

Culturally Sensitive Design Tool Kit Developed Through Global Co-Design

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Abstract. Designers are increasingly navigating translocated contexts, presenting the need to develop strong skills in sensitively working with host communities, avoiding surface-level engagements, and considering the longevity, ownership, and impact of designs [1]. This paper reviews a series of co-design workshops organised by Imperial College London and Royal College of Art's MSc Global Innovation Design (GID) students, Abigail Hoover, and Tori Simpson. These workshops assembled a global community of design experts, students, and academics to share their experiences and approaches when designing for diverse communities to create culturally robust design interventions that are contextually innovative in the cultures and communities they exist in. The outcome of these workshops is a collection of co-designed guidelines to support design practitioners in ethical co-design practices, particularly when engaging with communities to which they do not belong. The goal of conducting these workshops was to discuss, and create strategies to avoid design tourism, a concept that straddles many names, including parachute design, design littering, and design imperialism. Meaning 'projects where the primary purpose of the project is the educational or personal development of the visitors, and the resulting ideas are left without any potential for realistic implementation.' [2] This paper outlines the tools, techniques, and knowledge generated through collaborative participation and reflection during the workshops that can be applied within culturally sensitive projects and ever-evolving design environments. It will review the created workshop structure and outcome analysis strategies cataloguing results against pre-existing design ethics structures. These outputs prompt the designer to reflect on their own practice, how they involve users, and what is left behind for communities involved. This paper serves as a valuable resource for designers seeking to navigate design with cultural sensitivity and adaptability, incorporate best practice, as well as new approaches to innovation, and facilitate actionable response to generate sustainable futures.

Keywords. Co-Design workshops, Global Design, Cultural Design, Design Strategies, Design Tourism, Parachute Design, Design Education, Design Tools, Participatory Design, Multi-disciplinary design

1. Introduction

More and more frequently, a design thinking approach is being used to imagine solutions for diverse, wicked problems, in equally diverse contexts and communities [3]. This means that increasingly, designers are being asked to work in cultures and communities to which they do not belong, as active agents in driving both local and global change [4]. With this opportunity to create impact comes a responsibility for designers to build models of sensitive cooperation and exchange that create mutual benefit; for the designer

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and the community with which they are working. Designers must focus on developing strong skills in sensitively working with host communities, avoiding surface-level engagements, and considering the longevity, ownership, and impact of designs [2].

In a modern world, design has moved to a practice that is concerned with connecting and integrating useful knowledge from both the arts and sciences, in a way that is relevant to present problems and use cases. Designers, therefore, are concerned with exploring integrations of this interdisciplinary knowledge that will combine theory and practice towards new productive purposes, or innovation [3]. This phenomenon has arisen due to the scale, ambiguity, and complexity of each of the issues our world faces today: social, economic, and environmental. Furthermore, in a globalised world, where many of the aforementioned issues are border agnostic, designers must work cross-culturally to explore solutions whilst including interdisciplinary perspectives involving all project stakeholders [5]. By nature this collaborative work requires members of the community in which the design outcome will be situated to adopt a 'design approach', cascading to mean that those trained in design, considered 'design experts' must use their knowledge and skills to design, promote, and support effective methodologies of engagement in co-design processes, that enable participants to realise and use their own design capabilities [6].

However, it must be acknowledged that this role presents complex and multifaceted challenges, which are often specific to individual projects: their scope, funding, available time, and the structures of communities whom project leads hope to design with. Co-design, as intended here, can be defined as "social conversations in which everybody is allowed to bring ideas and take action, even though these ideas and actions could, at times, generate problems and tensions" [6]. Co-design therefore is not a space in which all individuals will agree, have the same skills, or access to power. The designer's role therefore becomes to facilitate these processes and close the gap between those who have the power to shape solutions, and those who are direct users, or directly affected by the solution [7].

Therefore, for a co-design process to be effective, communities designers are working in must receive mutual benefit: through implemented projects, capacity building, and positive legacies left behind by designers, with consideration given to promoting the longevity of co-created designs. Various terms have been conceptualised for defining the different contexts in which there is an imbalance in how much a design project's benefit is received by the designers versus the community groups they are working with:

Parachute Design describes situations in which "western designers embark on short-term projects where they design a product for developing regions in their spare time, deploy in and then leave" [8].

Design Tourism describes a potential pitfall of international educational collaborations, consisting of design projects where design students are working with host communities in translocated contexts, "where the primary purpose of the project is the educational or personal development of the visitors, and the resulting ideas are left without any potential for realistic implementation" [2].

Design Imperialism describes projects where "rather than helping increase collaboration between communities, policy makers, and institutions to bring about social change and ideas through design, projects exploit the communities in which they pursue the work" [9].

What all these terms capture are the potential pitfalls of co-design practices. Whilst these potential pitfalls and risks of co-design can be project or context specific, these

terms and their surrounding research have allowed us to understand some of the most common critiques of co-design processes. These often centre around designers conducting their work “without immersion with users, without being in-situ, and without a sense of culture, language, norms, and deep understanding of the problems people face” [10].

The workshop methodology recounted in this paper stemmed from experiences had by the researchers, Tori Simpson and Abigail Hoover, whilst completing the MASc Global Innovation Design (GID) programme, a joint masters course held at Imperial College London (ICL) and The Royal College of Art (RCA). The programme consists of time in three locations. All students will spend time in London, and then each student will spend time in two of the other partner countries: Japan, USA, China, and Singapore. This programme represents a “trans-national innovation-led, educational experience” that aims to help students “develop skills in applying creative methods to complex problems framed in real-world constraints” [11]. The group of students participating in the programme are inherently multicultural and multidisciplinary, each of whom bring their own individual perspectives and interests, leading them to focus their work on a wide range of contexts, from healthcare, to sustainability, technology, material sciences, activism and beyond. Within an incredible broad programme, a core objective of the course “is to prepare students to enter new situations where they can attune their manner and behaviour to a culture that may be very different from their own”, to ultimately equip them better for “conceiving and realising innovative services and products for others, where stakeholders may come from many other cultures, and also for high-level, meaningful engagements (including negotiation, influence, and decision making) with people from other nations and cultures” [11].

This study aimed to review these experiences from a global community of designers who engage in co-design practices through a series of collaborative workshops. Each event was focused on sharing, critiquing, and documenting desired strategies to implement. Considering which ones were feasible to implement, which were ignored and the corresponding reasoning. Because designers were asked to focus on their own lived experiences when coming together to create these guidelines, it is acknowledged that too many were produced for an individual to follow them all. Therefore, these produced results should be seen as a resource to open discussion, guide project ethos, and act as a starting point for evolving sensitive design practices. Their purpose is to provide designers with guidance on how to sensitively approach their work, it is equally to help designers feel heard, to allow them to acknowledge the challenges of their role and create a space to co-design our working practices. This paper recounts the workshop methodology, and principles produced at the initial workshop, based at ICL, including alumni, students and professors from the GID programme, as well as a follow up workshop, conducted with the World Design Organisation’s (WDO) Young Designers Circle (YDC), another international group of designers working across cultures to promote the use of design to help meet the United Nations Sustainable Development Goals (UN SDGs) [12].

2. Methodology

Two workshop frameworks were generated to facilitate personal and collaborative reflection on co-design experiences. To accommodate a range of participation, formats consisted of both in-person and online structures. Furthermore, exercises were

deliberately selected to prioritise a safe space for communication, anonymity, vulnerability, and reflection towards design projects which may or may not have held best practices in co-design. The outcome is a set of guidelines intended to support design practitioners in ethical co-design practices, especially when collaborating with communities to which they do not belong.

2.1. Participant Selection

The workshops included students, academics, and design professionals, who have gained tangible experiences working on and leading design projects in translocated contexts. The in-person workshop focused on students, professors, and alumni of the GID programme. This involved critically considering successes and shortcomings of their design work conducted to date; iterative discussion on how designers might improve their working practices; how to better incorporate the communities the designers are working with and consider the longevity and legacy of their projects. The second workshop was conducted virtually and comprised members of the World Design Organization's (WDO) Young Designers Circle (YDC), an international group of young multimedia designers dedicated to engaging with local communities and creating sustainable actions aligned with the United Nations Sustainable Development Goals (UN SDGs).

2.2. Ethical Considerations

Prior to the workshop each participant received a comprehensive overview of the workshop, along with additional readings and documentation on design tourism and global design. Consent forms were presented to and signed by all participants, ensuring they understood their rights to withdraw from participation at any time and that all content shared did not jeopardise themselves or communities specifically mentioned. Finally concluding the workshop, all participants were allowed to document their work to continue use and referencing in future endeavours. All workshops and content were produced in the English language.

2.3. Workshop Structure

The workshops were designed to enable participants to generate co-design strategies based on tangible experiences rather than solely on personal or theoretical beliefs. Consequently, the guidelines developed are granular and based on lived experiences, acknowledging that they may not be universally applicable. The in-person workshop lasted three hours, while the virtual workshop lasted one hour. Time was allocated to ensure sufficient context setting, development of trust, iteration, depth of conversation, and thorough documentation of content.

The workshop structure and inspiration were primarily derived from Jawad Anjim's *Power Hierarchy* in-person workshops, Sarah Stein Greenberg's "Creative Acts for Curious People: How to Think, Create, and Lead in Unconventional Ways," [13] and Maya Goodwill's "A Social Designer's Field Guide to Power Literacy." [14] Each workshop underwent review by professors from Imperial College London and the Royal College of Art who specialise in cultural design. Additionally, the three-hour in-person workshop was piloted with three ICL graduate design engineering students to assess the structural flow, identify activities that hindered productive conversation, and ensure the

development of group and workshop trust. Appendix 1 displays the workshop structure, and the time allocated for each activity. After each workshop, an anonymous survey was provided to all participants to express their opinions on the event and suggestions for future iterations.

2.4. Analysis Methodology

In final reflection, participants were tasked with sorting developed insights and strategies into the categories of do’s, don’ts, and acknowledgments, defined as:

Do’s are instructions on processes designers should ensure they follow, and positive mindsets they might adopt.

Don’ts are common pitfalls designers should endeavour to avoid in their own practice.

Acknowledgements are items of conversation that arose that did not necessarily translate into concrete instructions or guidelines but were highlighted as aspects designers should be aware of and dedicate time to considering within their working practices.

Recognizing that not all processes are relevant to every project, no suggestions were eliminated during the workshop or in analysis. These insights were then organised into the relevant sections of IDEO’s “Little Book of Design Research Ethics”[15]: respect, responsibility, honesty, inclusion, and evolution, as shown in Figures 1,2&3. This sorting provided a visual framework to examine similar or contradicting insights in relation to pre-existing values defined by ethicists and design researchers in both academic and professional fields. Furthermore, helps understand which of the 5 ethics pillars were most addressed and which were more ignored and why.



Figure 1. Description of IDEO’s Little Book of Design Research Ethics Research Practice Sections.

3. Findings

Presented in Table 1 are the amalgamation findings based on workshop participants co-built and synthesised suggestions. These findings are categorised into ‘do’s’ ‘don’ts’ and ‘acknowledgements’ and as aforementioned, are mapped to the relevant sections of IDEO’s “Little Book of Design Research Ethics”: respect, responsibility, honesty, inclusion, and evolution. Within the table highlighted in bold are the guidelines that arose multiple times, either from separate groups in the same workshop, or in both workshops.



Figure 2. Sorting of collected workshop insights

Table 1. Workshop Findings

Principles and Guidelines	IDEO categories				
	Respect	Responsibility	Honesty	Inclusion	Evolution
<i>Do's</i>					
Think about scaling and ownership	x				
Try to give something back	x				
Prepare	x				
Recognize participants may want change but don't carry agency		x			
Feel excited			x		
Record the process					
Use inclusive & empowering methodologies				x	
Bring external opinions to challenge existing ideas				x	
Include as many people as possible, from all stakeholder groups				x	
Include philosophy of other disciplines/ fields. Collaborate if possible				x	
Record the process					x
Research before a test	x	x			
Allow for spaces where people can speak freely and share experiences	x	x			
Prepare- start introductions before in the field	x	x	x		
Listen deeply and openly	x	x	x		
Ask what you can provide with your skillset		x	x		
Make decisions		x	x		
Give limitations as well – in a non-arrogant way		x	x		
Be open to changing everything					
Feel inclusive			x	x	
Make friends - take time engage socially as humans			x	x	
Be open to unplanned meetings / talks / serendipities					
Respect the culture whilst respecting yourself	x		x	x	
Take time to learn the language and recognise language barriers	x		x	x	
Be kind & sincere	x		x	x	
Truly understand and recognize the nuance of communication		x	x	x	
Seek, understand, and offer to include individuals who self-exclude		x	x	x	
Set expectations early (deadlines, deliverables)	x		x		
Give collaborators the option of whatever attribution they wish		x		x	
Incorporate feedback		x		x	

Use your privilege to empower (legacy as well)		x		x	
Create a local team to become champions		x		x	
Find out what matters to the community members	x			x	
Respect the culture	x			x	
Take multi-disciplinary approaches (2D&3D) to engage hands and eyes	x			x	
Recognize its a larger challenge to access marginalised communities	x			x	
Leave for synthesis	x				x
See it through to the end or create legacy	x				x
Approach with an adaptive mindset	x				x
Examine existing innovations in the space	x			x	x
Communicate effectively & often using a system that works for all	x			x	x
Ensure there is tangible benefits for all participants		x			x
Build trust, which can take years		x	x		x
Bring in diverse voices		x			x
Define the measure of success			x	x	x

Don'ts

Be afraid to reach out to people				x	
Think that you can get it all done / make it all perfect					x
Take advantage of people's time	x	x			
Be overly precious about your ideas	x	x			
Be against hearing fresh angles		x	x		
Be arrogant		x	x		
Be afraid to ask questions if you don't know/understand something			x		x
Be intimidated	x		x		x
Avoid being in the field	x			x	
Focus on what you are interested / care about	x			x	
Be resistive to adapting	x			x	x
Presume your way is best	x	x		x	x
Focus on too small of a target audience		x		x	x
Differentiate within the team		x		x	x
Assume communities will be welcoming		x		x	x
Design without long term engagement		x		x	
Forget who is running the show	x	x		x	
Be inflexible, with inefficient communication			x	x	x

Acknowledgements

Building skills to understand different perspectives takes a long time					x
You can't change how you look and will be perceived	x		x		
What we choose to say & not to say are equally important		x	x		
You will form relationships			x	x	
You may feel anxiety			x		x
You won't always get it right, but you can have the right intentions			x		x
Attitude & approach to topics can be different depending on the group	x				x
What they know and who they are	x			x	x
Communication as an asset for all parties	x		x	x	x
It will always be a new experience with new perspectives	x	x		x	
Building trust takes a long time		x	x		x
Vulnerable communities will be hard to access	x	x		x	
Stereotypes	x	x		x	
You may not have thought of everything, even if you think you have	x	x		x	
That you don't know everything			x	x	x
Who you are and respect difference			x	x	

4. Discussion

The two workshops produced a plethora of guidelines, making it impractical for individuals to follow all of them, especially when some guidelines contradict each other. Instead, these guidelines should be seen as a dynamic library of principles, some more relevant to specific projects than others. The goal is to initiate discussions and create a living, evolving set of principles that are agile and adapt to the ongoing evolution of design practices and ethics.

It is also acknowledged these insights were generated from the perspectives of designers and design researchers alone. Action should also be taken to engage directly with the communities involved, to understand which actions foster successful or limiting experiences before, during and after project closure. Workshop participants' nationalities primarily arise from the Global North and/or now practice/reside in Global North countries. All participants also hold formal academic training in design thinking or relevant design fields. Involved nationalities included: American, British, Indian, Australian, French, Italian, Chinese, South African, Columbian.

Insights dramatically range in specificity, comprehensibility, and universality. Recognizing that not all processes are relevant to every project, no suggestions were eliminated during the workshop or in analysis. Although assumption of repeated insights could indicate a higher level of importance, this can be further refined through specific exercises that focus on ranking general impact, urgency, and effort needed. Considerations of project structuring could also be considered to navigate often limiting factors such as funding, time, community access, ethics, and safety of both design researchers and engaged community. As research and analysis of findings continue, specific consideration will be placed on the usability of insights in real-world contexts. This can include but not limited to success metrics, and generating open-source, and accessibility conscious presentation of results to be used across all design mediums and project applications.

Through facilitating honest discussions of effective methodologies across translocated designers and projects, realistic understandings of design practice's effectiveness to hear and collaborate with were mapped alongside contribute to a growing understanding of what responsibilities a design researcher holds. Co-design processes are inherently complex, contradictory, and sometimes antagonistic. Different stakeholders, including design experts, participate in various ways, bringing their specific skills and cultural backgrounds. These social conversations allow everyone to contribute ideas and take action, even though it can sometimes generate problems and tensions. It is crucial to recognize that a co-design process is not a space where everyone agrees and speaks the same language; it is a dynamic environment where diverse perspectives and expertise come together to create innovative solutions.

5. Conclusion

This paper underscores the crucial role of design thinking in tackling diverse and complex problems across different cultural contexts. Designers increasingly working in unfamiliar communities must foster sensitive cooperation and mutual benefit. The study highlights potential pitfalls in co-design practices, such as parachute design, design tourism, and design imperialism, emphasising the need for immersion and cultural understanding.

The workshops aimed to generate co-design strategies based on tangible experiences, using recognized design methodology and safe communication/collaboration. The resulting principles support designers in approaching their work sensitively, providing a platform for reflection and mutual understanding.

By developing a workshop methodology that encourages ethical consideration, this study contributes to practical, context-specific guidelines. These guidelines, while not universally applicable, serve as a valuable resource for designers, guiding project ethos and fostering the evolution of sensitive design practices. Future work will refine these insights into an open-source resource, enhancing the ethical framework within which designers operate.

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Appendix

Appendix 1. Workshop Structure

<i>Workshop Structure</i>	
In-Person, 3hr duration	
<i>Allocated Time</i>	<i>Exercise duration</i>
5 mins	Introduction and Positionality Form [14]: An overview of what this workshop is and its desired output
5 mins	Vulnerability Entries: leaders each read a journal or a piece of writing from their experiences that will set a safe environment for the workshop
10 mins	Design Tourism Talk: leader led discussion overviewing what design tourism is
30 mins	Warmups: The story of your name [13], Listener/Talker exercise [13]
5 mins	Card Telephone: On a flash card write on a key experience you have had when designing for another community. It can be positive, negative, or neutral.
10 mins	Break
35 mins	Expert Introductions & Card Telephone con't: 5 experts who also participated in the workshop present on previous work and their experiences in Design Tourism. As this happened each participant received a random card from the previous exercise to provide a critique or comment.
10 mins	Break
20 mins	Experience Reflection: Participants were randomly divided into groups of 5. Each group provided a large sheet of paper to collaboratively reflect on design experiences within global contexts.
10 mins	Break
20 mins	Do's, Don'ts, Acknowledgements: each group then sorted generated rules, guidelines, and strategies into the exercise titles definitions
20 mins	Cool down and class work reflective piece: Each participant writes down something they learnt from another group member in this project, tossing them in the air each person reads another piece of paper out loud. A workshop survey was then sent out to collect workshop feedback.
Virtual Workshop, 1 hr duration	
5 mins	Introduction of workshop and participant vulnerability and rights reminder
5 mins	Design Tourism Overview and discussion
5 mins	Warm up: Where are you from, what do you do, and the Story of your name [13]
15 mins	Access to Power worksheet [14]: Steps 1-4
15 mins	Have an open conversation of learnings and have each individual generate their access power rating (step 5).
20 mins	Do's, Don'ts, Acknowledgements: <i>see in-person workshop</i>
10 mins	Cool down and class work reflective piece: <i>see in-person workshop</i>