Almighty hockey stick story

First Stick to Ice

When I was a small child, I had one of those at my home. It was made of wood with a natural and not painted shaft and a slightly green colored blade. To be honest, I have no idea why we had it at home, because I was not used to being the child who loves playing outside. Maybe, only once, I have used it on purpose. However, I liked to play with it. One day, it was my electric guitar, another day a rifle gun in cowboy/mafia action play, the next one a construction material for streets, cities, worlds, universes…

Ice hockey stick hunting (photo by Alicja Kochanowicz)

It came from my mom than, for the first time, I heard that ice hockey sticks could serve for ‘good’ when Canadians had beaten the ‘bad’ Soviets. Usually, I was supporting the side of the ‘good’ sticks. However, later it turned opposite, and the

Canadiens were beaten by the Soviets. Then I have learned that being a winner does not necessary means being good…

I have tricked on you a little bit, saying that I had not played ice hockey. Actually, I did. It was table ice hockey, which I used to play with my uncle at my grandma's. Every tin player had a name, a character and some history behind. Now, I have forgotten all the names and stories, except one. My uncle had a top-scoring player with a slightly bent stick, and he was calling him “nimble guy” (*шустряк* in Russian). At that time, I had learned that to be “the best” you need to change standard directions, rules or compositions and enter an irregular and extraordinary continuum in which we are now…

Much later, bent hockey sticks have entered my world in the forms of global warming, sea level rise, and carbon emissions…

The Most Famous Player

It happened in April 1998, in the *Nature* championship, when **a man** from the *University of Massachusetts* team **called Mann** (such a coincidence), with the assistance of Bradley & Hughes, scored the most famous goal in Earth's climate research[1]: a clear and compelling visual presentation of scientific data, demonstrating that global temperatures have risen in conjunction with the increase in industrialization and the use of fossil fuels[2]. "Hockey stick graph" as a term was popularized by the climatologist J. Mahlman[3], to describe Mann *et al.* (1999) climate reconstruction[4], envisaging a graph that is relatively flat as forming a stick's "shaft" followed by a sharp, steady increase corresponding to the "blade" portion. Everything else is history, but wait a minute, is it a final score? A hockey stick graph is not completed; it is alive, it changes its shape every year, month, even every second…

No surprise that having become the most famous player, Mann attracted attention of others, who possess power and money. In the “post-truth era”[5], climate denialism and skepticism were thriving, e.g. “Climategate” scandal[6] in 2009 and A. Montford book[7] (2010). At that time, Mann's name appeared in more than 375 of the hacked emails and climate change sceptics jumped on one email which describes Mann's solution to a problem as a "trick". However, the university

---

[1] Mann, M., Bradley, R. & Hughes, M. 1998: Global-scale temperature patterns and climate forcing over the past six centuries https://doi.org/10.1038/33859

[2] Mann, M. 2012: The Hockey Stick and the Climate Wars

[3] Scholarly Community Encyclopaedia 2022: Hockey Stick Graph

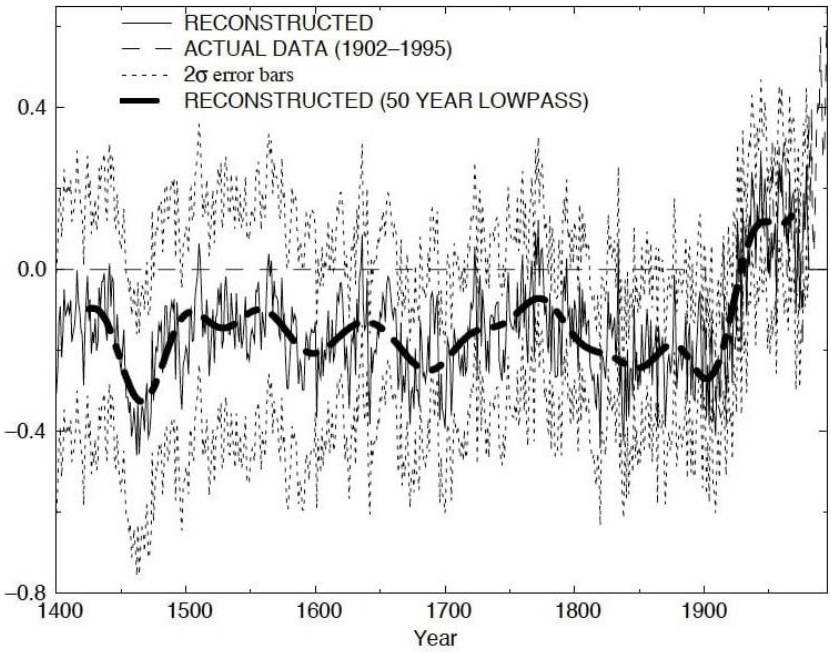
[4] Mann, M., Bradley, R. & Hughes, M. 1999: Northern Hemisphere temperatures during the past millennium: Inferences, uncertainties, and limitations https://doi.org/10.1029/1999GL900070

[5] Keyes R. 2004: The post-truth era: dishonesty and deception in contemporary life

[6] Wikipedia 2009: Climatic Research Unit email controversy

[7] Montford A. 2010: The Hockey Stick Illusion: Climategate and the Corruption of Science

commission has not found any evidence of suppressed or falsified data[8]. Later, Mann has seen the initial denialism over human-caused climate change subside in recent years, as the reality of global warming has become apparent[9].



The prototype: "The Original" hockey stick graph[10]

Back then, Mann was 33 (another coincidence?), and he was not planning to score; in fact, he didn't even know he was playing ice hockey. A few decades later[11], since the publication of the now iconic "hockey stick" curve, Mann scored again, finding more proof of the impact of human-caused climate change in the Common Era. Now, on his 60s, he is still attacking[12] using the same, but more technically and scientifically advanced hockey stick…

A man called Mann [13](photo by Sydney Herdle)

[8] Goldenberg S. 2010: 'Hockey stick' graph creator Michael Mann cleared of academic misconduct
[9] Hardcastle M. 2021: Profile of Michael E. Mann https://doi.org/10.1073/pnas.2116275118
[10] CBC/Radio-Canada 2021: Prominent climatologist behind 'hockey stick' graph talks about the 'New Climate War'
[11] Mann, M. 2021: Beyond the hockey stick: Climate lessons from the Common Era https://doi.org/10.1073/pnas.2112797118
[12] Michael E. Mann: https://michaelmann.net/books/
[13] CBC/Radio-Canada 2021: Prominent climatologist behind 'hockey stick' graph talks about the 'New Climate War'

Then and Now

Ice hockey was a tough and very simple game. Now, the equipment, arenas, and a multi-billion-dollar industry[14] brought it far away from the roots. It was used to play outside on frozen lakes and ponds in winter conditions. Due to global warming, winters are becoming milder and shorter. Now they are playing ice hockey all year round (World championships in May[15] and the NHL finals[16] in June) creating more CO_2 emissions and continuing to warm the winters (the effect called "positive feedback" of climate system)…

In the beginning, the hockey stick world was wooden: ash, maple, birch, hickory, and willow were players' friends. Modern ice hockey sticks are predominantly made of advanced composite materials, primarily carbon fibre layers held together by epoxy resin[17]. The production and disposal of carbon fibre hockey sticks have a significant environmental footprint due to their production and waste[18]. Ice hockey is an exceptionally Global North countries' sport. The environmental injustice of ice hockey lies in its reliance on resource-intensive, climate-altering artificial rinks that consume immense energy and water[19]. Maybe the hockey stick graph is also just a representation of the Global North?...

The idea of the game lies in the contact of the stick's blade with the ice surface. If you raise your hockey stick too high, it is a penalty, and in the official rules, it is called *high-sticking*[20]. No surprise that Earth penalises humans for high-sticking…

High-Sticking penalty[21]

[14] Mordor Intelligence 2026: Ice Hockey Equipment Market Size & Share Analysis
[15] 2026 IIHF World Championship
[16] NHL 2026 playoffs
[17] Wikipedia 2026: Ice hockey stick
[18] de Villiers A. 2024: Environmental impact of advanced hockey gear materials
[19] Chen C. & Kellison T. 2022: The clock is ticking: contexts, tensions and opportunities for addressing environmental justice in sport management
[20] Wikipedia 2025: High-sticking
[21] Škoda storyboard 2017: The First European Referee in NHL

The earliest versions of hockey were defined by passion rather than protection. Today's hockey gear - smarter, safer, faster[22] - sounds familiar to our progressive world. It is time to detach from the linear perspective of red-bladed hockey stick graphs representing historical reconstructions and future projections, which strongly disagree with natural cycles[23]. And open up to art, like a performance by I. Ulevičiūtė[24] who dressed as an ice hockey player, shot pucks at her painting. This action questions the artist's connection to her work - attachment to it, sense of ownership, a daimonic destruction[25] as the birth of new art. The best way to use **the almighty hockey stick** is for what it was made for: a tough and simple game…

Almighty hockey stick [26](photo by Justas Kažys)

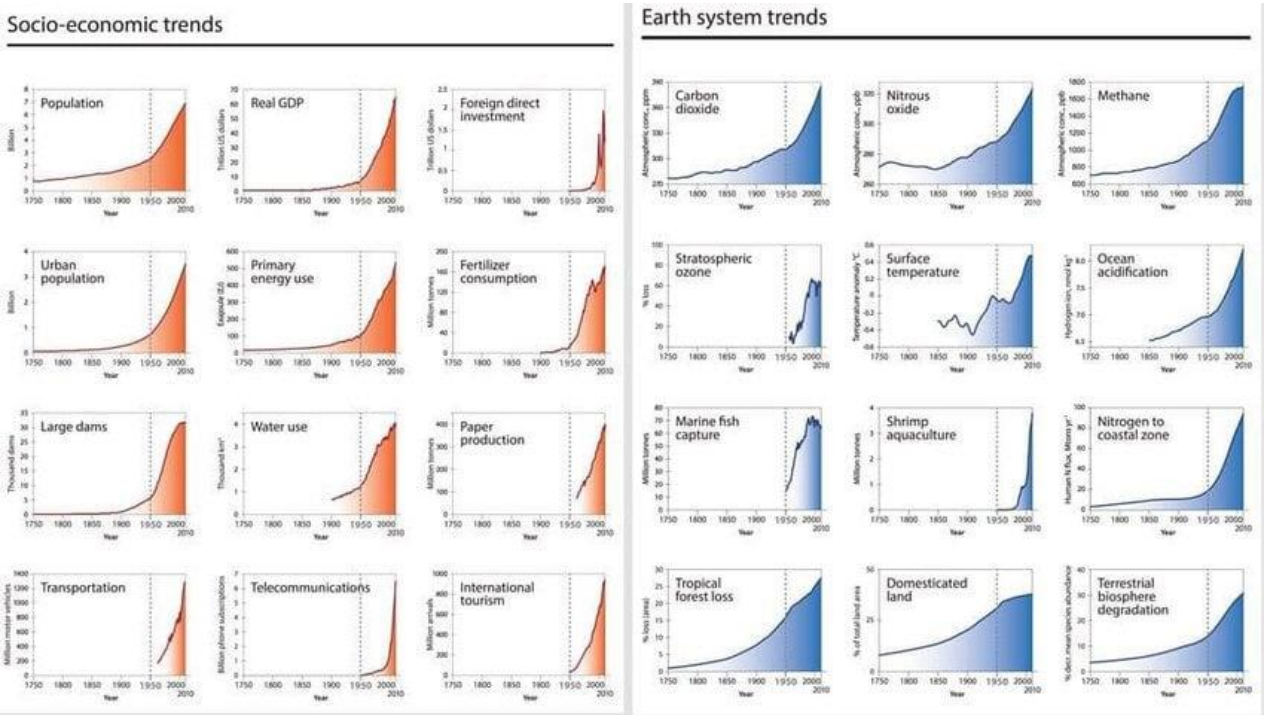
Goals Don't Lie

A philosopher, M. McLuhan, a pioneering 20th-century media theorist, had an expression: "*We shape our tools and, thereafter, our tools shape us*"[27]. Actually, it fits to the hockey stick graph. Since the invention of the tool in 1998, the avalanche of sticks has descended upon the Earth. Today's world is being battered from all sides by countless hockey sticks[28]. It has become some kind of obsession of the science industry to produce 'good' or 'bad' hockey stick graphs more and more…

Hockey stick serves as the image of the Great Acceleration. It is the post-World War II time period during which global population growth, economic growth, pollution and exploitation of natural resources have all increased at a dramatic

[22] Historic Hockey 2025: The Evolution of Hockey Equipment: How Gear Shaped the Game
[23] Kažys J. 2021: Could we Avoid Time Linearity Imposed by Climate Change?
[24] Ulevičiūtė I. 2025: "Koaguliacija" solo exhibition
[25] The American Women's College Psychology Department 2017: PSY321 Course Text: Theories of Personality
[26] Ulevičiūtė I. 2025: "Koaguliacija" solo exhibition
[27] McLuhan Galaxy 2013: We shape our tools and thereafter our tools shape us
[28] Murphy T. 2022: Death by hockey sticks

rate[29]. Humanity has become a dominant force in shaping face of the Earth: around 2020, the anthropogenic mass, which has recently doubled roughly every 20 years, surpassed all global living biomass[30].



What is your "good" vs "bad" Great Acceleration graph?[31].

A. Roberts & N. Lamp argue that two types of images – hockey sticks and crosses – are key to understanding current debates about economic globalization[32]. Both images could be 'good' as bringing prosperity to humanity in the form of GDP growth, and 'bad' as causing doom in the form of CO_2 emissions in the atmosphere. Thus, of all the candidates for a start date for the Anthropocene; the beginning of the Great Acceleration is by far the most convincing from an Earth System science perspective[33].

Eco-economic decoupling (separating economic growth from environmental degradation)[34] is also a hidden form of the hockey stick. Ice could be illusory: what seems to be "good" could just be a reflection of "bad". Why? Because a drop in emissions is an illusion created by global trade, and Western decoupled countries may switch back to increasing emissions[35]. Moreover, it does not follow climate justice principles. The Global North is responsible for the vast majority of historical

[29] Wikipedia 2026: Anthropocene
[30] Elhacham, E. *et al.* 2020: Global human-made mass exceeds all living biomass https://doi.org/10.1038/s41586-020-3010-5
[31] Steffen W. *et al.* 2015: The trajectory of the Anthropocene: The great acceleration https://doi.org/10.1177/2053019614564785
[32] Roberts A. & Lamp N. 2023: Hockey Sticks and Crosses
[33] Steffen W. *et al.* 2015: The trajectory of the Anthropocene: The great acceleration https://doi.org/10.1177/2053019614564785
[34] Wikipedia 2025: Eco-economic decoupling
[35] Hubacek K. *et al.* 2021: Evidence of decoupling consumption-based CO2 emissions from economic growth

emissions[36], and pushing for global decoupling strategies places a disproportionate burden on the developing countries. Maybe, a degrowth economy[37] could dispel the incantation of climate change. To be honest, it is just another hockey stick…

Mirroring ice: revealing the decoupling myth[38]

Masters of the Universe

Just imagine a huge (much bigger than the USS Enterprise[39]) ice hockey stick floating in an infinite space. It represents the idea of data-driven solutions[40] putting everything in one simplified line, ignoring that the vast majority of space around us is unmeasurable nothingness. What are the trajectories, continuations, prolongations and dimensions of the stick remaining unanswered questions…

So, where are the answers? S. Wexler & J. Oberlander felicitously explain the post-truth era and data-driven solutions paradox[41]: while we possess unprecedented amounts of data, objective reality increasingly takes a backseat to emotional, opinion-congruent narratives. According to T. Morton, climate change, as a "hyperobject", defies traditional boundaries and traditional human time scales; it induces a sense of uncanniness, dread, and helplessness[42]. It is odd to try illustrating such a process in a two-dimensional hockey stick graph…

The environmental philosophers (Derrida, Latour, Morton, etc.) invoke analysing, interpreting, and applying data-based science within ethical frameworks to address complex, real-world problems[43]. M. Heidegger argued that the environmental crisis

---

[36] Babatunde O. *et al.* 2024: How serious are ethical considerations in energy system decarbonization?
[37] Bowes T. 2025: Less is More: Is degrowth the solution to climate change?
[38] Pinterest: Hockey Stick Aesthetic
[39] Wikipedia 2025: USS Enterprise (NCC-1701) starship in the Star Trek media franchise
[40] Mucci T. 2024: What is data-driven decision-making?
[41] Wexler S. & Oberlander J. 2023: Ideology in the Attention Economy: A Portal to the Post-truth Era
[42] Davies W. 2017: The uncanniness of climate – Review of Morton's Hyperobjects
[43] Springer Nature 2026: Ethical Perspectives in Environmental Philosophy

requires moving beyond data-driven "calculative thinking" and moving toward a "meditative thinking", where we "let beings be" instead of manipulating them[44]…

We stick to data-driven science, imagining being the Masters of the Universe and choosing a hockey stick as the Power of Grayskull[45]. Linearity, even a curved one, is just a limited approach to the universe. Therefore, C. Eisenstein advocates for environmentalism rooted in a deep, affective love and reverence for the natural world. The people will only protect nature effectively when they recognize its inherent sacredness rather than its capacity to mitigate climate change[46]. Sometimes, it is enough to imagine that climate change no longer exists and, doubtfully, ever existed in the past:

It's the end of the world as we know it
It's the end of the world as we know it
It's the end of the world as we know it
And I Feel Fine[47]…

[44] Huttunen, R. & Kakkori, L. 2022:Heidegger's critique of the technology and the educational ecological imperative https://doi.org/10.1080/00131857.2021.1903436
[45] Wikipedia 2026: an American sword and planet media franchise Masters of the Universe
[46] Eisenstein C. 2014: Climate Change: The Bigger Picture
[47] R.E.M. 1987: It's the End of the World as We Know It (and I Feel Fine)