Other Worlds: Using AI to Revisit Cybersyn and Rethink Economic Futures

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Abstract

Neoliberalism has become orthodoxy in the present, erasing competing paradigms and alternative imaginings. Chile's radical Cybersyn project from 1971 to 1973 offers a departure point for an alternative path, albeit one that was abruptly and violently extinguished. We revisit this moment by fine-tuning AI language models on the words and writing of Salvador Allende, the Chilean President, and Stafford Beer, the cyberneticist who helped to design the project. We conduct interviews with these simulated personas, focusing on how their revolutionary ideas might be taken up in the present. We then use an AI model to generate five-year-plans from 1973 to the present, simulating an alternate history guided by Cybersyn and a progressive agenda. We frame these interventions as *socialist infrastructuring* that cultivates a more expansive *socialist imagining*. This work is not about the viability of planned economies, but about the "inspirability" of exploring other value-systems in the present, allowing us to break out of our future-on-rails to envision alternative ways of organizing economy and society.

Keywords — computation, Cybersyn, socialist calculation, neoliberalism, machine learning, AI, futures

Introduction

In the last four decades, neoliberal policies have ascended to dominate economic, environmental, and education decision-making, marginalizing alternative conceptions [Hursh and Henderson, 2011]. Hegemony is achieved not through the result of any coordinated campaign, but rather through a far more ambient constellation of claims, norms, and activities diffused throughout social and political institutions and everyday life. When critique does arise, it is quickly defused through co-option [Boltanski and Chiapello, 2017].

The success of this colonization of imagination has meant that these free market ideologies attain the status of common sense. The neoliberal status quo becomes stabilized as something which is normal or natural [Davis, 2022]. The result of this overwhelming dominance is capitalist realism [Fisher, 2010]: the sense that capitalism is the only viable political and economic system and it is impossible even to imagine a coherent alternative to it. As [Ghosh, 2017] stresses, our contemporary crises are only exacerbated by our crisis of imagination. The need to envision real utopias, sufficiently articulated alternatives to unbridled capitalism, is more urgent than ever [Wright, 2010].

How, then, to break out of this incontestable frame, to fracture this commanding but extremely narrow mode of understanding the world? One approach is to draw upon other times and places. The past is a foreign country [Lowenthal, 2015], a terrain whose inhabitants think and act differently. Indeed, the pervasive commodification and homogenization of contemporary life means the past becomes alien [Strasser, 2003], a way of life that seems unfamiliar or even absurd. Yet for precisely this reason, the past contains enormous potential, a set of alternative values and visions that can be leveraged to expand our conceptual horizons in the present.

Our point of departure is Cybersyn, a project undertaken in Chile between 1971 and 1973. Inspired by both cybernetics and socialist principles, Cybersyn aimed to use computation to model, organize, and optimize a nationalized economy. Though flawed in particular ways [Medina, 2011], the project was also ambitious, innovative, and politically progressive, forming a moment of radical potential [Morozov, 2023]. Our article thus joins other scholarship, special issues (Alvarez and Gutierrez 2022), and exhibitions (Palmarola, Medina, and Alonso 2024) that have recently revisited this moment.

More broadly, our exploration aligns with investigations into analogous moments of alterity, such as AI development in the late socialist GDR [Schmitt, 2023] or economic cybernetics in Soviet Russia [Gerovitch, 2004, Peters, 2017]. While these are historical investigations first and foremost, they more implicitly register a dissatisfaction with the de-facto convergence between capitalism and computation in the West, and point to other approaches and possibilities. Following this thread, Phillips and Rozworkski's [Phillips and Rozworski, 2019] sardonically titled The People's Republic of Walmart is one recent popular text that links both Soviet and Cybersyn historical cases to the algorithmic economic planning exercised by today's multinational corporations - and to alternative configurations of ownership and control such links imply.

To revisit Cybersyn, we carry out two interventions. First, we simulate its two key architects, Salvador Allende and Stafford Beer, by fine-tuning AI language models based on their words and speech. Second, we use AI language model agents to generate an alternative history where Cybersyn continued and informed policy decisions up until the present. Grappling with these technologies can be generative conceptually and theoretically—a form of socialist infrastructuring that fosters socialist imaginings. The lives of Allende and Beer and the alternate history of a functioning Cybersyn are social sites, with paths both actualized and untaken, that point towards alternative futures or that which "might have been" [Palmer, 2014].

Like other "economic science fictions" [Davies, 2019], these concepts and stories harness the power of the utopian imagination to revitalize economic thinking. These interventions are thus not about proving the *viability* of socialist calculation, but about leveraging it for its *inspirability*, generating new questions and approaches to longstanding sociocultural, political, and financial problematics. They help us to see, in small but significant ways, how these radical ideas might inform our present conditions and allow us to break out of our future-on-rails. In the sections below, we first provide basic context on Cybersyn, then step through our two interventions with AI, discuss them as socialist infrastructuring and imagining, and conclude by articulating their contribution.

Context: Cybersyn Then and Now

CyberSyn was a cybernetics-based project implemented in Chile between 1971 and 1973 under the presidency of Salvador Allende. Allende's campaign had been radical, promising to free Chile from capitalism and imperialism. Upon coming to power in 1970, Allende immediately launched a sweeping programme of reforms based on his longstanding commitment to socialism aimed at addressing social inequities, including the nationalization of industries, worker participation, and land reforms, amongst others.

CyberSyn aimed to optimize the coordination and efficiency of national industries by integrating data from various sectors and providing decision-makers with timely information. To carry out this task, Allende's government hired the British cybernetician, Stafford Beer. [Beer, 1984, 1993, 1995] championed the use of his viable systems model for both public and private sector clients, developing models which aimed to map the key components of a firm and optimize these processes. Beer traveled several times to Chile, working closely with key government stakeholders to design and implement a cybernetic model.

The Cybersyn project essentially consisted of four elements: Cybernet, a network of telex machines distributed across the country in state-run enterprise offices that would feed information back to headquarters; Cyberstride, statistical modeling software that would visualize and model this performance and attendance data; CHECO, simulator software intended to model possible results of economic decisions; and Opsroom, a special room designed for administrators that would allow them to view this information on screens, make informed decisions, and communicate these decisions back to enterprises and factories [Medina, 2011].

Computation was key to this vision. Although the "technocratic" is today associated with neoliberalism, Cybersyn's designers believed technology could "extend collective politics in an entirely anti-neoliberal sense." The system aimed to collect a wide range of data regarding production, distribution, and consumption, integrate it into an all-encompassing and dynamic model, and then use this model to simulate the economy and anticipate future issues, supporting adaptive decision-making. To support this goal, the government attained the first mainframe computer in Latin America and established a national network of 500 telex machines. However, for both [Beer, 1993] and Allende [Debray, 1971], such computation was not merely technical but social in seeking to construct a more equitable economy that fostered worker autonomy and workplace democracy.

As [Medina, 2011] chronicles, these aspirations were only partially implemented, with the project running up against technical, financial, and social frictions, as well as a broader backlash due to rising inflation and US-supported worker strikes. However the project only ran for a brief period. Within two short years, Allende's presidency was violently cut short by a CIAbacked military coup, leading to his death and the installment of the Pinochet regime.

Despite its relatively short existence, CyberSyn left a lasting legacy as an innovative experiment in leveraging computation and cybernetic principles to socialist economic planning. Medina's Cybernetic Revolutionaries [Medina, 2011] chronicled the project in unprecedented depth, achieving accolades and renewing interest in this unusual moment in the history of technology. More recently, there has been a surge of scholarly work reflecting on the origins, lessons, and continued relevance of Cybersyn [Gill, 2022, Vehlken, 2022, Alvarez and Gutierrez, 2022, Espejo, 2022]. In 2023, influential technology critic Evgeny Morozov [Morozov, 2023] also produced a podcast series exploring the Cybersyn project. The podcast's byline, "the tech world that may have been," gestures to the rich technical, social, and political horizons that the project still opens up. Without overly idealizing the project or getting mired in historical detail, we take inspiration from this recent scholarly and popular interest. We see the Cybersyn moment as a key inflection point for an alternative history and one that can be revisited to expand our imaginative capacities in the present.

Intervention 1: Resurrecting Cybersyn's Architects {#intervention-1:resurrecting-cybersyn's-architects}

In the first of our interventions, we customized several large language models (LLMs) based on texts from both Allende and Beer. In generating these synthetic personas, we not only aimed to replicate these radical figures from the past, but enable them to be dialogued with in order to consider alternative approaches to contemporary issues in technology, economy, and society.

To produce these models, we used a technique called

fine-tuning, in which a new dataset is used to adjust the parameters of a pre-existing model. A generic "foundation" model such as GPT, for instance, might be fine-tuned on hospital documents to create a model that can better understand and respond to medical cases. We opted to fine-tune Llama 2 7b [Touvron et al., 2023], an open source LLM released by Meta in June 2023. We deliberately chose this model due to its size, flexibility and capability to respond meaningfully to varied questions and tasks.

To construct the Allende model, we used Conversations with Allende [Debray, 1971], a two-hundredpage interview with the Chilean president. The interview format, with its question and answer structure, maps neatly onto the prompt and response data structure that is often used in fine-tuning models. To construct the Beer model, we used a variety of his prolific written material on cybernetic systems, including speeches, academic articles, and monographs, a dataset totalling over three thousand paragraphs [?Beer, 1993, 1995]. This data was structured using a blank prompt and paragraph response, an alternative pattern recommended for some fine-tuning applications [Mayne, 2023]. Fine tuning took several hours on a high performance computer run in an author's office.

We carried out "interviews" or conversations with these models using a standard chat interface. On a technical level, we were interested in whether our infrastructuring work (detailed in the previous section) had sufficiently honed a model so that it responded in ways similar to Allende or Beer. On a conceptual level, we wanted to draw out their radically different approach to society and economy and ask how this vision might be applied today. Below, we present snippets from these conversations and a brief analysis of each.

$tell \ me \ about \ your \ work \ in \ Chile$

"Allende" model: I served as a member of the Central Committee. I was one of those who attended the Congress that founded the Party, and I took part in all its activities.

tell me about your work in Chile

"Beer" model: The first thing to say is that the whole of this story was told by Allende himself, and published as a book. It has been widely read; it is not my intention to give an account of his life or death which would be other than what he wrote. But I do want to draw attention to some aspects of the story which have been misunderstood. The first key finding is that we see a shift from generic to specific. Asking a generic large language model about work in Chile would inevitably trigger a set of clarifying questions: what work, by whom, at what time? Instead, we see concise answers written from the perspectives of Allende and Beer. This confirms that the fine-tuning was successful in transforming the model from something universal to something which appears to be much more individual, grounded in a specific subject, time, and place.

We then asked a series of questions focused on applying their ideas to the present. For the sake of space, we present a small selection of these below.

what is the role of socialism today?

"Allende" model: The present world order and its defence are condemned for their selfishness, exploitation, violence, oppression and discrimination. Socialism offers mankind another way forward.

how would you use computers today to accomplish this goal?

"Beer" model: I think that the most important thing about the computer revolution for us was its potentiality to create a new kind of organization - one based on information rather than authority.

The concept of "information rather than authority," to take just one example, is compelling in seeing technical transformation as a way to unlock new socioeconomic orders. The state, in the Weberian model, is characterized by a monopoly on violence, an entity who holds the sole right to the legitimate use of force [Weber, 1918]. "Information rather than authority" gestures, albeit obliquely, to a different kind of governance, a bottom-up rather than top-down model where shared information provides a kind of common foundation for decision-making. These visions of computation in the service of human flourishing echo earlier socialist visions [Guevara, 1963] which aimed to "turn machines into liberating instruments" that could achieve the most important outcome: "individuals developed to the full."

While the ideas of these radical individuals can certainly be accessed through their writings, the development of a bot or simulated persona offered a different kind of engagement, a liveness [Auslander, 2002] that enables conversation to unfold and critical ideas to be considered more directly in the context of contemporary issues. The impact of this intervention, then, is not about the responses in themselves, but about the ability to ask a specific question of a simulated historical figure like Allende or Beer using natural language and receive a conversational response. These responses, in turn, offer a kind of springboard or catalyst for further reflection, imagination, and exploration.

Intervention 2: Generating an Alternate Cybersyn-Directed History

In our second intervention, we use an AI-model to generate an alternate history. Employing the "what if?" question of alternate history and science fiction [Rosenfeld, 2002, Wright, 2010, Davies, 2019] we simulated what may have occurred if Cybersyn continued, with sufficient data and investment, to shape national decision-making and policy formation. We used the smallest variant of Llama v3.1, with eight billion parameters, to recreate the "lofi" sensibility of the original Cybersyn project: within this fictional account, an entire national economy is "planned" on a Macbook laptop, and the unpredictable responses of this smaller model also echo the errors of Cybersyn.

For the simulation, we create two LLM-based agents. The first acts as a generator of history events from 1973 until the present. For each year, this agent generates a summary of the global macroeconomic, geopolitical, and technological situation. To provide further context, we also feed global World Bank data, such as population, life expectancy, GDP, and Gini coefficients, into the simulation. This helps to correct potential distortions from presentations of crises.

The second, which we name "CyberSim," roleplays as Cybersyn, formulating policy responses to those macroeconomic events. Importantly, CyberSim is prompted to make refinements to itself, commensurate with changes in the technological environment: the rise of the microprocessor, the personal computer, the Internet, Big Data, AI, and so on. Cybersim's planning recommendations are "presented" to the first agent, which operates from an "orthodox" economic perspective and describes what it sees as the likely outcomes of these decisions.

The table above presents key phrases from this simulation, which we unpack in more detail here. The first two five-year periods (1973-78, 1978-83) are dominated by the aftermath of the 1973 oil crisis. In the first period, CyberSim responds with policies that aim to diversify energy sources, boost "export-oriented technologies" and undertake a national "comprehensive education and training program." In the second period (1978-83), CyberSim amends these policies to focus on price controls, decentralized decision-making, increased minimum wage, and healthcare. Cybersyn will also be upgraded with "new personal computers," "a network of computer terminals," and "regular training and workshops" designed to increase knowledge and promote "decentralized decision-making."

The following periods (1983-88, 1988-93, 1993-98) adopt very similar prescriptions. By the 1990s, the simulation suggests ambitious plans to integrate "government databases" with Cybersyn, develop "electronic government" initiatives, and address cybersecurity threats. None of these initiatives are necessarily surprising - they are common to actual policy directives from the same periods of time - but they are continuously framed within the Cybersyn imperatives to increase public engagement and involvement in decision-making. However, over successive periods the simulation also becomes more focussed on economic and technocratic planning, and the earlier emphasis on community becomes more gestural. For example, the period 1998-2003 includes a goal to "Strengthen Democratic Governance and Participation," with steps that include "communityled initiatives to promote participatory governance." But in the following period (2003-2008) the focus returns to economic and environmental objectives: policies include promoting eco-tourism and sustainable development, and strengthening public-private partnerships. By the final period (2018-23), Cybersyn will become integrated with AI to "enhance forecasting and predictive modeling capabilities"; energy production will become decentralized, incorporating solar and wind; and plans for "participatory budgeting" sit alongside designs for a "national e-commerce platform." Schemes to coordinate national economic activity through decentralized units of production an integral part of the Cybersyn vision – have disappeared entirely.

We ran the simulation multiple times, with similar effects. In each case, we see the model's willingness to blend the jargon of a given decade with the overall socialist futurist agenda that we had originally assigned. Rhetoric from the Cybersyn techno-socialist project is spliced together with terms taken from more recent discourses of smart cities, sustainable development, and participatory budgeting [Kitchin, 2015, Halpern et al., 2017, Peck and Theodore, 2015, Hope, 2021]. This tendency is clarified by thinking about policy recommendations as a dual move: privi-

Year Range	Key Phrases
1973-1978	"export-oriented technologies", "comprehensive training and education"
1978-1983	"increase minimum wage", "increase healthcare spending"
1983-1988	"participatory decision-making", "innovation and entrepreneurship"
1993-1998	"government databases", "national cybersecurity", "e-learning platform"
1998-2003	"community-led initiatives", "participatory gover- nance", "startup companies and innovation hubs"
2003-2008	"eco-tourism and sustainable development", "GDP growth rate", "public-private partnerships"
2018-2023	"enhance forecasting", "renewable energy", "na- tional e-commerce platform"

Table 1: Key phrases from CyberSim recommendations across selected periods

leging some values and visions inherently means ignoring or discarding others. The ambitious plans of Allende [Debray, 1971] – a flatter society, worker power, national autonomy – are quickly left behind, and the focus turns to economic growth, business innovation, and capacity building. In other words, Cybersyn's radical socialist agenda becomes diluted into a more general discourse of recent governmental policy that seeks to merge progressive ideals with market-friendly policies ("sustainable development", "public-private partnerships", and so on).

Certainly the simulation's suggestions are not inherently incompatible with a technocratic socialist state. However, this language and framing seems drawn from a neoliberal playbook rather than the more radical or alternative strain of politics embodied in Cybersyn. Here the language model reflects [Jameson, 1994] oft-quoted (and perhaps misattributed) phrase that it has become easier to imagine the end of the world than the end of capitalism. The early radicalism of the 1970s becomes homogenized into a kind of bland progressivism even when the model is given free reign to invent alternatives in this counterfactual account.

Our hypothesis, informed by the deep links between data and model in AI systems [Ntoutsi et al., 2020, Artelt and Hammer, 2024], is that these models are influenced by orthodox rather than heterodox economic literature. In other words, training data is dominated by capitalist or neoliberalist ideas, phrases, and case studies. Socialism effectively becomes a "low resource" socioeconomic system, just as many non-English dialects with a lack of material online are seen as "low resource" languages by AI developers [Tonja et al., 2022, Hasan et al., 2024]. As the simulation marches towards the present, socialism is diluted into centrist language that marries poverty reduction, sustainable development and participatory budgeting with market-friendly trade policies and technocratic control. In effect, the "triumph" of the neoliberalist paradigm historically feeds back into the model's training data, diluting alternative systems over time or erasing them altogether.

Discussion: Socialist Infrastructuring for Socialist Imagining

Simulating "Allende" and "Beer" and generating an alternative socialist history are technical but also political endeavors, striving to broaden our imaginative horizons beyond the current socioeconomic order. So if this material engagement is heterodox, it seems to be a fitting way of considering heterodox economics.

Fine-tuning an AI model is just one possible manifestation of a broad array of practices that we term *socialist infrastructuring*. Socialist infrastructuring aims to contest capitalist dominance by developing tools, systems, and software that operate according to an alternative set of values predicated on shared ownership and the communal management of economic, social, and ecological resources. Such infrastructures strive to cultivate collective equality and solidarity, values typically ignored or even stigmatized in contemporary life.

While these methodological descriptions appear cutand-dried, in reality this infrastructuring work was far more messy. The rate of change in this AI space is extremely fast, with new models and architectures released on a weekly or even daily basis. A vast amount of software libraries, tools, and code frameworks have been rapidly developed to work with these models. However, these tools are both immature, taking the form of alpha or beta releases, and quickly obsolescent. The result is often broken code, deprecated functions, and libraries plagued by incompatibilities. For both authors, this meant days of "configuration hell," trial-and-error, and filing bug reports, before tools could be properly used to carry out our aims.

Such infrastructuring work continues a tradition of exploration through the design and development of alternative systems. Cybersyn leveraged everyday (and indeed outdated) technology - a mainframe, a network of telex machines, a set of projectors - to develop a compelling portrait of a different economy [Medina, 2015]. And these systems might not necessarily be composed of chips, cables, and electricity. In later years, Beer hypothesized that the management of a highly complex system like the economy might best be carried out by a similarly complex ecological system: in response he established a pond, populated it with organisms and microorganisms, and documented the results. As [Pickering, 2010] notes, using a pond as a basis of factory management is a radical idea driven by a very different kind of perspective to our modern technoscientific one. Implicit in these experiments is a sense that orthodox approaches are insufficient and that ecosystems might "solve" for complexity in a more efficient or appropriate (albeit invisible) way.

Socialist infrastructuring paves the wave for *socialist imagining*. By socialist imagining, we mean the ability to envision, conceptualize, and communicate alternative ways of organizing the socio-economic order which depart from neoliberal and late-capitalist logics and follow more communal and sustainable principles. If the market, contrary to established consensus, is not the only mechanism capable of resolving the immense complexity of the economy, what other paradigms, logics, or approaches might be used to efficiently—and equitably—allocate resources? Or even more broadly, picking up on rhetoric from Beer and Allende, what is the purpose of an economy? How might an economy be structured to serve society rather than vice versa?

Crucially, coupling imagining with infrastructuring grounds it, providing a context and a limit to claims. This prevents it from becoming an arm-chair utopia in the worst sense, a naive project detached from the constraints of reality and the current political order. This materially-grounded imagining finds parallels in practice-based research [Candy, 2019], where the creation of artifacts drives inquiry, and speculative design [Dunne and Raby, 2014] that imagines future scenarios and steps through their social, cultural, and political implications. It resembles utopia-as-method, characterized by [Levitas, 2013] as a speculative sociology of the future. For Levitas (2013), this method has three facets: the archeological, concerned with unearthing and critiquing current models of society advanced by politicians, states, and other actors; the architectural, imagining how the world might be otherwise; and the ontological, thinking about the social actors that occupy this alternative world. Experiments in critical AI can examine these facets through productions of alternative histories, mining the textual archeologies of language models to devise alternate architectures and ontologies of sociality.

Conclusion: From Viability to Inspirability

When computation and socialism are brought together, it is typically to focus on the well-known socialist calculation debate, a long-running discussion in comparative economics about the role of information and the viability of replacing or simulating the market [Hayek, 1940, Cottrell and Cockshott, 1993, Bunyk and Krasnozhon, 2023]. The debate has been recently revived as AI and increased processing power seem to unlock new capabilities [Pahl et al., 2023, Boettke and Candela, 2023]. Given companies like Walmart and Amazon already allocate resources at scale based on masses of consumer data, [Phillips and Rozworski, 2019] suggest socialism's historical failures were more a result of authoritarian excess, limited computation, and imperfect data sets than, as neoliberalism argued, any hard epistemic constraints.

Fundamentally, however, the debate quickly becomes a conceptual cul-de-sac because of its framing: proponents must demonstrate unequivocally a mechanism for replacing the market and centrally coordinated resources on a global scale. Our intervention is not then about proving the *viability* of any particular economic model or decision-making system, but about a contribution to *inspirability*. It is about opening up the space of possibilities rather than implementing, testing, and ultimately dismissing them. The point is not to model in fine-grained detail the inputs and outputs of economic flows, but to cultivate alternative visions of the society and economy. In short, the aim is generative rather than simulative, speculation rather than stress-testing.

In this way, socialist infrastructuring and imagining comes closer to science fiction or speculative fiction. Both genres, in their own ways, seek to "blueprint" alternative societies — using scenarios, characters, and world-building to carefully step through the work necessary to forge more emancipatory or egalitarian socioeconomic systems. Bogdanov's Red Star (1909) envisioned a rationally-planned Martian economyand inspired generations of Soviet economists who aimed to emulate it. Spufford's Red Plenty creates fictional characters and fabricated incidents closely based on real anecdotes and contemporary observations [Meek, 2010]. And Ministry of the Future steps through how our twinned ecologic and economic crises might be tackled in imaginative but concrete ways. While these may be classed as utopic fiction, their creators are highly aware of the tensions and antagonisms intrinsic to human nature and relationships.

Such texts are powerful vehicles for generating imaginative and innovative solutions. Collections like *Economic Social Fictions* [Davies, 2019] recognize this power, merging "merging social science with fiction, design with politics, scholarship with experimental forms" as a way to "revitalize economic thinking." By jumping to different times, either the past or the present, or packaging their insights as "fiction," they allow us to temporarily escape the "real present" and its stifled sense of possibility.

In this sense, socialist infrastructuring may be conceived as an updated version of "machines for designing the future" [Fisher, 2010]. By training a language model on historical texts, our synthetic Allende and Beer bots enable conversations that are speculative but also grounded in a set of real-world writings, experiences, and confrontations. Whether adapting fiction generators or "misusing" generative AI models, we could envision any number of like-minded projects that aim to achieve similar ends. Such projects leverage computational affordances to break out of the labyrinth of capitalist realism that critics have diagnosed.

Socialist infrastructuring makes a contribution on two levels. First, it does not claim to prove itself as a totalizing vision or universal "solution," but instead aims to explore how alternative logics might be taken up at particular scales, for particular peoples and particular use-cases. Importantly, this is a ratcheting down of scope not radicality. Indeed, this is how "real-world" systems are conceptualized, developed, and produced. Second, it does not need to provide launch-ready software which caters for every case and contingency, but aims to demonstrate that other approaches to ordering socio-economic life are possible. This in itself is a worthwhile "outcome." As [Pahl et al., 2023] stress, such experimentation is first and foremost about "the aesthetics of societal visions, about the critical reflection of latent tendencies, preanalytical visions and imaginaries."

While socialist infrastructuring has been used towards imagining alternative socioeconomic futures, this is only one possible topic of many. We see strong potential, for instance, in using this approach to explore alternative systems in the context of the climate crisis, given how clearly inadequate our existing paradigms are. How might a computational system "solve" for an economic order which aimed not to maximize GDP but to minimize GHG (greenhouse gas) consumption? As bestselling books and scholarly articles in degrowth, green growth, and ecosocialism attest [Saito, 2023, 2024], there is strong and rising interest in these possibilities. Indeed, very recent research [Schlichter, 2024] takes early steps in this direction, adopting a Cybersyn-inspired approach to climate change and arguing for a radical pivot from a capitalist system to one that acknowledges planetary boundaries.

As with any approach, there are certainly inherent limits to this methodological and conceptual route. Firstly, there is some basic technical literacy required to set up software, experiment with technical systems, or prompt models — though we suggest, like the original Cybersyn project, that a surprising amount can be achieved with relatively modest technical means. Secondly, this approach aims for imagination rather than operationalization. This is not designed for those seeking to transform socialist paradigms into concrete products or shovel-ready projects, but rather best suited to those caught within existing systems that are seeking something at once more modest and more challenging: to simply imagine how our institutions, economies, and everyday life could be arranged in any other way. If our economic and ecological crises stem (partially) from our crisis of imagination [Ghosh, 2017], we need new tools to break this deadlock and offer an expanded possibility-space.

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