



Something Wicked This Way Comes

A PROBLEMATIC PARADIGM FOR DESIGN IN TIMES OF CRISIS

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ABSTRACT

This paper offers a close reading of Horst Rittel's and Melvin Webber's often cited, yet rarely challenged or historically situated publication on wicked problems «Dilemmas in a General Theory of Planning,» published in 1973. My aim is to (1) lay out the consequences of understanding problems of social policy as wicked – a quality that evades naming actors responsible and marks problems as inevitable and unknowable and (2) historicize some of the assumptions that developed under the rubric of wickedness by examining the political, social, and cultural conditions in which wicked problems were conceived. I am invested in a denaturalization of design fixes as a predominant design response to crisis by contemplating the (unintended) consequences of adopting wickedness as a design paradigm.

KEYWORDS

- Wicked Problems
- Design History
- Problem-Solving
- U.S. 70s

*Now that it has been opened, with plagues and curses,
sins and ills whirling around, there is only one thing to do,
and that is to go even deeper,
all the way down into the almost – empty box,
in order to retrieve what, according to the venerable legend,
has been left at the bottom – yes, hope.
It is much too deep for me on my own;
are you willing to help me reach it? May I give you a hand? –*
**Latour, Bruno. Pandora's Hope. Harvard University Press
1999, 23.**

PART 1: MEN OF ACTION

In their widely received essay «Dilemmas in a General Theory of Planning,» published in 1973, design theorists Horst Rittel and Melvin Webber classify problems of social policy as wicked. These problems, they say, are inherently tricky because they are interdependent, incomprehensibly complex, and weave untraceable threads through the social fabric of our world. With wicked problems, there is no way of finding the «right» solution, because the plurality of publics and the infinite array of possible approaches make it impossible to formulate unitary aims. Their core argument is that ultimately, there is no reliable theory that «can locate societal goodness,» (Rittel and Webber, p. 169) and thus tell us which «moves are permissible» (ibid., 164) and which aren't.

Fifty years later, wicked problems continuously echo through the theoretical underbodies of sprouting design disciplines as an apt description of the kinds of problems designers deal with. A byword for the interdependencies and trickiness of the most pressing issues of our time, wickedness is a catchy concept, a heuristic that manages perplexity vis á vis complexity and has also gained currency in an array of interdisciplinary academic and non-academic contexts. The climate crisis in particular, has been dubbed «super wicked» (Levin et al. 2012). Wickedness seemingly foregrounds an embedded and self-reflexive designer who is sensitive «to the waves of repercussions that ripple through» (ibid., p. 156) social systems and acutely aware that one will always be ignorant or blind towards aspects that others deem central, or as Rittel and Webber put it: «[...] what comprises problem-solution for one is problem-generation for another» (ibid.). In the way that wickedness assumes connectivity and dismisses the idea of ultimate design solutions, it anticipates a critique of positivist and universalist tendencies as well as the concomitant commitment to socially and environmentally ambitious design practices, that define our contemporary disciplinary moment.

Yet, wickedness casts problems in a strange light. With its roots traced back to the Old English *wicca* and Proto-Germanic *wikkô*, signifying «wizard,» «sorcerer,» or «necromancer» this term is made from such stuff as fairytales and horror stories. It gained early association with maliciousness in William Shakespeare's *Macbeth*, where «wicke» or «wikke» from Middle English conveyed «morally perverse» or «evil.» The iconic line «By the pricking of my thumbs, something wicked this way comes» (*Macbeth: Entire Play*) foreshadows the protagonist's descent into moral corruption. Wicked characters or events, implicitly linked to magic, avoid deeper exploration of their motives and backgrounds. Wicked things reside in the shadows

or await at the end of a descending staircase into the subconscious. Wicked problems inherit these traits: lacking an origin story, resisting full explanation, yet integral to our existence's structures. Like magical antagonists, wicked problems reappear in different guises «over and over again» (Rittel and Webber, 1973, p. 160) and their resolutions can only ever be temporary. Treating a wicked problem, therefore, becomes a dangerous endeavor. The efforts of getting to the bottom of something malignant and despicable is not necessarily impossible but potentially off-limits. In this way, wickedness becomes a term that closes conversations rather than inviting further inquiry. By alluding to a nebulous nemesis, the concept of wickedness sidesteps a deeper discussion, diluting our capacity to perceive, address, and scrutinize what might really be going on underneath.

While Rittel and Webber distance themselves from the moral properties that wickedness implies, I argue that a closing-reading of *the paper referred to as the origin of wicked problems*¹ reveals that this term perfectly captures a problematic trajectory of design ethics. The subsequent discussion is informed by the question «What do we gain from calling problems wicked?» I contend that wickedness is less a productive label for the problems of our time and more of an opportunity to explore the blind spots of design as problem-solving.

COMPLEX SYSTEMS, MESSY WORLDS

The title of the paper «Dilemmas in a General Theory of Planning» (1973) contains the core idea: Rittel and Webber's text is first and foremost a critique of what they call «an idealized planning system» (p. 159) and universal methods that are deemed inadequate to deal with a world much more complicated, plural, and unpredictable than previously accounted for. The notion of wicked problems emerges as a corrective measure against industrial-age planning and design methods developed post-World War II in response to mass production and burgeoning consumerism. Commonly traced back to the «Conference on Systematic and Intuitive Methods in Engineering, Industrial Design, Architecture and Communications», held in London in 1962 as well as the Ulm School of Design (Hochschule für Gestaltung Ulm), the Design Methods Movement sought to «scientize» the design process to rationally and (cost-)efficiently solve the problems of an industrialized society (Cross, 1993; Rith and Dubberly, 2007; Fezer, 2022; Fischer and Herr, 2019). Rittel himself was among the pioneers of what he will later call the first-generation Design Methods (Cross, 1999; Bayazit, 2004).

1 The origin of the term is dated back to an exchange between Horst Rittel and systems analyst C. West Churchman in the context of a seminar Churchman gave at Berkeley on «the transfer of technology from the space program to the world of urban problems». See Skaburskis, Andrejs: «The Origin of «Wicked Problems.»» *Planning Theory & Practice*, Vol. 9, No. 2, 277–280, June 2008.

One of the main arguments against an understanding of design as science was that the execution of rigorous methods bared little resemblance to the actual process of designing and that the construction of universal practices was shortsighted and overstated (Jones, 1970).² As a rejection of the «arrogant confidence» with which «early systems analysts pronounced themselves ready to take on anyone's perceived problem, diagnostically to discover its hidden character, and then, having exposed its true nature, skillfully to excise its root causes» (Rittel and Webber, p. 159), today wickedness is associated with an important departure from positivist design and a turn toward an expanded understanding of the discipline beyond industry and consumerism.

The co-authors situate themselves within the historical moment of military research organizations like RAND,³ and the emergence of intellectual fields such as systems theory, cybernetics, and management science («We have been learning to see social processes as the links tying open systems into large and interconnected networks of systems.» (ibid., p. 159)). These discourses, influential in shaping the American consciousness in the mid-20th century, aimed to formalize general problem-solving processes, spanning social, technical, mechanical, and biological domains. In many ways, wickedness is paradigmatic for a significant shift in how problems were perceived and discussed across various arenas, including public discourse, academia, activism, and design. Rittel and Webber put it like this:

«Systems analysis, goals commissions, PPBS, social indicators, the several revolts, the poverty program, Model Cities, the current concerns with environmental quality and with the qualities of urban life, the search for new religions among contemporary youth, and the increasing attractiveness of the planning idea all seem to be driven by a common quest. Each in its peculiar way is asking for a clarification of purposes, for a redefinition of problems [...]» (p. 157)

In light of a cultural transformation, fueled by trips to the moon, computer-aided extrapolations of population growth, and environmental devastation, growing intellectual fields at the intersection of science and philosophy re-conceptualized problems with

complexity in mind. They drew from established problem-language frames in computational theory, mathematics, logic, and computer science – disciplines inherently seeking to solve problems with absolute certainty – and were inevitably confronted with contradictions, paradoxes, and unsolvable equations. Many other conceptualizations of problems that fit the related molds of wickedness emerged from economics, cybernetics, organizational theory, and philosophy, trying to make sense of «exceedingly complex systems» (Beer, 1959, p. 17) and the mess that the new scale and dimension of problems that had been unlocked. What concepts such as wicked problems, social messes (Russell L. Ackoffs, 1974), divergent problems (Ernst Friedrich Schumacher, 1977), or undecidable decisions (Heinz von Förster, 1991) have in common, is that they are classified as inherently different than the problems of engineers or natural scientists, and therefore in need of radically different approaches.

Berlin-born Rittel belonged to the early adopters of cybernetic design methodologies with a background in math, physics, mathematical logics, and sociology that lead him to work as a statistician and theorist of predicting socio-economic processes and planning before his employment at Ulm where he taught design methodology, mathematical operations analysis, communications theory, and epistemology.⁴ When «Dilemmas in a General Theory of Planning» was published, both Rittel and Webber held professorships at UC Berkeley, Rittel for Science of Design (1963–1990) and Webber for City and Regional Planning (1956–1990). While Rittel references and thinks with cybernetic and systems theory throughout his writing, he became critical of «the belief in the «makeability,» or unrestricted malleability of future history by means of the planning intellect – by reasoning, rational discourse, and civilized negotiation.» (Rittel and Webber, 158)

Rittel's turnaround on design methods is undergirded by a shift from seeing planning as a process of solving problems as efficiently as possible, towards a process of solving problems by «doing the right thing.» In the text co-authored with Webber he emphasizes a state of being «sensitized to the waves of repercussions generated by a problem-solving action» because «outputs from one become inputs to others,» (ibid., p. 159) essentially describing what cyberneticians have called a feedback loop. [fig 1]

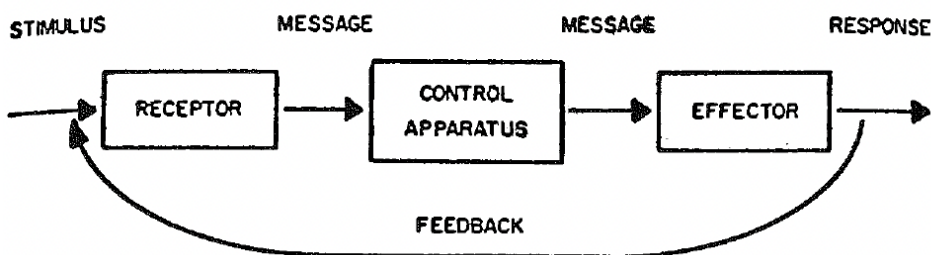


Figure 1: Simple feedback scheme (von Bertalanffy 1968, p.42)

2 The relationship between science, design, and methodological design approaches have been discussed by many design scholars such as Cross (1993; 2007), Glanville (1999), Bayazit (2004), Mareis (2011), and more recently Fezer (2022).

3 Project RAND, later known as the RAND Corporation, was established after WWII by mathematicians and engineers to address future warfare challenges. RAND became a pioneering force in Cold War science, contributing to the development of game theory, rational choice theory, and planning technologies like cost-benefit analysis and forecasting. See Andersson (2018).

4 A «Timeline of Rittel's Life» is published in Churchman et al., «In Memoriam.»

In cybernetics, derived from the Greek word *kubernetes*, or «steersman,» problem-solving is commonly framed in terms of a helmsperson consistently adapting their steering based on observed effects. This feedback loop enables the maintenance of a steady course amidst a dynamic environment. The skepticism towards such a model of governing voiced by Rittel and Webber is based on the complexity of networked systems that make it impossible to understand, let alone predict, which input will generate which output. But, more importantly, they say it has become less apparent what «distinguishes an observed condition from a desired condition» (ibid., p. 159) and «how we should intervene even if we do happen to know what aims we seek.»

THE BLACK BOX

As Rittel grappled with the shortcomings of existing theories and the challenges of achieving consensus among involved actors (ibid., 160), he arrived at a term that encapsulated all that is non-rational. We could say that this new term was introduced as a strategy that reduces complexity to make «*the planning idea operational*» (ibid., p. 159, emphasis in original). In this way, wickedness was selected to label but at the same time obscure all the problematic, unknown, or unwelcome feedback loops within social systems, essentially black boxing their inner workings.

As a term I am borrowing from cybernetics, systems theory, computing, and engineering, a black box refers to any type of system that is primarily understood in terms of its in- and outputs, with the internal mechanisms deliberately kept opaque. Similarly, wickedness, with all its enigmatic energy, casts a dark shadow on all systemic co-productions and renders them inscrutable to make planning actions feasible. [fig 2]

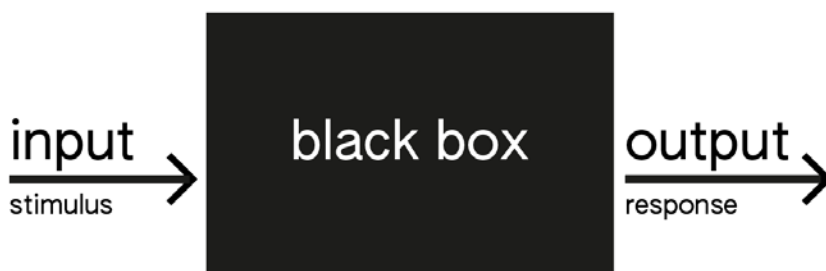


Figure 2: Model of a black box. Graphic made by the author.

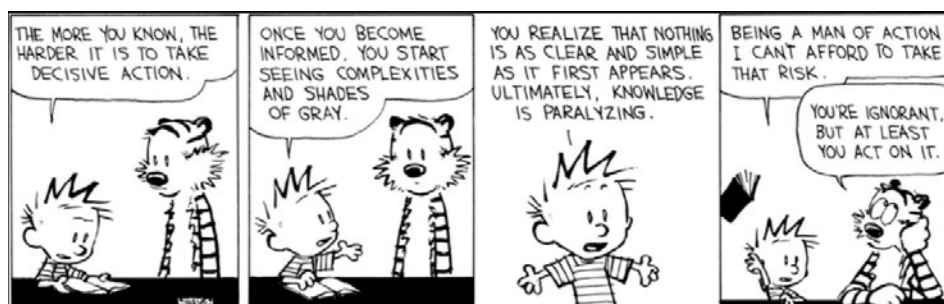


Figure 3: Calvin and Hobbes comic strip. [Screenshot by Johanna Mehl]. Retrieved June 06, 2024 from <https://itskarannotkaren.medium.com/wicked-problem-solving-355b00bc3f29>.

A Calvin and Hobbes comic strip (fig. 3) I recently came across, if imagined as a conversation between Rittel and Webber, provides a surprisingly apt illustration of what the deliberate use of a black box aims to achieve. Since the «more you know, the harder it is to take decisive action,» because «you start seeing complexities and shades of gray» ultimately stifles any attempts at problem-solving, not-knowing is a deliberate choice to remain action-able. Throwing the metaphorical book out the window is just another way of painting the metaphorical box black. Being «ignorant» in this case means making it possible to work with the constraints.

However, I argue that the type of information deliberately overlooked is precisely what needs to be highlighted in problems of social policy. For example: One of the main factors that leads Rittel and Webber to describe problems as «wicked» is that

«[...] the expert is also the player in a political game, seeking to promote his private vision of goodness over others'. Planning is a component of politics. There is no escaping that truism.» (ibid., p. 169)

While they argue from a position of good will and a genuine interest in *doing the right thing*, they condone that «the analyst's worldview is the strongest determining factor in explaining a discrepancy and, therefore, in resolving a wicked problem.» (ibid., p. 166) The black box, in this case, envelops what could be summarized as personal convictions of the planner, meaning all the processes contributing to the formation of these convictions, including the actor-network with which the planner is entangled, as well as cultural, social, political, and economic backgrounds. By calling the subjugation to politics wicked, these factors are made entirely invisible and disregarded; all the preconceived ideas that guide the planner toward a specific solution long before they started to think about the problem at all are deliberately left unexplored. Instead, the planner is presented more in relation to external constraints relevant to design, such as stakeholders and available resources:

«The planner terminates work on a wicked problem, not for reasons inherent in the «logic» of the problem. He stops for considerations that are external to the problem: he runs out of time, or money, or patience. He finally says, «That's good enough,» or «This is the best I can do within the limitations of the project,» or «I like this solution,» etc.» (ibid., p. 162)

Calling attention more to boundaries than biases, Rittel and Webber appeal to the responsibility and capability of the individual planner who could invest additional effort to «increase the chances of finding a better solution» (ibid., p. 162). Yet, the trajectory of designerly action is entrenched in truisms and the seemingly immutable logics of the corporate world. As a heuristic concept wickedness inadvertently closes doors that should be opened, gatekeeping an investigation into the preconceived ideas guiding planning processes. Especially considering the political climate in the San Francisco Bay area during the late 60s and early 70s when wicked problems were conceived, it is noteworthy that wickedness doesn't portray the systemic interconnections of designerly interventions as something that requires additional efforts in self-reflection and illuminating or entangling relational webs, but glosses over and seals off systemic processes to fortify the faith in «the wise and knowledgeable professional experts and politicians.» (ibid., p. 169) Merely pointing to the convoluted inner workings of social systems, wickedness does not see the system itself as faulty, ill-structured, or linked to problem causation.⁵ Meanwhile Rittel and Webber swipe at ongoing social movements, which are framed as destabilizing attacks that risk shaking historically grounded ideas of contemporary American society. In their account of a nation «buffeted by the revolt of the blacks, then by the revolt of the students, then by the widespread revolt against the war» (ibid., p. 157), the «ever-louder public protests against the professions' diagnoses of the clients' problems» are presented as «odd,» «perverse,» (ibid., p. 155) and a misguided campaign against professionalism. Anticipating present-day denominations of «snowflakes» – a derogatory term used by conservatives to insult the political left – Rittel and Webber compare New Left politics of the 60s to a «feeling approach,» meaning

«compassionate engagement and dramatic action, even of a revival of mysticism, aiming at overcoming The System which is seen as the evil source of misery and suffering.» (ibid., p. 158)

A similar critique the authors direct at Sixties cultural dissidents (Hippies, New Left, Counterculture), also guide contemporary so-called «war on woke» rhetorics propelled by alt-right politicians such as Ron DeSantis of the Republican Party. Within republican discourses, anti-woke has become catch-all to delegitimize all schools of thought that emphasize structural inequalities and draw attention to the linkages between for example the environmental crisis and gendered, racialized, and colonial structures of power, oppression, and exploitation.

5 The geographical and historical circumstances in which wicked problems were conceived mark a turbulent period characterized by emancipatory movements, anti-war campaigns, student protests, and the apex of environmentalism that emerged in the aftermath of WWII, economic disparities, and a growing skepticism towards the premises and promises of technological progress.

PART 2: THE CONCEALMENT STRATEGY

To explicate the dynamics of wickedness, Rittel and Webber mobilize a contemporary problem of public interest. Given the significant increase in violent crimes within inner-city neighborhoods during the post-war era, with figures doubling from 1940 to 1965, the problem of «crime in the streets» had evolved into a «malignant enemy in America's midst» (Johnson, 1965, p. 263). Consequently, crime statistics became pivotal tools in political campaigns (Vorenberg, 1972), highlighted by President Lyndon B. Johnson's proclamation of the «war on crime» in 1965 before the Congress on Law Enforcement and the Administration of Justice. While Johnson acknowledged that crime was a problem «hardly new to America,» he foregrounded that in

«... our increasingly mobile, urban society, crime problems are not only greater, they are immensely more complex. [...] The problems run deep and will not yield to quick and easy answers. We must identify and eliminate the causes of criminal activity whether they lie in the environment around us or deep in the nature of individual men.» (ibid., p. 264)

In the same speech he proposed «a comprehensive, penetrating analysis of the origins and nature of crime in modern America,» (ibid., p. 265) and established what later became known as the Crime Commission, tasked with an unprecedented two-year examination of problems with crime and the development of recommendation for reforming the criminal justice system. It is safe to presume that the public's interest in comprehending the causes of crime and its societal implications, coupled with the ongoing «war on crime,» particularly amid race riots in the Bay Area and policies like the Civil Rights Act of 1964 and the Law Enforcement Assistance Act of 1965, prompted Rittel and Webber to use «crime in the streets» as a case study. This problem was particularly suitable because it proved to be exceptionally intractable and convoluted, as a member of the Crime Commission, Juris Doctor James Vorenberg, reported in 1972 in *The Atlantic Monthly*:

«No one can say for sure what accounts for the enormous increase in the danger which Americans face from each other. We do know that those agencies on which we are accustomed to rely for crime control – police, courts, and corrections – seem less capable of that task today than they did five years ago, and many police chiefs, judges, and prison officials openly acknowledge that there is nothing they can do to help.»

What made this problem so wicked to Rittel and Webber was that «crime in the streets» appeared to be a symptom of a larger problem underneath, yet they claim it was impossible to know what that is. They mention poverty, inequality of opportunity, or a lack of gun control as just as likely to be the root cause of crime as «phrenologic aberrations,» (Rittel and Webber, 1973, 166) or a general loss of morals since there could never be a definitive rule or procedure for ascertaining what the correct answer is. In fact, the idea of moral decay was quite common and also appears in President Johnson's

speech that commenced the war on crime. «[Juvenile] delinquency and high crime rates among younger adults» were believed to be the results of the struggle to «maintain clear moral values» in «our increasingly complex society.» (Johnson, 1965, 265)

The proclamation of unknowability when it comes to the surge in violent crime becomes especially problematic considering the disclosures brought about by presidentially commissioned investigations on the matter. While the aforementioned Crime Commission had already revealed that «the frustration of poor people and minorities with continued denial of opportunities to improve their lives by lawful means has made reliance on crime an increasingly acceptable alternative,» (Vorenberg, 1972) President Johnson appointed the National Advisory Commission on Civil Disorders, known as the Kerner Commission after its chair, Governor Otto Kerner. The «long hot summer» of 1967 in many ways epitomized what Johnson saw as a surge in violent crime. It was marked by protests in over a hundred cities across the US triggered by the brutal arrest of a black taxi driver and a police raid in a night club in Detroit – events that erupted in violence, caused numerous casualties and injured thousands (Gillon, 2018). The Kerner commission was to find out «What happened? Why did it happen?» and «What can be done to prevent it from happening again and again?» (Kerner et al., 1967, p. 1) Following historian Steven M. Gillon in his thorough account of the Kerner Commission and its political environment, commissions were a common tool to quickly respond, yet stifle political issues, and their popularity «reflected the postwar fascination with experts and the belief that social scientists could offer objective solutions to complicated social problems.» (2018, p. XI) Comprising eleven bipartisan members, including two African American men and one woman, the commission, following consultations with a team of investigators, activists, witnesses, and government officials as well as visits to riot sites, released the 424-page report in the same year. Ironically, it opens with a quote from Lyndon B. Johnson himself, who, in his 1967 Address to the Nation, anticipated the conclusion reached by the report:

«The only genuine, long-range solutions for what has happened lies in an attack – mounted at every level – upon the conditions that breed despair and violence. All of us know what those conditions are: ignorance, discrimination, slums, poverty, disease, not enough jobs. [...]» (Kerner et al.)

The report attributed the riots to systematic racial discrimination – a problem that would not be solved overnight but required «a commitment to national action – compassionate, massive, and sustained [...]» (ibid., p. 1) Even though the root cause of the problem with increased violence and crime was clearly outlined and the thesis supported by a comprehensive investigation into locations, histories, and events, along with concrete recommendations to address the systemic entrenchment of «white racism» in American institutions, the report did not elicit a significant response. Instead, President Johnson largely dismissed and defunded the Commission. Historians agree that his rejection was influenced by concerns about ideological differences, the portrayal of the administration, and the incommensurability of its recommendations for increased investment in housing, education institutions, and the welfare system with the federal budget. (Gillon, 2018; Hinton, 2017)

PROBLEMS HAVE NEVER BEEN WICKED

Against the backdrop of the Kerner commission's findings published around the same time that wickedness was conceived, the assertion that problems «cannot be decided on logical grounds» (Rittel and Webber, 1973, p. 165) and that «the choice of explanation is arbitrary,» (ibid., p. 166) exposes why wickedness is a counterproductive concept to approach problems of social policy. Rittel and Webber are not wrong to observe that in planning processes, worldviews and levels of self-confidence are a «determining factor in explaining a discrepancy and, therefore, in resolving a wicked problem,» (ibid.) but what the outcome of the Kerner commission goes to show, is that these factors are also the reason why one can understand a problem, and still choose to do nothing about it. The case of the Kerner report underscores a historical pattern in social policy issues – it's not that the underlying causes of problems are inherently unknowable, but rather, that it might be preferable to keep them concealed, or black boxed. The key misconception in the operational framework of wickedness is that more understanding leads to better solutions. Here lies its biggest flaw: Wickedness does not account for power, bias, and an embedded observer. While «Dilemmas in a General Theory of Planning» is permeated by expressions of personal convictions being determinant for any problem-solving activity, the ways in which «self-confidence,» (ibid., p. 165) «private vision[s] of goodness,» (ibid., p. 169) or «elusive political judgment» (ibid., p. 160) are entangled with power, privilege, cultural norms, values, and histories remains unaddressed and hidden inside the black box. Engaging the original text shows that this negligence stems from an overly formalization of the planning process that feigns neutrality by employing mathematical language and logics:

«Under conditions C and assuming the validity of hypothesis H, effect E must occur. Now, given C, E does not occur. Consequently, H is to be refuted.» In the context of wicked problems, however, further modes are admissible: one can deny that the effect E has not occurred, or one can explain the nonoccurrence of E by intervening processes without having to abandon H. [...]» (ibid., p. 166)

Such a formula sows uncertainty where it is opportune in that it seemingly proves that any idea for a planning measure becomes a serious candidate. To make their point of «[a]nything goes» (ibid., p. 164), the authors draw on Karl Popper's logic of scientific discovery⁶ and entertain obvious nonsense solutions, like «Shoot all criminals» (ibid.) as this would *technically* solve the problem, which in turn could be explained by anything from «not enough police, by too many criminals, by inadequate laws, too many police, cultural deprivation, deficient opportunity, too many guns, phrenologic aberrations, etc.» (ibid., p.166) However, this logic shows how the

6 They reference German philosopher of science Karl Popper's book *The Logic of Scientific Discovery* published in 1959 in which he advocates for a scientific methodology grounded in falsifiability, theories can never be proven, only logically contradicted.

concept of wickedness is based on a liberal neutrality principle that tries depoliticize the planning process in the sense that it shifts the conversation from politics to technicalities. Meanwhile, the thorough investigation of the Kerner Commission made it evident that in fact not all explanations for criminal activity are equally plausible and that discerning causes should focus on «the environment around us» rather than «the nature of individual men.» (Johnson, 1965) Insisting that e.g. shooting everyone will undeniably solve the problem while «phrenological aberrations»⁷ are – «logically» speaking – just as likely to lead to criminal behavior as social inequalities seems like a questionable and loaded argument. Especially against the backdrop of emerging «law and order» approaches to executive power championed by republicans that called for harsher penalties for perpetrators and specifically targeted the black population, the recollection of a racist pseudo-science shows how the original idea behind wickedness was not a critique of circumstances, but oblivious to them at best.

In a perceived dilemma between an uncritical belief in rationality and an overly critical dismissal of professionalism, Rittel und Webber strengthen a moderate approach to problem solving to make designerly action operational. Their critique of the world's makeability, coupled with their dependence on truisms and an «it is what it is» mentality sidesteps discussions about the tangible impact of institutional power. The employment of such diversionary strategies, whether intentional or not, have real impact on the policies that *do* get implemented and that sustain injustices rather than transformative social investments. The Rockefeller drug laws, enacted in the same year as the publication of «Dilemmas in a General Theory of Planning,» for example, intensified penalties for drug-related crimes, aligning with the broader «war on crime» launched by Johnson. These «tough-on-crime» approaches led to the establishment of the Law Enforcement Assistance Administration, while social welfare programs such as the war on poverty were dismantled (Hilton, 2015).⁸

7 In the 19th century, the pseudo-scientific practices of phrenology linked certain measurements of the skull to mental capabilities. In the same way that connections were drawn between bone structures and criminal tendencies, they were drawn to gendered and racialized behavior and often used to dehumanize, enslave, and oppress cultural minorities.

8 Elisabeth Hinton's 2017 monograph **From the War on Poverty to the War on Crime** traces the rise of mass incarceration in the US back to Lyndon Johnson's Great Society social welfare programs, particularly the War on Poverty. Hinton argues that Johnson's simultaneous war on crime, fueled by racist assumptions, led to the militarization of local police and a shift towards punitive measures, ultimately resulting in the dominance of crime control and incarceration in addressing poverty and inequality by the 1980s.

DESIGN LITERACY

I want to emphasize that contemporary recitals of wickedness do not automatically imply a conservative stance on politics. The term is not a container of all that is outlined in the paper that popularized it, but rather has become a dictum that doesn't require a comprehensive reading of Rittel and Webber's text at all. In fact, institutions and individuals using the term today might do so specifically to address problems with privilege and power. However, I argue that we gain nothing from it. Instead, I proposed that it allows us to trace a lineage of design responses to crisis that are subjected to criticism for being gimmicky, solutionist, cosmetic, and a perpetuation of problematic politics.

When social problems are perceived as inevitable, unsolvable, externally imposed, and likely to destabilize societal systems, it dramatically limits the way they can be dealt with and the willingness to address them. Wickedness shifts the attention away from social problems by focusing on the predicament, dilemma, and friction, while establishing conundrum as a constitutional factor of being in the world. Its properties divert from the very entanglements it is supposed to name and curb resolution efforts towards symptomatic treatment that leaves underlying problems untouched. The problem with design problems, as I'd like to suggest, is practicing design as though it was not political – not in the sense that it is not employed for political action or with political intent, but that its operations are not understood as structurally entangled with exploitative histories and therefore amplifiers of contested hegemonies. Contrary to what we learned about the term, wicked problems is not a concept that emerged out of a social movement in design, but out of conservative politics.

Altering the language framework surrounding problems could be the starting point to shift the line of questioning; while wickedness tends to stifle inquiry, «systemicness» tends to foster openness. My suggestion, though, is not to simply replace the term «wicked problems» with «systemic problems», but rather, to begin by articulating what is already known instead of persisting in characterizing problems as unknowable. Take the climate crisis, for instance – labeling it as super wicked (Levin et al. 2012) veers away from the acknowledgment that we *do* comprehend its causes and the necessary measures to address it. Our inquiry should revolve around why it appears so enigmatic and what impedes political action on institutional fronts. In this way, this paper is invested in a denaturalization of black boxing by foregrounding the need to establish literacy of design and its historical legacies, contexts, and political undercurrents.

REFERENCES

- Ackoff, R. L. (1974). *Redesigning the future: A systems approach to societal problems*. Wiley.
- Alexander, C. (1971). The State of the Art in Design Methodology (M. Jacobson, Interviewer) [DMG-Newsletter Nr. 3, Berkeley, p. 3–7].
- Andersson, J. (2018). *The future of the world: Futurology, futurists, and the struggle for the postcold war imagination* (First edition). Oxford University Press.
- Bayazit, N. (2004). Investigating Design: A Review of Forty Years of Design Research. *Design Issues*, 20(1), 16–29. <https://doi.org/10.1162/074793604772933739>
- Beer, S. (1959). *Cybernetics and Management*. Wiley.
- Churchman, C. W. (1967). Guest Editorial: Wicked Problems. *Management Science*, 14(4), B141–B142.
- Churchman, C. W., Protzen, J.-P., Webber, M. M., & Krogh, D. (2007). In Memoriam: Horst W.J. Rittel. *Design Issues*, 23(1), 89–91.
- Cross, N. (1993). A History of Design Methodology. In M. J. Vries, N. Cross, & D. P. Grant (Eds.), *Design Methodology and Relationships with Science* (pp. 15–27). Springer Netherlands. https://doi.org/10.1007/978-94-015-8220-9_2
- Cross, N. (2007). From a Design Science to a Design Discipline: Understanding Designerly Ways of Knowing and Thinking. In R. Michel (Ed.), *Design Research Now* (pp. 41–54). DE GRUYTER. https://doi.org/10.1007/978-3-7643-8472-2_3
- Fezer, J. (2022). *Umstrittene Methoden: Architekturdiskurse der Verwissenschaftlichung, Politisierung und Partizipation im Umfeld des Design Methods Movement der 1960er Jahre* (1. Auflage). Adocs Produktion und Verlag.
- Fischer, T., & Herr, C. M. (Eds.). (2019). *Design Cybernetics: Navigating the New*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-18557-2>
- Glanville, R. (1999). Researching Design and Designing Research. *Design Issues*, 15(2), 80. <https://doi.org/10.2307/1511844>
- Hinton, E. (2015, March 20). Why We Should Reconsider the War on Crime. *TIME*. <https://time.com/3746059/war-on-crime-history/>
- Hinton, E. (2017). *From the War on Poverty to the War on Crime: The Making of Mass Incarceration in America*. Harvard University Press.
- Johnson, L. B. (1965). Special Message to the Congress on Law Enforcement and the Administration of Justice. *Public Papers of the Presidents 1965*, 1, 263–271.
- Jones, J. C. (1970). *Design methods: Seeds of human futures*. Wiley-Interscience.
- Kerner, O., Lindsay, J. V., Harris, F. R., Brooke, E. W., Corman, J. C., McCulloch, W. M., Abel, I. W., Thornton, C. B., Wilkins, R., Peden, K. G., & Jenkins, H. (1968). *Report of The National Advisory Committee on Civil Disorders*. U.S. Government Printing Office.
- Levin, K., Cashore, B., Bernstein, S., & Auld, G. (2012). Overcoming the tragedy of super wicked problems: Constraining our future selves to ameliorate global climate change. *Policy Sciences*, 45(2), 123–152. <https://doi.org/10.1007/s11077-012-9151-0>
- Mareis, C. (2011). *Design als Wissenskultur: Interferenzen zwischen Design- und Wissensdiskursen seit 1960*. Transcript.
- Rith, C., & Dubberly, H. (2007). Why Horst W.J. Rittel Matters. *Design Issues*, 23(1), 72–74.
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences*, 4, 155–169.
- Schuhmacher, E. F. (1973). *Small is beautiful. A study of economics as if people mattered*. Blond & Briggs.
- Scott, F. D. E. (2010). *Architecture or techno-utopia: Politics after modernism* (First MIT Press paperback edition). MIT Press.
- Shakespeare, W. (n.d.). *Macbeth: Entire Play*. Retrieved February 20, 2024, from <https://shakespeare.mit.edu/macbeth/full.html>
- Simon, H. A. (1988). The Science of Design: Creating the Artificial. *Design Issues*, 4(1/2), 67. <https://doi.org/10.2307/1511391>
- Skaburskis, A. (2008). The Origin of «Wicked Problems.» *Planning Theory & Practice*, 9(2), 277–280. <https://doi.org/10.1080/14649350802041654>
- Von Foerster, H. (2003). *Understanding understanding: Essays on cybernetics and cognition*. Springer.
- Vorenberg, J. (1972, May). The War on Crime: The First Five Years. *The Atlantic Monthly*. <https://www.theatlantic.com/past/docs/politics/crime/crimewar.html>

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