

## **Around the World with 14 Methods Innovation and Culture**

White paper

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### About the author

Apala is a world-renowned expert on Contextual Innovation—the discipline of creating breakthrough product concepts and adapting existing products, services, and technologies to new markets. HP Labs, adidas, Nokia, Sony Ericsson, NCR, and Intel are just a few of the companies that have benefited from Apala’s innovative, pioneering techniques in this exciting and growing field.

Apala and her CI team have helped designers, marketers, product managers and ethnographers apply her innovative techniques to develop exciting new concepts and products. She systematically guides the ideation process to uncover subtle patterns in ethnographic and market data to reveal the exciting breakthrough ideas that can drive your business and generate more revenue and profit.

Apala has developed a vast array of data-gathering techniques, including the Bollywood Method, Bizarre Bazaar, and the Funky Facilitator, which help understand the user experience in a variety of cultural and economic environments. She and her team pioneered the “Ecosystem Chart” which organizes vast amounts of ethnographic data into a coherent model. She is a creative and dynamic speaker who has received acclaim in USA, Canada, Europe, India, and China for her keynote talks on contextual innovation, internationalization, and designing for emerging markets.

Some of Apala’s Contextual Innovation projects include:

- Cell phones for the Indian market.
- Microcredit system, managing small loans to farmers and small businesses, with operators who could only read numbers, not text.
- Researching media applications in rural markets.
- Applying handwriting recognition in small businesses in India.
- Unusual applications for ATM machines.
- Identifying latent needs in emerging markets for U.S.-based home medical equipment used in the therapy process.

Apala has been with HFI since 1999 and is currently Vice President of Asia, managing offices in India, China, and Singapore, and a Contextual Innovation lab in Bangalore. An award-winning designer (International Audi Design Award), Apala has led teams spanning design, development, testing, and deployment of software products. In addition, she is ACM SIGCHI’s Vice Chair for local chapters.

On a more personal note, Apala is fascinated by Indian history and culture and loves ethnic outfits. She loves traveling, seeing temples, historical sites, and beautiful landscapes. She has been all over Europe, North America, and Asia. She is trained in classical Indian dance and is learning international ballroom dance. Apala has also been a radio jockey and news reporter with one of India’s top radio stations and often wonders about getting back to that in between contextual innovation projects! One of her current obsessions is to listen to different renditions of Othello, Macbeth, Hamlet and King Lear.

## Introduction

Innovation often rests heavily on the shoulders of what appears to be a magic trick. This is the trick of reading the user's mind! In order to design innovative solutions, it is imperative to understand the motivation level needs of users. To make users express their unarticulated needs. At the very least, to make users speak their mind! Without this peek into the user's mind, innovation of any kind becomes an uphill task.

And so how does one read the user's mind? There are many methods developed in the west for data gathering from the user (in-depth interviews, focus groups, think-aloud protocols, etc.). These methods are long established and well validated. They are well accepted. In fact, they are so well accepted that they are used reflexively by practitioners worldwide. Yet these methods don't always work well in eastern cultures. They need to be adapted.

It might seem odd to think that there are cultures where observation, think-aloud testing, and in-depth interviews are ineffective. In the west, these methods are the basis of a whole industry. But in fact, the Asian users generally need more context in communication. They are more hesitant to make negative comments. And they are very sensitive to cues of the hierarchy and subtext of communication. We can easily get misled if we do not specifically work to permission participants to share their real insights.

Differences in communication styles between some cultures are stark. Researchers have identified four distinct listening styles: people, action, content, and time-oriented.<sup>1</sup>

**People-style listening** emerged as a preference where concern for others' feelings and emotions appears paramount. People style listeners appear to seek out areas of common interest with others and are responsive to their emotions.

**Action-style listeners** prefer to receive concise, error-free presentations. Individuals endorsing the action listening style appear to be particularly impatient and easily frustrated when listening to a disorganized presentation.

**Content-style listeners** display a preference for receiving complex and challenging information that they can then carefully evaluate before forming judgments and opinions.

**Time-style listeners**, on the other hand, demonstrate a preference for brief or hurried interactions with others. Individuals endorsing the time listening style tend to let others know how much time they have to listen or they have a tendency to tell others how long they have to meet.

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1. Watson, K.W., Barker, L.L., and Weaver, J.B. "The Listening Styles Profile (LSP-16): Development and Validation of an Instrument to Assess Four Listening Styles." *Journal of the International Listening Association* 9 (1995): 1-13.

The adaptation of methods requires sensitivity to the triggers that enable communication within a culture. We must understand the root cause of hesitancy in communication. And these roots and enablers can be different as we move between countries, or even across a river within a country. I developed the Bollywood usability testing method in 2001. Now I want to share some of the progress we have made since then. My colleagues (past and present), Sarit Arora, Sushmita Munsh, and Sreejit Roy, have contributed significantly to the development of these methods.

Some practitioners ask if we can compare results across countries when we apply such different methods in each region. But I think this question suggests a false pretext of scientific method. People are so different that a rigid set of measures and metrics can provide only false data. It is like happily using the same yardstick to measure cloth and tea. You can do it. But it is hard to say what the results mean. The spectacular failures of companies trying to localize their web presence to Asia might well be the result of this type of short sighted approach. Data gathering must get to the truth of performance and perception. Then you can compare the truth across cultures.

Finally, I want to ask if more creative and culturally adapted methods could be useful in the West. Could specialized methods unlock better insights in New York, or California? It might be that our time-tested methods are only perfectly adapted to the American Mid-West!

## The methods

At HFI we have been experimenting with culturally adapted methods since 2001. We have seen how these methods can open our eyes to whole new levels of understanding. The key is to understand the impediment and then find the triggers and enablers to unlock the information we need.

I share the following examples to help illustrate the diversity of methods we need.

### *Data gathering methods*

- The funky facilitator
- Using storytelling to find “dissonances”
- Strangers in a strange land
- NLP (Neuro Linguistic Programming)
- Mata, pitah, guru , daivam technique
- Self referral referant

*Interview enhancements and culture probes*

- Jungian archetype folk probes
- Rasas
- Clock

*Usability testing methods*

- Bollywood
- Oy Vey! Why don't they do something about the.....???
- Go to the Light...

*Measurement*

- The autorick radio
- The bizarre-bazaar method

**Data gathering methods****1. The funky facilitator**

This method was not developed, it was discovered by chance. HFI teams were gathering data in Dharavi, which is the largest slum in Asia. We were in homes, doing interviews with our most senior and skilled staff. But the going was rough. People were hesitant to speak freely. Then one team had a real problem. The senior researcher had to take a call from a client. She had to leave the room and the call went on for nearly an hour. The junior apprentices who had come along to observe, valiantly continued the data gathering. But they got very different results!

It turned out that the interviewing and observation went really well when the interviewers were people who were very young. Since they seemed like they were kids and hence less “scary” (in a hierarchical society, kids are relatively low in the hierarchy) the participants spoke and interacted with them without any apprehension.

Having very young facilitators when doing contextual inquiry and/or interviews in India, particularly if the population being studied is from the bottom of the pyramid, makes all the difference!

**2. Using storytelling to find “dissonances”**

We had for a long time wondered about the use of storytelling in data gathering. The reason this seemed an interesting idea is the fact that India is predominantly an oral culture. Stories are passed on from generation to generation via storytellers of various kinds. We were keen to experiment with a familiar medium of interaction such as stories to see if and how, in an interview situation, the participant reacted differently.

In a project where we had to do an ethnographic study of Indian middle class families with respect to their computer usage habits, we decided to try a “storytelling” approach. Instead of asking questions, particularly when the questions might elicit responses that would, in certain cases, lead to loss of face, we asked the participants to narrate stories.

For example: when interviewing an Indian housewife about her computer usage, instead of asking “have you had any difficulty using the computer?” we asked her to narrate an instance when she loved having a computer at home and another instance when she hated having the computer at home. By asking her to tell a story, the participant was much less defensive about narrating incidents where she hated having a computer because of her inability to accomplish a task using the computer. Asking her the question directly would make her feel very apprehensive about giving her honest response because of the fear of loss of face (she is not smart enough to understand how to use the computer) and she would most certainly respond with a short “no, I have not had any difficulty.”

### 3. Strangers in a strange land

The concept of the “etic” and the “emic” has always fascinated me.

A researcher who works with emic knowledge, will look into—and generally accept unproblematically—the rules, terms, reference points and logic of the person she is studying.

An etic researcher will ask her informant questions based on her own perspective and concerns, which are often seen to be scientific, or universal.

Most observation and interviewing techniques lay emphasis on the emic. However, what role does the etic play in practical terms?

When working with abridged ethnographic methods, as in design research, the etic approach often elicits more open and honest responses from the participants. The feeling that participants get, of “oh, this chap is a foreigner and therefore it’s ok that he is asking such strange/stupid questions” makes it much easier for us to ask questions that would normally be thought of as awkward or even a strict no-no and equally easy for the participants to answer what would otherwise be considered embarrassing or very personal questions.

Moreover, the process we follow when working on contextual innovation projects places considerable emphasis on understanding the clients ecosystem. Thus, while we might be foreign to the context, this emphasis gives us a framework to probe from the outside if necessary and be familiar with the participants’ perspective. It is this understanding of the perspective that is taken into account in our etic point of view.

As Pawan Verma says, “societies reveal how they actually think and behave in the smallest things. Behavioral patterns have to be discovered not in the considered stance before an observer, but in the insignificant reflex preceding or following it.”<sup>2</sup>

Being an outsider trained in design ethnography, it often becomes easier to assume that there IS a considered stance and therefore be on the look-out for the insignificant reflex.

#### 4. NLP (Neuro Linguistic Programming)

This technique makes use of the 5 senses of the human body to elicit responses about an object/brand/service etc.

This technique is efficient in providing insights about the inner motivations, deeper feelings, barriers (pain points, pressure points) towards an object/brand/service, experiences, etc.

Here the consumers/users associate an object with the 5 senses. So, if user data was being gathered about a website, then we would have the following questions:

- Eyes—If you look at the website, what can you see? Why do say and feel so?
- Ears—If you could “hear” the website, what would you hear? Why?
- Taste—How will it taste if it turns into an edible object? Why?
- Smell—If you could “smell” the website, what would the smell be like? Why?
- Touch—If you could touch the website, how would the website feel? Why?

This technique is very effective in garnering different levels of information. Also, by using the 5 different senses, it is possible to get a richer and more complete picture of expected/current user experience.

#### 5. Mata, pitah, guru, daivam technique

This technique is entirely borrowed from Indian culture. Mata (mother) has certain core characteristics and responsibilities attached to her. Likewise pitah (father), guru and daivam (destiny/God). Participants are told to associate a brand/product/service/even features with the attributes of mata, pitah, guru and daivam. The core attributes:

- mata signifies care and sacrifice of personal needs for family.
- pitah symbolizes the protector and the provider.
- Guru signifies wisdom and knowledge.
- Daivam is the all knowing one.

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2. Varma P., Being Indian. Penguin Books India, New Delhi (2004).

Delving into the way participants match these core attributes with attributes/features of the product/service/brand reveal much information that resides at the deep unconscious level and hence would not emerge from direct questioning.

### **6. Self-referral referant**

The self-referral referant was used during an usability test being conducted in London. In the initial part of the test, we observed that most of the middle aged participants were finding it difficult to articulate their thoughts about preference questions. These questions were typically about choices that the participant had to make when shown certain alternate design solutions. Participants dithered a lot and were not comfortable making a clear choice. However, we did notice one common pattern. Most participants would say things like, “if my friend was going to use this, she would like this option.” It was interesting that even though they were hesitant to articulate their own preference, they were very clear about their friends’/family’s preferences. It was obvious that the articulation of the friend’s/family member’s preference was actually an indirect (and hence more comfortable) reference to their own preferences.

From this observation emerged the idea of this technique. In this technique, all preference questions referred to a hypothetical “friend” and seemingly was not about the participant. This use of the “self referral referant” elicited spontaneous responses about preferences without the fear of being judged.

## **Interview enhancements and culture probes**

### **7. Jungian archetype folk probes**

This method has been designed to make use of archetype folk characters rooted in the Chinese culture and to have users transfer those archetypal characteristics to other contexts.

The method entails using little pewter statues of characters from Chinese folk tales. These characters are very well known amongst the Chinese population.

Exploring archetypal associations in a playful and projective mode helps elicit unfiltered and deep responses from normally formal and not-free-with-strangers Chinese users.

We used this method when trying to gather user data regarding a new financial website that was being introduced in China. User after user came in and refused to say anything that could be perceived to be negative about this new website. This was in spite of very clearly finding it difficult to comprehend and use several features of the website.

However, as soon as we changed the data gathering method and used the pewter statues, the quality of feedback improved radically.

What we did was to write down the names of the various website features we were evaluating on little cards. Next we asked each participant to match each card with a pewter statue of their choice. It was very interesting to see the speed with which the cards were associated with each statue. In fact, the features that had proved frustrating for users were the first ones to be associated with the statues with negative attributes.

## 8. Rasas

Rasas are the essences of our emotions that exist both in the body and the mind.

The central objective of classical Indian art and drama is to create rasa in the spectators, in order to communicate or suggest a kind of knowledge that cannot be clearly expressed in words.

Classical Indian art will try to cover all rasas found in life, but will focus on the most desirable rasas.

Less agreeable rasas may also enter Indian art, but mostly to create the contrast that makes the agreeable rasas even more powerful.

We incorporated the rasas in the form of culture probes for a project in India. We used the rasa probes when we needed to explore the emotions people felt when interacting with ATMs for the first time.

This culture probe was designed as a set of cinema “emotion tickets,” carrying the Bollywood theme forward.

- Each user was given a booklet with a set of emotion tickets and asked to carry these around with them for 2 weeks.
- These tickets were categorized to express the nine rasas or emotions used extensively in Indian performing arts.
- These rasas were surprise, happiness, anger, loathing, courage, desire, disgust/despair, mirth, pity.
- Each rasa was expressed through images and dialogues from Bollywood films.
- Users were expected to articulate their feelings when interacting/using any financial service and/or technology, by recording it using the appropriate rasa.

At the end of 2 weeks, we collected all the emotion tickets from the participants and analyzed them. The analysis led to the creation of an emotion map that helped us see which were the dominant emotions felt by people when interacting with ATMs and hence what innovations would make sense for a new design for ATMs.

### 9. Clock technique

This technique helps in getting detailed understanding of a participant's routine/leisure/other weekend and weekday activities. It is ideally used in an in-depth interview scenario as one of the projective techniques along with others.

This technique brings out the following:

- Relation and the role of products/services/brands/features with the life of the target user group
- The link of the products/ services/brands/features with a particular time/time period of the day.
- It also helps us understand consumption/usage patterns over a period of time.
- Reveals essential patterns in their lives, thereby linking with product/service/feature development strategy.

The probe is designed as a clock drawn on paper. There is a clock for each day of the week. The probe is administered for a week. Before the week begins, the clock is placed with the respondent. Instructions are given to explain to the person about the details of using the clock chart for the next 7 days.

The respondent is told to record (on the clock) the amount of time spent on activities of interest for the particular user research project. At the end of the week, when the clocks are collected and then analyzed, there is a collection of rich material that can be used for detailed probing during the in-depth interviews with the respondents that follow the analysis.

## Usability testing methods

### 10. Adapting dramatized “persona” technique in Indian scenario: The Bollywood Style

This alternative method works well in any situation that demands individual critiquing. Under normal circumstances an individual user would find it difficult to critique any product. Users would tend to take a middle ground and say that every product is good and if there are problems it is the user's responsibility to work around them. Hence we decided to make use of the popular film review format.

Hindi or Bollywood (Bombay + Hollywood) films are immensely popular throughout India. And so are film reviews. Bollywood films are an integral part of every Indian's life. Hence Indians are also major readers of film reviews. Many reviewers are almost as popular as the film stars themselves.

Since the film review format is perhaps the only popular and accepted format for critiquing and comparing products, (in this case, films), we experimented with the use of this format for critiquing websites. The intention was to transfer the critiquing mindset from films to websites by borrowing the format.

Scenarios were generated (some of them dramatic) and woven into entire story lines of using the websites being evaluated. Several analogies to popular films and their reviews were alluded to in the description of the scenarios.

The idea was to help users get over the problem of articulating what they are thinking when doing the tasks.

It is usually very difficult for Indian users to think-aloud when doing a task during usability testing. Immersing them via a scenario seems to help take attention away from the seriousness of the task.

### **11. Oy Vey! Why don't they do something about the...???**

There is something about a conversation that makes it tempting for a New Yorker to chime in: the fact that everyone is complaining.

No New Yorker would start talking to a stranger about the weather—unless it was really bad. They find it most appropriate to make comments to strangers when there's something to complain about—"Why don't they do something about this garbage!" "Ever since they changed the schedules, you can't get a bus!"

Complaining gives New Yorkers a sense of togetherness in adversity. The angry edge is aimed at the impersonal "they" who are always doing things wrong. The person is thus welcomed into a warm little group.

And so, if what you are looking for is to get the MOST honest comments from a New Yorker, when he or she is participating in an usability evaluation...just make sure that the evaluation protocol always phrases the tasks and scenarios being evaluated in the "Oy Vey! Why don't they...?" tone.

### **12. Go to the Light...**

In California, on the other hand, focus on the positive, unlike the complaining stance in New York.

Ask users to explore the product/interface and see if they can suggest ways of making it better and easier to use...for all humanity.

## Measurement

**13. The autorick radio: A new representation for the semantic differential scale**

We noticed, over several projects done in India, that the semantic differential scale seemed to be a major stumbling block, especially for users from the lower socio-economic strata. Whenever the semantic differential scale was presented to them, there was a tendency to select the one of the 2 extreme options and nothing in between. This was very different from the experience these participants had while participating in the evaluation and using the product in question. So, in spite of an experience that was not black and white, everyone seemed to want to pick one of the 2 very black and white choices. After much probing and reflection, we realized that for these users, the concept of a difference in degree (moving from negative to positive) being represented by a horizontal straight line seemed very conflicting. The feeling was that if the different points in the scale represented different degrees of an attribute, then they could not appear to be on the same level, as they did with the straight horizontal line.

Hence a knob control was devised which resembled the volume control knob of the radio that all users were very familiar with. What they did with the volume control knob, when they went from low to high volume was very similar to what they needed to do when expressing the degree of an attribute (positive or negative) via the semantic differential scale. This representation significantly improved comprehension of the semantic differential scale among the participants.

**14. The bizarre-bazaar method**

Bizarre-bazaar is an informance (informative performance) method that has tested well with Asian users.

We had to compare new product concepts using a methodology that is specially adapted to the Asian environment.

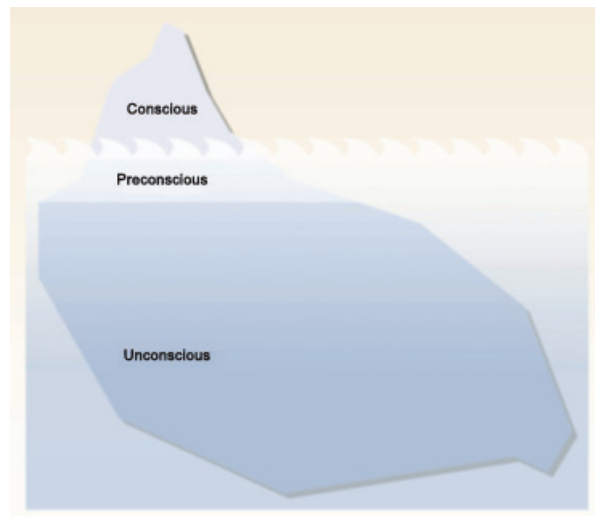
In Asia simply asking about people's feelings and functions in a sterile environment yield little. Instead we simulated the dynamics of a normal trading environment.

We provided a set of stalls with vendors (trained HFI facilitators) who were "selling" mockups of the selected concepts along with distractor items. The vendors described the concepts as if selling them to the participants and then gauged their reaction. In the fray of bargaining we gauged people's ability to grasp the concepts, appreciate the functions, and assign value to the designs.

## Conclusion

Methods such as the ones described in this paper are a way to help participants retrieve deep associations and values that lie in the realm of the preconscious and the unconscious.

In this age of globalization where products designed in one culture are increasingly meant for the whole world, the plot thickens if we pause a moment and wonder about how culture influences the unconscious. What if Carl Jung's archetypes are not universal? The archetypes are components of the collective unconscious and serve to organize, direct and inform human thought and behavior.



Isn't it imperative then to develop methods that help us address not just the different communication pain points in different cultures but also the issue of there being different content in the unconscious, in different cultures. One method to retrieve content from the unconscious may not, therefore, work universally well in all cultures.

Being able to understand users and their motivations and needs, at the deepest level of their psyche, helps in crafting innovative solutions that they are looking for, but are not be able to articulate. Hence these needs would lie undiscovered if we only relied on techniques that simply probed the conscious mind.

Our Methods and Tools lab in Pondicherry, India is at this time developing a new method—"Personas – Get a Handle on It"! I can promise you that it is VERY different from any persona generation method that you have used so far.

This one is best explained in person. Some day very soon, let's get together and talk about it...