
Towards Design Inspirations for Cultural Technologies from Explorative Workshops with San Youth

Maria Kauhondamwa

Namibia University of Science
and Technology, Department
of Computing and
Informatics, Windhoek,
Namibia.
mkauhondamwa@gmail.com

Heike Winschiers-Theophilus

Namibia University of Science
and Technology, Department
of Computing and
Informatics, Windhoek,
Namibia.
hwinschiers@nust.na

Kileni Fernando

//Ana-Jeh San Trust,
Windhoek, Namibia.
fkileni@yahoo.com

Abstract

Namibia prides itself as multi-cultural yet united country with a wide variety of ethnicities. Most communities take pride of their traditions, cultural values and practices. Based on historical legacies differences amongst tribes can still be observed. While some are well positioned in the socio-political landscape others are marginalized, such as the San communities. Youth caught between tradition and modernity, ethnicity and nationality, rural and urban contexts is affected at many social levels. Thus we conducted two explorative workshops with San youth seeking design inspirations for cultural technologies encouraging young Namibians to engage with their traditions and cultural practices in the modern world. We speculate that seductive cultural technologies could bridge the gap between the often perceived conflict of the past and the future of indigenous urban San youth.

Author Keywords

Namibian Youth; participatory design; seductive design; indigenous knowledge; Inspirational designs, San, youth

ACM Classification Keywords

H.2.10. Software Engineering: Design;

Introduction

Namibia, a southern African country, can pride itself of a very rich cultural heritage and ethnic diversity. As many as 11 ethnical groups are maintaining their languages, values and practices amalgamated into a modern-traditional lifestyle. This has been encouraged by a



Figure 1: first 3 phases of design thinking (Stanford Design School)

number of government initiatives acknowledging traditional authorities and indigenous communities. Though at national level a unifying socio-political programme is pursued, diversity is equally celebrated and welcome. Meanwhile a split between ethnical groups can still be observed. "Ethnic entities in Namibia still live to a large extent separated from each other in own compartments, culturally and geographically. This is equally applicable in rural and urban areas"[4, p. 17]. This divide inevitably creates power imbalances between the groups which led to marginalisation of mostly two tribes, namely the San communities (also called Bushmen) and the OvaHimba. Both have been predominantly nomadic in the past.

Moreover, Namibia has experienced a vast increase in urbanization. Thus young people have been leaving their rural homes in search for better education. As a consequence, migrants who have been growing up amongst their tribes are now in a metropole, far away from home and the familiar. Although they regularly return back home they lose out on much of their cultural practices in which their values are rooted. Thus we are exploring the possibilities to re-connect the youth with their traditions in difficult current situations addressing the youth's concerns and needs.

San communities

According to Suzman, "The San community makes up 2% of the Namibian population, which is approximately a total between 30 000 – 33 000 San people. They are regarded as one of the most disadvantaged ethnic group compared to other groups in Namibia on almost every socio-economic indicator" [3].

The San have often been considered to be one ethnical group, while the San tribes differentiate themselves

through their languages which are: Hai//om, !Kung, Ju/'hoansi, Naro, !xoo, N/oha, #xao//ae and khwe. Most of the San communities are settled in the northern and eastern part of Namibia. The San youth in Windhoek have formed a non-profit non-governmental organisation called //Ana-Jeh San Trust. The name //Ana-Jeh is a word derived from !Kung, one of the San dialects which means "new light". The main aim is to promote the right to education and to preserve the cultural heritage of the San community through outreach to schools in the San communities and to conduct empowerment workshops with the youth in Windhoek

Design process

Under the umbrella of a European Union funded project a long term collaboration between the Faculty of Computing and Informatics at the Namibia University of Science and Technology and the //Ana-Jeh San Trust was established. In order to derive technology inspirations, we followed a design thinking approach (see side bar). We ran two explorative workshops with the San youth, of which we report only on one in this position paper.

Explorative workshop: Past, Present and Future

The purpose of the workshop was to empathize with the San youth, identify youth challenges and aspirations as well as their positions in relation to their past and their future. A number of activities were created to enable the youth to express those. The workshop was also intended to serve as a basis for the ideation phase. We made use of observation, notes and recordings during the workshop for post-situ analysis.

Sixteen San youth took part. The workshop was structured in several phases and temporalities. The energizer brought out the youth's current skills.

Design Themes

PRESERVATION AND ACCESS

Technology can subtly encourage the youth to preserve their ancestral advices and revisit them when they are in need of advice.

ENGAGEMENT

Technology will enable the youth to express their feelings in a form of stories.

REFLECTION

Technology can dwell in the peacefulness of the past and the youth can go back in time to connect with their elders to reflect more deeply on what they see, and feel.

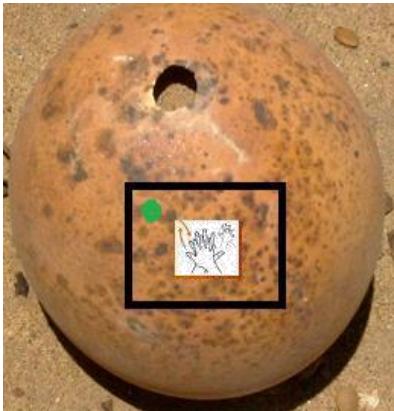


Figure 2, shows the ostrich egg system design

The second phase led the youth into a fantasy phase of having super powers and representing those in a tangible format using available scrap material and stationaries.

Then the real life challenges were depicted in rich pictures as groups and in phase 4 the virtual ancestors were called for help and advice. Last but not least all was to be combined in a group performance. These activities brought out a number of relevant issues such as skills the San youth have, e.g. singing, dancing and many others were named. The challenges centered a lot on basic needs of transport, food, safety, loneliness, and money to survive. While the ancestor advices were encouraging such as "Never Stop Believing in God, he is always there no matter what you are going through.", "Save money and make time for everything and help people in need". Amazing were the stories the groups wove together and the easiness of the San youth performing them, clearly showing their skills in performance and storytelling.

IDEATION

The workshop conducted with the San youth allowed us to gain insights on the importance of their culture and that they are susceptible to their ancestor's advice. "Recently there has been increasing attention paid to the role of community engagement with heritage, from facilitating the participation of various stakeholder groups in the safeguarding, preservation and communication of heritage to encouraging communities to record and share what they feel is of value to them" [2]. Thus inspired by their ancestral advice and stories, analysing the workshop data three design themes emerged (see side bar).

A preliminary design concepts inspired by these themes was developed.

Design Concepts

An ostrich egg device that will enable the youth to record challenges and corresponding advices provided by the elders was conceptualized (Figure 2). The design concept was also informed by Reitsma's story beads recording system, where she elegantly weaved traditional baskets and beads with modern RFID based recordings [5].

The Ostrich egg plays a vital role in the San Community. It is normally used as a means of food and storage of water. The shell is used for making beads, and these beads are a symbol of protection from diseases and bad spirits. The ostrich eggs value has also been expressed in different narratives by the San community as recorded by Candy Miller: "I once heard a San storyteller begin her tale by saying 'Let me crack open this egg to tell you...'" Pro: Eggs for nourishment, ostrich eggshell for water storage; stories for nourishment" [1, p.104]. And "to handle something like an ostrich egg as expressed by Leon Tsamkgao recorded by Miller in May 2013 [1, p.105].

Ostrich egg System Design

The Ostrich egg is a recording system that aims to record daily challenges and ancestral advices. It is a highly technological design that contains a server, database, a microphone and speakers and sensors that will detect the type of action to be done. Such as record, listen and stop. The technology that is inside the ostrich egg device recognizes the words and invites the user to either record an advice that is linked to a challenge by shaking the device or listen to an already existing advice by rubbing the surface of the egg. The ostrich egg device will be used whenever they need advice especially when they are

facing challenges. The ostrich egg device fits into the San community very well as it is a true representation of some of the items they use on a daily basis. Therefore, they can place it in their houses and use it whenever they need it, irrespective of where they stay.

The ostrich egg device will work by means of hand motion detection; the following procedures are to be followed:

To start recording: Shake the device ones. A red light will appear.

To listen: Rub on the device. A green light will appear

To finish recording or listening: tap twice on the device. A blue light will appear

Conclusion and Future work

In this position paper we have introduced the design research context and a preliminary design inspiration based on a workshop held with the San youth. We had the goal of both developing our understanding of the San youth through engagement and to gain design inspirations. Through continuous design interactions we have established the San youth's current position of their cultural practices and traditions. Currently a number of different prototypes are being developed to serve as technology probes in the next workshops with the San youth. Based on these and the new insights gained by the authors during CHI 2017 a number of cultural technologies will be co-developed.

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References

1. Candy Miller. 2015. Walking on Ostrich Eggshells: A Fictocritique on the Digital Transformation of Indigenous Folktales, Nicola Bidwell & Heike Winschiers-Theophilus (Ed.), At the Intersection of indigneous and traditional knowledge and technology design. Informing Science Press.
2. Fox Sarah and Christopher A. Le Dante. 2014. Community Historians: Scaffolding Community Engagement Through Culture and Heritage. Proc. of DIS 2014, New York: ACM, 785-794.
3. James Suzman. 2001. An Introduction to the Regional Assessment of the Status of the San in Southern Africa (Windhoek, Legal Assistance Centre, 2001)
4. Gerhard Töttemeyer, G. 2014. Namibia Today: Challenges and Obstacles to Reconciliation and Stability. Namibia Institute for Democracy.
5. Lizette Reitsma, 2015. Enabling Design to Disappear: The Design Process of StoryBeads, Nicola Bidwell & Heike Winschiers-Theophilus (Ed.), At the Intersection of indigneous and traditional knowledge and technology design. Informing Science Press.