Global-Local Dynamics: Strategies for Cross-Cultural UX Design in a Globalized World

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Introduction
We live in a connected world in which people and places are closer than ever, thanks to advances in technology and transportation. This interconnectedness has opened huge global markets for products and services which, for designers, presents both exciting opportunities and tough challenges. Designing for people from different cultures is difficult because it involves catering to a need—the core characteristic of the product—but in a way that aligns with their cultural expectations. It is a careful balance because excessive localization, or too little of it, can result in failure. Notable examples are American companies such as Mattel®, Home Depot®, and Best Buy™, which struggled in China due to differences in how people shop there. Even as big a player as Google™ has faced tough competition in places like South Korea.

Hofstede’s (1980) cultural dimensions framework has been widely used for understanding cultural differences and how they impact cross-cultural communication and business practices. Four dimensions were initially identified by Hofstede, with the fifth and sixth added later through research carried out by Michael Harris Bond and Michael Minkov.

The six dimensions are below:
1. Power Distance Index
2. Collectivism versus Individualism
3. Uncertainty Avoidance Index
4. Femininity versus Masculinity
5. Short-Term versus Long-Term Orientation
6. Restraint versus Indulgence
However, globalization has led to cultures changing more quickly than ever before as ideas and influences spread rapidly across borders. Designers need to really understand how people's cultural practices, as well as their political and economic situations, shape what they want and need.

This is what the contestation, homogenization, and hybridization (CHH) framework helps with. CHH is the acronym we use to denote the combined ideas proposed by David Held et al. (1999) and the Dutch sociologist Jan Nederveen Pieterse (2004) in reference to responses to globalization. Although David Held et al. noted that there are predominantly three responses to globalization, Pieterse brought out the nuances of hybridization. We view the three responses of contestation, homogenization, and hybridization as strategic constructs that can aid in arriving at the right design strategy. We believe it is a valuable addition to Hofstede’s framework because it helps designers navigate the complexities of global design.

This essay has these main goals:

- Introducing CHH as a useful tool alongside Hofstede’s dimensions.
- Illustrating how hybridization can be a smart strategy for designing products that work across cultures, and providing real-life examples to demonstrate its effectiveness.

**CHH: The Guiding Framework**

Below is an outline of the CHH framework and how it can enable designers in a cross-cultural context.

- Keeping cross-cultural sensitivities in mind, as the first step, designers can determine if a given product, or a set of its features, will likely be rejected due to complete incongruence between the needs of the local consumers versus what the global version has to offer. The response is categorized as contestation in such a case.

- In view of the alternatives available, or lack thereof versus the urgency of demand, the local consumers may choose to accept the offer as-is from the global offering and get homogenized, as it were.

- Finally, designers can adopt the optimal strategy of hybridization by adapting the product to local needs and preferences. With this approach, designers have additional options to either modify a product minimally (assimilationist hybridity) in which the homogenization response is pronounced, or designers can alter it radically (destabilizing hybridity) in which the contestation is strong, and the local consumers seek to push their own version out into the world.

**Contestation**

The local consumers contest an offering from the global market when it does not meet their expectations. For instance, in the realm of UX research methods, Apala Lahiri Chavan, world-renowned UX expert, has contested Western methods of data gathering because they are ineffective in certain local contexts due to differing communication styles and cultural characteristics like reverence to authority or hesitation at making negative comments in front of strangers, among others. She devised several innovative methods that are relevant to local cultures.

In the social media sphere, China has strongly contested American domination. The reasons behind Chinese contestation are not just political and economic, but cultural too. Although American culture emphasizes individualism, in sharp contrast, Chinese culture is based on collectivism. Their communication styles differ too; the American style of communication is direct, whereas the Chinese is indirect, with greater reliance on social cues and body language. These are just a couple of differences. The worldviews of the two countries, shaped as they are by political, economic, and cultural factors, are quite different, which leads to China contesting the dominant influence of American social media companies such as Meta™, Twitter, and YouTube™. China has blocked their entry and instead created a thriving social media ecosystem based on Chinese culture. This ecosystem comprises of established players such as Weibo™, WeChat™, and Douyin (TikTok®), which not only provide digital services to the Chinese, but also to the world at large.
**Homogenization**

The idea of globalization as homogenization revolves mainly around three concepts: Westernization (Hopper, 2007, p. 91), Americanization, and McDonaldization (Ritzer & Stillman, 2003, p. 30). Globalization can be considered synonymous with the evolution of a global culture that often tends to dilute and even obliterate local cultures.

An interesting example of homogenization is the wide adoption of Western UX research methods by researchers, such as in-depth user interviews, focus group discussions, and think-aloud protocols across the world for data gathering. UX practitioners have been relying on these well-established research methods almost reflexively to conduct user research.

Another example is the social media giant Facebook™. It has emerged as a dominant player in the competitive social media terrain. A look at the statistics reveals its grip over the globe. It is “the preferred social network in 157 of the 167 countries analyzed (94%)” (Cosenza, 2023). It is in this context that Facebook's global spread can be seen as homogenization or, in some cases, assimilationist hybridity (Pieterse, 2004, p. 79), that is, mild localization before consumption.

A cursory glance at Facebook reveals how it has been an agent of transmission of American culture across the world. Scholar Amel Ghermaoui (2016) noted that the American values of individualism, freedom, and profitability are reflected and reinforced throughout the site. The affordance to create and edit an individual profile mirrors individualism as an extension of one’s individual self and identity in the online world. The freedom to break free of geographical barriers, connect with people across the world, and freely share and express one’s opinions—personal and political—mirrors the American value of freedom of speech. Further, the default language of Facebook is English; the Euro-American language privileges and augments the dominant position of America.

**Hybridization**

Hybridization is where the local consumers transform the global version before adoption. The adopted aspect has elements of both the local and the global in it. Based on a thorough understanding of end users’ needs, expectations, and their ecosystems, the designer must determine which of the responses, homogenization or contestation, would make more sense. The designer can then choose between either of the two hybridization strategies such as assimilationist hybridity or destabilizing hybridity. The coming together of homogenization and hybridization could be considered assimilationist hybridity (p. 73) whereby the product or service has been minimally modified to suit local preferences. In this case, the degree of localization is not deep, rather, it happens at a superficial level. Whereas the union of contestation and hybridization could be considered destabilizing hybridity (p. 73), with localization cutting deep and radically altering the product or service.

![Figure 1. Hybridization strategies.](image-url)
**Assimilationist Hybridity**

The localization of American social media platforms in several countries across the world can be seen as demonstrating assimilationist hybridity as, in this case the wrapper is local, but the foundation is American. Localization is done through features such as provision of interfaces in local languages, localized advertisements, regional content, and adherence to the local rules and regulations even when retaining the core American design.

Adoption of the right hybridization strategy is the cornerstone of a product or service's success in the global market. For example, during research we conducted for a mobile phone maker a few years ago, we were rather surprised to discover that most participants in the study did not want to replace their English keyboard with a local language one (Hindi, in this case). Even if they were not very fluent with English, they wanted an English keyboard. Interacting in English was aspirational and a status marker. Moreover, many participants found it difficult to remember the exact alphabets used for spelling words in Hindi, given that there are 52 letters. Without the CHH framework, this hesitation with adopting local language texting when using the mobile phone was puzzling. Reviewing the situation using the CHH framework provided us with a different perspective. Participants would be happy to have dual (or multiple) keyboards so that they had both the aspirational English keyboard and the local language keyboard when they wanted to connect with parents or other family members. What was needed was an assimilationist hybrid solution and not an either-or solution, such as English or the local language. Over time, with the advancement in mobile phone technology, this is exactly what exists today. Multiple soft keyboards can be installed on smart phones and with predictive text suggestions; the challenge with local language spelling is also much reduced.

Implementation of an inappropriate hybridization strategy has been responsible for the dismal performance of many products and services offered by global companies. For instance, whereas Facebook has been successful in several local markets, it struggled in Japan. Associate Professor Huatong Sun (2020) points out that the reason is a cultural one. There is a clash between the American model of network sociality (Wittel, 2001) and the Japanese model. Japanese users were not comfortable with the individualistic, open style of communication common among American users. They were hesitant to share their family photos and preferred to use avatars instead of their photos for their profiles. Further, they preferred using pseudonyms while bonding. These pseudonyms were carefully chosen to reflect their identity and served as a filter to be able to bond with only their close friends or users with shared experiences or interests. To capture the Japanese market, Facebook implemented several localization initiatives such as designing customized interfaces and the ability to republish Facebook posts on Mixi social networking service (SNN). Providing further evidence of the strong influence of culture in social media preferences is the fact that Facebook was more successful after positioning itself as a professional networking platform like LinkedIn®. This is because local users were comfortable using their real names in professional settings. In comparison to other local markets, Facebook has not managed to capture a lion’s share of the Japanese market primarily due to cultural differences.

Another example of a failed product is World Washer (Chavan et al., 2009, p. 28), a washing machine launched by Whirlpool® in India with slight design modifications to suit local needs. The product failed; the reason being that it missed factoring important details such as the thickness of clothes. As Chavan et al. point out, the company discovered that “clothing such as lungis, dupattas, mundus, angavestrams, and, of course, saris” (p. 28) were put into the machines, and they were “getting caught, entangled, and shredded in the millimeter-wide gap between the machine’s agitator and drum” (p. 28). The company attempted assimilationist hybridity when what was required was destabilizing hybridity.

**Destabilizing Hybridity**

The Chinese social media platform Weibo can be seen as an example of destabilizing hybridity. Its adaptation of American social media technology has such profound local influence that it barely seems to retain any elements of the original. It has acquired a character of its own and has even managed to challenge American social media platforms across several markets in the world.

Weibo, which means microblogging in Chinese, has adopted and adapted several features of Twitter. It is hugely successful not just in China, but across several markets in the world.
Keeping cultural differences in mind, it has deftly used the strategy of deep localization. This is evident from its user interface. Weibo looks visually denser than Facebook. This could probably be due to the differences in the cognitive styles of East Asians and Westerners. For instance, whereas Westerners tend to focus on focal objects, East Asians rely on contextual information (Nisbett & Takahiko, 2007). Further, Huatong Sun (2020) clarifies on how the features of Weibo, such as rich-media, threaded comments, Wei-groups (micro-groups), and Wei-events (micro-events) are shaped by Chinese internet culture. Some of these features have been adopted by Twitter too.

There are numerous examples of destabilizing hybridity that are successfully employed as a strategy in areas other than social media as well. For instance, the Human Factors International (HFI) team was researching the design of a new low-cost ATM that was being launched in India by one of the top global ATM makers several years ago. During this research, we found a strange phenomenon reported by participants who were migrant workers from various parts of India working in Mumbai. For these migrant workers, sending money home to their families, who lived in small towns and villages, meant that one of the workers undertook a risky journey. Different individuals went to different parts of the country to carry cash from their co-workers to hand over to each family. It was risky because the cash that was being carried could be stolen during the journey.

However, all this changed once zero-balance savings accounts were available from all major banks, so the workers could deposit their earnings in these accounts (often done by the employer). Now the workers had access to ATMs with their debit cards. Someone had come up with the innovative idea of having the individual who was tasked to carry money to workers’ families take their ATM cards rather than cash. Once they reached the big city with ATMs that was nearest to the cluster of villages or small towns where the families lived, they withdrew the required cash from the ATM and handed it over to the family member who was sent by each family and had travelled from his village or town to collect the cash. After disbursing cash to all the families, the individual courier returned to Mumbai and returned the debit cards to their owners. This unique use of the debit card and ATMs to mitigate risk over long distance bus and train journeys across India is a fascinating example of home-grown destabilizing hybridity.

Further research methods developed by Apala Lahiri Chavan, the co-founder of HFI, such as the Bollywood technique, emotion tickets, and the bizarre bazaar method skillfully use destabilizing hybridity to better suit the Indian context. Brief descriptions of some of the methods follow:

- The Bollywood technique is a usability testing method. Due to cultural conditioning, Indian participants are hesitant to share negative opinions in front of a stranger (the researcher), which may be because they are embarrassed to admit that they could not find something on the site, making it difficult to elicit candid feedback. The technique instructs the facilitator to narrate a story with typical, emotionally charged Bollywood tropes. Each task the participant needs to perform is defined in the context of the story. For instance, Chavan had made one of her test participants imagine a character in a (very familiar Bollywood) plot in which her young and beautiful niece is about to get married. But then, as ill luck would have it, she is informed that the prospective groom is not just already married, but (to make matters worse) is a hitman too. She needs to book tickets for herself and the groom’s gullible and shocked wife, whom she manages to locate, to travel to Bangalore to stop the wedding! This novel and engaging approach helps participants become very immersed in roleplay and hence shed their inhibitions to freely share their candid opinions about their interaction with the website being tested. This technique can be applied in any other cultural setting. Just the choice of plot and the milieu need to match.

- The method of emotion tickets is an adaptation by Chavan of the cultural probe tool to the Indian context. She has used the concept of nine rasas, or emotions, intrinsic to Indian performing arts for this purpose. Emotion tickets are designed to resemble cinema tickets, and there are nine of them; one each for the nine rasas which include shringara (desire/romance), hasya (mirth), karuna (pathos or sadness), rudra (anger or fury), veer (valorous or heroic), bhayanak (fear or terror), bibhatsa (disgust), adhbuta (wonder or surprise), and shanta (peace or tranquility). Bollywood images and dialogues that are popular among Indians are used to illustrate the rasas. In the exercise, participants note each emotion they experience while interacting with the site,
app, or device being researched, along with the reason behind that emotion and what the trigger was by selecting an emotion ticket with the appropriate rasa. As the emotions are recorded over a period of time (very often, over the course of a couple of weeks) with no one observing them, the exercise yields rich information from the participants.

- In the bizarre bazaar method, Chavan and her team simulated a street market, or a bazaar, to immerse participants before probing them for responses. In these bazaars, product mockups with different combinations of features are sold. Participants, as buyers, are asked to compare product features. Bargaining for the best price is an intrinsic feature of shopping in bazaars, so too in the exercise. Facilitators gauge participants’ ability to understand the features, and the value they assign to them, through this activity.

**Points to Remember in a Cross-Cultural Context**

- In the context of cross-cultural design, form a thorough understanding of target cultures and their ecosystems to design appropriate products.
- The framework of CHH can be used by designers while designing products and services for users across cultures.
- Hybridization, which includes assimilationist hybridity and destabilizing hybridity, is the optimal strategy for crafting cross-cultural user experiences.
- Assimilationist hybridity is a strategy that can be adopted when the target culture is largely comfortable with global change but needs tailoring to make the product or service more suitable to their preferences.
- However, destabilizing hybridity is the preferred strategy when the target culture wants to blaze its own trail in contestation to what the global version already has to offer. It can also be used when the global version is perceived as a threat to their culture.

**Diversity Is the Way Forward**

In conclusion, we allude to the ideas put forth by Lilly Irani et al. (2010) in their paper “Postcolonial Computing: A Lens on Design and Development” to bolster the central argument of our thought experiment. They emphasize transcending binaries such as developed and developing or traditional and modern. Further, they stress upon the need to find synergies between different forms of knowledge and practice and recognize hybrid forms of design and technology generated at the intersection of these forms, with due attention paid to the asymmetrical power relations underlying those encounters.

We strongly believe that in the current globalized world, for products and services to be successful, design practices need to be guided by cultural considerations. Local consumers will likely neither accept a global product or service, however promising, as-is nor reject it outright; rather, consumers will look for a hybridized form curated to their unique needs. A designer’s choice of strategy, be it assimilationist hybridity or destabilizing hybridity, should be made only after obtaining a deep understanding of the cultures that the product’s user base will include. We also believe that the two hybridity strategies cannot only improve the acceptance of products in their intended markets but also help preserve cultural diversity through design. We would like to emphasize that dissenting from the dominant, global narrative and ensuring agency of the local consumers is imperative if we want to protect the diversity that characterizes, and even enriches, our world.
References


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<td>Revathy is a senior UX researcher in HFI. She earned a doctorate in English literature. She enjoys exploring the intersection of literature and culture, and her doctoral thesis is on the same topic. Her research-led practices draw on the synergies that exist between design and humanities.</td>
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