>Greenwashing is false advertising that purposely overstates a company or product's environmental friendliness. For example, the fossil fuel industry has advertised liquified natural gas as a sustainable energy resource despite harmful environmental and health effects.</p> <p><small>Created by Kelly in Lumen from Noun Project</small></p>	 <p>Missing data & undone science occurs when environmental data has not yet been created. For example, there are few studies on the long-term health effects of new chemicals like PFAS or of how they interact with other chemicals.</p> <p><small>Created by MURRAY GURMAN from Noun Project</small></p>	 <p>Distrust in expertise occurs when people distrust experts for historical and social reasons. For example, some racial minorities may distrust medical experts because they know about experiments like the Tuskegee Syphilis Study, which experimented on Black men without their consent.</p> <p><small>Created by Robert Skarigan from Noun Project</small></p>
 <p>Manufactured doubt occurs when groups spread disinformation by cherry-picking evidence or exaggerating scientific uncertainty about environmental problems. For example, climate change deniers focus on uncertainty in scientific models as evidence climate change is not happening.</p> <p><small>Created by Thiago Sigman from Noun Project</small></p>	 <p>Epistemic injustice occurs when a person or group's capacity to recognize or interpret a problem is not recognized by others, especially those in power. For example, Native fire management strategies like cultural burns were banned by the U.S. Forest Service for many years.</p> <p><small>Created by MURRAY GURMAN from Noun Project</small></p>	 <p>Binary thinking occurs when people think about data in black and white terms, which makes it hard to combine different types of data (e.g. qualitative vs. quantitative). This could mean that qualitative data (like personal experiences) is seen as less important for proving environmental harms.</p> <p><small>Created by David Chaves from Noun Project</small></p>
 <p>Divided governance occurs when the ability to collect and interpret data is spread across many agencies, causing conflict about who does what. This can result in agencies blaming each other by saying environmental problems are not their fault instead of working together.</p> <p><small>Created by Ezequiel from Noun Project</small></p>	 <p>Mismatched scales can lead to different priorities about environmental problems. For example, EPA air monitors are located far apart, which shows which regions are more polluted than others, but may miss pollution hot spots at the neighborhood scale.</p> <p><small>Created by Davide from Noun Project</small></p>	 <p>Frames & paradigms influence how people interpret data. They are hard to recognize and change because they seem normal to us. One paradigm that undermines environmental justice is prioritizing economic growth over reducing inequality and improving public health.</p> <p><small>Created by Massimo from Noun Project</small></p>