



Faculty of Design

2023

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Suggested citation:

Murphy, Ryan J. A. (2023) I am a Wicked Problem, too: A systemic design strategy for addressing procrastination and anxiety. In: Proceedings of Relating Systems Thinking and Design Volume: RSD12, 06-20 Oct 2023. Available at <https://openresearch.ocadu.ca/id/eprint/4925/>

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**Relating Systems Thinking and Design
(RSD12) Symposium | October 6–20, 2023**

I am a Wicked Problem, too: A systemic design strategy for addressing procrastination and anxiety

Ryan J. A. Murphy

It is perhaps easy or natural to think of systemic design at the level of communities, organisations, industries, ecosystems, or governments. As a discipline, after all, systemic design is largely developing in response to the pressing challenges influencing society at these levels. However, Lockton (2018) showed how systemic design also applies to wicked personal problems in a callback to the “knots” derived from the psychiatric practices and poetry of R.D. Laing and the “double-binds” of Bateson. In concluding, Lockton (2018, p. 429) asks: “Could we help people identify knots in their own lives (and help them untangle them?) Is it even possible to untangle these? Do they describe problems that have a wickedness to them which means attempting to untangle creates a whole new problem?” In this presentation, I try to answer this call by applying systemic design methods to a personal problem via an autoethnographic case study. Sparked by the dysfunctionally late realisation that I am a wicked problem, too, I have been making progress on my own procrastination problem with systemic design. I present an analysis of my own attempts to eradicate this disorderly habit by reframing it as a systemic design challenge—and me, and my tools, as a socio-technical system. Here, I share how systemic design modelling has played three roles in this progress: model as a diagnostic tool, model as treatment strategy, and model as therapy. Applying systemic design principles and tools helped me appreciate the complexity of this problem, design strategies for change, and identify novel, creative solutions that gave me leverage over some of the root causes and serve as a day-to-day disentangler when I get stuck in the tangled loops of my own anxieties. Key

contributions of this presentation include the framing of personal behavioural change as wicked problems, the demonstrated combination of autoethnography and systemic design modelling, the three roles of modelling in progressing personal, systemic change, and the model of procrastination-driven anxiety and its insights.

KEYWORDS: reflexivity, wicked problems, complexity, leverage analysis, autoethnography

RSD TOPIC(S): Cases & Practice, Health & Well-Being, Mapping & Modelling

Procrastination is a wicked problem

In this presentation, I share the realisation that my procrastination problem is a wicked problem. I begin with a brief background on procrastination and my difficulties with it. I then detail two sequential studies of this problem (both blends of autoethnography and systemic design methods). Third, I present a “final” systems model capturing the complex system driving my procrastination behaviours. I then show some of the most valuable insights generated by this investigation, namely how systemic models may be useful in diagnosing, strategising about, and treating these kinds of psycho-behavioural problems. Finally, I end with a discussion of the implications of applying systemic design to the self.

Procrastination is defined as a gap between intent and action, a needless voluntary delay in doing something you want or need to do, in spite of the knowledge that delaying is harmful (Pychyl, 2013). For over a decade, I have fought with procrastination. Like many people, despite my procrastination challenges, I managed to survive and complete most of what I needed to do—albeit usually at the last minute or with extensions. When I first began to treat procrastination as a serious problem, I sought to limit distractions. Yet, no matter what I prevented myself from being able to do, I always managed to find something else to do that wasn't the thing I was avoiding. The next stage of my treatment approach was to seek out productivity resources: if I could do more in less time, I thought, maybe my patterns of procrastination would not be so harmful. Unfortunately, countless productivity systems, time management techniques,

organising approaches, habit-building apps, and other tools failed to make a significant difference. The third stage of my treatment process (about ten years in) began when I became a father. I learned that I would not be able to use my old “bandaid” solutions as a dad: pulling all-nighters or going into “lockdown” mode to avoid all possible distractions in the final sprint of a project. At this point, I recalled Lockton’s (2018) suggestion that perhaps personal psychological problems could be wicked, too (Rittel & Webber, 1973) — and be understood and addressed with systemic design. Like the poetic stories captured in R.D. Laing’s *Knots* (1972) and the layers of injunction described by Bateson (2005), I wondered if I were, perhaps, trapped in problematic systems of thought, behaviour, and other phenomena. I decided to try to address this personal wicked problem with systemic design. This set the stage for the first of two studies in using systemic design to understand and resolve my procrastination challenges.

Methods & modelling

The two sequential self-studies on this problem used the same methodology. First, I engaged in deliberate self-study observation of my behaviour and thought patterns (LaBoskey, 2004). I translated my observations into systemic design models (Kim, 1992) and continued adapting the model with autoethnographic observations for a few weeks. I then analysed the model using leverage analysis (Murphy & Jones, 2020), identifying strategic insights for change. In the second study, I engaged a counsellor for the purpose of informing my therapy with strategies rooted in transactional analysis (Mellor & Schiff, 1975), cognitive-behavioural therapy (Field et al., 2015), shame resilience therapy (Brown, 2006), and polyvagal theory (Porges, 2009). Her guidance led to some key concepts from these theories, which are incorporated in the most recent version of the systems model and, ergo, my strategies for change. Over the course of six months, we met approximately monthly. I reported my progress, she provided direction and resources, and we assigned homework. Meanwhile, as I worked on the problem, I continued my autoethnographic observations. Last, I incorporated my observations and lessons learned into a second version of the systems map generated by the first study. Figure 1 shows the resulting model. Yellow-ringed phenomena represent “breakthrough” events: actionable, high-leverage behaviours I can engage in to escape a procrastination trap. Navy-outlined phenomena represent distinct events in the system.

Red-ringed phenomena are those without any causal influences within the system boundary—i.e., they are periphery forces. White phenomena are interventions. Finally, the gold element is Productivity, the goal phenomenon I am trying to encourage.

Findings

My study has demonstrated that models can help disentangle the complexity of complex behavioural issues (“modelling as diagnostics”), develop strategies for systemic behavioural change (“model as strategic plan”), and, day-to-day, models can help untangle the knots of feedback loops we find ourselves in as we get trapped again in our problems (“model reading as treatment”).

Modelling as diagnostics: A first (and personally surprising) takeaway from this study was the immediate utility of self-study and autoethnography in understanding ourselves-as-systems. Reframing an unyielding personal behavioural challenge as a wicked problem—and, consequently, applying systemic design to the challenge—helped me to make real progress on my procrastination habits for the first time in a decade. For instance, before I underwent this investigation, I never identified myself as anxious. As a result of study 1, not only did I recognise anxiety in myself, but the structure of the procrastination system showed how this emotion was at the core of the challenges I was experiencing. This insight led me to seek counselling. By modelling my behaviours and their impact on myself, I was able to see the whole system governing this intractable dynamic—exposing the “whole iceberg” (Stroh, 2015, Chapter 3).

Model as strategic plan: Once the complexity of this system was mapped in study 2, the application of leverage analysis (Murphy & Jones, 2020) revealed a set of “breakthrough events”: specific phenomena in the system that were both easily actioned yet held commensurate sway over the behaviour of the whole system. Crucially, these phenomena were not obvious. In fact, as Meadows (1997) cautioned, some of the “leverage points” I had previously identified were pulling the system in the wrong direction. For instance, working on my productivity system (which was supposed to make me more productive) was actually a form of fake progress that exacerbated my issues—a regressive catalyst of systemic change (Murphy, 2023). These breakthrough events gave me a set of specific behaviours to invoke when procrastinating, and the phenomena that support them tell me what to practice to eradicate the habit.

Model reading as treatment: As a kind of design probe for generative design research (Sanders & Stappers, 2014), the model maintains a manipulable representation of my thoughts and behaviours when I am procrastinating. Reviewing the model as I experience procrastination and its precedent and antecedent phenomena continues to be a fascinating and useful experience. When I find myself stuck, I can see my current situation reflected in the model and the different states of mapped phenomena. Literally reviewing these states and tracing through the model has become a way of grounding myself and halting the “spinning out” behaviours that used to take up entire days. For this reason, I now have the model printed and sitting on my desk.

While wicked problems, by definition, have limited generalizability and no knowable, universal solutions, this study suggests that systemic design practices and models might offer a pattern for progressing in these kinds of behavioural traps.

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