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<https://orcid.org/0000-0001-7935-7368> and Kapuire, Gereon Koch (2016) A hermeneutic inquiry into user-created personas in different Namibian locales. In: 14th Participatory Design Conference, 15-19 Aug 2016, Aarhus, Denmark.

<http://dx.doi.org/10.1145/2940299.2940310>

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A Hermeneutic Inquiry into User-Created Personas in different Namibian locales

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ABSTRACT

Persona is a tool broadly used in technology design to support communicational interactions between designers and users. Different Persona types and methods have evolved mostly in the Global North, and been partially deployed in the Global South every so often in its original User-Centred Design methodology. We postulate persona conceptualizations are expected to differ across cultures. We demonstrate this with an exploratory-case study on user-created persona co-designed with four Namibian ethnic groups: ovaHerero, Ovambo, ovaHimba and Khoisan. We follow a hermeneutic inquiry approach to discern cultural nuances from diverse human conducts. Findings reveal diverse self-representations whereby for each ethnic group results emerge in unlike fashions, viewpoints, recounts and storylines. This paper ultimately argues User-Created Persona as a potentially valid approach for pursuing cross-cultural depictions of personas that communicate cultural features and user experiences paramount to designing acceptable and gratifying technologies in dissimilar locales.

CCS Concepts

CCS → Human-centered computing → Interaction design → Interaction design process and methods → Scenario-based

Author Keywords

Participatory Design, Personas, User-Created Persona, UX, Cultural Usability, Cross-Cultural Design.

1. INTRODUCTION

Persona is a communicational tool typically used within User-Centred Design (UCD), meaning it is a tool created and positioned by design professionals. Its current widespread use and support among designers contrasts with the lack of persona empirical studies [29]. Experiential accounts are scarcer in the Global South [26], where persona is mainly situated following UCD concords [3]. However, operating with westerly originated methodologies such as UCD encourages westernised ways of thinking [47]. This widens the prospect of using assumptions in cross-cultural design [48], and in turn it jeopardises the persona success in communicating reliable user data to design processes. In fact research in the very Global North often reveals [12], speculates [26], or overtly states [6] the use of guesstimates and designers' personal experiences in persona conceptualisations. Brought about to contexts where technology designs have been less explored, misrepresentations might result in detrimental technological designs unaligned with cultures, traditions and

ways of living, all due to miscommunicated grounded user-data.

Because conceptualizations of individuals and groups widely differ across cultures [13], we argue personas can be more socially and culturally –or ethnically– nuanced due to the varied ways humans live and perform across the World. Our research departs from persona projects arranged in Participatory Design (PD) as promoters of values of democracy, enablement, equanimity and equality in organically including users in the inception, construction or deployment of personas. We then propose the co-design of user representations via User-Created Persona (UCP) while exploring apt methodological approaches.

This research presents a four case-study of persona co-creations with ovaHerero, Ovambo, ovaHimba and Khoisan ethnic groups in the context of existing technology co-design projects across Namibia. Our reflections are framed in a hermeneutical perspective of human action treated as having a semantic and textual structure of its own [30, 33]. A hermeneutical angle tries to study and describe meaningful human phenomena as free as possible from theoretical norms, relying instead on a practical understanding of action. Knowledge in hermeneutic inquiry is hence originated via everyday practical involvement with tools, artefacts and people, in our case prompted with UCP. In a seminal study of African culture from a hermeneutic lens, [24] inquiry on the Igbo culture by interpreting local symbolic structures following Ricoeur's method [33], which recognises the subjective space of all of those involved in the inquiry. In this context meaning is co-created taking into account local historical perspectives of sense making. Meaning co-creation is central to our enquiry in UCP.

Our interpretations of UCP attempt to depict a myriad of self-representations resulting in common features but also unlike ways, recounts and storylines depending on ethnic groups and to whom they offer such portrayals. This shows diverse conceptualisations of self-representations affecting the creation of persona artefacts. This paper hence introduces UCD persona first. Next it distinguishes and remarks literature on persona in PD in different contexts. UCP and its rationale are then introduced and followed by a detailed presentation of the four case studies. A hermeneutical angle subsequently interprets the results. Last we conclude that UCPs are a potentially effective approach to obtain and communicate particular cultural aspects vital to designing acceptable, useful and gratifying technologies.

2. PERSONAS AROUND THE GLOBE

2.1 Personas originated in UCD

Persona is a tool typically framed within UCD, and generally made of a name, a written narrative, and an ID-size close-up picture of a person [31]. It works as a communicational proxy of a group of individuals sharing commonalities about needs, requests and desires on technological products or services [32]. Persona most vital benefits range from supporting focus on [12], and creating empathy with end-users [28]; aiding design partakers to communicate at the different design stages [16]; complementing scenarios and PD [31], or taking the social and

political nature of design to the surface [15]. However there is a lack of scientific reliability in persona [14]; a tendency for designers to use implicit [12] or explicit [6] assumptions instead of grounded data [28], and a limited democratic involvement of laypeople in personas' conceptualisations and assemblies [2]. As a result of its own strengths and flaws many look at persona with reserve and a division in opinions [46].

However the major criticism of UCD in general, and of persona in particular, is that they do not endow laypeople with design tools and mechanisms [3] to convey cultural and contextual User Experiences (UX) in their own terms [10], and so to gain full appropriation of the design process [48].

2.2 Personas in PD: a pathway to “people”

At the turn of the 21st Century a shift from UCD into PD was a clear conceptualisation for Sanders [36, p.1], who argued to involve non-designers in design organically and democratically:

“new ways of thinking, feeling and working as the participatory experience is a method or set of methodologies as much as a mindset and an attitude about people having something to offer to the design process they can both articulate and create when given appropriate tools with which to express themselves”.

From 2002 personas in PD projects begun to include users and others in either persona inception [23], or assemblies [16], or in its deployment [2]. We find different lines of Personas in PD as: (1) object of conversation in design, (2) validation of designs via designer-created personas, and as (3) user-created personas.

2.3 Personas in Western Co-Design Settings

A meticulous literature review reveals an array of PD projects involving personas in the Global North that emerged since 2002. In the US, [31] introduced *persona for mass-market software development* and stated success in such proceeding, particularly in steadily facilitating communication amid many stakeholders. On the contrary [35] presented *persona for mass-market software development* in Sweden, where patterns of power and dominance made the personas to “confusingly” disintegrate from the project as initially devised. In UK [8] provided end-users with “pastiche scenarios” that brought out design issues otherwise over-sighted. Early *persona sketches* created and validated by end-users aided to defy software developers' UCD personas. In UK too [23] presented *low-cost fantasy persona* co-designed with elders to inspire confidence towards digital tools, while feeding desires to behave in new ways via fantasizing technologies using props [21]. Early design requirements and implicit goals based on such desires materialised [23]. In Denmark [2] explored persona co-design in the Public Services scaffolding from emotions to create empathy towards end-users. Making pragmatic use of oral testimonies provided by laypeople quizzed in a shopping mall, *persona embodiments* rendered users' needs and requests. While enabling the social and political nature of design decision-making to the surface, these persona artefacts, however, succumbed against power and non-participatory interests from top management and staff, reinforcing the need for deeper study and refinement on the plasticity and validity of persona co-designs in such settings. Also in Denmark [27] assembled users and designers to position *persona co-design for product innovation* and so facilitate communication among stakeholders. In a role-play activity participants acted out personas that provided a sound understanding of users' needs and aspirations via visualizations, empathetic and emotional elements. In Holland [43] drew upon *children persona co-design* to ground data from grandparents to provide on their goals, wants and traits. The researcher acted as a facilitator while children elicited needs from grandparents, supported by the implicit empathetic bond from the family ties. Children first integrated requirements into a storyline on a persona-template and grounded personas in a concluding co-

design gathering. In Australia, [46] jointly co-designed *personas with healthcare experts*. Despite not including patients' per-se, this procedure assisted communicational understandings about patients between other partakers involved in the design.

From all cases above personas seem to arise as a ‘lightweight’ artefact for communicating ‘heavyweight’ insights [46], and whereby immersive, partaken, hands-on co-design practices focus upon and convey persona benefits as stated in literature. Projects also assert their personas satisfy the ‘agreed’ definition.

Placing persona cross-culturally, though, conscious and caring designers may well ask themselves: what may persona bring to technology design in places such as the Global South if users come embodied via a westerly imagined utensil?

2.4 Personas going East and South

Nielsen [26] questions if the persona initially coined by Cooper [6] may be depicted differently in milieus beyond Global North. So-far the common tactic in non-western projects involving personas is to gather user-data and create personas via adopted UCD concords from persona's original Western inceptions [3]. In a cross-cultural probe [26] finds ‘stereotypical’ portrayals of people via photo depictions of westerly businessmen/women.

In India, [9] use storytelling in a project to elicit life-stories useful for researchers to craft personas. They though claim such personas are not grounded enough to aid software design as cross-cultural misperceptions may occur. Scaffolding from [9], [37] proposes *persona for UX* to pursue Information Communication Technologies for development. Yet as claimed by [26] mapping a western persona oratory from the outset reinforces rhetorical agendas [11] of ‘the other’ versus ‘us’ [13], which endures Ubicomp's colonial impulses in westerly own terms [10] instead of in users' loci and footings. ‘The other’ and ‘us’ in representation returns to India with [44] crafting personas via an ethnography on villagers' water consumption, and locally validating personas by making a film with the users. A more radical approach in India comes from Chavan, who taps into local people's emotional attachment to Bollywood actors via *Bollywood Personas* in usability testing scenarios [5].

In the periphery of Malaysia's capital [18] explores persona co-design with elders via focus groups to introduce computers. Though no reasons detailed [18] states the usefulness of persona to elicit cultural factors relevant to suitable technology design.

In a frugal redesign of novelty prosthetics for poor amputees in Vietnam, Lecomte et al. restate *local intelligences* as organic indicators for revision and adoption in persona creation [20]. Personas here depict dimensions of the ecosystem as key, while authors claim a need for culturally situated awareness to answer *new questions on the personas role and into collaboration for articulating implicit, local, embedded and grassroots expertise with more formalized information and methods* [20, p. 1].

Working with Long Lamai youth in the Malaysian jungle, [49] adapt personas within a PD project by enabling young participants to engage in SMS-composing without *losing face*. Researchers requested personas to possess a name, a gender and typical characteristics of youth and elders in the surroundings. The personas youth made aided eliciting youth's communicational needs and styles first, then for designers to proceed with figuring suitable technological affordances to co-design an SMS App based on Penan's Oroo' signs' language.

Whether in the North, West, South or East constructing persona artefacts encompasses crucial cultural nuances. To find out such distinctions we pursuit persona as research foci via designerly input by laypeople in crafting self-representations in urban and pastoral Namibia by co-designing through user-created persona.

2.5 User-Created Persona (UCP)

It is established and illustrated above that design methods, tools and techniques differ across cultures [45, 48]. They are influenced by the sites where they originated, thus data collected using them gets stained if/when deployed in further sites [5].

Where there is a scarcity on persona design in non-western sites, such as in Namibia, we argue to involve laypeople organically and participatorily in decoding cultural nuances so as to find out (1) how laypeople take-on, understand and co-design personas aiming to representing their needs, requirements and aspirations; (2) what cultural assumptions may come up, and how they differ from or assimilate western principles, guidelines and concords in the field of life, and also in the one of design, as well as (3) whether the persona co-design process, undertaken in full by laypeople, may create legit proxies useful to technology design. This project poses such questions to explore further possible and situated encodings of persona representations across cultures.

To hold a fair cross-cultural designerly dialogue we promote UCP as a self-representation by the people technologies are aimed for, rather than as an interpretation by design professions.

Hence UCP guides a culturally aware, open-ended and minded design practice working as an organic and dynamic utensil part of the users' designerly arsenal. UCP aims to assist laypeople to maintain the greatest control over the design of representational means that strive to convey technological genuine needs, requirements and ambitions to users' most truthful terms. UCP stands as a new tool encompassing methods and representational content creation with a social agenda of cross-world [persona] alliance in resistance to dominant market rhetoric [22] and to historical plots of colonial subjugation via *developing countries'* recounts [11] and misrepresentations of "the other" [13].

3. PERSONAS' ODYSSEY IN NAMIBIA

3.1 Namibia's Multiculturalism Today

Driving a peaceful reconciliation and unifying socio-political agenda, Namibia can pride itself with an extremely rich ethnic diversity and multifaceted cultural heritage. Diverse ethnicities manifest with delight their cultural practices, languages and worldviews in their daily lives together. This is promoted via government initiatives recognizing traditions and cultures [42]. On the other hand, Namibia today still experiences divide due to ethnocentrism and tribalism hampering a national social cohesion, as inter and intra-tribal rivalries such as those amid ovaHerero, Ovambo and ovaHimba speaking communities are nowadays still strong [42]. As a result, *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* [42, p. 17]. This separation also displays in group formations shown via communicational accounts where the 'discursive turn' produced by language becomes the main conduit to express social identities in general and of ethnicity in particular [40].

It can though be argued that *essentialist accounts of ethnicity have lost ground following the upsurge of constructionist approaches, which regard ethnicity as both a negotiable boundary and a situational reflection of interactional settings. But the ongoing sociological debate on the relationship between structure and agency in identification processes suggests that, even where ethnicity is situational and negotiable, its potential for dissolving or being subordinated to other social identities is to a large extent constricted by historical patterns of inter-group power relations* [40, p. 976].

3.2 Personification of Namibia's Ethnicities

As a cross-cultural societal self-representational artefact, UCP is bound to show dissimilar across Namibia's diverse populations.

To illustrate this point, and in the attempt to answer the research questions proposed in section 2.5 above, four ethnical groups, namely ovaHerero, Ovambo, ovaHimba and Khoisan took part in different persona probing sessions in different localities. What we aim is exploring the conceptualisations and potential representations of persona by each of these communities, rather than as an aggregation of individual participants in UCD persona. In the following sections several persona sessions held with each community are introduced. They are part of a set of ongoing PD projects by the local researchers. In all cases image and sound got recorded for further analysis, while local researchers facilitated and translated sittings and debates. Interpretations are based on local contextual knowledge.

4. OVAHERERO PERSONA SESSIONS

4.1 Context

This section details three different persona sessions held in three different villages in the Omaheke region in the East of Namibia, namely Erindiroukambe, Otjinene, and Okomakuara. One mediation occurred in each locality between 2014 and 2015. Sessions are described in chronological order, accounting for the methodological learnings and ensuing changes of methods.

4.1.1 OvaHerero Background

OvaHerero conform about 10% of Namibia's people (200 000), though settlements are also found in Botswana. They speak Otjiherero, a Bantu language. To our knowledge ovaHerero have not developed any historic, artistic or literary heritage, though they dearly, jointly, proudly (and some openly state "stubbornly") hold on to their culture, customs and traditions. These are largely compounded of pastoral lives, sacred places and rituals, and typical attires. Literature on ovaHerero's past is scarce and subjected to accounts of the German genocide committed between 1904 and 1909 [38]. Contemporary ovaHerero are mostly concerned with their own kinships and wealth expressed in cattle counts, even though it is only the elder and some infants who usually reside in rural areas, while other family members "temporarily" migrated to urban areas.

4.2 Co-Designing Personas per-se

4.2.1 Set-up

Erindiroukambe is a village about 400 kilometres from the capital city Windhoek. It is a typical Herero village with 18 homesteads and a total of 200 dwellers amid elders, toddlers and few unemployed youth residing in the village permanently [19]. Four local male elders and one male youngster met outside the local researcher's homestead. All but one elder are co-designers of Indigenous Knowledge (IK) technologies for 7 years now as part of a long-term project [19]. Thus they have participated in multiple co-design sessions along the process. Three local and one foreign researcher mediated the session.

4.2.2 Method

Local researchers explained the general concept of persona to the local co-designers. The aim was to explore how they would interpret first and then represent personas of their own. The overview by the foreign researcher extended into an interview-like discussion about customs and contextual factors. Local researchers interceded through continuous prompting and re-directing to attempt to focalise local depictions of personas.

4.2.3 Outcome

After positioning common ovaHerero practices and spatial affordances (as modelled in previous systems, see [34]) represented by objects (Figure 3), the focus came back to personas rather than the context alone. One of the elders talked about "the elder" being represented by a hat, stick and chair (Figure 2). In an attempt to scaffold the topic toward traits and

characteristics, participants posed distinct features to each other. They branded themselves with one trait (Figs. 1 & 2): the elder, the young, the doctor -who can fix all, the naughty, the funny.



Fig. 1. One Participant, One Trait; Fig. 2. An elder's typical representation: hat, stick, chair; Fig. 3. Agents & Objects Hierarchically arranged in a Typical Homestead.

4.2.4 Lessons Learnt

Neither ovaHerero participants nor local ovaHerero researchers initially understood the concept of personas. Thus the attempt to co-create personas took much prompting and directing that, in turn, led to self-stereotyping and to false self-representations where partakers depicted themselves using one trait descriptions – one of the common blunders in persona creation [28, p. 62].

After a local researcher's redirection we figured out a tangible exemplification based on a local appreciation of elements: co-constructing a new car out of diverse vehicles (i.e. features of a Ford 4x4 vs. Mitsubishi or Toyota). This third-party depiction of traits, needs and distinct features usual in persona gave local co-designers a clearer understanding on what was meant by personas, hence a more accurate accepting.

Third-party depictions suited clear exploring in the next session.

4.3 Telling School Girl & Woman Personas

4.3.1 Set-Up

Otjinene is located 360 kilometres away from Windhoek. With a continuous population increase it has recently become a town of more than 2000. Otjinene is surrounded by many small villages highly dependent on its infrastructures such as schools, clinics, bank, shops and a gas station. This session involved a local female elder who had earlier engaged with us in a Wikipedia research project, and it occurred in the yard of her homestead.

4.3.2 Method

The objective was to propose the elder to narrate a prompted portrait of a "school-girl" first, and then years later as "woman". The aim was to entice third-party descriptions rather than refer to the first person. This got repurposed into a tangible scenario.

4.3.3 Outcome

To model an isolated person resulted challenging for the elder. Exemplifying the girl alone needed to be embedded, thus a concrete scenario for the girl got proposed by the researchers.

Such an account triggered an elucidation mainly compounded of emotions such as the girl looking worried, playful, or being spotlighted by other girls. On physical aspects the description solely elicited aspects on being well-groomed. The girl turned-into-woman would then carry personality traits from her youth such as either drinking habits or politeness and respect. Asked

for a further physical depiction, the participant drew and coloured both (Figures 4 & 5), while she reiterated the girl well-groomed and wearing a flawless school attire; and the woman on a traditional ovaHerero dress with her arm up as a symbol of combative marching – an explicit form of defensiveness from, and defiance versus colonial repressiveness verified in other ovaHerero sites (arm-up for adult female marching in Figure 5).



Figure 4. Participant Drawing a School Girl and a Woman; Figure 5. Drawings of the School Girl and the Woman.

Asked on how she would transfer the facts stated in the session, she stated ovaHerero are orally-bound thus she could repeat it all again for researchers to write it and take it with the drawings.

4.3.4 Lesson Learnt

Isolated "third-person" imageries still showed challenging here, while an in-situ implementation of a scenario triggered a successful conceptualisation by the elder of personas based on traits and characteristics, and further illustrated in the drawings.

Third-party descriptions via prompt-narratives are now sought-for in a further locale for comparisons and further validation.

4.4 Bride & Groom Archetypical Personas

4.4.1 Set-up

Okomakuara is a village in the Ovitoto communal area, 110 kilometres away from the capital Windhoek. Between elders and youth they make a total population of 35. Some dwellers have participated in previous and ongoing projects such as a Facebook study and in the development of a crowdsourcing platform to gather IK. However the three male and female elder who joined this session had never engaged in prior co-design.

4.4.2 Method

Encouraged by outcomes based on TV characters as persona conceptualisations with Ovambo participants (cases below in 5), participants were invited to narrate a story of choice that could possibly be seen on TV once characters were suitably shaped.

4.4.3 Outcome

Participants spontaneously narrated how a young single male and female got pregnant. They explained the way the couple would go on informing families first and taking the subsequent responsibilities on the pregnancy; this leading to marriage, and how bride and groom would ideally be and behave regarding traits, behaviours, skills learnt and gained, as well as duties to cultivate once married. Participants then detailed the practise of "the stick" of the Elder (father of the bride), which would be given to the bride on her journey to her in-laws, and brought back later. Participants fetched a number of sticks from the house owner to explain the diverse connotations these do carry.

4.4.4 Lessons Learnt

The proposal of a TV movie was not well understood in contrast to narrating a story of their choice. Thus the persona embedded in a narrative has shown the most intuitive to the village elders, providing so meaningful data and trade for persona creations. The session also revealed further detail on the importance the stick and the dissimilar implicit meanings it carries with. However, asked on the marriage narrative recounted participants

concurrent this is no more a reality but *the way it was* and should be in the OvaHerero culture. They acknowledged youth these days have left for Windhoek and are also changing habits and customs. They though stated that when visiting the village, youth must accommodate conducts to the local and to traditions.

5. OVAMBO PERSONA SESSIONS

5.1 Context

This section presents two persona sessions with participants from the Ovambo ethnic group in Havana, an informal settlement located in the periphery of Windhoek. Havana is mostly dwelt by Ovambo migrants from the North who come to the city in search of jobs and entrepreneurial opportunities. The persona sessions were pre-ceded and post-ceded by numerous other design interventions with some of the youth in Havana.

5.1.1 Ovambo Background

With settlements also in Southern Angola, Ovambo are compounded of 12 culturally-related peoples. They speak Oshiwambo, a Bantu language like Otjiherero. Ovambo form around 80% of the citizenships in Namibia, the largest ethnic group. Ovambo is a term argued to originate from neighbouring ovaHerero, meaning either *wealthy people*, “ovajamba”, or people with the cattle posts (alike to ovaHerero, a valued good reflecting wealth), which historically marks Ovambo’s fiscal fortune and political rule [7]. Their economy is based on a mix of agriculture, mainly *mahangu* (pearl millet), sorghum and beans, and animal husbandry (cattle), supplemented by fishing in shallow pools and watercourses called *oshanas*. Unlike ovaHerero, Ovambo hold a rich cultural and artistic heritage of rituals, traditions, customs, and Arts. Ovambo are found in all economic sectors, ruling Namibia’s entrepreneurial activities.

5.2 Persona Prostitutes & Gangs in the Slum

5.2.1 Set-up

Both sessions took place at the Kabila Youth Centre (KYC) in Havana, where youth engaged in a 2-year funded R&D community outreach project to develop technology and services for the marginalized. Seven participants took part of the persona session, though previous to this they had walked researchers through the vicinity to point their living conditions as generally lacking public services like water, electricity or sanitation.

5.2.2 Method

The objective of the session was to identify local representatives of persons in Havana. Thus participants were requested to create local characters for a reality-based TV-series based on current and planned film recordings of these and other sessions.

Participants were divided in two groups provided with pens, markers, newspapers, magazines and A4/A1 paper, and after 20 minutes each group came about with a personified narrative.

5.2.3 Outcome

A group created a written *Eddy*, a 19 year-old youth who came to Windhoek at 16, and that currently lives in a shanty –cooking with firewood and having no electricity or water. The other group produced a collage from press cut-outs and handwritings entitled *Unemployed Youth*. The collage involved *collective characters and joint-background scenarios telling why and how local females* (i.e. Tselestina and her friend) *and males* (i.e. Alomgombe and Johaness) *turn into prostitutes & gang members through time and unfavourable conditions in the vicinity*.

5.2.4 Lessons Learnt

Depicting “Eddy” became a brief written realistic description of a Havana inhabitant. Yet it delivered no further detail about situational roots, Eddy’s life effects, or any of his ambitions. The *Unemployed Youth* collage, though, provided interpersonal

causes and consequential results for the central characters via an associational narrative.

Participants easily got the *personas as actors* approach, deriving depictions of “realistic” personas. However since the dissatisfying context of the informal settlement has surfaced in many other sessions with youth attempting to bring about change in Havana, we seek for an additional persona grounding.

5.3 Grounding the Prostitutes & Gangs

5.3.1 Set-up

This session scaffold from the above at the KYC to validate first, and then ground the characters previously created. Sixteen participants attended, with a fair overlap of youth from the previous meeting. The session was part of a wider contextual mapping within a technology co-design project.

5.3.2 Method

Participants got reminded of, or introduced to the initial personas before splitting into 2 groups provided with markers, pens, Sticky-Notes™ and A1-paper. A group was compounded of children and teens and facilitated by a researcher. The other group were older participants with no facilitator.

5.3.3 Outcome

The youngsters reuse results in the *Unemployed Youth* collage and built on them via Sticky-Notes™ they tucked-in (Figure 6). They first incurred into oral accounts of what a particular persona would say or think sometimes, and then decided relevant themes and recounts to tuck-in to the existing collage.



Figure 6. Persona collage: grounding prostitutes & gangs.

The group consisting of elder participants laid anew the challenges from the initial characters, and came up with a mural of political issues directly related to topics previously elicited.

5.3.4 Lessons Learnt

Proposing a TV-based approach provided of a clear mutual aim and engagement, as well as instant reciprocity and a sense of gratification in the provision of ongoing fun and a tangible outcome by filming these and the further sessions. This enters into a debate with the way TV and film characters enter the designer’s mind toward the co-designing of personas [16].

Although the second group did not provide further insights to existing characters, debating politics conferred other partakers like local politicians and the police, and enticed this group to plan such interactions to co-tackle issues at hand by presenting to such stakeholders the personas resulting from these sessions.

6. OVAHIMBA PERSONA SESSIONS

6.1 Context

This segment builds on two persona sessions in 2015 with ovaHimba communities in two villages in the Kunene area, Ohandungu and Otjise respectively. Interventions sparked from

steady research visits where an IK Crowdsourcing system is co-designed and co-developed to enable rural Namibians to gather, store, organise, and share their IK [39]. The aim was to explore expressions of UX using storytelling among other procedures.

6.1.1 OvaHimba Background

OvaHimba are held as a most peculiar tribe due to their way of life, rituals, dances, attire and hairdos. They conform an estimated 50 000 people, largely settled in the Kunene region, north-west of Namibia, with small settlements also in Southern Angola. Close kin to ovaHerero, they also speak Otjiherero. Their means of sustenance and trade are cattle and agriculture. Villages are wooden-fenced compounds of huts with a sacred fire (*kraal*) at the centre of the village. Largely semi-nomadic, ovaHimba are well-aware of technology and *the developed world*, becoming today more economically reliant on their self-representations of authenticity. Their attraction-like originality appeals visitors and film crews who expose ovaHimba to latest technological gizmos and that, in return, bring some financial prosperity for displaying their cultural rituals to others out there.

6.2 Bride & Groom Personas in Ohandungu

6.2.1 Set-up

This session was held in Ohandungu, a village about 30km north of Opuwo. It involved six local female with kids & babies, an elder male, as well as a local facilitator and five researchers. No participant had previously taken part in PD sessions with us.

6.2.2 Method

After a welcoming protocol participants got enticed to tell a local life scene as they would imagine it to be depicted on TV. The eldest female took the lead while the other participants added-in details along the narrative.

6.2.3 Outcome

The female elder spontaneously began narrating the day before, the very day, and day after a traditional ovaHimba wedding (Figure 7). The telling of the story came as a circular provision of sequencing, scenery, apparels and props, which the lead and another elder female and the elder male tore apart and shaped in twists and turns until it got entirely clear and well-organised.



Figure 7. Wedding narration in Ohandungu.

They chose characters and gave them social roles as referential depictions (i.e. an ovaHerero researcher as *The Herero uncle* who, being called, goes to the kraal where the wedding celebrates / [A new] *born like this one, then you just say this one is for Kambambatjii* (name of the brother's child), *when they grow up they will marry, that will then be his wife* / [the bride] *makes herself well up and stays inside the house and not among people. She will be fed in the house...*); attired to suit tradition (i.e. *in the presence of people she will not eat and she will put her things [ornaments] back*), and local traits (i.e. *Uncle is a sat, silent individual expressing himself solely by deep humming sounds* / [Bride] *sitting is in the manner of fearing people; that she should not sit with like men, for instance, and should know that this is but the culture in our culture*).

Participants also conveyed sophistication in fantasising next scenes of the story by placing themselves in it, and at times, in enticing spectators to belief in the first person performative

nature of particular moments in the narration (i.e. the elder suddenly asked: *Who are those? Who is walking? I am going from my place to the marriage place*). Relevant ornaments depicting marital statuses were also detailed as these evolved in the storyline (i.e. *Now, she can put all that on and wear all that when you are home. When there are visitors like you, then she can wear like this. She is a newly wedded*), as well as rationale and protocols of tradition in marriage –with the bride being *shy and humble*, and challenges like young husbands running away –to have an affair– from the household after marriage. Emotions, reactions, traits and actions expected of the married girl also emerged: *as she is passing by people, she will love to be told “you now are a grown woman”*. And as she walks, she won't elevate her arms as she'll be walking holding her dress...

6.2.4 Lessons Learnt

The story as-seen-on TV, though it begun as story-told, it ended somewhat entangled, yet eventually completed through a set of dismembered scenes from various viewpoints that provided a meaningful sequential narrative. This partially came as actions with barely any feelings or emotions provided to the characters, despite purposeful attempts from researchers in their enquiring.

Based on these findings, the next session aims to find how ovaHimba understand their social structure and those forming it.

6.3 Personas in a Collective Effort

6.3.1 Set-up

This session took place in Otjise with 2 male elders and 4 youth part of an ongoing design project where the main elder had co-designed the latest interface of the IK Crowdsourcing tool [39].

6.3.2 Method

A focus-group discussion explored how participants understood their social structure and the people forming it. Researchers further proposed to think of scenarios where each group would utilise the IK Crowdsourcing system proposed in an earlier usability testing, and how this would function for each group.

6.3.3 Outcome

Participants stated males and females as forming their social structure with roles explicitly being: (1)elderly male organising and proposing the daily chores; (2)boys completing tasks like fixing and preparing, and (3)women cooking and collecting firewood and water. The session corroborated Ohandungu's findings in that age is not as vital as marital status is.

When thinking of scenarios where each group –elderly male, boys and women– would utilise the IK Crowdsourcing tool, the main elder reversed the individualisation of the query and used it as a community collectivisation via a scenario about a funeral, and how each member in the communal complementary functioned together (*pamue*) according to culture, ritual and expected roles. He went on exemplifying young males as the catalysers of slaughtering, skinning and cutting wood. Although when asked about differences amid younger and older female, such differentiation among ages got once again reversed, and stated as that they all provide same amounts of effort, despite younger female are often assistance to elder ones.

Then the main kin affected, the elder typified himself, would call upon the cousins; *then my elder father that I call on (ritually), then any other person like a neighbour we live together, I tell them about this “wedding”...*

Swapping words from funeral to wedding was seemingly purposeful, as the elder continued stating that *the thing that makes us work together is for us to help each other, regardless the specific event, is that love to console, and to give you love, so that you don't think too much. The cow is slaughtered after realising that people who gathered here need to eat –then the*

cow is slaughtered. He finally stated, *but they* [the mourners / nuptial guests] *don't gather for the cow, they come to show love.*

Referring back to the technology tool, the elder stated that although elders are more likely to use it according to intelligence and youngsters more prompted to ability, what it finally counts is the will to use the tool, and to learn.

6.3.4 Lessons Learnt

The focus group approach with an entry point via participants' field of expertise, namely their own cultural structures, led participants toward technology usage scenarios fruitful in defining collective representations of defined groups of people. These scenario creations confirm a co-design skill acquired, as participants have now learnt to draw on examples in their cultural settings and derive them to scenarios of technology use.

7. Khoisan Persona Sessions

7.1 Context

This segment presents two research interventions carried out in Windhoek in 2015 as part of an international research project with Khoisan youth to develop participatory tools for human development. The aim is to enable transformational change with the Khoisan youth and the co-creation of new services, careers and support infrastructures to achieve sustainable livelihoods and wellbeing. The object of the sessions was to explore self-expressions and self-representations using different approaches.

7.1.1 Khoisan Background

Namibia is currently home to an estimate of 30 000 to 33 000 Khoisan speakers, less than 2% of the national population. Khoisan populations are distributed through the north and east, with the majority living in commercial farming and communal areas where they form small minority populations [41]. Khoisan or "Bushmen" are most researched people as archetypical societies of nomadic hunters and gatherers. The term San has been coined by non-San to group different tribes speaking dissimilar languages under one label [41]. The majority of labels used to refer to them (including "San" and "Bushmen") are etymologically pejorative and evoke negative associations such as "incapable", "unreliable", "drunken", "primitive", "childlike" and hence incapable of making adult decisions on their own. More positively they are also believed to be "technically gifted", "artistic", "clever", "skilled hunters", "powerful healers" [41]. As one of the "indigenous minorities" in Namibia, the Khoisan have received much international attention, and recently more local government initiatives have been launched to combat the socio-economical and often educational marginalization.

7.2 Masks

7.2.1 Set-up

A one day workshop was organized at a University where urban Khoisan youth got invited. A mix of foreign and local researchers facilitated the workshop. The main aim was to facilitate self-representation and relations within everyday life.

7.2.2 Method

Participants first played a game, *Anonymity*: Wearing a mask (i.e. a paper plate – Figure 8a) and a blank piece of A4-paper tucked-in to their backs, instructions got given as to: (1)stand up; (2)run around; (3)stop as requested; (4)get to the closet person, and (5)write a phrase on the A4 built-on: (a)I am proud of; (b)I feel lucky for; (c)I'd love to; (d)I want to change.

Next they played *Copy&Paste*: (6)sketch ten things in your life; (7)ten people too; (8)draw/re-draw things & people; (9)cut them out; (10)paste them to a collective wall collage (Figure 8b); (11)tell through objects and people, (12)make masks anew on you (each individual as themselves) and the stories (Figure 8c).

7.2.3 Outcome

Participants provided a common theme (a)I am proud of *been a Khoisan*; (d)I want to change *discrimination vs. Khoisan*; *how people think*; *defend rights of people, especially Khoisan*; *everybody's life*; *how the youth uses Social Media platforms*; *people who use drugs and people who abuse to better live*. Further accounts on *career goals*, *families and feelings* also arose on (c)I love to and (b)I feel lucky for, and in the ten images and people they initially crafted on paper and cut out.

Due to time constraints participants cobbled together a mapping on who "they" were [non-specified if individuals/group] within settings and things depicted in wall stories and via the masks.



Figures 8a. Individual Mask (bottom left), 8b. Collective Wall (centre), 8c. Final Mask detailed (bottom right).

7.2.4 Lessons Learnt

Participants got on well with the session, seemingly enjoyed it, and mingled amid themselves and researchers with no difficulty. However the results were lacking depth on a content level while being rather an artistic self-representation within the context.

7.3 Mixed Youth Day

7.3.1 Set-up

This session came as celebratory of successes of ongoing youth projects. Sixty-three primarily youth gathered in a workshop by Marlon Parker from RLabs South Africa, who proposed dividing in groups to debate and present *Youth Unemployment*.

7.3.1.1 Method

The session was multi-culturally populated and fused in groups. A group of Khoisan got willingly together at a table and remained so for the length of the session. Groups were first invited to answer *why we have youth unemployment in Namibia*, and then continuously confronted with further "why" queries.

7.3.2 Outcome

The following sequence shows the answer/question flow by the Khoisan assembly. *Why are you uneducated? Why are you discriminated and bullied? Why are you uncivilised? Why are you not exposed to technology and modern lifestyle? Why are you afraid to try and explore new things? Why are you exploited? Why are you the weak tribe in the world?*

7.3.3 Lessons Learnt

The Khoisan attending a mixed workshop clustered themselves and thematised their marginalization; contrary to the Mask session where current life and desires were readily thematised.

8. Hermeneutic Interpretations

Our approach to interpretation in these sessions is vitally hermeneutic, as it does not try to impose any Western pre-conceptions of what a 'user' is and how it should be embodied. Instead it searches for meaning via a process of dialogue and emic reading of artefacts and practices involved in the sessions.

“The end product of a hermeneutic inquiry -an interpretive account- is more modest in its aims than is a formal set of rules or a causal law, but at the same time it is, I believe, subtle and complex, intellectually satisfying, and more appropriate to human action, embracing the historical openness, the ambiguity and opacity, the deceptions, dangers, and delights that action manifests” [30, p. 1092].

According to Heidegger [17] practical involvement occurs via three modes of engagement: (1) Ready-to-hand mode: this is the basic mode of engagement in everyday activities. Rather than being aware of the tools and artefacts we use, these are blended into the situation in which we are engaged and experienced, structured by our history and tradition. (2) Unready-to-hand mode: this mode occurs after a *breakdown* or upset in the situation that interrupt the flow of actions in relation to the desired goal. In this mode certain aspects of our practice become problematic and therefore the source of the breakdown becomes salient in the context of a particular situation. (3) Present-at-hand mode: this mode is typical of rationalist approaches, where once we cannot resolve a breakdown in unready-to-hand mode, there is a search for causal explanations and detached objective analysis of the situation. In this mode we stop, step back to find our concerns in interacting with others.

A key task of the hermeneutic method is to push ready-to-hand understanding into the unready-to-hand mode and to make it accessible to thematic description [30]. Our challenge was then to facilitate the co-creation of personas drawing on knowledge in ‘ready-to-hand’ mode, i.e. using elements from the local culture and everyday practice to obtain artefacts re-presenting potential users of technology. However accessing and picturing this knowledge was easier in situations of breakdown where ‘unready-to-hand mode’ came into play. Our interventions intentionally and unintentionally created this type of spaces ‘pushing’ into ‘unready-to-hand’ engagement mode.

8.1 Ethnical Signifiers: Symbols & Values

Interpreting and validating personas within local understandings of cultural practices is demonstrated via the advent of themes.

8.1.1 Context, Values and Signifiers

The spatial context and traditional values and signifiers emerge in ovaHerero persona conceptualisations as recurrent themes. This confirms earlier results in [1] where ovaHerero also described their spatial context through objects with great ease.

The ovaHerero drawn lady symbolises key values underpinning their way of life, i.e. typical ovaHerero woman with the uniform attire and the position of the hand when marching. The posture validates the correctness of her representation in the same way that for the male elder associated with the stick, hat and chair.

The *Bride & Groom* narrative in Okomakuara represents the couple idealisation based on traditional values, while the stick emerges again as a symbol of family honour, unity and respect.

Combining spaces, symbols and values in ovaHerero contexts potential features of personas emerge as set in time and space. We get affluent, valuable and concrete descriptions of persona artefact quality in: societal hierarchical arrangements, related ecologies, oral accounts, empathetic traits, implicit meaning in physical artefacts like the stick or the women’s dress, or in actions like the hand-up marching. This knowledge potentially formats and shapes the persona artefact representation.

8.1.2 Personalized and pragmatic plots

The theme of personalized plots in Ovambo persona imageries maps the observed everyday conversations of Ovambos, where oral accounts are personalized through known names of persons, places and objects. This allows the audience to follow complex intertwined storylines via a stand-in proxy. Ovambos’ pragmatic

and versatile narrative conducts have been evident in all interactions and have been reconfirmed in the persona sessions.

To scaffold from previous character sketches allowed validating the findings while implementing and grounding needs and desires from other participants. Scaffolding from the initial challenges permitted political issues and further partakers like politicians and police to emerge and be accounted for in crafting an agenda of extra [personas] involvement in future discussions.

It is worth noting that, throughout, the Ovambo participants *intermingled persons, personas and character indistinctly when referring to the people talked about and the issues discussed.*

8.1.3 Physical signifiers

An important re-occurring theme with ovaHimba communities remains the significance and specificities of their traditional attire, accompanying all facets of, for example, a woman’s life – from menstruation to full marriage performing husbandry and community chores. This reconfirms previous failed attempts by a foreign designer unfamiliar with ovaHimba customs to correctly model an ovaHimba woman [39], while it adds explicit detail about forms, materials and UXs by which an ovaHimba persona proxy gets, maybe tacitly to foreign eye, represented by.

8.1.4 Relations and collectives

In all persona sessions across the different ethnical groups we record the importance of relations. Personas are constructed in intertwined relationships with others. However the ability and intend of these ethnic groups to create meaning in collective characterisations varied according to type of symbols used:

With ovaHerero, ovaHimba and Khoisan, the relational bounds led to collective descriptions of personas that wiped out the individual. Moreover we recorded a lack of naming in the persons depicted in the sessions –hinting at a collective attitude.

Ovambo persona narratives though concreted persona females Tselestina and friend; persona males Alomgombe and Johaness, and other members of the community as interwoven relations.

Collective characterisations, thus, emerged as follows with: ovaHerero i.e. the elder, the school girl and the woman; Ovambo i.e. the teen parallel / community interwoven relations; Khoisan i.e. isolated youth against other ethnic groups, and ovaHimba i.e. elders, youngsters, girls and women. Moreover, while ovaHimba co-designers used themselves or a person near to exemplify a particular role of a community member, they narrated roles as per the collective performing this or that action –as part of the ritual in the proposed scenario, or in showing a particular emotion. These accounts equally confirm occurrences stated in earlier literature on technology co-designed with Namibian indigenous communities [1, 4, 19, 34, 39, 47, 48].

The kaleidoscopic and subjective nature of the collective characterisation, or the lack of it, recognises the unique standpoints of agents and observers in the construction of a hermeneutic account deeply rooted in local history and the contextual and cultural affordances of the co-design situation. This carries significant implications for the concept of persona as a dynamic index of a collective group, i.e. the symbolic power of artefacts to represent a collective is significantly moderated by the meanings afforded by the local cultural system. To put it simply, it cannot be assumed that all cultures can associate symbols with a collective with the same ease.

8.1.5 Reality versus Romanticism

We find differences between idealised persons and realities in the *Bride & Groom Archetypical Personas* in Okomakuara and the *Bride & Groom Archetypical Personas* in Ohandungu; how an ovaHerero person *should be* and how an ovaHimba person *is*.

To this, OvaHimba stated how it is in the present tense as a reality partly performative-like, partly a recounted narrative

where sense of loss is clearly depicted and self-realised without the need of “the idealised”. OvaHerero, though, hold a “sense of pride” with “idealised” perfected human-beings no longer there.

In such realisations of reality portrayals via persona representations, ovaHerero exaggerate the positive of “the idealised”, Ovambo over-exaggerate the conditions in which they live in the informal settlement, while ovaHimba present it “as is” without a story added. As for the Khoisan, the emotional distorts the perspective via the otherness they have internalised. This was observed in the two workshop days where the sense of otherness did not occur among them, but in the company of “others” it did emerge. This position has been backed by people from the Khoisan ethnic group in more informal conversations.

9. Conclusion

This paper has presented an ongoing literature review on personas that highlights the risks of operating with westerly originated methodologies in cross-cultural design, as these encourage westernised ways of thinking [45] and widen the prospect of using designerly assumptions [48]. In persona terms this diminishes, while it also jeopardises the artefact’s success in communicating reliable user data to design processes.

In the attempt to answer *new questions on the personas role and into collaboration for articulating implicit, local, embedded and grassroots expertise with more formalized information and methods* [20, p. 1], we have presented results from a four-case empirical project whereby persona has become foci of research as User-Created Personas (UCP) co-designed with four indigenous groups in rural and urban Namibia –ovaHerero, Ovambo, ovaHimba and Khoisan. In exploring persona co-creations in Namibia, learnings and practical gain emerged.

A hermeneutical lens to magnify how Namibian communities engaged with, and combined indigenous and PD tools and practices has enabled a clearer understanding of local meanings shaping the co-design of persona artefacts. Our interventions used artefacts, many of which were part of the communities’ ready-to-hand engagement mode. However, the fact that they were being used for a new type of situation led to a number of breakdowns, which in turn gave us access to the users more fundamental assumptions and understanding about their local culture, their beliefs around participation, who or what qualifies as a user, and what counts as useful technology.

The different approaches to methods have provided dissimilar outcomes –positive and less– depending on culture and milieu:

Proposing personas per-se was a difficult task with ovaHerero, while exemplifications of third-parties embedded in scenarios resulted in depictions such as the girl and the woman that led to the sub-description in a self-description of any given ovaHerero woman like the elder herself, though conditional to “the other”. Another set of persona representations emerged from crafting characters departing from scenarios of free choice, although personas as TV-characters became a struggle for ovaHerero.

OvaHimba and Ovambo, however, seamlessly embedded characters in film narratives and provided them distinct traits, typical features, and interrelations with others in the community. This emerged as collective representations with ovaHimba, while Ovambo made the personas individual-based, if embedded in narratives of interrelatedness with others. The Khoisan youth revealed two different portrayals of their selves according to either being on their own (i.e. aspirational and inspirational) or mixed with other ethnic groups (i.e. ostracised).

Storytelling in Namibian contexts has proven most fruitful to elicit user-data towards UCP. We recommend its positioning in similar contexts and support further studies in using filmic tools and techniques such as [44] and [5], while controverting the way movie making and TV storytelling are criticised in [16].

Meaning co-creation is central to our enquiry. Thus validations amid local software students in Namibia, design professionals in Copenhagen (Denmark), and scholars London (UK) followed while writing this paper. This data is being analysed, while next we aim to carry a “user involvement” evaluation of the UCP sessions based on participants’ gains as referred in [19].

Ultimately we argue that creating and using self-representations varies according to culture and context, and that UCP has greatly assisted to illustrate the importance of this in Namibia. UCP needs further cross-cultural research on persona as an object of research to better understand such phenomenon, and to contextualise its communicational power in technology design.

10. ACKNOWLEDGMENTS

We thank all participants and institutional sponsors.

11. REFERENCES

- [1] Bidwell, N. J. & Winschiers-Theophilus, H. (2012). Extending Connections Between Land and People Digitally: Designing with Rural Herero Communities in Namibia. In Giaccardi, E., *Heritage and Social Media: Understanding heritage in a participatory culture*, (pp. 197–216). Routledge.
- [2] Bødker, S., Christiansen, E., Nyvang, T., & Zander, P.-O. (2012). Personas, people and participation: challenges from the trenches of local government. In *Proc. of the PDC’12* (Vol. 1, pp. 91–100). Roskilde, Denmark: ACM Press.
- [3] Cabrero, D. G. (2014). Participatory design of persona artefacts for user eXperience in non-WEIRD cultures. In *Proc. of the PDC’14* (Vol. 2, pp. 247–250). Windhoek, Namibia: ACM Press.
- [4] Cabrero, D. G. (2015). User-Created Persona: Namibian rural Otjiherero speakers. In *Proc. of the SIGDOC’15*. Limerick, Ireland: ACM Press.
- [5] Chavan, A. L., & Prabhu, G. V. (Eds.). (2011). *Innovative Solutions: What Designers Need to Know for Today’s Emerging Markets*. Boca Raton, London: CRC Press.
- [6] Cooper, A. (1998). *The Inmates Are Running the Asylum: Why High Tech Products Drive Us Crazy and How to Restore the Sanity*. Indianapolis, USA: Sams Publishing.
- [7] Davies, G. (1994). *The Ovambo in Context: The People, Their Land and European Colonisation, Chap 1*.
- [8] Dearden, A., Lauener, A., Slack, F., Roast, C., & Cassidy, S. (2006). Make it so! Jean-Luc Picard, Bart Simpson and the Design of E-Public Services. In *Proc. of the PDC’06* (Vol. 1, pp. 67–76). Trento, Italy: ACM Press.
- [9] Dearden, A., & Rizvi, H. (2008). Adapting participatory and agile software methods to participatory rural development. In *Proc. of the PDC’08* (pp. 221–225). Florence, Italy: Indiana University.
- [10] Dourish, P., & Mainwaring, S. D. (2012). Ubicomp’s Colonial Impulse. In *Proc. of the UbiComp’12* (pp. 133–142). ACM Press.
- [11] Escobar, A. (1995). *Encountering development*. Princeton, New Jersey: Princeton University Press.
- [12] Friess, E. (2012). Personas and decision making in the design process: an ethnographic case study. In *Proc. of the SIGCHI Conference* (pp. 1209–1218). Austin, USA: ACM Press.
- [13] Geertz, C. (1974). "From the Native's Point of View": On the Nature of Anthropological Understanding. *Bulletin of the American Academy of Arts and Sciences*, 28(1), 26-45.

- [14] Getto, G., & Amant, K. S. (2014). Designing globally, working locally. *Communication Design Quarterly Review*, 3(1), 24–46.
- [15] Grudin, J. (2003). The west wing: fiction can serve politics. *Scandinavian Journal of Information Systems*, 15(1), 73–77.
- [16] Grudin, J., & Pruitt, J. (2002). Personas, participatory design and product development: An infrastructure for engagement. In *Proc. PDC '02* (pp. 144–152). Malmö.
- [17] Heidegger (1962). Being and Time.
- [18] Hisham, S. (2009). Experimenting with the use of persona in a focus group discussion with older adults in Malaysia. In *Proc. OZCHI'09* (pp. 333–336). Melbourne, Australia: ACM Press.
- [19] Kapuire, G. K., Winschiers-Theophilus, H., & Blake, E. (2014). An insider perspective on community gains: A subjective account of a Namibian rural communities' perception of a long-term participatory design project. *International Journal of Human-Computer Studies*, 1–20.
- [20] Lecomte, C., Blanco, E., Trompette, P., & Cholez, C. (2013). Towards a Better Frugal Design using Persona: issues and insights from an ethnography on prosthetics in Vietnam. In *Proc. 1st IICCI* (pp. 1–19). Paris, France.
- [21] Light, A. (2011). Democratizing technology: making transformation using designing, performance and props. In *Proc. of the CHI'11* (pp. 2239–2242). ACM Press.
- [22] Light, A., Brereton, M., & Roe, P. (2015). Some Notes on the Design of 'World Machines'. In *Proc. of the OzCHI'15* (pp. 289–293). Melbourne, VIC, Australia: ACM Press.
- [23] Light, A., Simpson, G., Weaver, L., & Healey, P. G. (2009). Geezers, turbines, fantasy personas: making the everyday into the future. In *Proc. of the C&C'09* (pp. 39–48). Berkeley, California, USA: ACM Press.
- [24] Madu, R. O. (1992). African symbols, proverbs, and myths: the hermeneutics of destiny. P. Lang, New York.
- [25] Nghiulikwa, R. V. (2008). *Re-situating and shifting cultural identity in contemporary Namibia*. University of the Western Cape, South Africa.
- [26] Nielsen, L. (2009). Personas in Cross-Cultural Projects. In D. Katre, R. Orngreen, P. Yammiyavar, & T. Clemmensen (Eds.), *Proc. of the HWID'09* (pp. 76–82). India: Springer.
- [27] Nielsen, L. (2012). Acting as Someone Like Me: Personas in Participatory Innovation. In *Proc. of the PIN-C 2012* (pp. 1–7). Melbourne, Australia.
- [28] Nielsen, L. (2013). *Personas: User Focused Design*. Springer, London, Heidelberg, New York. 2012.
- [29] Nielsen, L., & Hansen, K. S. (2014). Persona is Applicable: A Study on the Use of Personas in Denmark. In *Proc. of the CHI '14* (pp. 1665–1674). Toronto, Canada: ACM Press.
- [30] Packer, M. J. (1985). Hermeneutic Inquiry in the Study of Human Conduct. *American Psych*, 40(10), 1081–1092.
- [31] Pruitt, J., & Grudin, J. (2006). Personas: Practice and Theory. *Design Studies: Human-Centered Design* (313–334).
- [32] Putnam, C., Kolko, B., & Wood, S. (2012). Communicating about users in ICTD: leveraging HCI personas. *Proc. of the ICTD'12* (pp. 338–349). Atlanta, Georgia, US, ACM Press.
- [33] Ricoeur, P. (1995). *Oneself as another*. University of Chicago Press.
- [34] Rodil, K., Winschiers-Theophilus, H., & Jensen, K. L. (2012). Enhancing cross-cultural participation through creative visual exploration. In *Proc. of the PDC'12* (Vol. 1, pp. 81–90). Roskilde, Denmark: ACM Press.
- [35] Rönkkö, K., Hellman, M., Kilander, B., & Dittrich, Y. (2004). Personas is not applicable: local remedies interpreted in a wider context. *Proc. of the PDC'04* (Vol. 1, pp. 112–120). ACM Press.
- [36] Sanders, E. B.-N. (2002). From User-Centered to Participatory Design Approaches, *Design and the Social Sciences: Making Connections* (pp. 1–8). Taylor & Francis.
- [37] Sarat St. Peter, H. A. (2015). Communicating User Experience: 'Wicked' Problems, Patchwork Personas, and the ICTD Project Lifecycle. *International Journal of Sociotechnology and Knowledge Development*, 7(2), 14–26.
- [38] Sarkin-Hughes, J. (2009). *Colonial Genocide and Reparations Claims in the 21st Century: The Socio-Legal Context of Claims under International Law by the Herero against Germany for Genocide in Namibia, 1904-1908*. Westport, Connecticut and London: Praeger Security International.
- [39] Stanley, C., Winschiers-Theophilus, H., Blake, E., & Rodil, K. (2015). Ovahimba community in Namibia ventures into crowdsourcing design. In *Proc. of the IFIP WG 9.4*. Negombo, Sri Lanka.
- [40] Stell, G., Fox, T. (2015). Ethnicity in discourse: the interactional negotiation of ethnic boundaries in post-apartheid Namibia. *Ethnic & Racial Studies*. 38(6), 976–992
- [41] Suzman, J. (2001) Regional Assessment of the Status of the San in Southern Africa, Report Series in Suzman, J., Legal Assistance Centre (LAC), Windhoek.
- [42] Töttemeyer, G. (2014). Namibia Today: Challenges and Obstacles to Reconciliation and Stability. Namibia Institute for Democracy.
- [43] van Doorn, F., Stappers, P. J., & Gielen, M. (2013). Design research by proxy: using children as researchers to gain contextual knowledge about user experience. *Proc. of the CHI'13* (pp. 2883–2892). Paris, France: ACM Press.
- [44] Vestergaard, L., Hauge, B., Thorp Hansen, C. (2016). Almost like being there: the power of personas when designing for foreign cultures. *CoDesign*. 1-18.
- [45] Walker, K., Underwood, J., Waema, T., Duncley, L., Abdelnour-Nocera, J., Luckin, R., Camara, S. (2008). A resource kit for participatory socio-technical design in rural Kenya. *Proc. of CHI'08* (pp. 2709–2714). Florence, Italy: ACM Press.
- [46] Williams, I., Brereton, M., Donovan, J., & McDonald, K. (2014). A Collaborative Rapid Persona-Building Workshop: Creating Design Personas with Health Researchers. *International Journal of Sociotechnology and Knowledge Development*, 6(2), 17–35.
- [47] Winschiers-Theophilus, H. (2006). Being participated: a community approach. In *Proc. of the PDC'10* (pp. 1–10). Sydney, Australia: ACM Press.
- [48] Winschiers-Theophilus, H. (2009). The Art of Cross-Cultural Design for Usability. In *Universal Access in HCI* (C. Stephanidis (Ed.), pp. 665–671). Springer, Berlin.
- [49] Zaman, T., & Winschiers-Theophilus, H. (2015). Penan's Oroo' Short Message Signs (PO-SMS): Co-design of a Digital Jungle Sign Language Application. In *Proc. of the INTERACT'15*. Bamberg, Germany: ACM Press.

