

# *Sumak kawsay*: Social Empowerment through Participatory User-Centred Design in Ecuador

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## **Abstract**

The aim of this article is to direct the social design debate to constructivist approaches to design education in the Global South. This article provides insight into the process of participatory user-centred design involving Ecuadorian third year graphic design students and cocoa cultivators of limited resources in Ecuador. The students and *cacaoteros* become codesigners of a brand identity for the farmers' association by means of an extensive review of literature on cocoa cultivation and commercialisation in Latin America, in-depth interviews with community members on the traditional farming practices of cocoa growing communities in Northern Ecuador and the data collected from the students' participation in and observation of the lifestyle within the community. This article illustrates the 'wicked' problems faced by these design students and the relevance of their experience to the study of social design practices and design education in developing countries.

## **Keywords**

user-centred design, Global South, higher education, sustainability, community engagement

## ***Sumak kawsay* and design education**

*Sumak kawsay*, a Kichwa term meaning 'good living', is an Andean concept that has played an instrumental role in the social, cultural and educational reforms in Ecuador since PAIS Alliance came into power in 2007. It is a philosophy adopted from the pre-colombian civilisations of the South American Andes, which promotes 'holistic citizenry in which people are active participants in their own transformation' (Republic of Ecuador National Planning Council 2013, 24). That is to say, it prioritises collective well-being over individual economic prosperity, through the 'active involvement of individuals and collectives in major decision-making processes in order to construct their own destiny and happiness' (Republic of Ecuador National Planning Council 2013, 21).

Consequently, the Ecuadorian government has espoused higher education as one of the principal guarantors of *sumak kawsay*, resulting in tertiary level students being encouraged to undertake investigative projects such as *proyecto integrador de saberes* (project of knowledge integration) and *proyecto de vinculación con el colectivo* (project of community engagement) (Consejo de Educación Superior 2016) in order to identify the social necessities of vulnerable communities. The philosophy of *sumak kawsay*, hence, has become the foundation of the enactivist constructivist approach to higher education as indicated in Article 3j of the Academic Regulation of Higher Education, which states that the objective of higher education in Ecuador is to contribute to the democratisation of knowledge, as the means by which the rights of the Ecuadorian people are guaranteed and the inequalities among them reduced (Consejo de Educación Superior 2013, 4).

The relatively recent shift in design practice to include the more socially oriented strategies of design thinking (a key component of social design, of which participatory user-centred is an example) the philosophy of practice as theory in design education, in addition to the unpredictability of 'wicked problems' (Buchanan 1992) in design, not only make design projects especially adaptable to initiatives related to *sumak kawsay*, but ironically because of their problem-solving component, also make them well suited for constructivist paradigms in education. Additionally, the design process, by means of the design product, offers a tangible means of evaluating the effectiveness of community engagement or service-learning practices. Nevertheless, no matter how 'wicked' the problems to be tackled are, design thinking and consequently social design, particularly as it relates to community engagement, is not necessarily the same in developing countries as it is in more industrialised ones (Smithsonian's Cooper-Hewitt *et al.* 2012), as the following case study of the Amazonas farming community will illustrate.

## The research project

The work carried out by third year graphic design students of the Pontifical Catholic University of Ecuador in Esmeraldas (PUCESE) in an isolated cocoa growing community in Northern Esmeraldas, popularly referred to as Amazonas, was part of both knowledge integration and community engagement projects. These graphic design students, all of whom were from the city, were initially wary of packing in their laptops and donning heavy rubber boots, covering themselves in mosquito repellent in the middle of the chikungunya epidemic and setting off to a rural location an hour from the city, at 7:00 am on a Saturday morning to do design work!

The cocoa farmers of Amazonas had previously approached the department of Graphic Design of the PUCESE about having the students assist them with creating a brand identity (Figure 1) for their unofficial organic cocoa cultivation association, with the intention of eventually being able to sell directly to both national and international buyers. This would give them some form of empowerment over their labour as cocoa cultivators or *cacaoteros* in this region are often limited to underselling their beans to intermediaries who later sell them to local or international chocolatiers for a higher price. Nevertheless, selling directly to buyers would require a concerted effort on the part of the cocoa farmers to organise themselves into larger groups of farmers in order to make up the numbers for export (Grob 2015) or at the very least, to be taken more seriously in matters concerning them (Instituto Ecuatoriano de la Propiedad Intelectual 2014). From the interviews



**Figure 1**  
Brand logo

conducted with these farmers, the students gathered that this desire for a 'brand identity' was motivated by the need to encourage more farmers of the region to join their initiative to use traditional organic methods to grow the more aromatic *cacao arriba* or *fino de aroma* cocoa rather than the hardier yet supposedly more insipid cocoa plant clone, CCN 51, with the objective of setting the community apart in the production of high quality cocoa.

The students tried to get a 'feel' for the product they were designing for by doing extensive reading on cocoa cultivation and field research, which consisted of participating in tasting sessions of dark chocolate from cocoa producers from all over Ecuador, making comparative analyses of the logotypes and brand identities of these national producers and visiting cocoa farms in Esmeraldas, in addition to a chocolate factory in Mindo, where they experienced the bean to bar process of chocolate making. Nevertheless, the most pertinent information for the students' design came from the series of interviews of representatives of organisations involved in cocoa cultivation and the cocoa farmers themselves. Through informal interviews, questionnaires and direct observation, it was established that the most immediate design problem was the lack of adequate signage, starting with the absence of road signs indicating the un-asphalted 5 kilometre trail leading to the community, a fact which contributed to its isolation (Figure 2).

It should be said, however, that although this design project was initially undertaken to meet governmental requirements for tertiary institutions regarding the principles of *sumak kawsay*, and not as a conscious effort to promote 'designerly ways of knowing' (Cross 2001), the nature of the project itself, the actual physical contact with the community and the joint effort of designing a brand identity for the *cacaoteros*, necessarily threw the students into a problem-solving scenario of 'wicked competencies' (Giloi 2015). In that regard, one of the main obstacles they encountered was the distance of the Amazonas farming community from the city and the fact that the community, which was connected to the main highway by an unpaved hidden track, could only be reached by private means of transportation. Additionally, only one of the eight students participating in the project had access to a vehicle so this made frequent visits to the community on the part of the entire group an added expense. This resulted in the students taking turns in visiting the Amazonas community during the week, a reality which may



**Figure 2**

The students working on the road sign.

have affected the quality of the data gathered from their participant-observer accounts.

Moreover, despite the fact that the group of students had the opportunity to visit the community on Saturday, given that this was the only day that the university provided a private van service for them, it was also the day on which many of the farmers were involved in various activities such as attending cocoa cultivation capacitation courses imparted by agronomists working for the state, grinding sugar cane for their natural sugar supply and helping out in the small makeshift biodiesel plant which provided the community with energy, and so could not all be found in any one place at any one time. This made prototype testing difficult and the students found themselves having to rely on the opinions of the more seasoned members of the group of farmers to facilitate the design process. As a result, even though the students were able to interview all of the cocoa growers of this association on their opinion of the image they considered most representative of their cocoa growing activity, that is, whether it was the cocoa pod (open, closed or split in half vertically or horizontally), the cocoa seed, the cocoa tree or the silhouette of the farmer carrying a branch of cocoa pods and so on, the various prototyping stages to decide on the colour, form and the thickness of the lines of the image chosen were not always carried out with the same set of farmers.

Kimbell (2011) in her critical essay on design thinking, divides this strategy into three different categories: design thinking as cognitive style, as a general theory of design and as an organisational resource, for which the purpose of design are problem solving, taming wicked problems and innovation, respectively. However, rather than facilitate the deconstruction of design thinking into these separate components, the students' experience with interactive user-centred design has shown them that these supposedly separate categories are indeed

interdependent. Designing for underprivileged clients is not just about problem solving but also about being able to tackle wicked or unexpected problems effectively. In addition, this concept of experiential learning or learning through action, allows the designer to go beyond designing for end-users to actually subsuming the users' experiences into the design to produce 'social innovation' (Brown & Wyatt 2010). Moreover, the practitioner in the process becomes a 'reflective' subject (Schön 1983) of action, which is particularly useful in unpredictable situations where the designer, similar to the physician in Schön's (1983, 41) example, cannot simply 'apply standard techniques to a case that is not in the books'. The problem, in other words, should ideally be dealt within the context in which it arises, in a process of mutual knowledge building involving the design skills of the student practitioners and the expertise of the community on such matters.

That said, there is a slight flaw in such community user-centred design projects due to the fact that the end result of this collaboration is usually a design product, something in which only one of the two collaborating teams is likely to have expertise knowledge. This means that although the students may have brainstormed with the farmers on their preferences regarding colour, form, hierarchy, typography and so on, the design product still needed to be guided by the basic principles of design (Ambrose & Harris 2009), in order to ensure communicability in addition to visual appeal. In other words, as Kimbell (2015, 289) indicates, despite all the claims of the design process being user-centred, the designer is still the 'main agent within the design', a fact which actually questions whether there has indeed been social empowerment of the user or a democratisation of the design process in the use of these community engagement strategies.

## Design research

The research component of knowledge integration and community engagement university projects (Consejo de Educación Superior 2013) in Ecuador also highlights certain issues relating to design research in education. The use of experiential knowledge in these types of community engagement projects helps to erode the traditional dichotomy between research and practice in art and design, which posits research as an activity expected to produce results which will benefit the community and practice as an activity with economic benefits (Niedderer 2008, 1). In the case of the Amazonas project where economic interests have been set aside, that is, the students were not being paid for their designs nor were the financial benefits of having an effectively designed brand identity expected to be immediate, research and practice take on more of a symbiotic relationship in which clinical research is used to buttress practice, and practice – notably the practice of handling messy situations (Stoltermann 2008) – is utilised to create new knowledge about design practice and education, something which traditional scientific research methodologies which seek to reduce complexity (Stoltermann 2008) are not able to do. In effect, the products of design, the results of this 'practice', as Buchanan (1992, 11) points out, are not just physical objects but rather a collection of experiences and services which play a critical role in generating new knowledge of what 'a product is or could be'.

## The economics of social design

It seems to be the general consensus among some design critics (Lupton 2009; Brown 2009; Kurvinen *et al.* 2008; Dourish 2004; Forlizzi 2008) that a more participatory approach towards design is necessary if designers ever hope to effectively communicate with their designs in today's society. Nevertheless, this social approach to design or 'design thinking' which Brown (2009) claims is about 'putting people first' comes suspiciously close to being just another, albeit more effective, way of picking potential consumers' brains in order to sell (operative word being 'sell') them things that they actually need instead of simply want.

That said, it would be imprudent to think that by breaking away from the stronghold of the advertising industry and actively engaging the designer in taking a more critical stance against consumerist culture (Lupton 2009), design will no longer somehow be subjected to economic interests. In other words, design, no matter what its objectives are, is costly and its implementation even more cost prohibitive in economically challenged societies due to a lack of infrastructure and the availability of materials. Therefore how a design is funded, which necessarily involves the interests behind that funding, should be an integral component of any discussion on social design because it is what will determine the level of participation of the designer in the project, the type of relationship between the designer and the client, and consequently, between the designer and the customer/user, not to mention the nature of the design or the quality of the design itself. Hence the criteria which define the roles of designer, client and user, based on commercially driven or traditional design, will sooner or later have to be reconsidered in order to accommodate any discussion on social design. For example, in the event that the design is done for free, how does this alter the roles of designer, client and user?

The PUCESE, by incorporating social design into its community engagement project, had the students fund their own design projects as they would any coursework project undertaken during their university career. This meant that the students would 'donate' a design that would fulfil the 'design' necessities of said community. It was discovered that the benefits of involving students in this type of design venture far outweighed the limitations of the students' budget and lack of work experience. In other words, whereas it is not feasible to centre social design on the possibility of designers working for free, design for payment in kind may be something to consider in designing for communities of developing countries. In this case, the involvement of the students in designing for a community provided them with invaluable work experience and the opportunity to see their designs put to use in the real world as opposed to limiting themselves to exhibiting their work on campus (Figure 3). This gave the students the sensation that they were actually contributing to making a difference in the society around them. Papanek (1973, 81), supports this idea of service-learning as he believes that this will not only encourage the students to 'set up alternative patterns of thinking about design problems' but may also help them to 'develop the kind of social and moral responsibility that is needed in design'.

Additionally, students may not have extensive experience at handling budgets but given the limitations of their own budgets, they are likely to have their ears closer to the ground in terms of knowing where the bargains are. In the case of



**Figure 3**  
Packaging with the new logo.

these eight students, they knew which printing companies gave good quality for less, which stores supplied cheaper materials, how to barter for a better price or take full advantage of group discounts for students. Despite this, students should be considered a critical element in social design, not merely as a cheaper way of sourcing design but rather as the future of sustainable design as it is their application of socially responsible design practices, learnt at the university level in such community engagement projects, which can guarantee a change in future design practices (Figure 4).

However, be that as it may, it would be disingenuous to assume that the design product would not be compromised under such circumstances. As the students of the Amazon project were operating on a very tight budget, they had to prioritise the necessities of the community. The selection of material for the final design is one such example of the design process being directly influenced by the limitations of the designer/client's financial resources. In this case, the students originally envisioned using wood for the signs, in keeping with the natural environment and the organic philosophy of the community, but that would have been much more expensive as they would have had to hire a professional carpenter and the signs would have required frequent maintenance in such humid weather, a problem which would have put an additional strain on the community's economy. So, instead, the students chose to print the designs for the signs on adhesive vinyl, which had very low upkeep and could easily be added to the iron support provided free of cost by the father of one of the students (Figure 2). Surely in this case where the student practitioners find themselves to be both designer and client (as funders of their own design), for the non-traditional client/users, who are, in turn, clients for secondary users (other farmers of the



**Figure 4**

The students before the presentation of the documentary on their work to the university and some members of the community.

area), warrants a reconsideration of designer, user and client roles in this context of social design for development.

## Local versus foreign

Another interesting issue raised by this experiment in user participatory design in Amazonas, is the reliance on local as opposed to foreign designers to tackle local 'wicked problems'. The participatory user-centred approach to design grows out of an increasing tendency among designers to take on a socially responsible role towards global issues concerning 'gender, poverty and global warming' (Ambrose & Harris 2009). However, even though this debate routinely involves the issue of design for developing countries (Lupton 2009; Brown 2009; Nussbaum 2013; Polak 2008), there is less attention paid to design in developing countries, leaving designers from the countries implicated, out of the debate on social design, otherwise referred to as public-interest design, green design, social impact design, socially responsive or responsible design, transformation design or humanitarian design (Smithsonian's Cooper-Hewitt *et al.* 2012, 8). The experience of designing for this community of cocoa cultivators begs the question of whether or not social design should, in addition to addressing this shift from the traditional relationship between the designer and the client and/or the user/consumer towards a more user-centric model, also involve a closer examination of the role of these designers, clients and users in the context of developing countries.

This movement towards 'social responsibility' in design which purportedly emerged in the 1990s and 2000s (Lupton 2009) opens up the debate on what



exactly is meant by a 'social' or a needs-based approach to design and whether or not this recent tendency in design can realistically address the needs in the more underprivileged societies of this globalised world. Additionally, given the fact that this debate is primarily taking place among designers of developed countries, one wonders whether social design has the same meaning in the context of an industrialised nation as it does in a less industrialised one? Lupton (2009) speaks of a renewed critical approach to design without much emphasis on the necessity of renewing the very definition of the roles of the social actors involved in the design process.

Thus, in developing countries where the user or client roles may not be so well defined, particularly since the role of the client in community-centred design very often depends on external funding sources, the question of what an acceptable working definition of social design would be in such an environment remains. Kristin Donaldson (2008, 36) makes a point of this in her article, 'Why to be wary of "design for developing countries"', in which she states that much of the design taking place in developing countries is subject to the Western designer's 'free time and/or the fiscal schedules of donor agencies' and hence tend to be short-term ventures. For this reason, she supports the view that a sustainable approach to design in 'less industrialized economies' (Donaldson 2008, 35), would be more feasible if local designers were involved in the process.

On the other hand, designers from economically challenged nations are already asking the question if this foreign presence is necessary in order for them to solve their own problems. Kirtee Shah (Smithsonian's Cooper-Hewitt *et al.* 2012), an architect and Director of the Ahmedabad Study Action Group in India, highlights this cultural bias or 'dominant logic' (Pralhad 2005) which leads to the assumption that the less-developed countries are necessarily dependent on the know-how of the West to address their needs, even if we are indeed talking about collaboration among equals.

While it is logical that socially conscious designers from industrialised countries such as Nussbaum (2013) would raise these issues from the perspective of the foreign designer, there seems to be an even more pressing problem at hand indicated by Shah which it not being dealt with as effectively in theoretical writings on design related to emerging economies and that is what these local designers can or could be doing to resolve the design needs themselves within their countries. In other words, why are foreign designers even there in the first place when there are local designers who may be able to do a better job? If the answer to that question is the fact that with foreign designers comes the much needed foreign capital for the design, this raises another question. What exactly is the ultimate goal of social/green/humanitarian design or design for development and who is actually benefitting from it?

Designer theorists such as Paul Polak (2008) or Bruce Nussbaum (2013) do not seem to be too concerned about the implications of the foreign designers' role in social impact design in developing countries as they are about the (foreign) designer's capacity to meet (or create?) the needs of the potential consumer in these less developed regions. Polak (2008, 24), for example, says: 'The global market for low-cost drip irrigation, however, looks to be huge. I think at least 10 million poor families will buy a system.' That is, social design here simply implements the same commercial structure which anchors the traditional roles of designer, client and consumer, but with a focus on a distinct sort of consumer, one of limited purchasing power and a different set of needs



**Figure 5**  
The presentation.

(Figure 5). Like Prahalad (2005) who subscribes to the theory that the poor can consume their way out of poverty, Polak (2008) and Nussbaum (2013) seem to be of the concept that the designer could be the beacon to this 'social' consumption as opposed to senseless consumption, one supposes. Hence the purpose of social design, which does not come up in Lupton's (2009) or Battarbee's (2004) theoretical musings on participatory design, may not be to isolate design from consumerism after all but from a particular kind of consumerism.

Donaldson (2008, 36), however, insists that the answer lies in channelling the design work through local designers as opposed to foreign ones. The theorist notes that in order to assure the usefulness, usability and/or sustainability of a design in a less-developed country where funding for design is harder to come by or justify, the traditionally technology-centric design of the 'subsidized and donated varieties' typical of the 'remote or parachute design' tendency in developing countries, should be replaced by a more user-centric one with local designers. After all, who better to understand the needs of the local user than the local designer? In addition, the entity funding the design research project is likely to save money in having local designers do the job as it avoids having to finance long and costly social research ventures aimed at enabling foreign designers gain a better understanding of local culture, prior to the actual research into the needs of the population itself. In fact, in the "Design and Social Impact" summit, cultural bias was cited as one of the 'potential hazards' facing social design in developing countries: 'Social impact designers working globally have a mandate to tread sensitively within the cultures to which they are providing services, or they will create the perception, if not the reality, of saddling a community with ineffective or inappropriate efforts or creating real harm'. (Smithsonian's Cooper-Hewitt *et al.* 2012, 22).

Prahalad (2005) on the other hand, thinks that the debate on local versus global is irrelevant and that what should really be sought after is the union between both. 'Maladies' of emerging economies such as poverty could be resolved through 'co-creation' between multinational corporations, government agencies and user participation through consumption. Similarly, Polak (2008) and Nussbaum (2013) believe in the collaborative creative efforts between global and local entities although both agree that there needs to be a deeper understanding of the local context of the design problem. Additionally, Bernard Amadei, Professor of Civil Engineering at the University of Colorado, declares that foreign designers have to make a concerted effort to learn from local designers alluding to the kind of collaborative approach Nussbaum explores in *Creative Intelligence* (2013): 'The young entrepreneurs there have a lot to teach us. They know the market; they know the constraints and they are very creative' (Smithsonian's Cooper-Hewitt *et al.* 2012, 22).

However, the solution may not be to have foreign designers learn from local designers in order to do the job well, or to leave designing exclusively up to local practitioners who may not have all the answers simply because they are from the same culture. The contribution of designer professionals could take place at the university level, where it may be easier to inculcate more socially responsible practices in a younger more receptive audience of future designers. Jennifer Toy of the Kounkuey Design Initiative, who participated in planning a landscape design program at the University of Nairobi 'to educate practitioners', along with Amy Smith of MIT's D-Lab and Patrice Martin of Co-Lead and Creative Director of IDEO.org, belong to a group of designers (Smithsonian's Cooper-Hewitt *et al.* 2012, 23) who believe in design as a tool of empowerment rather than a 'thing that creates objects or buildings' and that it is critical to 'boost the knowledge and resources of nascent designers in the places they served'. Smith comments: 'I do think we also have to think about designers who are in those communities, because long-term sustainable development and change will happen if designers are living in the place and not always being brought in from universities' (Smithsonian's Cooper-Hewitt *et al.* 2012, 35).

Shah for his part talks about programmes aimed at young architects which involve collaboration with universities to provide workshops in at least 10 Asian countries and Richie Moalosi of the University of Botswana also suggested that student exchange programmes between 'new emerging economies and the developed economies' should be considered. Whether there are specially designed university programmes in developed countries, experienced designers from industrialised nations sharing their knowledge in special programmes at universities in less-industrialised countries or exchange programmes between university students of developed and developing countries, there seems to be the general notion that social design will not be sustainable without the contribution of 'nascent designers' and among these emerging designers, more critically, those who stand the most to gain or contribute, the young designers of these emerging economies.

## Conclusion

Whereas sustainable design may be a welcome change from the commercially driven practices of traditional design, design in which designers are expected to

finance their own projects is just not sustainable. Participative design involving developing communities in industrially challenged countries are likely to be costly due to the limited options available to the designer, as the students have discovered in the case of Amazonas. Hence, cost and affordability are always going to be issues to contend with when dealing with design for developmental purposes as these factors exert a great influence on the outcome of the participatory process involving designer and the user/community.

Consequently, designer/clients may end up sacrificing quality in favour of the actual completion of a design or face having their design compromised by political interests in government-funded design projects. This is not to say that interesting design work involving the community cannot be undertaken if local designers are not willing to fund these designs themselves. It will, however, probably mean that 'designers with a cause' from developing countries will have to add grant application writing to their job description and do the extra research to source the funds available for developmental projects in the area they are designing for. They will thus have to come out of the shadows and become more actively involved in round table discussions involving community client/users, government institutions and non-profit organisations which work closely with funding agencies.

On a positive note, this recent interest in socially responsible design has served to turn the spotlight on the pressing issues in developing societies even if they cannot all be resolved by design. There may be some doubt as to what a proper definition of social design is or what the 'accepted standards and ethical guidelines' should be for its practice. Nevertheless, unless there is an honest examination of the impact economic interests have on the roles played by the designer, client and user in the design process, whether it involves developed or developing countries, design professionals or students, there can be little expectation as to the effectiveness of social design in the societies that stand to benefit most from this practice.

Hence, I would add another term to the long list of epithets for social design: 'imperfect' design. Design that understands that going into the field is complicated and unpredictable, that a community is not a homogenous infrangible whole of similar wants and needs, that the client is not always the one who pays or the user a passive receptor of the message and lastly, that designing for an imperfect world requires patience and the humble acceptance that even the best, well-intentioned design does not always meet the targeted need.

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