

# Probes: Information or Inspiration?

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A critique on the use of design probes

*“They [Probes] are a way for us to get to know you better, and for you to get to know us.”*

*- Bill Gaver (Gaver et al. 1999)*

## Introduction

Over the recent years, the focus of designing has shifted from improving usefulness to sparking pleasure (Gaver et al. 2004, Mattelmäki 2005, Boehner et al. 2007). This change has forced design practitioners to evaluate their existing tools. Designing for pleasure - is a task that requires a deep understanding of peoples feelings, experiences and attitudes (Gaver et al. 2004). The influential paper published by Gaver, Dune and Pacenti (1999) about 'cultural probes' highlights the importance of evocative tasks that provide participant's subjective interpretation of the context.

These evocative tasks shaped with intentional ambiguity serve a crucial role in the design-led research method, as the information gathered is aimed at generating creativity, expression and discussion (Sanders and Stapers 2014). However, some researchers and designers are not satisfied with the probe's subjective nature and tend to rationalise the information gathered to define user needs and requirements (Gaver et al. 2004).

Over the recent years different types of probes have been documented (Graham and Rouncefield 2008, Mattelmäki 2005, Crabtree et al. 2003, Hemmings et al. 2002, Hutchinson et al. 2003) with each having a unique purpose. Through this essay I seek to gain a rich understanding of probes as a research method, critically review the information gathering approach of probes (for example: informational probes and technology probes) and the inspiration probing approach of cultural probes. Lastly, reflect on the process of creating probes and the information they gathered during the Micro UX unit.

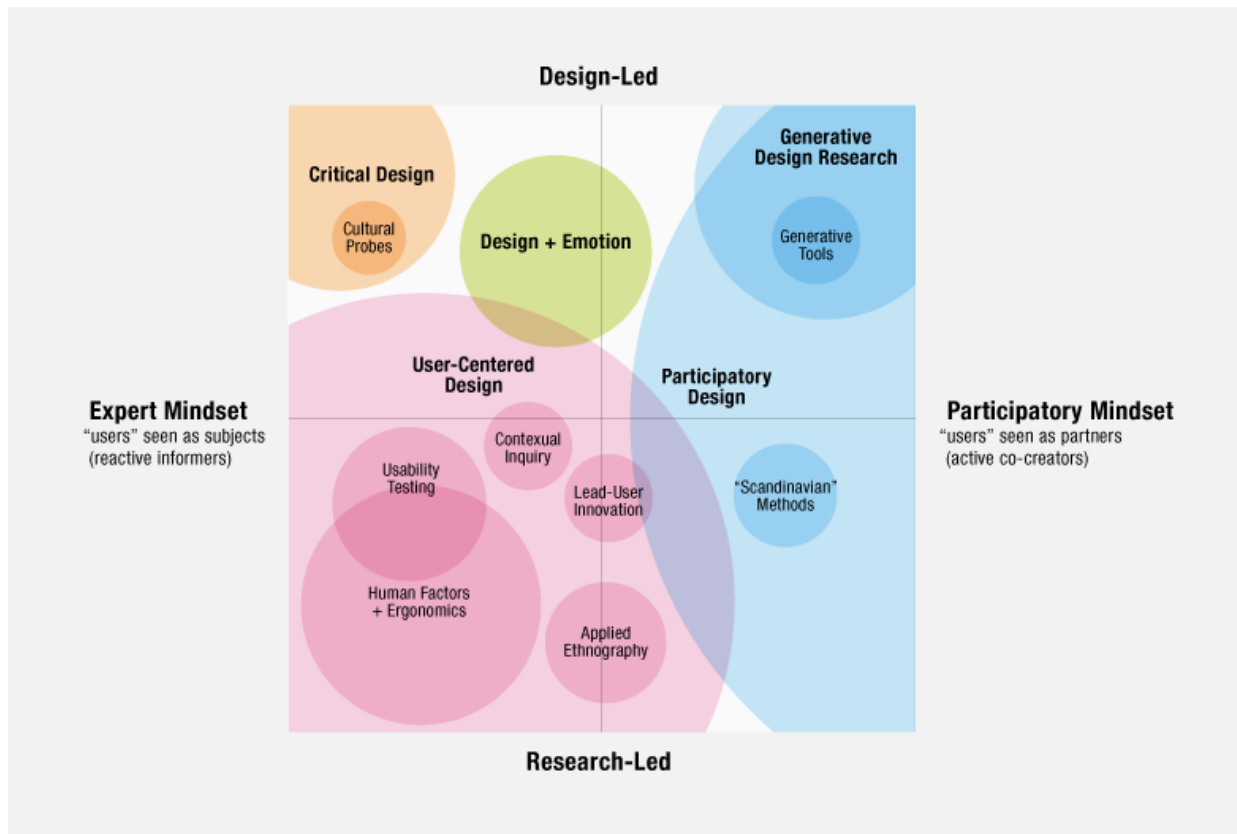


Fig. 1: Map of design research-research types (Sanders 2008)

## Evolution of probes

Gaver, Dunne and Pacenti (1999) were focusing on ways to include elderly individuals into the daily life of their local communities. Due to geographical restrictions the team found it challenging to immerse themselves into the “local cultures.” They developed ‘cultural probes’ a design-led research method to gain inspirational glimpses of targeted communities. Mattelmäki (2005) views the research method as a medium that fosters dialogue between designers, participants and the broader design team. She also acknowledges the participatory nature of the research method that allows volunteers to build on the provocative artefacts crafted by designers. Sanders and Stappers (2014) notes probes as a prominent approach in the practice of design-led research as it has a strong bias towards making, telling and enacting. They also recommend the use of probes during the pre-design phase as it helps understand peoples’ ‘life-world.’

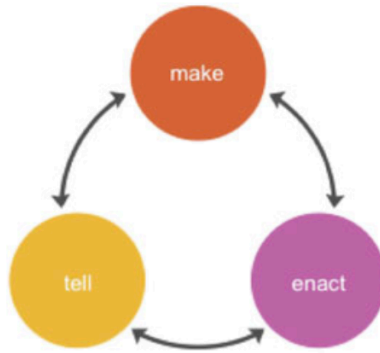


Fig. 2: Making, telling and enacting as complementary, connected activities. (Brandt, Binder and Sanders 2012, also cited in Sanders and Stapper 2014)

Over the years, probes have also been adopted and adapted for variety of other reasons, with each having their own unique purpose. They have also been applied to gather information instead of probing inspiration (Hemmings et al. 2002, Crabtree et al. 2003, Hutchinson et al. 2003). The approach not only helped the team gain insights in sensitive contexts but also establish a channel of communication with volunteers (Hemmings et al. 2002, Crabtree et al. 2003). Hilary Hutchinson and her colleagues (Hutchinson et al. 2003) further extend the definition of informational probes by leveraging technology to collect information, reflect on volunteers attitudes towards technology, and inspire designers towards new technologies.

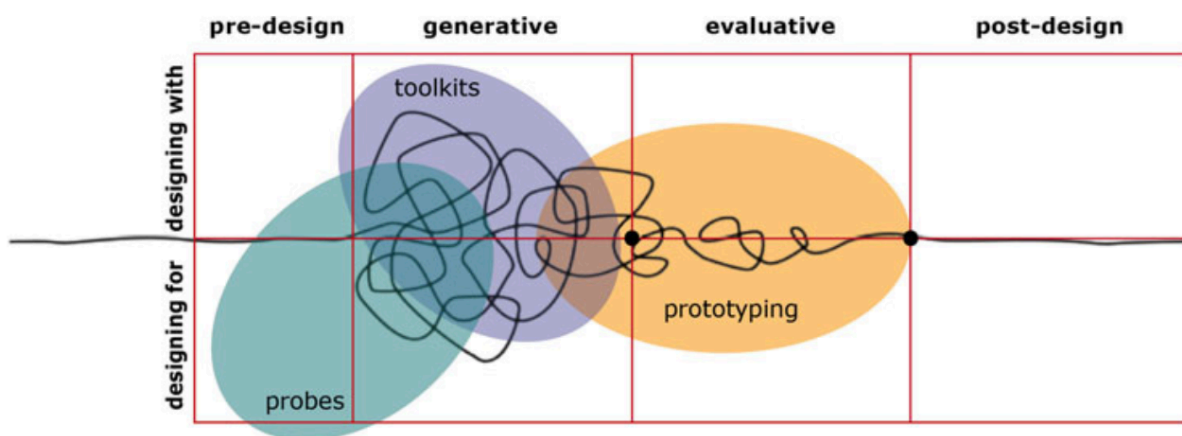


Fig. 3: Framework highlighting the use of probes during the pre-design phase. (Sanders and Stapper 2014)

However, the following year Gaver and his team (Gaver et. el 2004) published an article highlighting the concerns around appropriating probes as a scientific approach. Placing empathy and engagement as the core focus, they ask researchers to exercise caution as “controlling probes may dilute its particular appeal.”

## **A critique on the information gathering approach**

Informational probes were originally designed with a biographical approach to gather information in sensitive situations (such as hostels for elderly care) where traditional user research methods (such as ethnographic studies and user interviews) were thought to be troublesome (Crabtree et al. 2003, also quoted in Mattelmäki 2005). The purpose of the probes, in this scenario, is to gather information about volunteers daily routines and highlight any practical concerns. Comparatively, technology probes share a similar social science objective of collecting information about users, but with a focus on using technology (Hutchinson et al. 2003). Both these methods also aim to ‘analyse’ the information received from probes to develop a comprehensive understanding of the volunteer’s activities and environment.

Gaver (Gaver et. el 2004) criticises the above ‘scientific’ appropriation of probes as it inhibits imagination and constrains story-telling which are considered to be important elements in design. He asks researchers and designers to exercise caution when using straightforward questions, as the probes might elicit ordinary responses that the team would already be aware of. Lastly, analysing and summarising the information dilutes the individuality of the responses, which could have served as inspiration to the broader team.

According to Hemmings et al. (2002) the visual design of the informational probes is not considered to be important. However, during our Micro UX project we observed that focusing on the visual appeal of the probes increases the chances of participants engaging with them.



## **A Brief review of Cultural Probes**

Gaver (Gaver et al. 1999) refers to cultural probes as “artistic proposals” that generate inspiring information from participants, aimed at familiarising the designers with the textures of “local cultures”. In design companies, Mattelmäki (2005) notes the use of probes to support the design teams’ inspiration by allowing designers to creatively express using their personal skills and styles. Wallace (2013) further extends the role of cultural probes as purposefully crafted design objects that foster co-creativity between the participants and designers. She stresses on incorporating scaffolds to elicit creativity as it may not come naturally to all volunteers. The probe returns enriched with participants influence, creativity and ambiguity creates a sort of tension that could be valuable for design (Gaver et al. 2004).

However, the value of inspiration gathered through cultural probes rests on the availability of ethnographic information (Hemmings et al. 2002). Bill Gaver (1999) mentions the team already had the quantitative demographic data which provided them the freedom to explore the different attitudes of elders. In an industrial context, designers need to justify the resources spent on designing and launching the probes. They are often expected to relate the probe findings to the design proposals to account for the resources expended on the probes (Mattelmäki 2005, Lucero 2007). However, this might not always be possible, due to their fragmented and ambiguous nature (Gaver et al. 2004).

Similarly, our stakeholders on the Micro UX project found it challenging to understand the rationale behind the subjective nature of the cultural probes. They were often curious about how the information would relate to the governance model.





Fig. 6: A snapshot of our meeting with stakeholders Richard and Matt where we discussed the role of probes in informing the community governance model of pub ownership

## Discussion

During our Micro UX unit we had the opportunity to work with Mark J Dodds from Peoples Pub Partnership and Richard Gaplin from the Walworth living room. Our brief was to design ways to materialise the community-governance model of pub ownership. Referencing Gaver's (1999) study we decided to split into different groups. The first team focused on literature review and quantitative information, the second team used questionnaires to conduct user interview and the third team looked at probes as a designed research method to gain inspiration from peoples' experiences in pubs.

While majority of the studies mention the importance of materiality and the visual aesthetics, none of them focused on testing the probes before actually launching them. During the project we realised that creating multiple iterations of probes refines its provocative qualities which can impact the engagement and the information they embody. However, I believe, Gaver, Mattelmaki, Sanders and Stappers might refer to this as scientific appropriation of probes.



Fig. 7: Multiple iterations of the map probe, aimed at exploring materiality and its impact on engagement.

Probes not only encourage communication between designers and participants, they also encourage social interactions amongst participants. During our launch event we observed participants immersed in conversations around the pub cart, sharing knowledge about their favourite snacks and drinks.



Fig. 8: Participants sharing their pub stories with designers and other participants

Probes have been proven to be an important research method in our project. However, they do pose a high risk as their value depends on participation from the volunteers. Moreover, in the past, probes have also been vandalised, stolen and misused (Crabtree et al. 2003). One of the volunteers drew inappropriate symbols on our probes, which they later tried to erase.

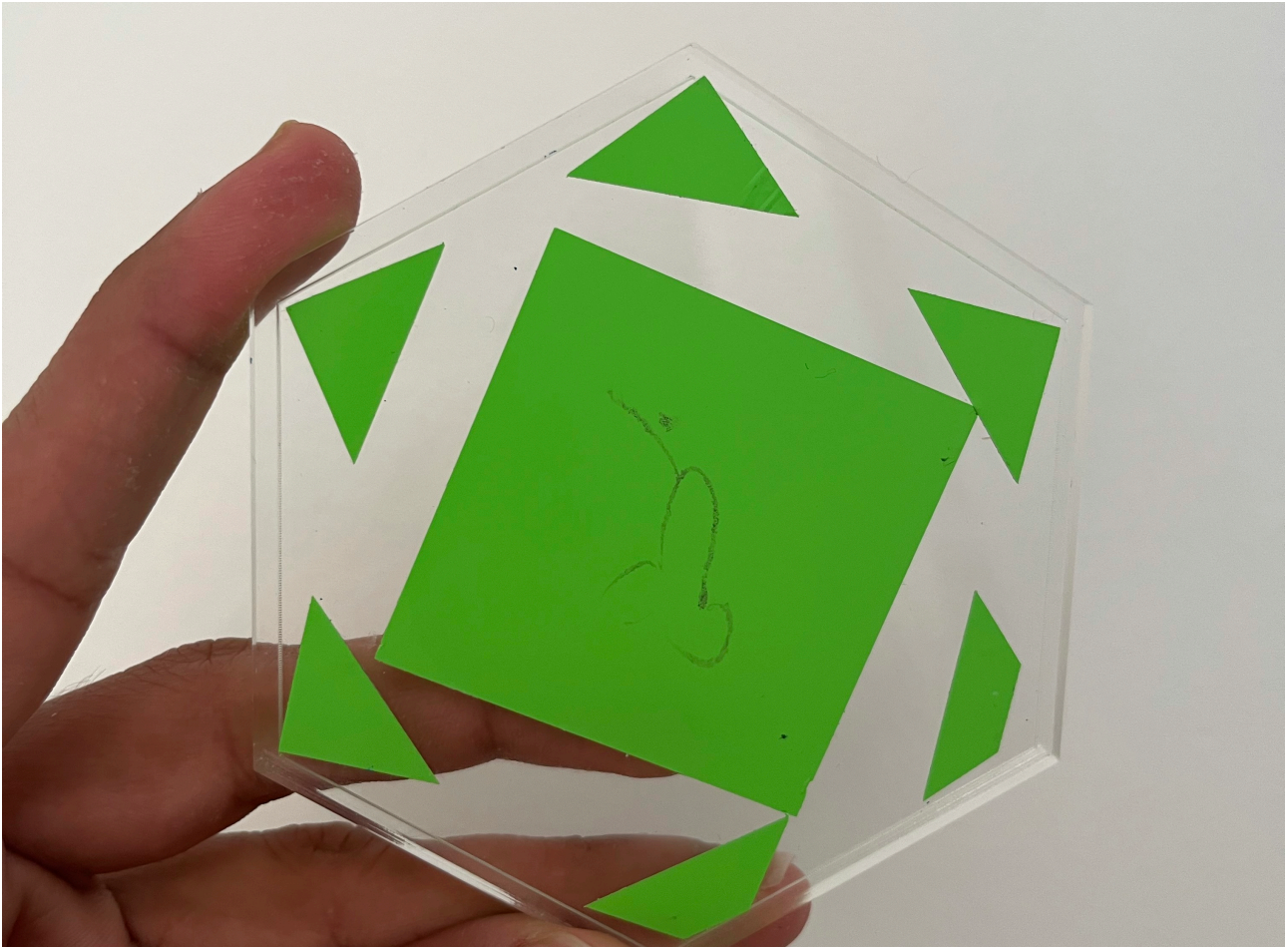


Fig. 8: One of the participants drew a willy on our beer coaster probe

## Conclusion

To summarise, probes have been a fundamental research method in our project. I believe probes can serve as a medium of gathering inspiration and information as long as they are supported with other ethnographic approaches. Their ability to evoke conversations among volunteers and designers have guided us in understanding the value of ambiguity in design. It is important to note that the probe's appearance and presentation directly influence the participants' attitude towards them. Despite their advantages,

stakeholders in the industry struggle to understand the value of probes as they embody multiple layers of complexity which might make them hard to rationalise. Undoubtedly the participants enjoyed interacting with the probes we designed, however designers and researchers need to be careful while using this method as they involve a risk of failure due to lack of engagement. Furthermore, the unsupervised nature of the design artefacts may also be misused to communicate inappropriate messages. The essay can further be extended to incorporate other types of probes (such as empathy probes, evaluative probes and mobile probes) to elaborate on their qualities and the impact they have on the design outcome.

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