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Debra Ruh,

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Debra Ruh

Debra Maria Ruh is a globally celebrated visionary, bestselling author, and advocate for disability inclusion and accessibility. As CEO of Ruh Global IMPACT and Co-Founder and Chairman of Billion Strong[1], she drives transformative change, unlocking the $8 trillion market potential of the disability community. Ranked in the top 2% of LinkedIn influencers with over 650,000 followers, she amplifies inclusion worldwide via X/Twitter, LinkedIn, and YouTube, earning recognition as a top 15 global digital influencer (2018-2021).

Since founding TecAccess in 2001—a multimillion-dollar pioneer in ICT accessibility with a 90% disabled workforce—she has advised Fortune 500 companies and governments on inclusion strategies, smart cities, and AI solutions as CEO of Ruh Global IMPACT.

[1] ***https://www.billion-strong.org/***

In 2021, she launched Billion Strong, uniting over 1 billion people with disabilities across 116+ countries to foster empowerment and discoverability. A U.S. State Department speaker, Debra shapes policy at the United Nations and beyond.

Her media platforms, AXSChat[2] (over 1 billion tweets) and Human Potential at Work (500+ interviews), cement her as a leading voice. Author of Inclusion Branding and two other books, and her work appears in Forbes, INC, and Nasdaq. From 2006-2021, she advanced ICT accessibility as Employ-Ability & Technology Chair at UN G3ict. Honored with the SBA's Small Business Person of the Year (2005) and other awards, Debra's mission—fueled by her daughter with Down syndrome—design a world for all.

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[2] **https://www.axschat.com/**

Introduction

It is with immense pride and gratitude that I step into the role of Guest Editor for the Journal of May 2025 Volume-20, Issue-5, of the Design for All Institute of India . I extend my deepest appreciation to Dr. Sunil Bhatia for entrusting me with this privilege and to the brilliant authors whose contributions have brought this issue to life. Together, we are crafting a visionary exploration of design's greatest promise: "inclusion for all".

This edition boldly confronts a pressing question: Why, in an era of unprecedented knowledge and innovation, do we persist in designing systems—be it schools, cities, or algorithms—that serve only a privileged few when we possess the tools to create for everyone at every stage of life?

Here, we redefine what it means to build a world that truly works for all humanity. Through the lenses of gaming, technology, environments, systems, and policy, we uncover transformative ideas that bridge gaps and break barriers.

Prepare to be inspired by a dynamic collection of articles that amplify the voices of the global disability community and spotlight cutting-edge advancements in assistive technology and accessibility.

These pages dive deep into the heart of human inclusion, celebrating the resilience, diversity, and untapped potential of individuals with disabilities. You'll encounter groundbreaking innovations that empower autonomy, revolutionize communication, and unlock seamless access to information and services—proving that technology, when wielded with purpose, can reshape lives.

This journal is more than a publication—it's a call to action. Our goal is to ignite your imagination, spark vital conversations, and fuel collaboration toward a future where inclusivity and equality are not aspirations but realities.

Welcome to a celebration of human potential and a roadmap for progress. Thank you for joining us on this journey—we're confident this issue will leave you informed, empowered, and eager to champion design for all.

Enjoy the read!

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Designing for Your Future Self: Human Inclusion, Accessibility, and a Better World for All

Debra Ruh

What if the most powerful design shift wasn't about aesthetics, speed, or profitability but about designing for your future self?

What if everything we built — our cities, our homes, our digital tools, our classrooms, our transportation, our public services — were created with the assumption that every human being changes?

That we age. We fall. We recover. We adapt. That some of us are born with disabilities, and many more of us will acquire them throughout life.
This isn't a possibility. This is reality. And the future of design must rise to meet it.

We are proud to present this May issue of the Design for All journal, focused on a concept that should be at the core of every innovation: Human Inclusion.
Designing for inclusion means designing with the awareness that disability is a normal part of the human experience. It's not a fringe concern. It's not just about ramps or screen readers (though both are vital). It's about creating systems, products, and environments that serve humans across every stage of life. From infancy to elder care, from mental health to mobility, and from birth to legacy.

The global aging crisis is not on the horizon — it is here. By 2050, over 2 billion people will be aged 60 or older.

With age comes shifts in vision, hearing, cognition, mobility, stamina, and more. The smart companies, governments, and innovators are already adjusting. They're asking: How can we design for our future selves?

The best examples are already among us. HP quietly released a printer — the OfficeJet Pro 9020 series, model F500 — that Steve Tyler, who is blind, celebrated for its ease of use, accessibility, and thoughtful innovation — not because it was labeled as "for the blind," but because it simply worked for everyone. Game developers are now coordinating across the industry to standardize accessibility labels[3] on digital storefronts. This isn't a small shift. It signals that accessibility is becoming part of the design DNA in industries that shape culture and technology.

But we must go further. It is still far too common to see products, buildings, platforms, and systems launched into the world that exclude enormous segments of the population. Whether by oversight, outdated assumptions, or deliberate cost-cutting, exclusionary design does real harm. And not just to those affected now, but to the very people who built those systems when *they* eventually age or experience disability.

Let's say it clearly: to design something today that does not work for people with disabilities is to design something that will eventually fail you, your loved ones, and your future self.

[3] ***Ian Carlos Campbell, 2025, Game companies will standardize accessibility labels on storefronts and product pages, https://www.engadget.com/gaming/game-companies-will-standardize-accessibility-labels-on-storefronts-and-product-pages-211335539.html***

This is about dignity. It's also about business. It's about climate. It's about AI.

Human-centered design must be part of saving our planet. When we build sustainable, accessible, inclusive environments, we reduce waste, create resilient communities, and ensure that innovations serve everyone. Accessibility isn't at odds with environmental goals — it complements them.

And yes, there is anxiety around AI. Many are afraid it will replace, dominate, or dehumanize us. But maybe — just maybe — this is our opportunity to use AI for great good. To support fragile humans. To ensure we *don't* leave anyone behind. AI can become a powerful tool for amplifying inclusion, from voice navigation to real-time captioning to customized learning and communication tools.

But it must be designed with us, not just for us. That's why I co-founded Billion Strong, a global identity and empowerment movement by and for people with disabilities, neurodivergent individuals, and allies. With over 1.3 billion people globally living with disabilities, our mission is simple: to convene, connect, and empower our community to be visible, heard, and valued. We are a "Nothing About Us Without Us" movement that embraces collaboration, storytelling, innovation, and global leadership. We invite all communities, including the design and gaming worlds, to join us in building a more inclusive future.

We are also proud to announce our new partnership with LifeUSA.org, an organization deeply committed to supporting vulnerable populations, including people in crisis, displaced communities, and refugees. This collaboration demonstrates how a disability inclusion

and accessibility team can add real value to philanthropic communities and the funders who protect our most at-risk populations. As we face rising global instability and increased attacks on DEI frameworks, this alliance is a bold example of what it means to *invest in resilience, humanity, and unity*. Together, we are helping to pick up the pieces, rebuild systems, and offer pathways forward for those who are too often left behind.

Human inclusion is not just the right thing to do. It is the smart, sustainable, strategic way forward.

We must design like our future depended on it. Because it does.

In this "Design for All Institute of India" issue, we present 8 **articles from leaders worldwide.**

In his article "Smart Cities for All: The Imperative of Human-Centric Design Today," Richard J. Streitz emphasizes that smart cities must prioritize human-centric design to serve all citizens, particularly the 1 in 6 people globally living with disabilities. He explores how involving end-users in design processes ensures inclusivity across physical spaces—like accessible streets with curb cuts—and digital environments, such as websites meeting WCAG standards and AR/VR tools with adaptive features. Case studies, including London's Bluetooth beacons for the visually impaired, highlight practical, tech-driven solutions. Streitz argues that inclusive design fosters resilient, equitable cities, aligning with the UN's Sustainable Development Goals. His work calls for immediate action to create urban spaces where everyone thrives.

In his article "Empowering the Disability Community Through Radical Collaboration and Grassroots Leadership," Nabil Eid highlights how people with disabilities, over 1.3 billion globally, are driving change despite systemic barriers. He explores how radical collaboration—unconventional partnerships—and grassroots leadership are dismantling exclusion through community-led initiatives. Case studies from India, Kenya, and the U.S. showcase innovations like accessible technology and policy shifts born from lived experience.

Eid argues that these efforts challenge top-down inertia, urging policymakers to fund collaboration and empower disability-led expertise. The article underscores a movement redefining inclusion, rooted in resilience and collective action.

Khalil Meek, in his article "Human Dignity Without Limits: Why Supporting People with Disabilities Is a Responsibility We All Share," emphasizes the universal importance of disability inclusion as a matter of justice, not charity. Representing Life for Relief and Development, Meek illustrates how inclusive systems benefit everyone, drawing on examples like curb cuts and closed captions. He highlights the transformative work of organizations like Ruh Global IMPACT and Billion Strong, alongside LIFE's initiatives, such as a 3D-printed prosthetics hub in Jordan that restores independence to individuals in conflict zones. Through stories from Syria, Yemen, Palestine, and Iraq, Meek demonstrates the power of blending global advocacy with local impact, calling on all sectors of society to join this movement for a more equitable world.

In his article, "Why Are We Still Designing Systems That Exclude When We Know How to Design for All?" Puneet Singh Singhal reflects

on his experiences with dyslexia and dyspraxia in Delhi, revealing how systems—from schools to cities—often exclude those outside a narrow "normal." He critiques the lack of disability inclusion in climate action, noting how environmental crises disproportionately impact vulnerable groups, like people with disabilities, due to inaccessible emergency plans. Through his initiative, Green Disability, Puneet advocates for universal design principles, such as accessible warning systems, which benefit all. He highlights grassroots efforts, like inclusive climate rallies with sign language interpreters, to show how collaboration drives innovation. Puneet calls for accountability and action to ensure inclusive design across all sectors, fostering equity for everyone.

In her article "Accessibility in Gaming from Today's Perspective," Verónica Morales Beltrán examines the evolving role of accessibility in the video game industry, drawing from her 12-year career at Electronic Arts. She highlights gaming's power to connect and inspire, stressing that skills should never be a barrier to play. Recent advancements, like Microsoft's Xbox Adaptive Joystick, the Switch 2's integrated screen reader, and the ESA's Accessible Games Initiative with 24 accessibility tags, mark significant progress in 2025. Beltrán emphasizes the importance of representation, citing games like Harmonium, which portrays disability positively, and advocates for a combined top-down and bottom-up approach to ensure equitable opportunities for the 15% of the global population with disabilities. She calls for embracing accessibility as both an altruistic and self-serving act, benefiting all as we age.

In his article "Where Are WE?" Steve Tyler reflects on his career pioneering accessibility innovations—like the first accessible mobile

phones and set-top boxes—enabled by platforms from Microsoft, Apple, and Google. Despite these advancements, he critiques persistent systemic barriers, noting that over 96% of web homepages remain inaccessible in 2025, and people with disabilities face exclusion in employment and education. Tyler questions the commercialization of representative organizations and the misuse of co-production, advocating for human-centered design over specialized accessibility frameworks. He highlights the need for disability-led leadership, simplified messaging, and sustained cultural change through education and collaboration. Tyler calls for a reimagined disability narrative to ensure true inclusion for all.

In their article "Building AI Systems That Recognize Global Diversity through Better Data, Smarter Tech, and Inclusive Practices," Venkat Rao and Dr. Emily Springer critique the Western-centric foundations of large language models (LLMs) and outline a vision for truly global AI. They argue that despite the global reach of generative AI tools like ChatGPT and Claude, these systems are largely trained on data rooted in Western, Educated, Industrialized, Rich, and Democratic (WEIRD) contexts—leading to culturally biased outputs. Through examples—from facial recognition misjudging African and Japanese expressions to AI rewriting Indian voices to match Western norms—they illustrate the real harm of cultural misrepresentation in AI.

The authors call for a paradigm shift that begins with diversifying datasets through inclusive, community-led data collection, better linguistic representation, and culturally aware labeling.

They highlight the need for smarter technical strategies like transfer learning and bias detection and push for inclusive design through global, multidisciplinary teams and participatory development

processes. Rao and Springer conclude with a powerful vision: AI systems that don't flatten cultural nuance but instead embrace it—tools that connect rather than divide and technologies that empower people across every culture, language, and identity.

Thank you!

Debra Ruh

Richard J. Streitz, *with a 35-year career, is a visionary leader in universal inclusion and design. As Chief Operating Officer at Ruh Global Impact, he drives global expansion; consults on accessibility, smart cities, Web 3.0, Blockchain, DAO, AI, and AR/VR strategies; and promotes inclusion awareness. Previously, as VP of Design & Development at S&S Theme Parks and Resorts S.A., he co-founded and led the design of the world's first universally accessible, digitally integrated theme park and resort in Costa Rica, collaborating with government officials. As a former Walt Disney Imagineer, Streitz managed major projects like Disney's Hollywood Studios, EuroDisney, Animal Kingdom, and Tokyo DisneySeas, overseeing multimillion-dollar budgets and hundreds of team members across disciplines. He also contributed to enhancements at Magic Kingdom, EPCOT Center, and Disneyland in Anaheim. Streitz's commitment to universal design ensures inclusivity for persons with disabilities and the global senior community. His expertise spans creative design, production efficiency, and executive oversight, enabling him to lead large-scale international projects. A persuasive communicator, he excels at pitching ideas to diverse stakeholders while maintaining schedules, budgets, and design integrity. Streitz's multi-disciplinary background in design, production, and construction, combined with his strategic*

leadership, positions him as a pivotal figure in creating inclusive, innovative urban environments.

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Smart Cities for All: The Imperative of Human-Centric Design Today

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Abstract :

Smart cities leverage technology to enhance urban living, yet they often overlook the diverse needs of their most vulnerable populations, risking exclusion over inclusion. This article advocates for a human-centric approach to urban design, ensuring that physical spaces, services, and digital technologies are accessible and equitable for all—children, the elderly, individuals with cognitive or physical disabilities, and beyond. Through practical short-term solutions like accessible infrastructure, sensory-friendly public spaces, and inclusive digital platforms, the article outlines actionable steps toward a more equitable urban future. It also presents best practices and visionary strategies, demonstrating how inclusive design in urban planning and digital innovation can enhance quality of life today while building a foundation for a truly "smart" and inclusive tomorrow, aligned with the principles of designing for all phases of the human life cycle.

Keywords:

Inclusive Design; Smart Cities; Accessibility; Universal Design; Digital Inclusion; Human-Centric Innovation

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Smart Cities for All: The Imperative of Human-Centric Design Today

Source Image: https://pixabay.com/

Introduction

Smart cities are transforming urban life through technology – from sensor-equipped infrastructure to digital public services – yet the true measure of a smart city's success is how well it serves all its people. In recent years, planners and innovators have recognized that a city cannot be "smart" if it leaves behind those who are not tech-savvy, mobile, or young. This is where human-centric design becomes essential. *Human-centered design* is an approach to problem-solving that focuses on the needs, wants, and limitations of people first. (smartcitieslibrary.com) .

Rather than forcing citizens to adapt to technology-driven initiatives, the technology and design of the city are tailored to its people.

In practice, this means involving end-users in the planning process and considering the diverse perspectives of everyone affected – from children playing in parks to seniors navigating busy streets. By taking into account users' needs from the outset, cities can avoid costly retrofits and ensure that new initiatives have the desired impact.

Inclusive, human-centric design is not just a matter of social equity – it is also vital for sustainability and resilience. Urban populations today are more diverse than ever, and they are aging. More than 12% of the global population is over 65, and about 1 in 6 people worldwide lives with a disability (weforum.org).

These numbers will only grow with time. Yet, historically, many city environments and services have overlooked the needs of vulnerable groups. Marginalized communities – including low-income, elderly, immigrant, and disabled residents – have not always shared in the benefits of urban growth and revitalization.

Designing *with* and *for* these populations is both a moral imperative and a practical necessity. The United Nations' Sustainable Development Goals underscore the importance of inclusive urban development, calling on cities to "make cities and human settlements inclusive, safe, resilient, and sustainable" (www2.deloitte.com).

An inclusive design approach can also yield broader benefits: Cities that foster inclusion often enjoy stronger economic health and social cohesion than those that do not.

In short, when cities work well for everyone – including people with disabilities, children, and the elderly – the whole community thrives.

This article, written for the Design for All Institute of India, examines how human-centric design can make smart cities inclusive in both physical and digital spaces.

It combines a visionary outlook with practical short-term solutions, structured in two sections: the first focuses on physical environments like streets and public spaces, while the second explores digital environments, including websites, apps, and technologies like AR/VR

and blockchain. Through best practices and case studies, the article demonstrates how inclusive design enhances daily life for people of all ages and abilities, laying the foundation for smarter, more equitable cities in the future.

Inclusive Design in Physical Environments

A truly inclusive city begins at the human scale – in the design of its neighborhoods, buildings, transportation systems, and public spaces. These physical environments shape how people move through and experience the city. Too often, city layouts and architecture unintentionally exclude those with mobility challenges, sensory impairments, or other special needs. For example, a lack of ramps, poorly lit streets, or the absence of seating can turn a simple errand into an ordeal for an elderly person. In fact, in many places, "the shortage of ramps, well-lit spaces, and designed accessibility for the elderly demonstrates that the isolation of older adults is not elective but a consequence of a lack of inclusive design and urban planning". (citychangers.org).

The good news is that by applying universal design principles – designing spaces to be usable by as many people as possible – cities can address these gaps and improve access for all. A classic illustration is the *curb cut*: the small ramp connecting a sidewalk to the street. Curb cuts were originally installed for wheelchair users, but they have proven "*unexpectedly useful for a wider range of people, including parents with strollers, cyclists, [and] delivery workers"*, exemplifying the "curb-cut effect" in which accommodations for a minority benefit a much larger population. (archdaily.com). This effect underscores that investing in accessibility yields widespread dividends.

Designing inclusive physical environments involves thinking about the full spectrum of human ability and age. Consider a few domains and best practices:

- **The "Streets and Mobility" subsection focuses on creating safe, navigable streets for all, with features like ramps, curb cuts, tactile paving, and audible crosswalk signals for the visually impaired, plus clear signage. Pedestrian zones and traffic-calming measures safeguard children and seniors, while accessible transit options—low-floor buses, audio-visual announcements, and inclusive apps—improve mobility. London's use of Bluetooth beacon technology, delivering audio navigation for blind riders via smartphones (www2.deloitte.com), exemplifies tech-driven accessibility. These barrier-free, tech-enhanced solutions provide immediate improvements, broadening mobility for those with disabilities.**

- **The "Public Buildings and Spaces" subsection advocates for universal access in public facilities like schools, libraries, and government offices, emphasizing step-free entrances, wide corridors, and accessible restrooms. Wayfinding is enhanced with high-contrast braille signage and logical layouts for the visually and cognitively impaired. Features like seating, hearing loops, and accessible emergency systems—such as visual alarms for the deaf and evacuation chairs for wheelchair users—support diverse needs. Short-term solutions, including retrofit ramps and braille on elevator buttons, offer immediate improvements for inclusivity.**

- **The "Housing and Home Design" subsection highlights aging in place through inclusive home features like lever-style door handles, level entrances, reachable switches, and voice-activated smart systems. These modifications support people with disabilities, families with children, pregnant women, and those carrying heavy loads. While building codes increasingly include accessibility standards, city programs can offer incentives for retrofitting older homes with upgrades like stair lifts or walk-in showers. Such practical, short-term steps ensure that diverse populations can live safely and comfortably in their communities.**

- **The Parks and Recreation subsection stresses inclusivity in leisure spaces, advocating for city parks with paved pathways, accessible playgrounds (e.g., secure swings, ramped structures), and shaded areas for seniors and those with sensory sensitivities. Small parks can include backrest seating and wheelchair-friendly tables. The principle "what's good for children is good for all" highlights how child-friendly designs, like safe crossings and engaging parks, benefit everyone, including seniors with dementia (smartcitieslibrary.com). Involving diverse user groups in design ensures that parks foster community participation for all.**

- **The "Workplaces and Commerce" subsection underscores the importance of accessible offices, shops, and restaurants to foster economic participation in inclusive cities. Workplaces can implement universal design with adjustable desks, quiet focus rooms for neurodiverse employees, and icon-based signage for**

clarity. Retailers and restaurants should ensure step-free entrances, wide aisles, and adaptive services like large-print or braille menus, alongside staff training in sign language or autism-friendly service. These low-cost changes expand customer bases and satisfaction, while city policies can encourage adoption through codes and awards.

Inclusivity in the physical realm is as much about mindset as it is about modifications. City planners are increasingly adopting participatory design processes, engaging *"people with disabilities [as] the preeminent experts on their own needs"* in urban planning(fastcompany.com).

Co-designing urban solutions with end-users, such as wheelchair users advising on sidewalks or children shaping playground designs, leads to practical, innovative, and community-accepted outcomes. A human-centric approach ensures that diversity is prioritized from the start, embedding accessibility seamlessly into the physical environment. In inclusive cities, features like ramps, tactile guides, hearing loops, and family-friendly rest areas are standard components of good design. Many inclusive solutions can be implemented quickly—painting clearer crosswalks, adding grab bars, installing ramps, and improving street lighting—greatly enhancing daily life for vulnerable residents. Cities are also adopting smart technologies like IoT sensors, enabling adaptive infrastructure, such as pedestrian signals that adjust for slower walkers or benches that report wheelchair lift issues. These innovations, combined with inclusive design, create urban spaces that dynamically adapt to users' needs. Investing in accessible infrastructure and thoughtfully adopting new tools ensures that cities remain welcoming to all.

Inclusive Design in Digital Environments

In parallel with the physical cityscape, the digital dimension of smart cities must also be designed for inclusivity. Modern urban life increasingly relies on digital interfaces – whether it's a city government website, a mobile app for transportation and services, interactive kiosks on the street, or cutting-edge experiences like augmented reality (AR) navigation. A human-centric smart city recognizes that *digital inclusion* is as important as physical accessibility. This means ensuring that people of all abilities, ages, and socioeconomic backgrounds can access and benefit from digital services with ease and dignity.

The "Websites and Digital Services" subsection advocates for city websites and digital services to meet accessibility standards like the Web Content Accessibility Guidelines (WCAG) [w3.org]. Practical steps include alt-text for images, high-contrast resizable text, keyboard navigation, video captions, and error-tolerant forms, benefiting users with disabilities. These features also enhance usability for all, such as captions aiding in noisy environments or simple interfaces helping older users and mobile users [w3.org]. The web is meant to work for everyone, regardless of ability or context [w3.org]. Adopting these principles offers a quick, impactful win for cities and organizations.

The "Mobile Apps and Smart City Tech" subsection stresses the importance of inclusive UX design in smart city apps used for reporting issues, paying bills, or receiving alerts. Apps must be user-tested with diverse groups, offer customizable interfaces, and accommodate users with limited digital literacy. Designers should consider elderly or low-income individuals who may lack smartphones

or reliable internet, addressing scenarios like connectivity outages. A digital inclusion expert notes that systems often assume constant smartphone access, risking exclusion if a device fails (cheqd.io).

Therefore, inclusive digital services should always offer alternative channels: for example, if a city introduces an app for accessing public transit info, it should retain audible announcements or SMS-based services as a backup for those without smartphones. If a vaccine appointment system is online, there should also be a phone hotline or walk-in option. These redundancies ensure that critical information and services truly reach *everyone*, not just the digitally connected. Beyond ensuring access, inclusive digital design strives to be intuitive and user-friendly across a wide range of abilities. This is where human-centric design in the digital realm really shines: by involving end-users in iterative design, developers can identify barriers and preferences early. Key best practices include:

Follow Universal Design for UX

Universal design in user interfaces prioritizes simplicity, clarity, and flexibility to ensure accessibility for diverse users. It advocates for plain language, consistent navigation, adjustable settings like text size and contrast, and constructive error messages for those with cognitive or language challenges. Inclusive design must consider demographics, cultural differences, and digital literacy to create broadly understandable experiences [cheqd.io].

For example, city service apps can incorporate icons alongside text and offer multilingual options to support users with limited literacy.

Assistive Technologies and Adaptive Interfaces

Adapting digital tools to users' needs is crucial, with voice interfaces aiding those with limited mobility or literacy and screen reader compatibility supporting the blind. Public kiosks should feature tactile inputs and audio outputs for accessibility. Developers need to ensure compatibility with smartphone assistive features like voice control and test with assistive tech to catch issues early. This approach makes digital services accessible to users with visual, hearing, or motor impairments.

AR/VR and Emerging Tech

Augmented reality (AR) and virtual reality (VR) in smart cities, such as AR navigation and VR public consultations, can enhance inclusion by enabling virtual exploration for those with physical limitations and providing sign language interpretation [accessibility.com]. However, traditional accessibility tools may not apply, necessitating multiple modalities (audio, visual, haptic) and user controls to prevent sensory overload. Innovations like one-handed controllers [accessibility.com] and voice-command VR interfaces [accessibility.com] ensure accessibility for users with motor disabilities or older adults.

Inclusive Digital Infrastructure

Smart city infrastructure, including blockchain for digital IDs, data platforms, and AI services, must be designed to avoid excluding those without devices or technical skills. User-friendly interfaces, community education, and alternatives like physical ID cards can help. Public engagement, clear communication, and robust privacy measures build trust among vulnerable users. Pairing high-tech with

low-tech options, such as AI voice assistants and physical sensors, ensures inclusivity for all residents.

Ensuring Digital Inclusion (Continuous Process)

Addressing digital exclusion in smart cities requires ongoing efforts through policy and outreach. Programs offering free public internet, device lending at libraries, and app training for seniors help bridge access gaps. These initiatives complement accessible design by tackling socioeconomic barriers, ensuring benefits reach those without data plans. Combining technical design with supportive programs ensures that smart cities' digital transformation includes everyone.

Conclusion

The conclusion emphasizes that smart cities must prioritize human-centric, inclusive design to fulfill their promise, ensuring urban spaces—both physical and digital—are kind, comfortable, and empowering for all, including children, the elderly, and people with disabilities. It envisions a future where autonomous vehicles, adaptive public spaces, and personalized digital platforms cater to diverse needs, fostering a sense of belonging. Many solutions, like adding ramps, improving signage, and updating websites for accessibility, can be implemented immediately, creating momentum for broader inclusion. These changes benefit everyone, enhancing overall usability and fostering innovation. Inclusive cities are more resilient and agile, adapting to change while drawing on all citizens' talents. Ultimately, designing for all is the foundation of a truly smart city, built through daily, thoughtful choices.

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Theme: Accountability and Hope: Radical collaboration, grassroots leadership, and real change.

Nabil Eid ***is a global leader in Accessibility, Disability Inclusion, and Digital Transformation.***

Nabil serves as the CIO at Ruh Global IMPACT and Co-founder & CSO of Billion Strong. With over 25 years of experience, he has led transformative initiatives in inclusive policies, assistive technologies, and accessibility solutions within the international development ecosystem.

His expertise is frequently sought by leading United Nations agencies—including UNDP, UNESCWA, and ITU, and a wide network of governmental and civil society organizations. Nabil played a key role in establishing inclusive digital environments, such as the first accessible telecenters for people with disabilities in the MENA region. A prolific author, Nabil has published 12 influential books in English and Arabic on topics ranging from accessibility and digital empowerment to fully inclusive—transforming systems to reflect the full diversity of human potential.

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Empowering the Disability Community Through Radical Collaboration and Grassroots Leadership

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Abstract

People with disabilities—comprising over 1.3 billion individuals globally—face persistent systemic barriers, despite decades of advocacy and legal frameworks aimed at inclusion.

This article explores how radical collaboration and grassroots leadership are redefining the path to equity and accountability within the disability community. By highlighting case studies from India, Kenya, the U.S., and beyond, the article illustrates how disability-led initiatives and cross-sector partnerships are dismantling exclusionary structures and advancing real, measurable change. Rather than waiting for top-down reform, people with disabilities are forging solutions rooted in lived experience, resilience, and collective action. From accessible technology to inclusive education policy, this movement is not only challenging the status quo—it is building a more just, inclusive future.

The article calls on policymakers to support these efforts by funding collaboration, empowering community leaders, and integrating disability-led expertise into mainstream decision-making.

Keywords:

Disability Inclusion, Radical Collaboration, Grassroots Leadership, Accessibility, Inclusive Policy, Assistive Technology, Systemic Barriers, Lived Experience, Disability Advocacy, Inclusive Design, Digital Accessibility, Community Empowerment, Social Justice, Policy Change, Disability Rights.

Empowering the Disability Community Through Radical Collaboration and Grassroots Leadership

Introduction

The disability community—over 1.3 billion individuals worldwide—stands at a critical juncture. Representing 16% of the global population (World Health Organization, 2023), this vast and diverse group navigates a landscape where systems meant to support them—be it healthcare, education, employment, or infrastructure—frequently falter, shaped more by indifference than deliberate intent. This is not a new story: decades of promises, from international conventions to national laws, have painted inclusion as an achievable horizon. Yet, the gap between rhetoric and reality persists, leaving people with disabilities to contend with barriers that are as entrenched as they are avoidable. Globally, their voices are too often muted, their needs sidelined by a design philosophy that favors convenience for the majority over equity for all.

Within this struggle, however, lies a profound and untapped opportunity. Through radical collaboration and grassroots leadership, people with disabilities are not merely demanding accountability—they are actively constructing it. These twin forces—unconventional partnerships and community-driven initiatives—represent a seismic

shift, challenging the top-down inertia that has long defined progress in this space. This article examines how these dynamics drive substantive, measurable change, from local innovations to policy overhauls, offering policymakers a practical blueprint to move beyond token gestures toward a future where inclusion is woven into the fabric of society, not tacked on as an afterthought.

The urgency is unmistakable: the status quo is not just unsustainable—it is a failure of imagination and will. The disability community, through its resilience and ingenuity, is already illuminating the way forward. The question remains whether those in power will follow or continue to lag.

Systemic Failures Quantified

Across the globe, people with disabilities confront a paradox: they are a significant portion of humanity—yet remain relegated to the margins of societal systems designed without them in mind.

Decades of legislation, advocacy, and technological advancement have promised inclusion, yet the reality falls starkly short. From employment to digital access to basic mobility, the disability community faces barriers that are not mere oversights but symptoms of deeper, systemic neglect.

This neglect is quantifiable, pervasive, and rooted in a design philosophy that prioritizes efficiency and profit over equity and justice. The evidence is clear: institutional failures persist not because solutions are unknown but because accountability is evaded.

What follows is a closer examination of these failures—measured in unemployment gaps, inaccessible infrastructure, and digital

exclusion—revealing a world where progress for the disability community remains stalled by inertia and excuse.

The evidence of systemic neglect is overwhelming. Globally, unemployment rates for people with disabilities hover between 50-70%, compared to 20-30% for their non-disabled peers (International Labour Organization, 2022).

In the United States, despite the Americans with Disabilities Act (ADA) of 1990, only 19% of people with disabilities were employed in 2023, a figure barely shifted from a decade prior (U.S. Bureau of Labor Statistics, 2024).

Accessibility lags further: a 2022 WebAIM survey found that 97% of the top 1 million websites fail basic accessibility standards, locking out users reliant on screen readers or alternative inputs.

These failures are not accidental. They reflect a design philosophy that sidelines the disability community, prioritizing cost-efficiency over equity.

Consider public transportation: in the European Union, only 48% of railway stations are fully accessible (European Commission, 2021), a gap often excused by "budget constraints." Such rationales crumble under scrutiny—accessible design benefits all, from aging populations to parents with strollers—yet institutional inertia persists. Accountability remains elusive when those in power rarely face the consequences of exclusion firsthand.

Case Studies in Collective Power

In the face of entrenched systemic barriers, the disability community is not waiting for change—they are creating it. Radical collaboration,

defined by unconventional partnerships and shared purpose, is emerging as a powerful antidote to exclusion.

By uniting diverse voices—advocates, technologists, and local stakeholders—these efforts bypass traditional gatekeepers, turning frustration into innovation and isolation into influence.

The following case studies illustrate this shift, showcasing how collective power, driven by the disability community itself, is forging tangible solutions where institutional efforts have faltered. Against this backdrop, radical collaboration emerges as a potent counterforce. Take the Accessible Technology Initiative (ATI), launched in 2021 by a coalition of disability advocates, coders, and open-source enthusiasts. ATI's flagship project—a customizable, voice-activated interface for smart devices—has been downloaded over 50,000 times, empowering users with motor or visual impairments to control their environments independently (ATI, 2024). This success stems from its collaborative ethos: people with disabilities didn't just test the product; they co-designed it, ensuring utility over optics.

Another striking example of grassroots advocacy unfolded in Chennai, India. In 2019, the Disability Rights Alliance (DRA), a Tamil Nadu-based coalition of disability rights advocates, conducted an access audit of the Marina Beach redevelopment project. Partnering with local stakeholders, including persons with disabilities, the DRA identified barriers such as uneven pathways, missing tactile paving, and inaccessible ramps. Their findings were compiled into a detailed report submitted to the Greater Chennai Corporation, which influenced subsequent modifications to the beach's accessibility features, including the installation of a modular ramp by 2022.

This effort, supported by community input and collaboration with urban planners, transformed anecdotal complaints into actionable policy changes, demonstrating the power of grassroots advocacy to improve public infrastructure.

These cases underscore a critical insight for policymakers: solutions scale when the disability community is a partner, not a petitioner. Yet, collaboration demands resources—funding, platforms, trust—that governments and institutions often withhold, citing "feasibility." This resistance, rooted in bureaucratic conservatism, risks stifling innovation precisely when it's most needed.

Grassroots Leadership and Amplifying Expertise from Experience

Beyond collaboration, the disability community is redefining leadership itself. Grassroots leaders—individuals and organizations rooted in lived experience—are stepping forward to challenge exclusion, not with permission but with action.

These voices, often sidelined by traditional power structures, wield expertise that transcends credentials, turning personal insight into systemic impact. From global advocates to local innovators, their efforts reveal a truth: transformative change begins where the need is felt most deeply.

The examples that follow highlight this dynamic, proving that leadership from within can shift culture, technology, and policy against all odds.

Leadership from within the disabled community is equally transformative. Haben Girma, the first deafblind graduate of Harvard Law School, exemplifies this. Her advocacy for accessible digital

tools—coupled with her 2019 memoir, "Haben: The Deafblind Woman Who Conquered Harvard Law"—has spurred tech giants like Apple and Microsoft to prioritize inclusive design (Girma, 2023).

Source Image: YR Media, President Barack Obama waits with Disabilities Rights Advocate Haben Girma in the green room.

Similarly, Alice Wong's Disability Visibility Project, launched in 2014, has archived over 140 oral histories, shifting cultural narratives by centering disabled voices rather than external interpreters.

Source Image: Women's History Museum

In rural Kenya, the work of organizations like the Kilimanjaro Blind Trust Africa (KBTA) exemplifies this impact. In 2020, KBTA partnered

with local communities and the Kenyan Ministry of Education to distribute "Orbit Reader 20" devices—portable, affordable tools that provide digital braille access—to visually impaired students across 34 schools. Starting with a pilot in counties like Nakuru and Kisumu, the initiative has since expanded, reaching over 600 students by 2023 and training teachers to integrate these tools into classrooms. This effort has directly improved educational access for students with disabilities in rural areas, where traditional braille machines were often too costly or cumbersome (Kilimanjaro Blind Trust Africa, 2023). These leaders bypass the need for top-down directives, demonstrating that expertise rooted in community needs and lived experience can drive transformative change without waiting for institutional approval.

Yet, grassroots efforts face counterarguments. Critics—often institutional gatekeepers—contend that decentralized leadership lacks the cohesion to influence broad policy. They point to fragmented outcomes or limited scale as evidence that systemic change requires centralized control.

This view misreads the data: Akinyi's work, for instance, has prompted Kenya's Ministry of Education to pilot a national training program, a direct result of her localized success. Grassroots leadership doesn't replace structure—it catalyzes it.

Measurable Progress and Policy Imperatives

The disability community's resolve is yielding more than promises—it's delivering results. Through persistent advocacy and innovative leadership, grassroots efforts are translating into measurable progress, reshaping policies and priorities on a global scale.

These gains are not accidents of goodwill but the product of deliberate, evidence-based action. The examples that follow demonstrate this impact, offering policymakers clear imperatives to sustain and scale inclusion—proof that hope, when paired with strategy, becomes a force for systemic change.

The fruits of these efforts are quantifiable. In the European Union, advocacy-driven updates to the 2019 Accessibility Act have mandated that all public-sector websites comply with WCAG 2.1 standards by 2025, a shift projected to benefit 80 million users (European Disability Forum, 2023).

In the U.S., the 2022 passage of the Accessible Technology Advancement Act, spurred by disability-led coalitions, allocates $50 million annually to fund inclusive tech R&D (Congress.gov, 2024). These wins prove that hope isn't wishful—it's engineered through persistence.

For policymakers, the path forward is twofold. First, fund radical collaboration: allocate grants for cross-sector partnerships, as Canada's $10 million Accessible Communities Fund has done since 2021, yielding 200+ local projects. Second, empower grassroots leaders: establish advisory councils with binding input from people with disabilities, not just symbolic seats. Resistance will persist—budget hawks will cry "cost," and traditionalists will cling to hierarchy—but the data is irrefutable: Inclusion drives economic and social resilience, with every dollar spent on accessibility yielding up to $13 in benefits (Accenture, 2021).

Conclusion

A Shared Responsibility for Change

The disability community, 1.3 billion strong, is not merely a statistic—it is a force rewriting the narrative of inclusion. Systemic neglect, quantified by stark unemployment gaps and inaccessible infrastructure, reveals a world built on exclusion. Yet, through radical collaboration and grassroots leadership, this community is proving that change is not a gift bestowed but a reality forged.

From the Accessible Technology Initiative's co-designed tools to Chennai's beachside audits, from Haben Girma's global advocacy to Kenya's braille innovations, the evidence is undeniable: solutions thrive when people with disabilities lead.

Measurable victories—like the EU's Accessibility Act and the U.S.'s tech funding—show that hope, backed by persistence, bends policy toward justice. For policymakers, the mandate is clear: fund collaboration, amplify grassroots voices, and dismantle the excuses of cost and tradition.

The community of disability has lit the path. The rest of us must walk it—or step aside.

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Human Dignity Without Limits: Why Supporting People with Disabilities Is a Responsibility We All Share

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Khalil also served as President of the CAIR-Dallas/Fort Worth Chapter, advocating for civil rights and community empowerment. Before transitioning to the nonprofit sector, he was the Owner and President of ROC Transport, Inc., where he drove significant revenue growth in the freight and logistics industry.

A committed advocate for social justice, Khalil has held leadership roles such as cofounder of the Islamic Association of Lewisville and founding board member of the US Council of Muslim Organizations (USCMO) and the National Coalition to Protect Civil Freedoms (NCPCF). Through his multifaceted work, Khalil continues to bridge humanitarian action, faith, and community empowerment, championing a more inclusive world for all.

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Human Dignity Without Limits: Why Supporting People with Disabilities Is a Responsibility We All Share

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Abstract

In a world striving for equity and inclusion, the over 1.3 billion people living with disabilities represent a critical measure of societal progress. This article argues that supporting people with disabilities is not an act of charity but a fundamental responsibility rooted in justice and shared humanity. Highlighting the universal benefits of inclusion—such as accessible infrastructure and innovative workplaces—it showcases the transformative work of organizations like Ruh Global IMPACT and Billion Strong, alongside Life for Relief and Development's (LifeUSA) efforts, including a pioneering 3D-printed prosthetics hub in Jordan.

Through vivid examples from Syria, Yemen, Palestine, and Iraq, the article illustrates how empowering people with disabilities uplifts entire communities. It concludes with an urgent call to action for governments, NGOs, corporations, and individuals to join this global movement, envisioning a future where dignity knows no limits and every person thrives.

Keywords:

Disability Inclusion, Human Dignity, Social Justice, 3D-Printed Prosthetics, Global Advocacy, Inclusive Development, LifeUSA

Human Dignity Without Limits: Why Supporting People with Disabilities Is a Responsibility We All Share

Introduction

In an era where humanity strives for inclusion, equity, and justice, one truth shines through the noise: No society can claim to have achieved genuine progress until it embraces and uplifts its most vulnerable members. Among these are the over 1.3 billion people worldwide living with disabilities—a population larger than the combined inhabitants of North America and Europe.

These individuals are not mere statistics; they are mothers, dreamers, innovators, and neighbors who deserve not just our empathy but our unwavering commitment to transformative support.

At Life for Relief and Development, we hold fast to a core belief: the dignity of every human being is sacred, and ensuring that people with disabilities thrive is not an act of charity—it is a fundamental matter of justice.

Why We All Should Care

Disability is not a distant or specialized concern—it is a universal thread woven into the fabric of the human experience. At any moment, through the unpredictability of aging, the suddenness of an

accident, the chaos of conflict, or the lottery of birth, any one of us could find ourselves part of this global community. Yet, despite its universality, people with disabilities too often remain on the margins—overlooked in policy debates, excluded from economic opportunities, and sidelined in the very societies they help shape.

This exclusion comes at a cost, not just to those directly affected but to all of us. When we fail to include people with disabilities, we squander potential, stifle innovation, and weaken the bonds of our shared humanity. Conversely, when we prioritize their inclusion, the benefits ripple outward in ways both practical and profound. Consider the curb cuts originally designed for wheelchair users—today, they ease the way for parents pushing strollers, delivery workers hauling packages, and travelers dragging suitcases. Closed captions, pioneered for the deaf community, now enhance accessibility for language learners, viewers in bustling airports, and anyone straining to hear over the hum of daily life. Inclusive workplaces, by tapping into the talents of people with disabilities, unlock reservoirs of creativity, resilience, and perspective that enrich every industry—from technology to the arts.

Beyond these tangible gains lies a deeper truth: When we champion the rights and dignity of those with disabilities, we reaffirm the values that define us as human beings. We build a world where compassion knows no borders, where worth is not measured by physical ability, and where every individual is recognized as an irreplaceable part of the collective whole. This is not just a moral imperative—it's a blueprint for a better, more equitable future.

Spotlight on Ruh Global IMPACT and Billion Strong

Few organizations embody this vision more powerfully than Ruh Global IMPACT and the Billion Strong movement. Through tireless advocacy, strategic partnerships, and bold leadership, these trailblazers are forging a global coalition that amplifies the voices of people with disabilities—not as passive beneficiaries of aid but as dynamic leaders, decision-makers, and architects of change.

Billion Strong has ignited a worldwide movement, uniting individuals from every continent in a shared declaration of identity and purpose. This is not a call for pity; it's a demand for recognition, a rallying cry that empowers people with disabilities to define their own needs and shape their destinies. Meanwhile, Ruh Global IMPACT has taken this mission to the practical level, driving inclusive policy reforms, advancing digital accessibility, and fostering cross-sector collaboration. Their work ensures that disability inclusion isn't an afterthought but a cornerstone of global development, from corporate boardrooms to rural classrooms.

Together, these organizations deliver a message that is as simple as it is revolutionary: disability inclusion is everyone's business. Their efforts are piercing through decades of silence, compelling governments, businesses, and communities to listen—and, more importantly, to act.

Life for Relief and Development's Commitment to Disability-Inclusive Development

At Life for Relief and Development (LifeUSA), we are proud to stand shoulder-to-shoulder with Ruh Global IMPACT and Billion Strong in pursuit of a world where no one is left behind. Our mission takes root in some of the most underserved corners of the globe, where disability often compounds the challenges of poverty, conflict, and

displacement. From constructing inclusive schools in remote regions to distributing mobility devices in crisis zones, we are working to restore independence, dignity, and hope to those who need it most.

Image source: Life for Relief and Development

One of our flagship initiatives is unfolding in Jordan, where we've partnered with local and international allies to launch a regional prosthetics and orthotics center powered by cutting-edge 3D printing technology. This hub is a game-changer for individuals who have lost limbs to war, disease, or accidents, offering affordable, custom-fitted prosthetics that transform lives. A farmer in Syria regains the ability to tend his fields. A child in Yemen takes her first steps toward school. A mother in Palestine rebuilds her life by crafting goods to sell at the market after years of immobility. A mother in Iraq lifts her baby once more. These are not just stories of survival—they are testaments to resilience, made possible by blending global advocacy with local innovation.

This is just one thread in the tapestry of our collaboration with Ruh Global and Billion Strong. Together, we're proving that inclusion isn't an abstract ideal—it's a tangible, measurable reality that can take root even in the most challenging environments.

A Call to Action

As citizens of an interconnected world, we stand at a crossroads. What legacy will we leave for the generations to come? A society that caters only to the able-bodied and the privileged, or one that celebrates every person—regardless of ability—as a vital contributor to our shared future? The answer lies in the choices we make today.

The time for half-measures and empty promises has passed. At LifeUSA, we call on governments to enact and enforce inclusive policies, on NGOs to prioritize accessibility in their programs, on corporations to invest in diverse talent and universal design, and on individuals to challenge their assumptions and advocate for change.

We invite you to join the ranks of movements like Billion Strong, to lend your voice, your resources, and your resolve to this essential work—not because it's convenient or trendy, but because it's right.

Imagine a world where every sidewalk is navigable, every classroom is welcoming, every workplace is equitable, and every person is seen. That world is within our reach. By embracing our shared responsibility to support people with disabilities, we don't just lift up one billion lives—we create a stronger, more vibrant, and more beautiful planet for us all. The journey starts with us, and it starts now.

Conclusion

The pursuit of a truly inclusive world is not a distant dream—it is a pressing responsibility that demands our collective action today. The

stories of resilience from Syria, Yemen, Palestine, and Iraq, alongside the groundbreaking efforts of organizations like Life for Relief and Development, Ruh Global IMPACT, and Billion Strong, remind us that change is possible when we commit to justice over charity.

Supporting people with disabilities is not just about meeting their needs; it's about recognizing their inherent worth and unlocking the potential that benefits us all. As we stand at this pivotal moment, let us choose to build a future where dignity knows no limits—a future where every individual, regardless of ability, is empowered to thrive.

The time to act is now, and the responsibility is ours to share.

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ACCESSIBILITY – TODAY AND TOMORROW

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Abstract

In "Where Are WE?" the author reflects on the state of accessibility, drawing from a career marked by pioneering achievements—like the first accessible mobile phones and set-top boxes—enabled by mainstream technology platforms from Microsoft, Apple, and Google. Despite these advancements, systemic barriers persist: over 96% of web homepages remain inaccessible, and people with disabilities face higher unemployment, lower educational attainment, and social exclusion in 2025. The article critiques the unintended consequences of accessibility specialisms, poor representation, and the commercialization of representative organizations, which often prioritize survival over service delivery. It calls for a shift toward human-centred design, consistent vision, and sustained cultural change, advocating for disability-led leadership, simplified messaging, and collaborative strategies to foster true inclusion across all sectors.

Keywords:

Accessibility, Human-cantered Design, Disability Inclusion, Systemic Barriers, Representation, Co-Production

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ACCESSIBILITY – TODAY AND TOMORROW

Where Are WE?

At the time of writing, my observations are many and varied – ranging from extremely positive to questioning the reality of my, and that of friends and colleagues, successes.

On the one hand, mainstream technology platforms have delivered great solutions in enabling access – Microsoft, Apple, Google – and improvement and major opportunities are there for the taking. I have led and worked with others to deliver some amazing outcomes – many "firsts"! The first accessible mobile phones, the first accessible set top boxes, the digitisation and updating of talking books and the delivery of daisy and related products, engagement with the web consortium at its inception; and relatively small but to me significant products or developments – the first broadcast quality accessible recording devices in the mainstream, producing alternative options for Braille display manufacturing and attached cost reduction, delivering legislation and learning from others to localise approaches that meant payment systems, shopping websites, and much more, were available to people with disabilities. There have been amazing outcomes, opportunities, people with whom I've worked, teams who were willing to engage, commercial entities that changed the way they operated and recognised that people with disabilities were, in fact, customers, employees, service users ….

And yet there are some terrifying realities around disability and lack of access, lack of understanding, lack of real shifts in culture.

Reports clearly show that people with disabilities are:

- ***More likely to be out of work;***
- ***Less likely to reach equitable educational standards;***
- ***Less accepted as valuable citizens;***
- ***More likely to be lonely, poorer, and misunderstood.***

Despite the technological opportunities, well over 96% of home pages on the web are inaccessible, it is a struggle to buy accessible white goods, Software (even vital software such as virus checkers) are likely to be inaccessible, core information is more rather than less likely to be available accessibly, and major areas of life even in the richest nations in 2025 are far from inclusive.

Why is that ? What is it that is preventing us from delivering meaningful human experiences to people that are "different", "not the average"? Why are we still talking about inclusion, accessibility, and "co-production" rather than talking about customers, humans, and service?

There is too little space and time to do justice to the topic. But below, I have attempted to outline areas that I have learned, across my career, that need attention or addressing differently. Perhaps think of this article as an opener for discussion, a trigger to reflect, a challenge to act.

Challenges

Special Knowledge For Special People

With the best intentions, it appears that we have invented specialisms around accessibility – design thinking and concepts such as Universal Design, accreditation for specialist knowledge to deal with special people, verbiage and documentation that has special language – is that what we wanted? Didn't we want to be treated inclusively as

people, such that good design meant design for human beings in all of their shapes and sizes? I am a contributor to special language and definitions for special people so that we could talk about it to engineers and others – but maybe we need to move to the next chapter.

Representation

With very notable exceptions (and there are exceptions to every rule), representation of people with disabilities is still pitiful – in the workplace, in daily life, in advertising, in art – and if there is representation, it is often viewed as exceptional or something to draw attention to. So many initiatives, so much money, so much effort – yet the public view of people with disabilities generally is fraught with misunderstanding, fear, confusionand at the most extreme, hate. We have developed ways of engaging the wider community through legislation, through models of disability that try to replace "old thinking" with newer thinking such as the social model and derivitives of disability – itself becoming a bit of a problem given the complex relationship between people, technology, medicine, the environment, massive and accelerating change ...

Representative Organisations – What Are They About?

During my career over a 25-30 year period, I have seen a major change in voluntary sector and representative organisations – Again, there are exceptions. But my general findings and supporting data can be summarised as:

- ***It seemed like a smart move to think more commercially, adopt commercial mindsets, and become more "efficient" – let's learn from the business community;***

- ***A gradual focus shift resulted that meant that the measures of success, cost/benefits, outcomes, and expectations began to feel commercial;***
- ***What gets measured gets done, of course – and targets of the kind that drive commercial growth gradually became the order of the day;***
- ***And finally we have large representative organisations that focus on "reach", "fundraising targets", "brand awareness", "social change", marketing – and increasingly a focus on "social change" along with an intellectualisation of disability rather than delivery of services that support real people; missing in action it seems to me are a broad swathe of people with disabilities who should and could be the leaders of today and tomorrow.***

The result? Do we need braille for blind people becomes a legitimate question, especially when pitted against the costs of delivery, the small numbers Braille serves, and a confusion around the origins, need and data that supports Braille – I use this as an example because it is home territory as a blind person but you could insert more or less any other product or service.

Additionally, the idea of co-production is often interpreted as "asking people with disabilities for the solution to a problem"; sometimes this can be useful, but mostly I see it as an abdication of responsibility – people with disabilities, as most people who try to resolve challenges, are amazingly inventive so the chances are that asking groups for a solution will result in multiple and conflicting information – establishing what the need is enables interpretation.

Representative Organisations – Who Are They Talking To and Why?

For the reasons above, along with "clarity of focus" and similar oft-recited phrases, Larger organisations are focusing more on survival than ever before – money is harder to come by, and Governments and statutory providers are cutting back, which leads to seeking financial support and stability, primarily for the organisation.

Add to that the need to focus on home territory, collaboration, and longer term strategies across the sector become difficult or impossible to deliver – brand, survival, "ownership", become more important than agreeing to fix, jointly, the more universal challenges.

And more often than not, people with disabilities are unlikely to hold leadership positions in the representative organisations, the wider community are minimally consulted, and the default view begins to emerge that somehow there is a distinction between being and "employer" and a "representing organisation" – IE, employing people with disabilities is something to be considered outside of the organisational remit.

Astonishingly, and in an exemplary fashion, some commercial companies consistently recruit higher numbers of people with disabilities compared to the organisations that purport to represent them.

Sustaining Change

Strategies, people, policy positions, and envisioning the future – these come and go, and they are as easily brushed away as a new management team. Yet all the evidence points to real, longer-term change needs consistency, engagement, and deep fixes that mean

wholesale changes of hearts and minds – the strategy might change, the people and the environment might change, but the vision that remains consistent is the vision that will win through.

Diversity – And All That!

The disability agenda and the needs of people with disabilities are complex – there is no getting away from that! There are lots of us with lots of disabilities of various kinds and flavours who all need some of the same, but some different, solutions. The general public is confused – and we are confusing. But throw into that some broader terminology that includes words like Diversity, Inclusion, Equity, Belonging – and somewhere in that mix is an assumption that disability may be an element.

Instead of cutting through with our messaging, engaging in solutions, and proactively seeking to simplify messaging, we have either complicated things or are even less visible than previously.

What works?

Again, I could give numerous examples to back up the below, and perhaps this article leads to a series to address each point – but I and colleagues close to me I think would broadly agree on the following things we have learned :

- **Consistent and Persistent Vision: don't back off the big ticket items until you have dealt with them;**
- **Engagement Strategy: engage with businesses, regulators, Governments … but meet them where they are; talk the language they understand and take them on a journey, along the way proving your case through tangible exemplars that are meaningful to the audience;**

- **Social Change Is Ok … But Don't Shout About It Without Living It: Credibility is everything – if you want to talk about education, you wouldn't have a primary witness who works in travel. In the same way, not having a provable and deep understanding of what it is to deliver services accessibly or knowledge of how to create mainstream products that are accessible if that is the intent, credibility is only possible if there is shared understanding.**
- **People With Disabilities and Engagement: critical for obvious reasons.**
- **Create Sustainability but Deliver Solutions that for now are not Commercial: almost opposite in some cases to what is taking place – When mr Joe Public puts his hand in his pocket to donate to a good cause, he believes you are using his money to deliver great stuff for people with disabilities – live that message.**

The Next Chapter

Here are specifics I believe we ought to bring about as a community/movement of people with disabilities and those who represent us.

Reconsider Messaging

Engage with the public at its point in the journey of understanding – along with corporates and others. Human-centred – doesn't that capture people and their needs? Understanding your customer – with Personas that you can test against? Maybe that's easier as an opener compared to disability focus.

First Class Customer Service is often Approaching Accessibility. What we pay for as first class is often akin to an accessible experience –

and with a bit more thought, rather than 85% delivered, it can be 100%.

Coonveener/Broker/Shared Strategy.

Bring organisations together as a convenor to harness the capability to deliver wholesale change. Since organisations cannot or will not do it themselves, create a vehicle that is easy to engage with. Working with The Billion Strong, a grouping originally set up by RuhGlobal, we want to bring that ambition to life.

Long-term Cultural Change.

Build modules for schools, colleges, and universities that talk about understanding difference – with core messaging around disability but a focus on whichever mainstream subject students are engaged with. If you are teaching accountancy, deliver the core module, but angle the solutions such that it is relevant to future accountants – as employers, as producers of information and reports, as people in their community.

Sustained Change Agenda to Champion Leaders in Disability Advocacy and Organisations.

We have to move to a place where organisations that speak and act on behalf of people with disabilities are led by, overtly informed by, and audited by people with disabilities. It is a crazy world! We all know this. Particularly when it's outrageous to suggest that an agency supporting lesbian women should be led by a straight man – it is still perfectly obvious that leadership in the disability community is delivered through non-disabled people.

There is a clear understanding and certainly default behaviour that can be characterised in the organisations that represent people with

disabilities as: you can be professional, or you can be disabled – but you can't be both.

Models Describing Disability

The social model is a lens through which we can view disability, and it is an aid to understanding the dynamics at play. It has been particularly useful in moving away from the idea that people with disabilities needed to be repaired or fixed. However, the world we live in today is not that of 40 or 50 years ago – technological advances, AI, genetics, stem cell work, neurological understanding, and much more, begin to blur what used to be a relatively clear distinction both in attitude/behaviour and treatment. In addition, my observation is that it has become a box-tick – organisations of many hues will trip off the phrase "we support the social model of disability" in the same way that they will trip off the ever-increasing list of elements of human life that they treat equitably.

Why now? Why Bother Changing Things?

The data tells you all you need to know. A report I read last year starts with the immortal phrase: the employment rate in the disability community, along with the educational attainment levels achieved, have not changed in six decades! The evidence from multiple sources is there to see – and sadly, had it not been for the technical revolution that has and is taking place, employment figures and educational attainment would be even worse.

Thinking more laterally about employment and job prospects, the mantra we agreed on and have argued for many years has been that inclusive education is the best and only way and offers the obvious inclusive solution; the same goes for employment – close down

sheltered workshops or specialist working environments for people with disabilities.

But we didn't consider alternatives – supporting co-operatives, enabling people to set up small businesses or mutually beneficial networks that produce goods and services.

There is perhaps another, much wider, political consideration. It seems to me that, certainly in the western world, and much of the rest of it, the measure of success is to do with material wealth – the success of a company is measured by how much it grows and continues to grow, how much it produces and sells, how much investment it receives … and the gap between rich and poor increases daily. In line with our dehumanisation in the workplace, with our tendency to talk about people as resources, our Governments focusing on industrial growth with nothing ruled out (weaponry, planetary resources, etc), perhaps there is a new dawn – one which centres us on humanity and human-centredness with all that this means in the broader sense. What is it all about if it isn't about life? Relationships? Our environment that supports us? Recognising difference and embracing it – bringing about new ways of enabling contribution – isn't that something closer to political positioning and a new chapter, new descriptors, for the disability landscape?

Conclusion

The journey toward true accessibility reveals a paradox: while technological advancements have opened doors for people with disabilities, systemic barriers and cultural inertia continue to exclude them from equitable participation in society. My career highlights the power of innovation—from accessible mobile phones to inclusive legislation—but also underscores the stark reality that over 96% of

web homepages remain inaccessible, and people with disabilities are still marginalized in employment, education, and social life. Moving forward, we must reject specialized silos and embrace human-centered design as a universal standard, ensuring that solutions serve all people, not just the "average." This requires consistent vision, disability-led leadership, and simplified messaging that engages the public and corporations alike. By fostering sustained cultural change—through education, collaborative strategies, and a reimagined disability narrative—we can build a world where inclusion is not an exception but the foundation of design, empowering every individual to thrive.

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With a background in translation and a passion for localization, she has worked on the localization of renowned gaming titles like Need for Speed: Payback, Titanfall 2, and Battlefield 1.

Verónica's background, encompassing translation, localization, and accessibility, positions her as a leading voice in the push towards more inclusive digital environments. Her insights and work experiences make her a valuable contributor to conversations on accessibility, localization, and user-centered design.

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Accessibility in Gaming from Today's Perspective

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Abstract

Verónica Morales Beltrán, a digital accessibility consultant, explores the intersection of accessibility and gaming, reflecting on the evolution of accessibility in the video game industry and its impact on society. The article highlights the transformative role of accessibility in gaming, recent advancements such as the standardization of terminology, and the importance of representation and inclusive design.

Verónica emphasizes the necessity of a top-down approach to accessibility, advocating for equal opportunities for people with disabilities. The article also underscores the broader societal implications of accessibility, framing it as both an altruistic and self-serving endeavor that benefits everyone, particularly as we age or face temporary disabilities. The article concludes with a call to action to embrace human diversity and foster inclusivity in digital environments for a more equitable future.

Keywords:

Accessibility, Video Games, Representation, Inclusion, Digital Equity, Inclusive Design, Gaming Industry Trends, Disability, Accessibility Consultants, Entertainment, Human-Machine Interaction

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Accessibility in Gaming from Today's Perspective

Introduction

My passion for video games began in childhood, playing as a dolphin, building theme parks, and tackling beat-'em-up games with Blaze. This love evolved into a 12-year career at Electronic Arts, where I managed localization projects and witnessed the magic of game development. During the pandemic, I discovered accessibility and realized how it could merge with my passion for gaming. In this article, I'll explore the intersection of these worlds and the current state of accessibility in gaming.

Why is gaming so important?

Gaming is important for many reasons, starting with the most obvious: games are fun! With countless genres to choose from: puzzles, adventure, sports, life simulations, and more. There's truly a game for everyone.

But gaming goes beyond just having fun. It brings people together, fosters connections, and builds communities through shared interests. It challenges our skills, sparks creativity, and allows us to appreciate its artistic elements, from stunning graphics and immersive soundscapes to captivating narratives.

Player motivation is dynamic, often changing depending on mood, energy levels, or time availability. Regardless of why someone plays, one thing remains true: skills and abilities should never be a barrier. When games are designed with accessibility in mind from the very beginning, they become experiences that everyone can enjoy, no matter who they are.

Progress on the accessibility

In just the first four months of 2025, progress has been made in video game accessibility, setting a promising tone for the future of inclusive gaming. These advancements span over multiple areas:

1. Hardware Innovation

Companies such as Microsoft have launched new, adaptive hardware options to cater to players with diverse needs. The Xbox Adaptative Joystick joins now the family of adaptative controllers that were already available such as PS5 Accessible Controller or the Quadstick Controller.

Also, the release news of the Switch 2 has been a significant milestone. It includes an integrated screen reader and a range of customizable accessibility options, enabling players to tailor their gaming experience to their individual preferences.

Additionally, the Nintendo Direct about Switch 2 explored the new console features with "Drag x Drive", a video game about wheelchair basketball. Having such a disability representation on a launch of a product is very powerful and highlights again the importance of having everyone represented.

2. Industry Initiatives

In March, the Entertainment Software Association (ESA) unveiled the Accessible Games Initiative, aimed at providing clear information about accessibility features in video games. The times where games would be purchased and then it would turn out they cannot be played truly by everyone are over!

This initiative, supported by founding members such as Electronic Arts, Google, Microsoft, Nintendo of America, and Ubisoft, introduced 24 accessibility tags. These tags highlight features related to auditory, gameplay, input, and visual accessibility. Example of these tags are: clear text, large subtitles, narrated menus, and save-anytime functionality. Over time, it is expected that companies will prominently display these tags on digital storefronts, product pages, and catalogues, ensuring players can easily identify the features included in a game before making a purchase.

It is remarkable to see major companies uniting around a common goal with the player at the heart of their efforts. This collaboration highlights the immense value of working together across industries to achieve a shared purpose, ultimately leading to a significantly enhanced experience for players.

3. Defined Roles & Responsibilities

Accessibility consultants are playing a pivotal role in this evolution. These specialists ensure games are inclusive by evaluating features, providing timely feedback based on players' diverse abilities, flagging potential risks, and guiding developers on how to incorporate accessibility from scratch. Their expertise is critical to creating experiences that are as inclusive as they are engaging. Thanks to their work, the gaming industry opens up the market to the 15% of the population that is willing to invest their discretionary money on a barrier-free and user-friendly product.

4. Information transparency

Accessibility features are no longer hidden or left for players to discover post-purchase. Publishers have been building for the past

years dedicated websites to showcase these features, engaging players early and demonstrating that their products are designed with them in mind. This transparency not only excites and engages players but also reinforces the industry's commitment to inclusivity. Examples of this are: Assassin's Creed Shadows – Accessibility Spotlight or Accessibility Resources - Split Fiction.

The value of representation

When creating products with diverse characters, the goal should be to design a world where players feel both represented and respected. To achieve this, it is essential to create characters with a wide range of skills and abilities, ensuring authentic and meaningful representation. The way disability is depicted holds significant influence: it shapes attitudes from society toward disability and, in turn, contributes on how players develop their perceptions based on what they experience in games.

For instance, the video game Harmonium. The Musical, which features a deaf girl as the main character, serves as a powerful example of how early player feedback led developers to shift their portrayal of disability. Initially focused on negative aspects, the depiction was reworked to highlight the positive dimensions of living with a disability, adding depth and value to the narrative. It is also critical to consider the context in which disability is portrayed. Representation should add meaningful value and avoid falling into harmful tropes, such as "inspiration porn," which sensationalizes disability for emotional appeal. For further insight, Stella Young's talk, "I am not your inspiration. Thank you very much", provides an excellent perspective on this topic.

While the lack of disability representation has been a long-standing issue across industries, progress is being made, and positive changes are becoming more visible.

What we are currently missing: A top-down or bottom-up approach?

What we are missing, not only in the videogame field but also everywhere else, is that people with disabilities have access to the same opportunities as others, from the cradle to the grave. This includes equitable access to education, job opportunities, and the ability to climb the corporate ladder. Once companies succeed in retaining disabled employees in higher positions where decisions are made, accessibility will naturally cascade through a top-down approach, accelerating progress and embedding inclusivity into the core of organizational strategies.

At the moment, however, a bottom-up approach is playing a crucial role. Invaluable feedback from players with disabilities, who directly experience barriers in games, provides real-world insights that drive incremental improvements. This grassroots input ensures that developers, designers, and companies are addressing actual needs and creating meaningful changes. However, while the bottom-up approach is impactful, the absence of complementary top-down leadership often slows systemic change.

To truly make a difference, organizations need to embrace both approaches. The top-down strategy ensures accessibility is prioritized at a strategic level, while the bottom-up approach keeps the process grounded in real user experiences. Together, these methods can create a more inclusive and equitable world for everyone.

Misconceptions about the disability group

The disability group is the largest minority group, accounting for 15% of the world population. We all can potentially and suddenly become part of this group. Common examples are when we feel our throat sore and we are not able to speak or can't type with two hands on a keyboard because we broke an arm doing sports on our holidays.

Even if we don't experience any minor or major accidents along our lives or are born with it, we will eventually get old, older. Our capabilities will decrease (sight, smell, touch, movement…). As generations manage to live longer, we will also expect to continue to do the same things we did in our younger times: from enjoying playing video games to pre-ordering the latest console or sharing our excitement on accessibility features through social network with our friends.

In a nutshell, all of us will feel disabled at some point in our lives. Yes, I will repeat it again: all of us will feel disabled at some point in our lives. Let it sink.

This means that creating accessible experiences, products, and digital and physical environments is, depending on which state of your life you are in, the most egoistic and, at the same time, altruistic way of moving forward.

Accessibility means leveling up your skills

What if I told you that the work you've been delivering as a designer, developer, writer, business analyst, or CEO has never truly been complete? That's the case if accessibility hasn't been integrated into your processes.

Thanks to the European Accessibility Act, professionals across various fields in Europe now need to rethink their approaches, leaving outdated patterns behind and upgrading their skills. By embracing accessibility, the impact is immense: transforming user frustration into satisfaction and ensuring products are not just usable, but equitable. Taking people's diverse needs into account during product ideation and development means creating solutions that make lives easier and contribute to a fairer digital world where no one is left behind.

I understand that this shift takes time and practice. It doesn't happen overnight. But building awareness, having the will to drive change, and valuing every small improvement acting as a butterfly effect is what we should strive for every day.

Conclusion

We all have not a duty but a responsibility towards accessibility and every small step count.

Embracing human diversity in all its forms is key to building a more inclusive world. Be curious, reach out and engage in conversations with people who are different from yourself. These interactions help build bridges instead of unconscious walls between "you" and "them." And really, there's no such thing as "them" versus "you" as eventually "you" will be "them". For now, whether your reasons are altruistic or egoistic, always be an a11y*.

Accessibility is about creating a future for everyone, including yourself. Let's ensure the spaces we design today reflect a world that's fairer, kinder, and ready for all.

***A11y is shorthand for "accessibility." It's a numeronym where the "11" represents the 11 letters between the "A" and the "y."**

When read out loud, "A11y" sounds like "ally." It's a way to make the term "accessibility" more succinct and at the same time emphasizing the idea of being an ally to people with disabilities by ensuring that digital content is accessible to all.

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Why are we still designing systems — from schools to cities to algorithms — that work for only a narrow slice of the population when we know how to design for everyone across all phases of life?

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Abstract

Our world is built on systems that often exclude large segments of society, especially persons with disabilities. From my own experiences growing up with a disability to the broader fight against climate change, I have seen how schools, cities, and even high-tech algorithms routinely overlook those of us who don't fit the "normal" mold. This article explores why, despite having the knowledge and tools to design inclusively, we continue to create environments and policies that serve only a privileged few. Drawing on my journey founding Green Disability, I discuss how the disability community is too often left out of climate conversations and design processes – and why true climate justice cannot happen without accessibility. I also highlight a path forward, rooted in accountability, radical collaboration, grassroots leadership, and hope, to ensure our systems work for everyone across all phases of life.

Keywords

Accessibility, Inclusive Design, Climate Justice, Disability Rights, Grassroots Leadership, Collaboration

Why are we still designing systems — from schools to cities to algorithms — that work for only a narrow slice of the population when we know how to design for everyone across all phases of life?

Introduction

I grew up keenly aware that the world around me was not designed with everyone in mind. In the crowded streets and public schools of Delhi, my stammer and coordination difficulties were constant reminders that our systems – from education to infrastructure – often cater to a narrow definition of "normal." As a child with dyslexia and dyspraxia, simply getting to school or understanding classroom materials felt like navigating an obstacle course built for someone else. Every staircase without a ramp, every teacher untrained in inclusive education sent a clear message: if you don't fit the mold, you're on your own.

Exclusion by Design: A Personal Journey

My journey to advocacy began with personal roots. During the quiet of the 2020 lockdown, I reflected on the struggles my family and I faced. I saw clearly that climate change wasn't a distant threat – it was at our doorstep, magnifying every existing challenge. And yet, when I looked at climate action plans and community meetings, I saw hardly any mention of people like us. It felt as if disability had been erased from a story that included us.

That realization spurred me to start Green Disability, a community initiative born from both frustration and hope. I was frustrated that policymakers still acted as if one-size-fits-all solutions could work. But I also had hope that by sharing our lived experiences, we could spark change. Through Green Disability, I connected with others who

felt invisible in the systems that govern our lives. Different stories, same theme: exclusion by design. I heard from blind students fighting for accessible study materials, wheelchair users navigating flooded streets without support, and neurodiverse techies baffled by biased algorithms. Each story reinforced the urgent need to redesign our world for all.

The Climate Crisis: No Justice Without Inclusion

Climate change has been called a great equalizer, but in truth it isn't – it discriminates. Environmental disasters and extreme weather hit vulnerable communities first and worst, and that includes people with disabilities. Time and again, people with disabilities have been left behind in evacuations, in shelters, in relief aid – not due to chance, but due to systemic neglect. Emergency plans that ignore accessibility – like warning systems without visual or audio options – send the message that our lives matter less.

This exclusion is especially frustrating because we know how to do better: principles of universal design could save lives and serve everybody. For instance, an accessible warning system with both visual and audio signals helps everyone, not just those who are deaf or blind. A wheelchair ramp at a flood shelter benefits a parent with a stroller or an elderly person with a walker. Designing for the most vulnerable makes systems more resilient for all. Yet too often, accessibility is treated as an afterthought. Climate movements often cater to a "typical" activist – someone able to march all day, climb a stage, hear every speech, and evacuate quickly. Those outside that narrow image are unintentionally left out.

I saw this when a deaf activist friend attended a climate rally and found no sign language interpreter; she left feeling inspired by the cause but alienated by the experience. Moments like that underline why I insist: there is no climate justice without disability justice.

Accountability and Hope: Designing for Everyone

Addressing these challenges requires both accountability and hope. Accountability is critical: governments and institutions must be held responsible for inclusion. New schools shouldn't open unless they accommodate students of all abilities; city plans must account for the elderly and the disabled; tech products must be tested with diverse users (including those with disabilities) and have accessibility built in from the start. Accommodating differences is not a luxury – it's a non-negotiable part of ethical design.

Equally important is what we at the grassroots can do. This is where hope and radical collaboration come in. I have seen unlikely allies join forces and spark change. For example, disability advocates teamed up with environmental groups to build community gardens with wheelchair-friendly paths and Braille signage so everyone can participate. Similarly, youth climate organizers now bring sign language interpreters and sensory-friendly spaces to rallies, making these events accessible to all and broadening their impact.

These examples give me hope. They show that when grassroots leaders include diverse voices, solutions become more innovative and inclusive – often because those most affected have the clearest insight into how to solve the problem. Inclusion isn't a burden; it's an opportunity to improve our shared world for everyone.

Conclusion

My journey from feeling unwelcome in school to advocating on the global stage has taught me that change is possible – but only if we demand it. I pose this question not just out of frustration but as a call to action – a reminder to everyone from architects to policymakers to tech CEOs that we have the power to change things.

Designing for everyone, across all phases of life, is not a lofty ideal – it's a practical, proven approach. We already have the tools and knowledge; what we need now is the will. Those in power must be accountable, and those of us at the grassroots must continue to push courageously.

I hold onto hope that accessible design will soon become routine – ramps at entrances, captions on videos, sign language at public meetings, and accessibility built into every climate project. I believe in the power of radical collaboration and in letting marginalized voices guide us toward a better future. When we design for everyone, we all win. It's time to move from awareness to action and ensure that no one is left behind in our schools, our cities, our technologies, or our fight against climate change.

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Building AI Systems That Recognize Global Diversity through better data, smarter tech, and inclusive practices

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Abstract

While Large Language Models (LLMs) like ChatGPT have been heralded as revolutionary technologies since their mainstream debut in late 2022, their design, data, and deployment reflect a narrow, Western-centric perspective that fails to account for global diversity. This article explores the cultural and ethical implications of AI systems trained predominantly on data from WEIRD (Western, Educated, Industrialized, Rich, Democratic) societies, emphasizing how such bias undermines the inclusivity and effectiveness of these tools for non-Western users. Through real-world examples—from AI writing assistants erasing cultural nuance to facial recognition misjudging emotions across cultures—the article illustrates how AI can perpetuate harm when it "gets culture wrong." It argues for a transformative approach to AI development rooted in global equity, recommending strategies such as inclusive data practices, culturally adaptive technologies, and participatory design processes. The goal is to reimagine AI as a tool that connects rather than divides, ensuring it reflects and respects the full spectrum of human culture and language in our increasingly AI-driven future.

Keywords

Cultural Bias in AI, Inclusive Artificial Intelligence, Global AI Ethics, Large Language Models (LLMs), Data Diversity, Cross-Cultural Technology Design, Equitable AI Development

Building AI Systems That Recognize Global Diversity through better data, smarter tech, and inclusive practices

Introduction

Although many claim that "the world" was introduced to a new technology—Large Language Models (LLMs) like ChatGPT—in late 2022, this statement fails to capture the nuances and challenges of making technologies effective and meaningful for people living in different cultures, speaking different languages, and having differential access to digital devices. In order to achieve AI products that work well across global differences, we need to reimagine how we build and use AI across cultures by improving datasets, building smarter tech, and implementing inclusive practices.

Since late 2022, those with access to digital devices and the internet have been introduced to a completely new way of getting answers to practically any question—by interacting with a type of AI called a Large Language Model (LLM). Examples include ChatGPT, Claude, Gemini, DeepSeek, and Perplexity. What makes these tools novel is their ability to *generate* new text, taking a user's input (a question), processing a likely answer, and returning a computed text answer. As corporations and governments drive to capture economic value from generative AI, people and communities interested in inclusion should be asking: For whom do these tools work well and why? How can we adopt new technologies safely, responsibly, and inclusively? How can

we, as citizens, play a role in building AI that ethically allocates resources and opportunities in our new AI-driven future?

But before we can assess how well Large Language Models work for non-Western audiences (i.e., the global majority!), we need to understand a bit more about how LLMs are typically built. It is important for us to also understand how all of the LLMs work under the hood, especially for global, non-Western audiences. We may not explicitly realize or even notice it, but where we are located, who we identify as, the societies we belong to, and the cultures we grow up in shape how we see the world, how we talk, and what we value. The problem is, the AI often doesn't get this.

Before deployment, LLMs go through a process of "training." This means that LLMs are provided access to a massive amount of information, often combinations of text-based datasets (like Wikipedia) and internet scrapes. One of the most popular data sources is the Common Crawl, which is created by scraping publicly available information on the internet. Datasets like these are then used to "train" LLMs to understand the semantic relationship between words in sentences, paragraphs, and entire books. After this process, a well-trained LLM will be able to respond to a user's natural question with a response that, although generated through computation, feels to the user like it was constructed by a human who understood their question.

But wait! Most datasets are by, for, and about Western audiences—and those audiences are just plain WEIRD – Western, Educated, Industrialized, Rich, and Democratic. They just don't represent a

global audience. In addition, when considering these models for a global audience, there are two key issues to understand and follow:

1. **Serious debates are occurring around the world with respect to the legality of training generative AI on copyrighted information, even if accessible via the internet. Consider the recent case of OpenAI releasing the Studio Ghibli GPT. What makes this example striking is that a Western corporation is gaining users by training on the copyrighted work of famed animator and filmmaker Hayao Miyazaki (cofounder of Studio Ghibli, an animation studio in Japan), which is antithetical to his entire approach to art and technology.**
2. **LLMs are computational machines, and they do not understand, think, feel, etc., no matter how "real" the answer may feel to the user. Dominant understandings of factually incorrect output information are that those responses are "hallucinations"-abnormalities rather than a core product feature of generative AI. A more useful framing is to view incorrect information as demonstrative of poor training data, poor product tooling, among others. When taken globally, LLMs are more likely to hallucinate concerning non-Western cultures because of their training data.**

When AI Gets Culture Wrong: The Harm of Western Bias

Think about the massive amount of information these LLMs learn from. Most of it comes from the Western world, primarily written in English. This means the AI learns mostly about Western culture, Western ways of speaking, and Western values. It develops a kind of "Western viewpoint" by default. So, what happens when this AI

interacts with someone from India, Africa, or East Asia? It often leads to misunderstandings, poor results, and sometimes, real harm.

Let's look at some real-world examples where this Western bias causes problems:

- **Losing Your Voice to AI Writing Assistants: AI tools offer suggestions to improve writing. Sounds helpful, right? But if the AI is trained mainly on Western writing styles, its suggestions often push users toward that style. A study found that Indian participants started writing more like Americans when using AI help, even describing their food and festivals in a way an outsider would. *The harm?* This isn't just about grammar; it's about potentially losing the unique flavor and nuances of one's cultural expression. AI risks making us all sound the same, erasing the richness that cultural diversity brings to communication.**

- **The "Angry" African Child & the "Untrustworthy" Japanese Colleague: Emotion AI tools try to read feelings from facial expressions. But they're usually trained on Western faces. In the West, a big smile often means happiness, and maybe less expression means something negative. But that's not universal! In parts of Southeast Asia, a smile might hide embarrassment. In Japan, showing less emotion is often seen as respectful and professional, but an AI might wrongly flag this as "unemotional" or even "untrustworthy". An African child showing a neutral expression, unfamiliar to the AI, was even flagged as "angry". *The harm here?* When emotion AI tools are integrated into government services, company hiring processes, and more, people can be unfairly judged, lose job opportunities, or face**

suspicion simply because their culturally normal expressions don't match the AI's Western training. Imagine being detained at an airport because facial recognition, biased by Western norms, misread your neutral expression as aggression, as has happened to Arab travelers.

- **Translation Troubles : More than just words : AI translation is getting better, but it struggles deeply with cultural context. Slang is a great example. Meta's AI translated the Spanish slang "no manches" (meaning "no way !" or "come on !") literally as "no stain," which is meaningless. AI also misses vital distinctions, like in the Yoruba language, where there are different words for "queen" and "wife of the king." AI often translates both simply as "queen," erasing an important cultural difference. *The harm ?* At best, it leads to confusing or awkward communication. At worst, it can cause serious misunderstandings, strip away important cultural meanings, and make the technology frustrating or unusable for non-Western users. An Afro-Indigenous Brazilian man's asylum application was even delayed because of errors in AI-powered communication that couldn't handle his dialect.**

- **Seeing the World Through Western Eyes: Computer vision AI, which identifies things in images, also suffers. Models trained on Western images perform poorly when shown culturally diverse scenes. They might misidentify traditional clothing or objects. Text-to-image generators often portray non-Western cultures based on stereotypes or an "outsider's" romanticized view rather than reality. *The harm?* This reinforces stereotypes, spreads**

inaccurate representations of cultures, and makes AI less useful for tasks involving non-Western visual contexts.

These aren't just minor glitches. They show that an AI trained primarily in one culture *cannot* effectively or fairly serve everyone else.

How Do We Fix This? Building AI that Works for the World

If the problem starts with the data and the design being too Western-focused, the solution must involve broadening that focus significantly. We need to actively build AI that is able to analyze and process globally diverse inputs. Here's how we can add more substance to make that happen:

1. **Get Better, More Diverse Data: This is job number one. Simply pouring more Western data into AI won't fix it. We need *representative* data.**
    - **Go Global: Actively collect text, speech, and images from Asia, Africa, Latin America, Indigenous communities, and other underrepresented regions. This includes supporting efforts to digitize languages that have few online resources.**
    - **Be intersectional: Individuals aren't just "man" or "woman"; they are dynamic beings that have age, sexualities, education, parental status, religions, and more. Representative, intersectional datasets are needed to represent the complexity of each person. Community-Centric Approach: Don't just take data; work *with* communities. Involve local people in collecting and labeling information. They understand the nuances best and can**

prevent misinterpretations. This ensures the data truly reflects the culture.

- **Expert Collaboration: Bring in local linguists, sociologists, and cultural experts. Their insights are invaluable for designing data collection that is culturally sensitive and accurate.**
- **Culturally Aware Labeling: How data is labeled matters. Guidelines for annotating data need to account for cultural context to avoid baking in biases due to labeling.**

2. Smarter Tech Approaches: We also need technical innovations designed for cultural adaptability.

- **Teaching AI to Transfer Knowledge: Techniques like *transfer learning* allow AI trained on lots of data (like English) to learn a new, low-resource language or cultural context much faster, even with less data. *Few-shot learning* helps AI learn new concepts (like a specific cultural greeting) from just a few examples. This helps address existing data gaps.**
- **Understanding Language Structure: For languages with non-Latin scripts (like Hindi or Arabic) or complex grammar (like Turkish or Basque), AI needs specialized techniques. This includes better *tokenization* (how AI breaks down words) that respects the language's structure and using phonetics (like the International Phonetic Alphabet) to help AI understand script differences.**
- **Detecting and Reducing Bias: We need tools specifically designed to find and mitigate cultural biases in both the data**

and the AI models themselves. This is an ongoing process, not a one-time fix.

- **Building Context Awareness: AI needs to get better at understanding context. This involves techniques to help AI grasp implied meanings, non-verbal cues (though this is hard!), and the overall situation, not just the words themselves.**

3. Inclusive Design and Development: Who builds the AI and how they build it matters.

- **Diverse Teams: If the people building AI come from varied cultural backgrounds, they are more likely to spot potential issues and build more inclusive systems. We need more diversity in the AI field globally.**
- **Ethical Frameworks and Governance: Companies and countries need clear guidelines and rules. International standards like the UNESCO Recommendation on AI Ethics emphasize protecting cultural diversity. We need governance models that involve multiple stakeholders (governments, companies, and communities) to ensure that cultural representation is prioritized. This includes audits to check for bias.**
- **Community Involvement in Design: Beyond just data collection, involve communities in designing and testing the AI (participatory design). Does it meet their needs? Is it culturally appropriate? Continuous feedback loops are essential.**

Putting these pieces together – better data, smarter tech, and inclusive practices – is how we move toward AI that genuinely understands and respects global cultures.

Looking Ahead: AI That Connects, Not Divides

Imagine an AI that doesn't just translate words but understands the cultural meaning behind them: An AI that can adapt its communication style, recognize different cultural norms, and avoid both overt and covert stereotypes. This kind of AI could be a powerful tool for connection and ensure that the economic value of AI does not merely reproduce existing global inequalities. It could help people from different backgrounds understand each other better, preserve endangered languages and traditions, and provide truly personalized and respectful assistance to everyone, everywhere.

Getting there requires a real shift in how we build AI. We need to move away from the current model where Western data dominates and actively embrace global diversity at every stage – from data collection to team building to the final product. It's about making a conscious choice to build AI that respects and reflects the incredible variety of human culture. Only then can AI fulfill its potential as an inclusive technology for the 21st century.

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Suggested Reading

- ***AI Suggestions Homogenize Writing Toward Western Styles and Diminish Cultural Nuances: Research paper detailing the***

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Letter from the Chairman's Desk

By Sunil Bhatia PhD

The design of the gearbox in an automobile serves as a guide for users. A driver's incorrect action of shifting gears using the handlebar can directly affect the vehicle's performance. Today, control systems are designed to prevent road accidents. If a driver accidentally applies force to the gear handle and it fails to engage properly in the gearbox slots, the engine may cease functioning.

I admire the design of gears inspired by the pulley system, which uses ropes to lift heavy weights with minimal effort. In automobiles, the ropes have been replaced by teeth on the outer circumference of pulleys of varying sizes to facilitate motion. Interestingly, the final design of the gearbox allows for gear changes using a handlebar arranged in an "H" pattern. The risk of a driver selecting the wrong gear is reduced in systems where gear shifting is automatic and adjusts according to the vehicle's speed, based on the pressure applied to the accelerator pedal.

In a movie I watched, a villain tampered with a vehicle's brakes to cause an accident. As the driver realizes the brakes are not functioning, he desperately keeps pressing them, assuming it's a minor fault that will correct itself. When he realizes it's no use, his focus shifts to the steering wheel to avoid a collision. This example illustrates how a product can guide the user in critical situations. If the driver fails to act correctly, he may crash into a tree, fall into a

valley, or even die. This is a powerful example of how a product can guide users toward the best actions under extreme conditions. That instinct for survival, guided by design, is a true force of progress.

If I were in the driver's seat during a brake failure, I would not hesitate to sacrifice the gearbox to save my life. As a trained technocrat, I understand that a lower gear at high speed acts like a brake. I would shift through gears, knowing each gear is effective within a specific speed range. Once the vehicle slowed enough, I would shift into reverse, and when it reached a minimal speed, I would jump out to save myself.

The people of snowy regions, deserts, and mountains live lifestyles shaped by their environment. They adapt based on what nature—or "the product"—is guiding them to do. This instinct to follow environmental cues is a force behind the progress of life. The plant kingdom is no different. A cactus or camel is a testament to how both plants and animals adapt based on environmental guidance. I have never seen any living being resist the guidance of nature. They accept it without challenge. However, modern humans—with some technological advancement—have begun to defy nature, contributing to climate devastation. As a result, our very existence is at risk.

This conflict with nature began with the domestication of animals and extended to controlling women—representatives of nature and its randomness, like trees that grow freely when the environment is right. Man's urge to control is an attempt to assert superiority over plants and animals—an act of dominance.

I once visited a friend's house and saw a painting of Jesus standing outside a closed entrance gate. My friend asked me what I saw in it. I said it looked ordinary. He replied, "You missed the detail—Jesus is

outside a door with no knob. He cannot enter unless the occupant opens it. He does not force entry." That moment made me realize how door latches and locks symbolize ownership. When someone locks a door and carries the key, they assert their occupancy. Multiple keys mean multiple authorized users. The lock-and-key system distinguishes between authorized and unauthorized entry. Even such a simple design guides user—it tells you when and how you are permitted to access something. I'm not referring to the level of security, but the way design itself offers guidance to users.

Biologically, a young man is the product of a young woman, and vice versa. Their union, influenced by hormones, happens without formal instruction. They guide one another, eventually leading to reproduction. Nature is the ultimate guide, showing all living beings how to survive and ensure continuity. Seeds, for instance, stay dormant until conditions—soil, temperature, moisture—are ideal. This suggests that seeds contain sensors that trigger growth at the right moment. I've never seen a plant or animal mistakenly try to reproduce with a different species. Dogs mate with dogs, mango trees yield mangoes by attracting specific pollinators. Not all insects are suitable for pollination—it's the elegance of nature that guides life to stay within its boundaries.

Plants communicate with each other—expressing needs, offering space, or sharing resources. This natural love among living beings promotes survival. Humans, driven by greed, often interfere by crossbreeding and crossing natural boundaries. Nature created man and woman, but love, as a guiding force, helps ensure balanced survival—not just for humans, but all life forms.

One day, I saw a dog searching for a comfortable place to sleep. He chose a pile of dry leaves—nature's air-cushioned mattress. If he felt hot, he dug into the soil to find cool, moist earth. In cold conditions, he curled up to reduce body exposure and preserve heat. These instincts are nature's way of guiding survival.

When I travel standing on a metro, my entire body is exposed, increasing the chance of pickpocketing. When seated, I'm more protected. Even this reflects how exposure changes our vulnerability.

Watching my mother thread, a needle was another lesson in natural problem-solving. When she struggled to insert the thread, she instinctively twisted it with her fingers—adding strength and stiffness. The natural oil on her fingers acted as a lubricant. Sometimes, she used saliva for the same purpose. She cut the thread's tip with her teeth when it was frayed. All these seemingly primitive actions were solutions guided by experience and instinct.

When her mixer grinder didn't work, she didn't panic. She checked the overload switch and the power supply, found the issue, and fixed it. These built-in design features guide users at every step, ensuring functionality and safety.

I am thankful to Debra Ruh guest editor od special issue and her focus of collecting the articles were limited to her own orgnizations. She made this special issue for covering latest technology for defferently abled peoples. She tried to highlight the issues and possible solution through design and combination of available latesttechnology.

With Regards

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Forthcoming Issues

Year 2025 declared as Women's Designer

June 2025 Vol-20 No-6

Valerie Fletcher ***has been executive director since 1998 of the Institute for Human Centered Design (IHCD). Fletcher writes, lectures, and works internationally. She generates opportunities for IHCD and has broad oversight of all consulting and design services. She created the IHCD User/Expert Lab which has over 400 people engaged in the evaluation of places, products, and services. Her current research focus is generating data to inform inclusive designing for the Black, Indigenous, People of Color (BIPoC) and for people with a spectrum of brain-based conditions.***

Fletcher's career has been divided between design and public mental health and she is the former deputy commissioner of the Massachusetts Department of Mental Health where she oversaw the largest participatory planning process ever undertaken in a state mental health system. She was Principal of Fletcher Studio Design from 1978-1985.

She is councilor for the International Association for Universal Design (IAUD) in Japan. She has created an international universal design benchmarking project for the government of Singapore. She serves as Trustee of the Boston Architectural College. Fletcher has a master's degree in ethics and public policy from Harvard University. The Boston Society of Architects awarded her the Women in Design award in 2005. The Helen Hamlyn Research Centre at the Royal College of Art in London named her Inclusive Design Champion 2022.

July 2024 Vol-20 No-7

Prof Brigett Wolf

Brigitte Wolf is a retired professor of strategic design and design theory focussing on sustainability. Her background is in industrial design and psychology. She held a chair at KISD (Cologne International School of Design), Wuppertal University and the German

University Cairo, Egypt. In addition, she was guest lecturer at universities in Cuba, Brazil, Argentina and Iran. Recently she has been conducting seminars at ecosign/Academy in Cologne and supervising PhD students at Wuppertal University and the University of Teheran.

August 2025 Vol-20 No-8

Shannon Iacino is a Professor of Industrial Design and Design for Sustainability at Savannah College of Art and Design. Her work specializes in leveraging technology to advance the principles of the circular economy and design for social good. With a background in sustainable design and emerging technologies, Shannon integrates innovation and ecological responsibility into her teaching and research. Her work emphasizes creating systems and products that minimize waste, promote resource efficiency, and address societal challenges. Through interdisciplinary design projects, Shannon collaborates with students and communities to develop impactful solutions that balance technological advancement with sustainable practices.

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it is available on www.morebooks.de one of the largest online bookstores. Here's the link to it: https://www.morebooks.de/store/gb/book/design-for-all/isbn/978-613-9-83306-1

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HOW WE LIVE: Through the Products that We Use

Authored by : Sugandh Malhotra,

Professor, IDC School of Design, IIT Bombay (INDIA)

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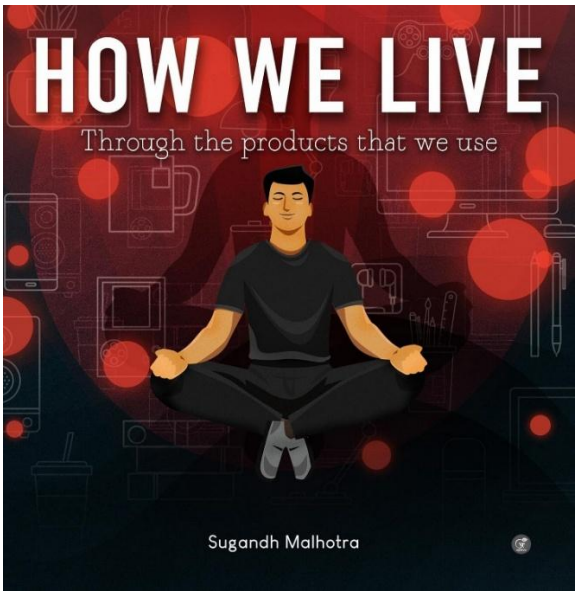

Products tell stories about their users, their likes, tastes and journeys. 'How We Live' book aims to outlay, document and study the used products and create a persona of the users through a brief narrative. This visual documentation book is an excellent resource to observe and acknowledge the subtle differences in choices that are driven by nuances other than personal preferences.

Available at: Amazon.in, Amazon.com, Astitva Prakashan

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MOVE MUMBAI: Kaali Peeli and Beyond

Authored by : Vivek Kant, Sugandh Malhotra, Angshuman Das, Tekhenutso Theriah

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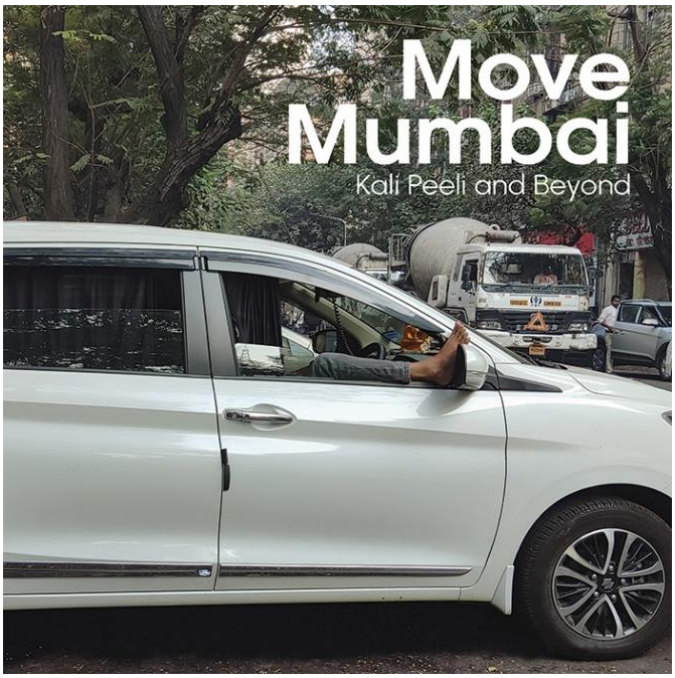

Move Mumbai" is an incredulous yet everyday traffic story from the streets of Mumbai captured through a series of photographs. We closely observe how Mumbaikars use their vehicles, and live with and around them. From cab drivers to bus passengers, from goods carriers to bikers, to children, and pedestrians, Mumbaikars encounter hundreds of vehicles daily while commuting between any two places whether they may or may not be in one themselves. While a two-wheeler motorbike is designed to carry two people. Mumbaikars still manage to fit multiple, especially younger children, in ways that a designer would typically not envision. This reflects in certain ways the economic constraints faced by many Indian families, the cultural value placed on integrated family living, and their resourcefulness. This is one of the many ways in which the city dwellers have appropriated vehicles. We hope that the readers relook at these everyday images with a new pair of eyes to understand the seemingly mundane yet incredulous images of the mobility of Mumbaikars.

Available at: Amazon.in, Amazon.com, Astitva Prakashan

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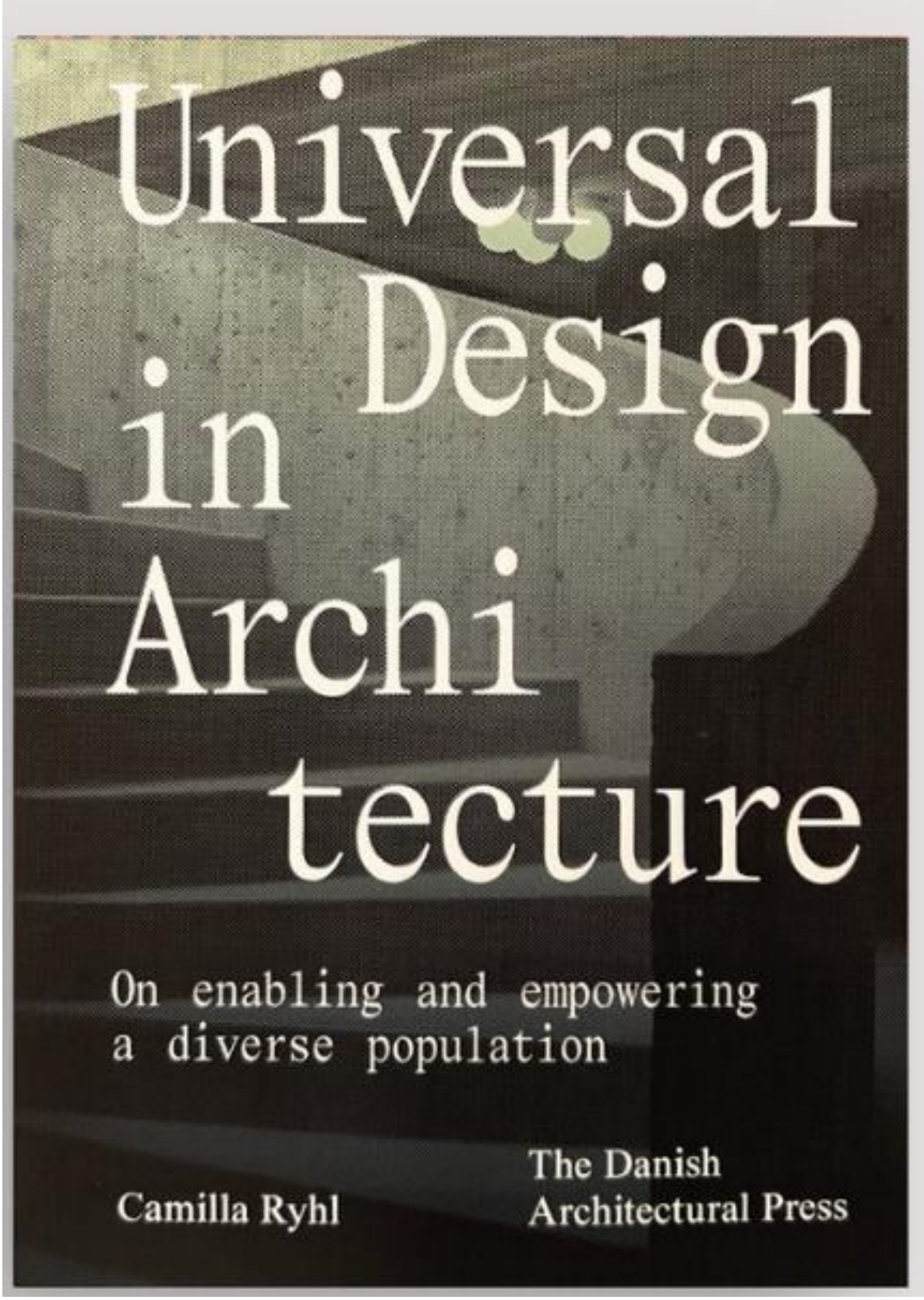

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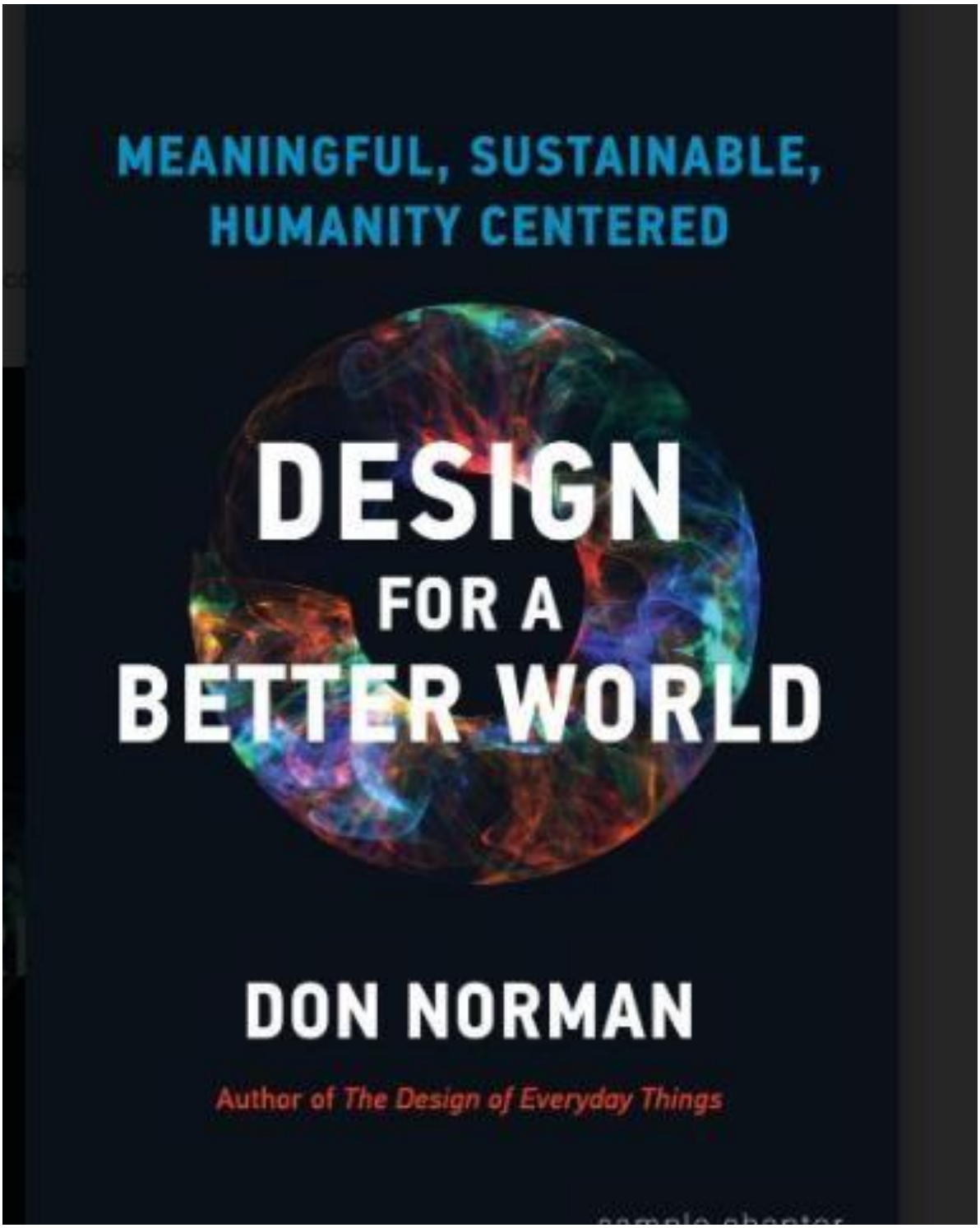

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Emilio Rossi (Editor)

Innovation Design for Social Inclusion and Sustainability

Design Cultures and Creative Practices for Urban Natural Heritage

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News

1. 'In Perspectives' challenges design industry to rethink inclusion from the inside out

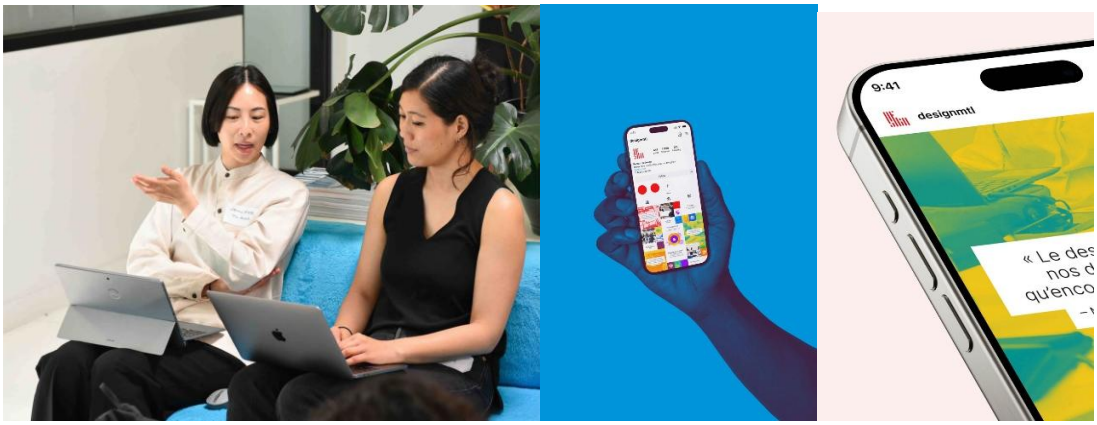
Developed by Montreal-based studios Six Cinquième and Never Was Average, this human-centred framework offers a timely and practical way for design professionals to embed equity, empathy and humility into their everyday practice.

In a time when much of the creative industry is quietly retreating from the promises made in 2020, a group of Montreal-based designers is offering a bold, human-centred alternative. 'In Perspectives' is a new initiative from design studio Six Cinquième in collaboration with Never Was Average that's not just a response to the shifting cultural winds around DEI—it's a reframing of how inclusion can live in the day-to-day work of design. Backed by the Bureau du Design de Montréal and supported by the Ministère de la Culture et des Communications du Québec, the project is part of the city's wider Quality Toolkit initiative, which aims to equip creatives with tools that lead to better, more inclusive outcomes. What makes 'In Perspectives' different is its grounding in lived experience. Rather than offering a prescriptive checklist or generic guidelines, the framework is built on stories, dialogue, and real-world application.

Over a year in development, the project involved co-creation workshops with BIPOC designers and community members, in-depth documentation of lived experiences, and a shared commitment to humility. Miro Laflaga, co-founder of Six Cinquième, says: "The answers don't come from the designers; they come from the people we are designing with. It takes humility to be real with yourself and say, I don't have all the answers – and that's okay."

The result is a resource that encourages design professionals to step back from universal assumptions and lean into complexity. As Harry Julmice, co-founder of Never Was Average, explains: "Universal design gets talked about like it's the gold standard. But for many of us, it doesn't feel that way. When your lived experience exists outside the assumed norm, universalism starts to feel like code for someone else's normal."

Instead, the framework invites designers to embrace intersectionality, nuance, and contextual relevance. That shift can be uncomfortable – but that's the point. 'In Perspectives' isn't about comfort; it's about truth. It asks who design truly serves and what it means to create from a place of care, curiosity, and community.



The team behind the project were intentional in their collaborative approach. Rather than speaking for under-recognised groups, they invited those communities in from the start. Workshops became spaces for difficult, necessary conversations about exclusion, visibility, and the emotional impact of design decisions.

Ash Phillips, co-founder of Six Cinquième, says: "We didn't want to lead with assumptions. The goal was to address pain points for both designers and community members by listening first."

This dialogue shaped the structure and language of the toolkit, which blends practical steps with reflective prompts. From inclusive facilitation techniques to examples of co-creation, it offers an approach that's less about process and more about mindset. For Six Cinquième and Never Was Average, the project needed to remain actionable while also leaving room for growth and learning.

To ensure the work wasn't extractive, the team built in accountability from the outset. "We weren't interested in a top-down consultation process," says Joanna Chevalier, co-founder of Never Was Average. "We wanted real conversation—unfiltered, unstructured, outside of systems built by institutions or corporate agendas."

That community-first ethos also shaped how the project was designed and produced. The two studios handled the visual identity, research, and development in-house, allowing for consistency and cultural fluency. The result is a digital experience that feels accessible, warm, and grounded in real-life contexts.

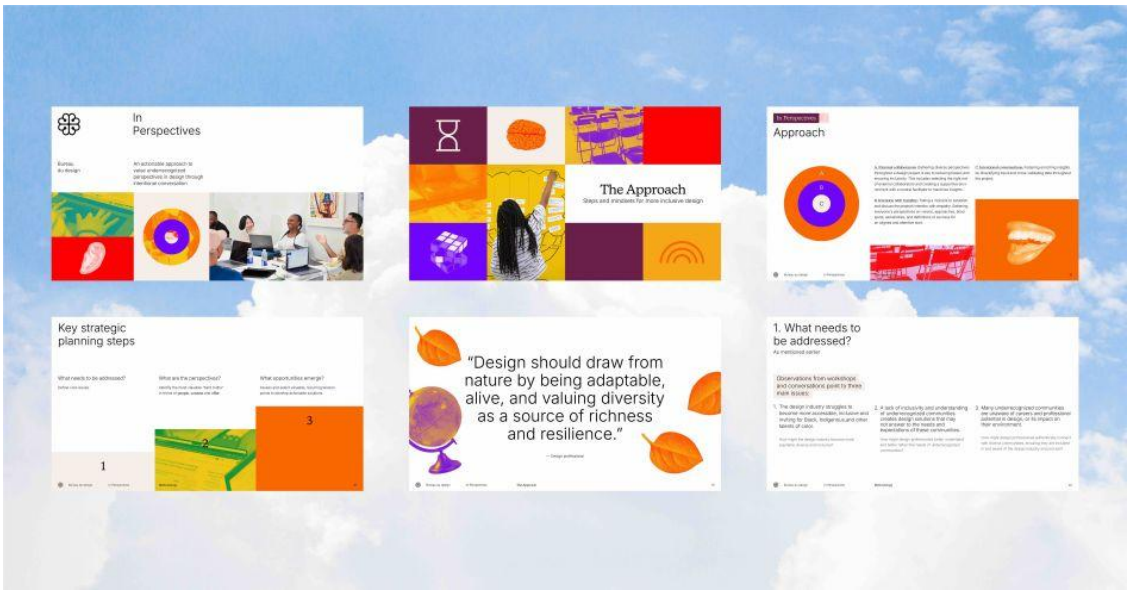
Importantly, 'In Perspectives' doesn't just speak to big institutions or government-led projects. It's designed for everyone. Whether you're an independent designer, a small studio, or a creative director at a larger agency, the framework invites you to reflect on your role, your influence, and your responsibility.

That reflection can start with small shifts. "One of the most important things designers can do is reconsider who their work is really serving," says Miro. "Our power doesn't lie in serving algorithms or shareholders – it's in putting people at the centre of our practice."

Ash adds, "It comes down to intention. Designers have a lot of power over how people experience the world. So, what impact do we want to have? That's a mindset shift—one that starts with acknowledging that our process can shape real outcomes for real people."

Part of what makes 'In Perspectives' resonate is its grounding in Montreal's design legacy—a city known for its creative talent and cultural diversity. However, as the team points out, the challenges the project addresses aren't unique to Canada. Around the world, design communities are grappling with questions of representation, inclusion, and access.

"Montreal's multicultural lens gave us the self-awareness to question our own industry," says Ash. "But the toolkit is designed to travel. Diversity might look different in every city, but the need for inclusive practices is universal."



As the backlash against DEI initiatives intensifies across sectors, this project feels especially urgent. For Harry, it's about staying the course even when the cultural mood shifts. "The reality is that society is becoming more diverse every day. If organisations want to remain relevant, they need to adapt. 'In Perspectives' helps translate values into long-term, sustainable practices."

That long-term view is key, and rather than offering quick fixes, the project champions patience, dialogue, and accountability. It asks designers to show up fully, be vulnerable, and remain curious. For studios looking to take the first step, the advice is simple: start with intention and stay open.

"Ask yourself what you want your legacy to be," says Joanna. "Is it a perfect portfolio built on the same old process? Or is it the impact you've had by designing in ways that are more human, more generous, and more honest?"

With 'In Perspectives', the team at Six Cinquième and Never Was Average isn't just offering a framework—they're inviting a mindset shift. One that acknowledges the complexity of human experience and the power of design to shape it. In doing so, they're building a path forward that doesn't just include more people but starts with them.

(Courtesy: Creative Boom)

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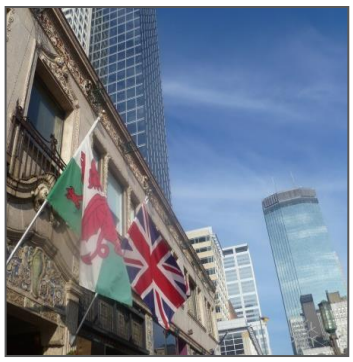

Programme and Events

World Design Congress
Design for Planet
London 2025

9-11 September 2025

#

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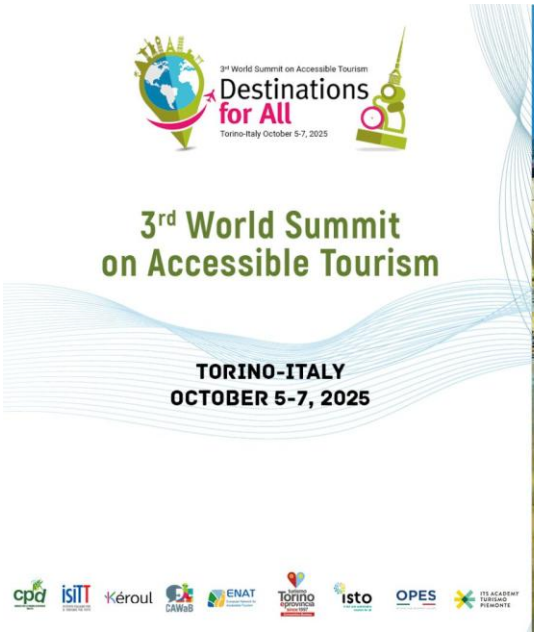

STUDENT SERVICE DESIGN COMPETITION!

OBJECTIVE:
The competition aims to leverage students' creativity and service design skills to address real-world challenges faced by India's social sector. Solutions must be innovative, actionable, and culturally sensitive, motivating NGOs to implement them effectively.

ELIGIBILITY AND PARTICIPATION:
Open to undergraduate, postgraduate, and doctoral students enrolled in academic institutions during 2025.

KEY DATES:
Registration Deadline: **Feb 15, 2025**

Submission Deadline: **Jun 15, 2025**

Announcement of finalist teams: **Aug 15, 2025**

Final Presentations: **Oct 6-8, 2025,** at the ServDes25 Conference

Announcement of Winners: **Oct 8, 2025,** at the ServDes25 Conference

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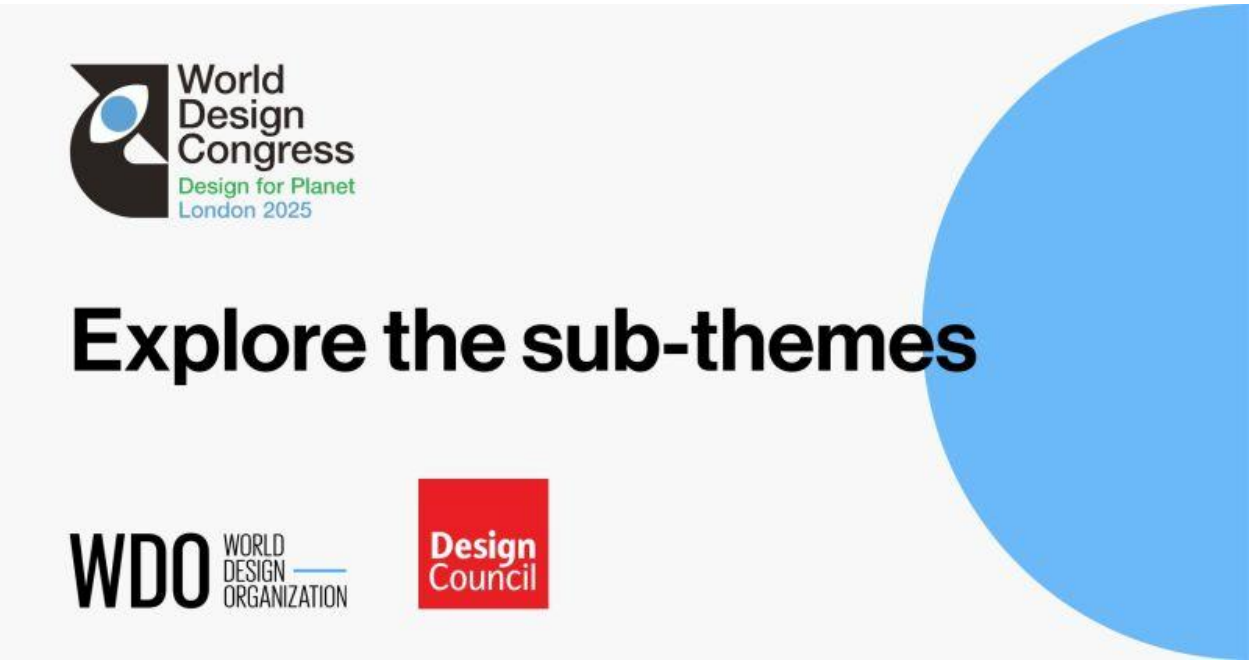

Are you curious about submitting a paper or poster to the World Design Congress in London this September? In line with the hashtag#DesignforPlanet theme, swipe to learn more about the first submission sub-theme of Shifting Paradigms — From Extractive to Regenerative Design, which aims to highlight work that showcases the transformative potential of design in addressing planetary health.

Don't miss out! Submissions are open globally until 31 May 2025.

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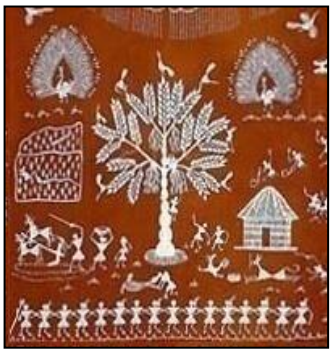

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