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Benefits of Design Practice in Fieldwork and Benefits of Fieldwork in the Design Practice

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Abstract

Design, as a discipline can make significant contributions to solving social challenges through framing complex issues. This paper explores the values that design practice can offer in the field and which cannot be created from a distance with a traditional solution oriented process. It also explores the capacities that designers develop particularly whilst working in the field. It introduces a fragment of a longitudinal project called Aalto LAB Mexico (ALM) which is on-going and takes place in 20 de Noviembre (El 20), a Mayan-community located in Calakmul, Campeche, Mexico, where *design thinking* (Brown 2009; Findeli 2001) is being utilized as a tool for achieving sustainable societal change (Papanek 1972; Manzini 1992; Thackara 2006; Mau, et al. 2004; et al.). In here, the reflection focuses on how despite having much information available beforehand, it was only when being in the field, meeting the right stakeholders, co-experiencing and building trustable relations with them, that the design team was able to comprehend the complexity of the challenge. Furthermore, they were able to engage the community in the design process and ultimately ideate “Artesanía para el Bienestar” (Artistry for Wellbeing) a concept to increase proactive planning and improve the community’s access to healthcare. Whilst dealing with great uncertainty, the design team observed that enablement and learning happens both ways in fieldwork, as a *two-way mirror perspective*.

Keywords

system design, design in the field, design thinking, design ethnography, healthcare

Introduction

Aalto LAB is an original initiative of Aalto University which is intercultural and interdisciplinary and it is driven by design and has the ultimate goal of *making the world a better place*. It focuses on specific geographic locations and aims at engaging their populations in the process. The first was Aalto LAB Shanghai, which focused on Xian Qiao village, in Shanghai China, and took place in 2010 in collaboration with Tongji University. Aalto LAB Mexico (ALM)¹ started in 2012 as a cooperation between three universities: Aalto University (FIN), Tecnológico de Monterrey (MEX) and National Autonomous University of Mexico (MEX) (Garduño, Nousala and Fuad-Luke 2014). ALM focuses on the community Ejido 20 de Noviembre (El 20).

¹ See more here: <https://aaltolabmexico.wordpress.com/>

El 20, was founded in 1971 and out of 82 communities in the Municipality of Calakmul (H. Ayuntamiento de Calakmul 2012), it is the only one with a (nearly²) fully Mayan population, and it is located in a region of vast cultural and natural richness, very close to the only place in Mexico that is part of UNESCO's mixed heritage site list: Calakmul (the Ancient Mayan City and Natural Reservoir Biosphere [UNESCO n.d.]). Nonetheless, Calakmul is also rated within the most highly marginalized municipalities of Mexico: 85.8% of its population live in poverty, and 46.1% live in extreme poverty; 91.5% lack access to social security and 37.1% lack access to healthcare (CONEVAL 2012).

The first ALM (2012) was dedicated to an exploratory phase with the goal of obtaining a diagnosis concerning the greater challenges and opportunity areas in El 20. By 2013, three necessary and feasible, although challenging projects had been envisioned: a Water project (Chantiri et al. 2014), an Eco-Hostel to grow tourism and generate a sustainable architectural model (Garduño 2014), and that of gaining better access to healthcare by linking it to the community's craft production, 'Artesanía para el Bienestar'; the latter being the focus of this paper.

The team of ALM 2013 was encouraged to build on the existing knowledge and design concepts generated in the previous year. However, the students of 2013, including two of the authors of this paper encountered a problem, **the knowledge that the previous participants gained through the experience in 2012 was non-transferable** (even when some of the first students also participated in 2013). The team conducted research before visiting the community, but it was only by interacting with its inhabitants and experiencing the place that they made sense of the information they had gathered and were able to make a valuable contribution by conceptualizing a strategy through which craft work could improve the community's access to healthcare.

Fieldwork³, hence, is defined as an intensive visit to another society, a period of learning and exchange between the visitors and the community members. It combines informal conversations and building relations, but also well-known methods widely used in the field of design, including observation and co-design workshops. Every activity aims to gathering accurate information and creating deep understanding.

Whilst in this case, the fieldwork was put into a practice in a context that included long distance traveling (from Helsinki to Calakmul), language barriers, not all Finnish students spoke Spanish, almost no one in the community speaks English, and some of the elderly speak only Mayan, a language not spoken by any of the participants. Furthermore the participants came from various cultural backgrounds and various Universities and studied a variety of different disciplines. It should be highlighted that this type activity (field work) can be conducted inside one's own society as well. It is possible to "jump into another world" just next to one's own everyday routines. Time has to be dedicated to conducting fieldwork, and it has to be approached with an open mind, a sense of commitment, and curiosity from both sides, the ones that 'enter the field' and from the ones that 'belong to a certain community'.

² Some people, including the husbands or wives of some of El 20's second generation inhabitants and few new comers do not acknowledge themselves as Mayan; which is the case with all the original settlers.

³ It can be argued that *fieldwork* denotes a discriminating attitude, where 'the subjects of study are to be observed in their own habitat'. This is not our intention. The term fieldwork was selected simply because of its connotation of a type of practice that contextualizes, as opposed to those (lab) that isolate and decontextualize (Koskinen et al. 2011).

The fieldwork is the most relevant period within an Aalto LAB; it is preceded by a preparation period and followed by a reflection period (Garduño, Nousala and Fuad-Luke 2014). In the former, the participants gather as much information as they judge necessary for the fieldtrip; in the latter, they refine work obtained in the field, assimilate their learning and report it, so that the team of the following year can take over the project. The following section explains the point of departure for the participants of 2013.

The Challenge

The participants of 2012 reported their findings in several formats including a project blog and a final report.

Through several visits to the community, the main researcher and coordinator of ALM (also author of this paper), was able to observe a different face of poverty: self-sufficiency rather than subsistence farming, passionate artisans rather than deprived craft-makers. The concepts proposed by the participants of 2012 followed that same spirit, however, it was the coordinator's role to generate even more challenging briefs which would take those original concepts much further.

Shortly, the brief given to this particular team indicated that artisans had been identified as relevant stakeholders (*a great proportion of the inhabitants are passionate craft makers since at least one person in each household is an artisan: all women weave hammocks and/or embroider clothes, and in the recent years some, including men have started to work with wood*). Many artisans are organized in formal or informal groups, so that the heads of each group are gatekeepers. By reaching that stakeholder group, the whole community could be reached. Furthermore, the craft production in El 20 was found unique and culturally valuable, therefore, much potential was identified in improving its management.

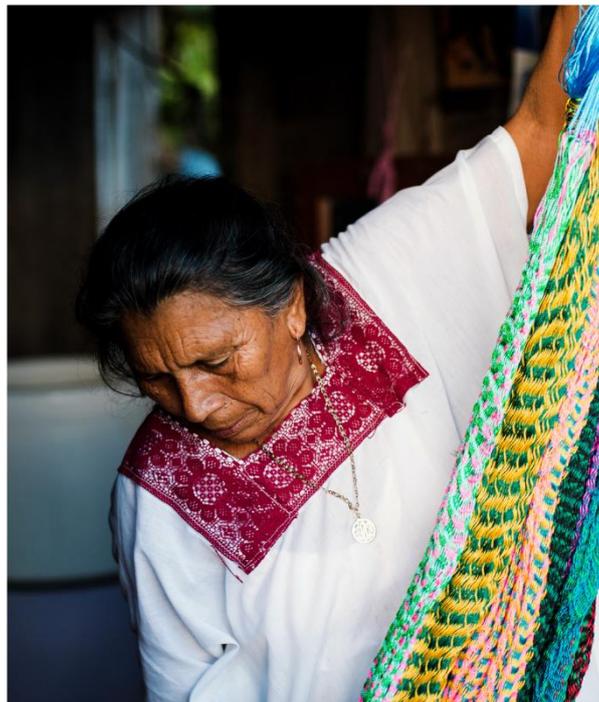


Figure 1. A hammock maker shows her work. Photo by Jan Ahlstedt.

Additionally, as mentioned above, one of the main factors that makes Calakmul a marginalized municipality, is its lack of access to healthcare. Stories collected in EI 20 had shown that the existing access to healthcare was inadequate for different reasons including that there is a long distance between the community and the nearest hospitals and the transportation is very costly.

The participants of 2013 were asked to first find different possible manners in which a community such as EI 20 could gain an adequate access to the Mexican national health care system (or any other, like private ones). The great challenge consisted of combining these two, a strong stakeholder group (the artisans) and a complex challenge (access to healthcare).

Great part of the preparation phase was dedicated to obtain understanding on how the Mexican healthcare system works but also to identifying the different possibilities that an indigenous community has of gaining access to it. The team also learned that when a health related emergency situation occurs, the people in EI 20 have to sell land to be able to cover the costs for transportation and treatments and that lack of co-operation and organization was one of the main obstacles in the artisan's income possibilities. However, rather than finding all the answers, the participants, especially those who were new to ALM, encountered a growing number of questions many of which could only be answered when visiting EI 20, such as the role of money and the actual complexity of the healthcare system.

Fieldtrip

All the participants of ALM 2013 gathered in Mexico City before travelling to Calakmul, where a general working plan was scheduled. The fieldtrip would consist of a ten days fieldwork based on action research, ethnographic informed techniques and co-design workshops. The teams would start by exploring the place through observation, and informal conversations; which would help them validate if what they imagined in the preparation phase was accurate. Next, they would engage the community members in co-design workshops in order to generate new concepts and even find manners to visualize them.

One could attempt to understand complex and complicated societal matters from existing literature and databases; but like anthropologists confirm, the understanding that can be achieved through those means results very limited when compared to what can be learned through fieldwork. Only by being in the field, one is able to meet the right stakeholders, co-experience things with them and ultimately build trustable relationships, three elements that were identified as crucial within the overall co-design process.

Meeting right stakeholders

In order to obtain a comprehensive understanding and be able to make informed decisions, meeting the right stakeholders, that is, the real people who take part in the systems that are being analysed, was crucial. Although this might sound as a self-evident statement, the authors of this paper testified with their experience that a brief meeting with one of these stakeholders can clarify matters that

could not be clarified from a distance despite dedicating several days to that task. They were lucky to be in the community at the same time as the doctor was paying her monthly visit to El 20. They were able to ask direct questions and finally understand the different healthcare systems that exist in Mexico and identify the general requirements for gaining access to each of those.



Figure 2. The design team was lucky that their fieldtrip coincided with the Doctor's visit to 20 de Noviembre. Photo by Jan Ahlstedt.

Co-experiencing

When conducting fieldwork, one of the well-known ethnographic methods is conducting participant observation. In this case, the team realized that taking part in daily activities of the community, such as craft making, they were able to experience together with community members. Rather than becoming neutral, nearly invisible observers, the team engaged in conversations that on one hand allowed them to better understand the values that support their work, and on the other, engaged them in the generation of ideas for new products or services.

During a session with Martha, who creates jewellery out of corn leaves, seeds and plants, the team got to experience the role of nature in the community, the various usages and meanings of plants and herbs. This experience stayed in the memory of the participants as a true moment of exchange that allowed them to better understand the community; furthermore, it was also a valuable experience for Martha, who had the opportunity to hear from the visitors what they might want to see and hear.



Figure 3. Martha, who makes jewellery from corn leaves taught her process to the design team; this was 'a true moment of exchange'. Photo by Jan Ahlstedt.

Building Trust

Trust is the foundation of gathering user insights in field work. Without trust, there is no co-design. In ALM the informal activities like football have been in a crucial role of building the trust and relations throughout the process. Nowadays, the members of ALM team get invited to people's homes and in many cases, conversations reach a great level of intimacy, evidencing that trust has been built amongst the two groups.

If designers make the most of these three possibilities that are simultaneously available only in the field, the probability that they will rightly comprehend the problematics of a particular context increases; hence, it is also more probable that the outcomes of their processes would be relevant and feasible contributions to people's lives. However, fieldwork also allows designers to develop certain capacities, thus, bringing benefits to them also.

Benefits of Design Practice in Fieldwork

Connecting the dots, as Nussbaum (2013) describes, is an essential feature of design. In this fieldwork case, connecting dots was not solely about comprehending the current complex healthcare system; it was also about understanding the restrictions that marginalize a community and identifying the opportunities to reach sustainable healthcare by making use of the resources available, including the human capital.

Framing Complex Matters

By being in the field, the design team was able to build trustworthy relations within the community, to communicate directly with the right stakeholders (users and providers of healthcare services), and therefore gained knowledge and understanding of the complexity of their healthcare system (e.g.

how geographical boundaries constrain the access to healthcare); which in turn, expanded the capability to design solutions that fit to El 20's specific cultural context.

The community is located in the State of Campeche, very near its borderline with the State of Quintana Roo. The nearest well equipped hospital is located in Chetumal, the capital city of the State of Quintana Roo. Most families of El 20 are beneficiaries of a National Health Insurance Program (Seguro Popular), but given that its coverage is restricted to one's own home state, this insurance does not cover up for their visits to the nearest hospital. The best hospitals in the State of Campeche are located in the capital, the City of Campeche: while they might reach Chetumal in 1.5 hours, it takes them approximately 4 hours to reach the City of Campeche. The trip to the hospital is not only long, but it results excessively expensive for families who practice subsistence farming and therefore have no salaries nor constant income.

The National Social Security System that provides healthcare and has the best equipped hospitals in the country is accessed through a formal job. In here we find the incompatibility of two systems because the Mayan community appreciates their traditional way of living and their capacity to feed themselves through their agriculture; if they got formal jobs in order to gain access to that healthcare service, their traditional way of living would be lost. Nonetheless, research conducted before the visit to El 20 showed that there was a new way to enrol into that healthcare system, by paying an annual fee, which opened up the possibilities for the community.

ALM team was misfortunate that one of its facilitators suffered an injury while being in El 20; nonetheless, this event also allowed the team to gather first-hand information about the whole customer journey throughout a medical emergency in Calakmul. The doctor was not in El 20, therefore the patient had to be taken by taxi to Xpujil (the capital town of Calakmul), located 15 km away from El 20. The x-ray machine was not functioning in Xpujil, the patient was thereafter taken to Chetumal by taxi which cost 800 pesos (a trip by metro in Mexico City costs 5 pesos). The total sum including travel and all hospital expenses was of approximately 5000 pesos (around 300 euros), extremely expensive for people of El 20.

The more the team was able to make sense of the tangled Mexican healthcare systems, the more it was evident that many people in the community found it very difficult to understand the big picture; in many cases, they did not even try to and simply avoided dealing with the subject. The information that the team gathered by interviewing different stakeholders was mapped out in a big piece of paper. The map allowed the team to visualize the different healthcare options. It became evident that money was a crucial factor when deciding which one to choose.



Figure 4. Map drawn in El 20 with information gathered from the right stakeholders: users and providers of healthcare services. It shows the different hospitals in the area and the processes and costs of each of them. This tool helped both, the design team and members of the community to understand the complexity embedded in these systems. Photo by Jan Ahlstedt.

The map was not only the tool through which the design team made sense of the complicated systems, but it also helped people in the community to get an overview of the healthcare choices and the expenses attached to each of them, including transportation costs (taxi drive or gas). The map was left in the community house to assist anyone who could need it.

Having the current healthcare situation mapped out also made it easier to identify opportunities that could help to tackle the great challenge, at least make the situation better than it was. By having an emergency fund, the community could prevent its inhabitants from selling their lands whenever they had to face a medical emergency. An emergency fund was feasible because the team had already observed a culture of sharing; for example, each family pays 10 pesos a month in order to pay for the one doctor's trip every month to El 20.

That is how 'Artesanía para el Bienestar' emerged. The team suggested to the community to start a healthcare fund and together with the community members, they defined a long term strategy. The fund could start with an emergency pot, but after a few years, they could raise enough money to pay the voluntary fees to the national social security system. The artisans could play a lead role in raising the money: some selected products could be labelled with the Artesanía para el Bienestar brand and be sold for a higher price; that extra money would go to the fund.

The concept proved that through design, the community members were enabled to tackle a complex healthcare system systematically and to consider abstract issues as something they can manage or, at the very least, influence.

Bringing the Community Together

It became clear that increasing the community's capacity to handle emergency situations through proactive actions was needed. And if the actions were embedded in the community's everyday life, their sense of community spirit could also grow and help organize the stakeholders into an ecosystem of community players that could interact in other areas besides healthcare. Therefore, the key goal within the concept "Artesania para el Bienestar" is to encourage the artisans to actively take part of this process and enable them to consider, e.g. their income level as something meaningful for the community as a whole.



Figure 5. The design team was a neutral figure in the community, which allowed them to bring together groups that would not normally work together. Photo by Jan Ahlstedt.

The community had certain groups, usually family units with different roles and which sometimes were not communicating much with each other. As outsiders, we (the design team), entered the community as a neutral party, which allowed the team to be genuinely curious about their culture and even gently disruptive. The arrangement of co-design workshops where all families and groups were welcome, created spaces that brought together groups that would otherwise not necessarily meet. The co-creation (Mattelmäki & Sleeswijk-Visser 2011) aimed to conveying a sense of shared ownership of the concepts and ideas which could result beneficial to all members of the community, regardless of to which established group they belonged.

The concepts that emerged in the field aimed to empower the community to lead their own planning and implementation processes. Business was introduced as a possibility for cultural exchange and for

the preservation of the craft skills and cultural narratives, rather than as a tool for profit only. Wealth and security were conceptualized as a communal capital to be grown, rather than as an individual goal. This fits in the context of El 20, where family units are strong and where barter is currently practiced (eg. chickens are used as a currency). “Artesanía para el Bienestar” is more than just a design concept; it is a process that empowers the community to be the owners of their future development. This, which might come across as a self-evident component of a development process, is an extraordinary starting point in a context where people have got used to be passive, having being managed from the governmental top-down (paternalistic) perspective which for decades disregarded their cultural and historical heritage.

Benefits of Fieldwork in the Design Practice

In the best case, fieldwork functions as a possibility for designers to grow their capacity to deal with uncertainty, and grow their capability to rethink existing solutions. While designers are in the field, they are away from their own cultural norms and existing systems. When these features, which normally limit the thinking process, do not exist, designers are able to generate new ideas and alternatives that can exceed standard solutions.



Figure 6. By gaining a thorough understanding of the context and through the participation of the right stakeholders in the design process, a feasible concept of a long term strategy, ‘Artesanía para el Bienestar’, emerged in the field. Photos by Jan Ahlstedt.

In the field, designers are able to share their professional knowledge while at the same time learning from the members of the community and other relevant stakeholders. This is an interesting opportunity for designers that can bring more depth to their work; design can switch its focus and go from delivering end solutions to facilitating processes that enable proactive planning in communities.

The Two-way Mirror Perspective

Whilst being in the field, the design team realized that its greatest contribution to the community was that of acting as a mirror that reflected the positive qualities that the community had but did not see as valuable. When the team had left the community and had time to reflect, it became evident that the mirror perspective works both ways because the visit to the community caused the design team to question their own cultural habits, norms and values.

Before ALM's visit to 20 NOV, the artisans had not reflected on the fact that the narratives entailed in their products and processes add value and make them unique. For example, the wood used in the artisans' craft is collected from their surrounding biosphere, which is protected and regulated. Only certain naturally fallen trees are allowed to be collected and used for production. Therefore, the artisans have a limited amount of wood and the material is highly valued; every piece of craft is created in accordance with the shape of the piece of wood at hand. Furthermore, collecting the wood has also got the second purpose of preventing forest fires; a man stated, "We are cleaning up the forest".

In the field the design team worked as a mirror that reflected positive qualities that the community members were unaware of possessing. Before the team's visit to El 20, the artisans had not reflected on the fact that the narratives entailed in their products and processes added value and make them unique. Agustín, who is a highly talented hammock maker and designer expressed, "Sometimes we can't turn our light bulbs on by ourselves".

Agustín's quote is equally applicable to the designers, for whom the visit to the field becomes a possibility to learn about different ways of doing and living. Ultimately, the visitors reflect about their own lives and wonder if what they learned from the people in the community is somewhat applicable to them.

Conclusion

Members of a community must have an active role and become the owners of the process towards a sustainable and long-term development (Hagerman 2010); therefore, we did not only seek for solutions but rather to foster a design thinking ability within the community. "Artesanía para el Bienstar" rightly exemplifies the multidimensionality of a design process in a field.

The design team was able to encourage the community members to tackle a complex healthcare system systematically from various perspectives and to consider abstract issues as something they can manage or, at the very least, influence. Together with the community, the design team managed to identify challenges and resources and to envision opportunities how the community could tackle their own challenges by making use of the resources they had available.

This case study contributes to the current discussion on broadening the role of design; it encourages designers to try new possibilities by engaging with a diversity of disciplines and stakeholders and also to explore new directions by tackling societal problematics through design (Papanek 1972; Manzini & Cullars 1992; Thackara 2006; Mau, et al. 2004; et al.). Research in emergent areas such as *social design* (Margolin & Margolin 2002; AHRC 2014) and *social innovation* (Manzini & Jégou 2003) need to grow to support this process. Fuad-Luke (2013) argues that "the potential of design research work to lever positive change is significant if it can move beyond the confines of academic discourse, scale

up, and find mutually interested partners for these projects to capture the popular imagination". The essence of this paper is not to examine the result of the design process in regard to concepts and solutions created around the topic of healthcare, rather it presents the values and multiple benefits a design process in the field can bring apart from the "end-result" solutions such as framing complex matters and bringing the community together and engaging them in the design process. Moreover, fieldwork is beneficial because of the learning that designers gain exclusively from it. In future practices, these aspects of design should be considered and recognized as values to achieve sustainable societal change.

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