A 2024 Sophos survey revealed 67% of healthcare organizations fended off ransomware attacks, a 7% increase from 2023.

USER ACCOUNT

Challenging the Growth Narrative in and Through HCI

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Human–computer interaction (HCI) researchers have long studied technology design and use in supporting sustainability and social justice. However, the concerns of computing's engagement with and dependency on economic growth—which has led to climate change, biodiversity loss, species extinction, economic inequality, social inequity, and many other crises we face today—have yet to gain substantial attention. Recently, Sharma et al. problematized computing's engagement with growth, suggesting that a post-growth philosophy should be embraced in technology design and development [1]. Post-growth decenters the conventional notion of "economic growth" (usually measured in GDP) as the central goal of economic policy and technological innovation, in favor of centering alternative measures of well-being. It calls for a reimagining of modern life and advocates for shrinking sectors that are unsustainable, unjust, and harmful, such as fossil fuel and corporate domination, while growing other sectors, such as healthcare and education, that cultivate care, sustainability, and our collective well-being. The central goal is to build a society that serves both the planet and its residents, now and in the future.

Today, post-growth arguments are increasingly being discussed in mainstream media and policy venues. In September 2024, the UN Pact for the Future declared the institution's intentions to improve "how we measure human progress, going beyond GDP to capturing human and planetary well-being and sustainability."[1] At ACM CHI 2024, we organized and participated in the workshop "Post-growth HCI: Co-Envisioning HCI Beyond Economic Growth" [2]. The richness of thoughts, diversity of identities, dedication to advancing sustainability considerations, and creativity of the professionals involved enabled more profound, enriching discussions.

However, these are just the opening steps along an important, critical, and difficult path. What is the path forward in HCI when growth is so ubiquitously ingrained and privileged by our economic systems? Dare we acknowledge the seemingly impossible nature of the quest? How do we challenge the growth narrative?

This article reflects on some conversations we had during the workshop and invites the broader HCI community to envision technology-mediated futures beyond the dominant growth paradigm. Futures that are different and better.

1 https://press.un.org/en/2024/ga12641.doc.htm

We need to critically interrogate the political and economic systems in which individuals, communities, and technologies co-exist

CONSIDERING THE POLITICAL ECONOMY

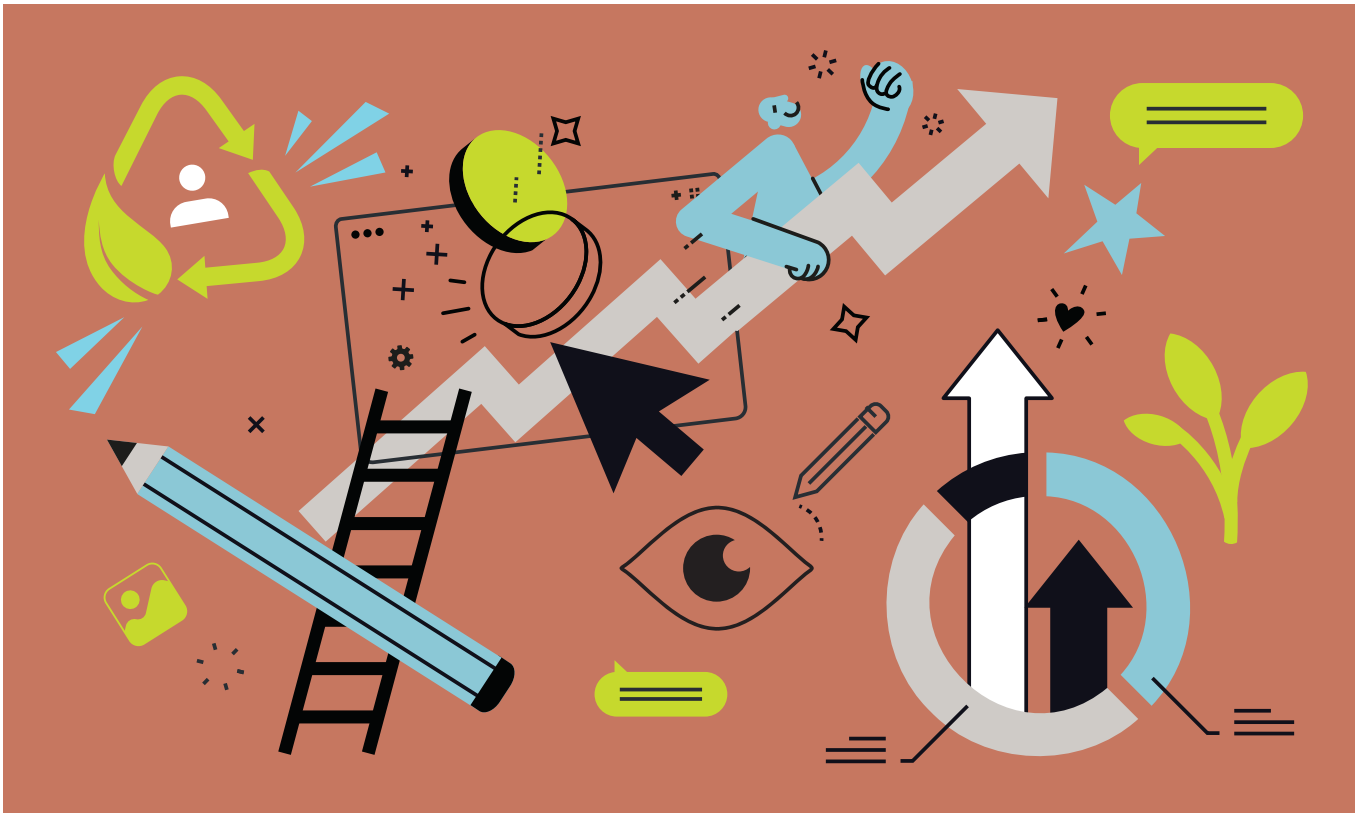
HCI research often focuses on incremental, user-level changes. Perhaps because these are more tangible and manageable to design, map, and implement. Or, perhaps, because, at least implicitly, these are less likely to challenge the basic ethos of computing. In any case, such efforts fall short when addressing challenges of sustainability and social justice that operate on a much broader global scale. To tackle such issues, it is essential to confront the larger systems that shape computing research and development.

Nardi et al. have repeatedly urged the HCI community to engage with the political economy in the design and evaluation of technology [3]. Recently, others have made a similar appeal [1]. Yet, many continue to shy away from examining the economic systems underpinning our work and their profound impact on the environment. What prevents us from integrating considerations of political economy into HCI? And how can we shift from the relatively narrow focus on individual users to critically examine the broader economic structures in which they—and our technologies—are embedded?

Given the precarious circumstances and computing's central role, it is time for us, HCI professionals, to reflect and then act. Sharma and Kumar suggest:

2024

Numerous reports claim the largest ransomware payment ever made was $75M to the Dark Angels group. The targeted Fortune 50 company remains a mystery.



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"HCI has an opportunity to redefine its role in shaping technological futures—not as a driver of perpetual expansion but as a force for enabling equitable, regenerative, and sustainable systems. As HCI professionals, we would have to re-evaluate not just our technical ingenuity but a fundamental rethinking of values, priorities, and the very purpose of innovation itself" [1].

Engaging with the political economy in HCI requires a paradigm shift that draws from ecological economics. Unlike traditional economics, which often assumes infinite resources and an unbounded biosphere (which is what has guided computing's advancements so far), ecological economics frames the economy as a subset of the finite planetary ecosystem. This perspective challenges us to rethink the fundamental relationship between economic systems and environmental sustainability, offering insights that can guide transformative HCI practices.

Viewing HCI through this lens also prompts us to confront a critical question: Why is most sustainable HCI research concentrated on industrialized, affluent Western contexts, while the Global South, where sustainability challenges are compounded by developmental inequities, remains underrepresented? A question that some of us have explored elsewhere [4]. It requires HCI to move beyond its comfort zone, engaging with the deeply entrenched neoliberal and other political-economic systems that perpetuate inequality and environmental degradation.

As we design technologies, we need to critically interrogate the political and economic systems in which individuals, communities, and technologies co-exist. The future of HCI lies in fostering a more inclusive conversation and collaborating with scholars who have not yet been a part of HCI, including ecological economists, ecologists, biologists, and others who can bring diverse perspectives.

UNCOVERING CAPITALIST MOTIVES

The global economic system is deeply rooted in anthropocentrism—the belief that humans are the most important beings and their needs and desires should take precedence. This belief has led to the commodification of more-than-human life forms, treating them solely as resources to be exploited for human benefit. HCI, as the name implies, also stems from an anthropocentric foundation. Human-centered design (HCD), for example, focuses on understanding users' needs and creating innovative solutions. However, in practice, it often overlooks more-than-human entities and our larger living ecosystems in which humans are just one element. It's crucial to bring to light the capitalist

For the second quarter of 2025, Check Point Research named Microsoft the most frequently impersonated brand accounting for 25% of phishing attacks followed by Google, Apple, Spotify, and Adobe.

motivations underlying and shaping many applications of HCD. Many so-called "human-centered" solutions, such as smart cities, robotics, and wearables, can be better described as "corporate-centered" designs created to exploit commercial opportunities for short-term financial gains. These designs, while ostensibly user-focused, have primarily served capitalist imperatives, like shareholder profit and year-after-year growth, reducing human users to consumers to be monetized [5].

Post-growth challenges this growth-driven, profit-centered model, but it does not reject any focus on humanity. Instead, it seeks to decenter humans. Decentering humans does not mean eliminating humans; it means recognizing that humans are entangled with other species and ecosystems, which also have agency, identity, and intelligence. In this sense, post-growth remains human-centered in its commitment to addressing human well-being, but it broadens the scope to include more-than-human life forms and the planet's finite resources. For example, some CHI'24 workshop contributions examined growth-oriented values that often underpin diverse technology projects, ranging from data visualizations to ambient health tools, and showed how these types of technologies would change in a post-growth context. Others explored real tensions and the difficulties of reducing the dependency of computing R&D on capitalist markets.

As we move forward, we can reimagine technology design beyond the confines of capitalism and short-term gain. This requires acknowledging that both humans and more-than-human entities share this planet, and our designs must reflect an understanding of this shared existence, this interdependence, integrating more-than-human perspectives and respecting their intrinsic value.

DEBUNKING THE MYTHS OF BIG TECH

The prevailing narrative often suggests that technology holds the answer to societal issues such as poverty, health, hunger, and sustainability. Tech entrepreneurs blithely proffer solutions to problems that are not technological at all. The story goes that the next technological fix is just around the corner, yet the "solution" never seems to materialize. Although these claims can be easily debunked, the myths persist that our future must be in the hands of technocrats, despite economists pointing out that the true breakthroughs have never come from entrepreneurs but from long-term, risky state-funded investments. Many of Silicon Valley's hallmark innovations—the touchscreen, the internet, GPS, voice recognition, etc.—were made possible by substantial government support, not corporate ingenuity alone [6]. However, technosolutionism is far from the only problem with big tech that needs to be deconstructed and brought to light. The outsized role played by the tech community, and tech deployment, in research funding strategies, lobbying, political decision-making, roles in surveillance and weapon systems, land-use, and the algorithmicification of our daily lives is spectacularly unprecedented. Nardi critiques "smart" cities, writing: "[O]ne smart cities initiative stated, 'Accidental deaths from opioid addiction claim more lives in the U.S. than guns and traffic accidents.' This is more or less true. 'And most cities are strapped for the money and other resources they need to combat it. While there are challenges, promising early intervention solutions are coming—solutions that focus on four key elements: engagement, data, technology, and funding.' This is not true! Such solutions are *not* coming! It is shocking to peddle expensive technologies falsely claiming to address human tragedies with the intent of funneling scarce resources to corporate interests. While rigid central planning is no solution, neither is putting elite foxes in charge of the henhouse. We must back up a level, or several levels, and *ask why* cities are cash strapped. Why can't we address people's basic needs? If cities are struggling, why buy data technologies when resources for counseling, jobs, medical care, health insurance, and housing are essential? We can collect all the data we want, but that won't solve the opioid crisis which requires direct, caring, holistic interventions" [5].

What if in this story technology isn't about endless growth but about fostering well-being, justice, and more sustainable worlds?

So, instead of continuing to place faith in big tech's promises, why can't we embrace a more radical agenda—one that challenges the growth-centric narratives perpetuated by Silicon Valley. This vision calls for a transformation within the computing profession itself, moving away from technosolutionism toward prioritizing human dignity and humility over profits and expansion [6]. Several CHI'24 workshop papers explored such initiatives, including the cultivation of grassroots food systems and mutual aid initiatives, the re-shaping of game design by post-growth values, and ways of organizing and mobilizing the efforts of the post-growth HCI community.

RETHINKING ACADEMIC SUCCESS

Wealth and success in academia are often measured in terms of growth-oriented metrics: publications, presen-

82.6%

of phishing emails utilized some form of AI according to KnowBe4's 2025 Phishing Threat Trend Report.

tations, and grant acquisitions. In our attempt to gather more, as academics, are we supporting and nourishing the process of academia, which involves cultivating deep thought, discourse, and action, or are we undermining and eroding its values and societal contributions? More is not always better.

The relentless pressure to publish for competitive venues, including ACM CHI, often incentivizes quantity over quality or meaningful contributions. Research institutions usually reward faculty and students whose CVs are bulging with research papers, creating a system where researchers spend excessive time chasing publications rather than delving deep into truly impactful questions. In this "publish-or-perish" model, collaboration, which is crucial for knowledge sharing and innovation, takes a backseat in this relentless pursuit of individual publication records. To churn out a paper, researchers play the game of pursuing novel topics because such topics are often easily publishable. The current proliferation of papers uncritically applying LLMs to ever-new problem areas just because it seemed possible has been criticized; Arawjo lamented that such work is "taking up territory and filling it with junk that newer authors need to wade through to justify their work" [7]. While the objectives of these authors can be questioned, the structures that incentivize this behavior are to blame.

Post-growth demands dismantling the neoliberal paradigm in academia, instead advocating for "slow" academia—more thoughtful research, teaching, and reflection. This could include a metrics shift from raw individualized publication numbers to a more holistic and collective evaluation of research impact on society and the environment. Academics can write less and be more precise by concentrating on groundbreaking research with lasting consequences. They can focus on deliberation over acceleration, prioritizing reflection, open-ended inquiry, and cultivating deep thought, discourse, and action within the HCI community and the broader world.

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Several other bold steps could catalyze this shift. Perhaps, implementing a system where each academic is incentivized to publish a low number of high-quality papers. Tenure and promotion processes could prioritize a sustainable research workload, fostering in-depth research. The Ph.D. model could shift toward a strong emphasis on a well-developed, impactful monograph thesis with actual or potential real-world impact, to encourage in-depth research and analysis over the rapid accumulation of short publications. As a scholarly community, we need to collectively decide what future we want to cultivate in HCI academia: Do we want a system focused on relentless publication volume or collaborative and impactful research?

ENVISIONING A DIFFERENT NARRATIVE

HCI has been following the single story of growth, which celebrates production and consumption via technologies. What if there was another story? What if in this story technology isn't about endless growth but about fostering well-being, justice, and more sustainable worlds? What if the story goes:

Anita squinted at her dusty screen, its faded colors contrasting with the vibrant flora bursting through the windows. Her work was not about optimizing user engagement, but designing artifacts that nurtured connection. Her designs weren't commodities to be bought, but resources to be shared and maintained collectively. They had no patents or private ownership, but belonged to the community and were open for adaptation and improvement by anyone. She was part of an independent Transitional Computing Foundation, which most of the big tech companies (and many smaller ones) established (using 1% of their profits) after prolonged consultation and encouragement from the professional computing community to help explore a move from a profit-centric, growth mentality to a more

The Anti-Phishing Working Group's (APWG) Q1 2025 "Phishing Activity Trends Report" reported that 73.5% of business e-mail compromise (BEC) scams originated in Gmail.

sustainable and life-affirming future. The TCF, as well as the NSF Post-Growth Sociotechnical Initiative Program, provided funding for Anita as a community co-researcher, working with local communities. Her learnings were then incorporated into their business models to seek ways to sustain meaningful relationships with a few long-term customers instead of constantly acquiring new ones. Some departments within big tech companies started experimenting with maintaining a flat curve across quarterly meetings. On the academic side, there were no flashy conferences at "exotic" locations or coveted publication deadlines throughout the year; instead, knowledge was exchanged through local and participatory meetups. The idea of scaling up was outmoded here. Success was measured by the strength of relationships, the health of the environment, and the well-being of all life forms. This was a world where the frantic chase for progress had been replaced by slow, deliberate care for each other and the planet—a new world.

What if HCI can help in building such an alternative future? It certainly holds a powerful position to do so. Our unique blend of skills sets us apart: We possess the can-do spirit of engineers, the critical lens of humanities scholars, the understanding of behavior from psychologists, the deep empathy and cultural sensitivity of anthropologists, and the creativity of designers [4]. This vibrant interdisciplinary perspective, combined with a welcoming openness to subversive ideas, positions us to tackle complex questions and societal issues meaningfully. Toyama reminds us that "HCI [is] the conscience of computing. I do think we have a large role to play... in terms of ensuring that the computing industry itself ceases to become a net consumer of resources... and we should play that role" [4]. Wolf, Asad, and Dombrowski emphasize: "We can, through our projects and design praxis, [separately and together] wrestle with and struggle against the institutions that we ourselves live and work under, at the same time we try to create alternatives that are more equitable and make possible [post]-capitalist futures" [8]. We have to keep pushing, keep speaking louder to challenge the prevailing narratives that prioritize growth, and by extension, unjust and unsustainable politics.

We hope you join us in challenging the status quo and dismantling unjust and unsustainable narratives within HCI. We can establish projects and new ways of organizing that counter the narrative and institutionalization of economic growth as the oppressive and hegemonic force that it is today. This includes raising collective critical consciousness toward post-growth. Those with creative ideas across the globe should reach out to us and join our growing post-growth HCI collective as we work together to address sustainability predicaments, which, after all, are global. We can work toward transforming computing academia, rippling outward to the larger academic community, and beyond. A better HCI is possible; it is needed.

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Biographies

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DOI:10.1145/3744691