

**Restoring African Feminist
Indigenous Knowledge in the
Southern African Human
Languages Technologies project:
An action research case study of
the San tsî Khoen Digital Archive
2020-2022**

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Abstract

The United Nations declared 2019 the International Year of Indigenous Languagesⁱ for the promotion of language development, peace, and reconciliation. One of the stated aims of the awareness campaign is the integration of indigenous languages into standard settings, bringing about empowerment through capacity building and through the elaboration of new knowledge. The San tsî Khoen Digital Languages Application & Archive is a project based in the San & Khoi Centre at the University of Cape Town (UCT). Established in 2020 and funded by the Department of Sports, Arts and Culture, it is informed by a co-design digital curation process with the community. The project archives the endangered and erased languages of the indigenous San and Khoi communities of southern Africa, with an initial focus on N|uu and Khoekhoegowab. To obtain this, the project

integrates decolonial scholarship within a digital environment of human languages technologies that creates a visibility of not only erased and endangered languages but also indigenous African feminist knowledges that have been lacking in scholarship. The digital archive hopes to provide support for the case for these languages to become South African official languages. With this purpose in mind, its co-design digital curation process challenges the insular and fragmented nature of academic output, thereby allowing for a greater degree of critical analysis. This action research and digital curation process is not without its challenges, as co-creating knowledge in an attempted decolonial framework that aims to foreground African indigenous feminist knowledge (such as that of last fluent Nluu speaker, Ouma Katrina Esau) in a region of historical linguistic violence, as a consequence of colonialism and neo-colonialism, is in itself not without its various contestations. This paper critically discusses this collaborative research and co-design knowledge production process engaged with over a process of forty research workshopsⁱⁱ, over the past two years. The analysis and discussion in this paper are derived from a thematic analysis of this co-design digital curation process facilitated by the San & Khoi Centre between 2020 and 2022. We provide a critical perspective on how the San tsî Khoen Archive was developed from the unique point of view of the women project members (as senior researcher and curation research interns on the project) and their consideration of decolonial imperatives in addressing the complex challenges for co-design processes in feminist indigenous digital archive language restoration.

Keywords

Action research, endangered languages, African Feminist Knowledge, Indigenous Knowledge, human languages technologies, co-design, community partnership, decolonial challenges

Introduction

N|uu is considered of the oldest click languages in the Southern Kalahari region. Khoekhoegowab (Cape Khoe) is one of the first languages spoken by inhabitants of the present-day Western Cape and more broadly in the region (see Sands and Güldemann, 2009:212). These languages are associated with well documented extermination in the early colonial era and associated cultural genocide. Today, they are considered endangered African languages that face extinction (Miller et al. 2007:113), which would result in the loss of a rich and diverse heritage which was once endemic to South Africa. The South African National Heritage Resources Act (1999)ⁱⁱⁱ foregrounds the protection of living heritage through indigenous knowledge systems as linked to language and memory through documentation. Such provision is also covered by the legally related South African National Archives Act of 1996, which makes it explicitly clear that every generation has the moral responsibility to protect the heritage of the nation for succeeding generations to promote reconciliation, understanding and respect through heritage to be researched and documented. Carrying out this responsibility prevents loss and thereby contributes to economic and social development of communities. The key factor that propels the San tsî Khoen^{iv} Digital Archive into the digital humanities is the fact that it is based on collaborative scholarship and pedagogy, dependent on the synergy and relationship between indigenous knowledge holders,

community researchers, interdisciplinary scholars, linguists, and digital curators.

2. Project Overview

2.1 Background and Context

The San tsî Khoen Digital Archive Project is a knowledge partnership between the San & Khoi Centre and the A/Xarra Restorative Justice Forum, co-founded in 2018 through community dialogues at the Centre for African Studies. The forum has a number of research commissions, including in language and women's indigenous knowledge. The project intends to contribute towards building knowledge and forging cultural bridges between organisations, communities, and the broader public by means of creative collaboration (Bam-Hutchison 2019:3). N|uu and Khoekhoegowab are amplified by the project to prevent the loss of a rich and diverse language and cultural heritage which was once endemic to South Africa.

2.2 Aims of the Digital Archive

This archive hopes to make a direct contribution to policy development and its decolonial implementation to the benefit of South Africa's diverse indigenous language communities. While there is public interest in accessing and engaging with endangered languages, they are largely captured in inaccessible formats. To support the development of indigenous languages in accessible form, this digital archive aims to establish a digital application to facilitate easy, fun, place-based engagement with endangered South African languages, with an initial focus on N|uu and Khoekhoegowab. The digital application allows South Africans and others to interact with an automated system of digitized Khoekhoegowab and N|uu simply by using a southern African language of choice. The digital application is

landscape-contextual, i.e., generating related indigenous words in the endangered languages used for indigenous plants and their medicinal use and related usage in rituals, highlighting sites in the landscapes as sites of African feminist indigenous memory (as ways of knowing that are not patriarchal and hierarchical). African Feminist knowledge used in the context of this paper are associated with knowledge that is transmitted through elder female knowledge keepers of language and associated cultural knowledge often excluded from the western disciplines (see Bam, 2021; Muthien and Bam, 2021). Feminist knowledges are inclusive and carried over by both women and men as integral to rematriation processes (i.e. going back to ‘mother earth’ in terms of knowledge of ecosystems and well-being for all). Underpinned by an online archive of language glossaries and accessible resources about the history of endangered South African languages, the cultural value of related knowledges and paradigms as metadata is therefore intentionally enhanced by this platform. The application allows for the development of multilingualism through its users learning endangered southern African languages which are landscape-contextual, making it meaningful and an educational intervention on several levels. Users would therefore be able to develop multiliteracies which could possibly lead to accessing pathways in wider skills development (especially for the indigenous unemployed, women and youth).

The digital archive hopes to provide support for the case for these languages to become South African official languages, towards redress and healing for wounded communities that have suffered the devastating effects of cultural genocide through a strengthened public understanding of our language commonalities to support a

more racially and economically integrated society. It also hopes to provide a platform for sharing a richer, accessible knowledgebase of African feminist knowledge of indigenous plants, places, and cultural rituals through using digital technologies and linguistic methods to restore these erased languages as living languages.

Of its outcomes as an open access digital application include an expanded updated public archive of Khoekhoegowab and N|uu languages and interrelated indigenous African feminist knowledges; mobile, location-sensitive access to two endangered languages in South Africa, extended to more endangered African languages; centralised access to all resources related to endangered African languages and related indigenous knowledges. Through participatory and inclusive knowledge development with local community partners, it aims to provide potential co-design living indigenous language and heritage models for future applications. In this regard, project member and A/Xarra Restorative Justice Forum civic activist and chair, Tauriq Jenkins, expressed the cohort’s intentions “to make the language(s) live, to come out of the archive and live and breathe” (2021). In this manner, the project is actively working to address these intentions in an ongoing multi-pronged approach.

3. Decolonial Theoretical Framework

To address the challenge presented by the project’s situational complexity, based at a historically white institution directly associated with genocide and linguicide of indigenous people in the region (see Schramm, 2016:133), the San tsî Khoen Digital Archive aims at decolonising the field of digital humanities through its praxis. In

this, the project team works diligently to avoid the trap of mistaking diverse representation for decolonisation, as described by Risam (2018: 78-82) in which digital tools are typically used to assimilate indigenous and marginalised communities of people into the knowledge production of the Global North, which Nabudere (2006:15) describes as an extension of the north's exploitation of Africa's natural and mineral resources. By being cognisant of this possible risk, the digital humanities attempts to avoid inadvertent perpetuation of epistemic violence, of further oppression, and exploitation of indigenous people's knowledge. It is a delicate area of ethics at a historically white higher education institution as we wrestle with the question of how we could appropriately develop digital tools to recover languages and African feminist knowledges that have been displaced by colonial imposition and its western knowledge system and archives of the Global North.

In trying to address this formidable challenge, the project is theoretically anchored in decolonisation through the scholarship contributions of Bulhan (1980), wa Thiong'o (1986), Mignolo (2011), and Bam (2021). Furthermore, in our engagement with the project over the last two years, we have actively endeavoured to practice decoloniality as viewed through Mignolo's conceptions of decolonial "thinking and doing" (Mignolo 2011, xxiv). Decolonial thinking undertaking to "delink itself from the imposed dichotomies articulated in the West", for example, the "knower and the known, the subject and the object, theory and praxis" (Mignolo 2011: 42). By moving away from the colonial assertion that western epistemology should be the accepted as the benchmark, we instead employed a measure of "epistemic disobedience" (Mignolo 2011:

122), while acknowledging the innate indigenous, African feminist generational knowledge which resides for hundreds of years within the San and Khoi descendent communities into the present. By engaging with these living archives, we are reminded that colonial archives are sites of power and control (Stoler 2002: 97). Therefore, by subverting this power, the archive is not only a location of decoloniality, but it additionally offers the academic community a bespoke approach to the digital archiving of indigenous epistemologies. Furthermore, in our praxis over the last two years of action research, we've drawn on Bulhan's theory of 'cultural inbetweenity' as well as his paper on the 'Stages of Colonialism in Africa' as contexts (1980). The theory of 'cultural inbetweenity' describes the reactive patterns of people dominated for an extended period of time. The theory proposes three stages of identification based on an individual's reaction to dominant Euro-American worldviews and dominant indigenous worldviews (1980: 105-106). The first stage, capitulation, is the active assimilation into the dominating worldview and culture while simultaneously giving up one's worldview and culture of origin (which similarly happened to oppressed people in South Africa). The second stage, revitalisation, is characterised by the defensive rejection of



Source: Bulhan, H. A., 2015. *Stages of Colonialism in Africa: From Occupation of Land to Occupation of Being*. Journal of Social and Political Psychology, 3 (1): 239-256.

the dominant worldview coupled with an equally defensive romanticism of the worldview and culture of a person’s origin (such as the period of indigenous revivalism in South Africa since particularly from the year 2000 when the Decade of Indigenous People was announced by the United Nations). The final stage, radicalisation, is one of a revolutionary commitment to the synthesis required for socio-political transformation (1980:106). For this project and the work of the San & Khoi Centre, this phase relates to enacting decoloniality through praxis beyond mere revivalism. The principles Bulhan (2015) highlights for the decolonisation of psychological science is applicable in the context of decolonising the digital humanities through the work of the project presented; see Figure 1. To prevent the San tsî Khoen Digital Archive falling into the trap of mistaking assimilation for decoloniality the project team strives to ensure that it promotes and addresses the human language and informational needs of the communities represented; affords opportunities for digital curation training in the context of lived realities for those descendants of these communities; facilitate a ‘bottom up’ approach to the language the

reclamation process. This approach positions the San and Khoi communities at the centre of the process of reclaiming their language with the archival development team serving as a support mechanism to help the communities build their digital and knowledge creation capacity. Research in Africa highlights that a gender digital divide exists (Schelenz and Schopp, 2018: 1412). In addressing this challenge, small steps matter to reduce cycles of poverty amongst women where women in Africa have lower ICT literacy rates, less access to mobile resources – especially in the context of patriarchal cultural structures and practices (Schelenz and Schopp 2018:1414).

Our challenge remains redress within an erased and captured knowledge global context of metacolonialism in Africa, as described by Bulhan (2015), and to instead enter into a state of re-memembering by moving the ‘centre’ after more than 500 years of “dismemberment” (wa Thiong’o (1993). The other challenge is the mechanism of globalisation, a system of worldwide innovation that offers ‘advancement’ to humanity. On closer examination, Bulhan (2015) describes ‘metacolonialism’ as

differing from its previous manifestation in that it penetrates deeper into people's psychology and social relations with a global power of mystification that obscures class, race, and ethnic distinctions. This blurring of identity indicators necessitates benchmarking against the Theory of Cultural Inbetweenness. The importance of addressing this challenge is heightened when so much of the language restoration process is carried out by individuals who have inherited a generational legacy of oppression and knowledge exploitation by powerful institutions. The project's aim is therefore to provide restorative justice to the San and Khoi people over scholarly defensive positioning which typically limits self-determination, empowerment, and prevents collective well-being. Decolonial language theorist wa Thiong'o argued that "the present predicaments of Africa are often not a matter of personal choice: they arise from a historical situation", highlighting the psychological, epistemological, as well as the cultural and linguistic impacts of coloniality (1986, xii). Bam's book, *Ausi Told Me* (2021) speaks to what wa Thiong'o describes by exploring the seven concomitant forms of cultural and knowledge erasure in a colonised indigenous Cape context – language and African feminist knowledge as a key component.

4. Knowledge and Language Reclamation

4.1 Cultivation of Collective Well-Being

A challenge experienced by the development team is the effect of the racial polarisation in South Africa created by the "divide and rule" policies suffered for three centuries and epistemicide (erasure of knowledge) as strategies deployed by the colonial powers and apartheid regime (Bam 2021, 35). This is

particularly observed in the struggle for recognition by people speaking the Nama dialect and those speaking the Damara dialect of Khoekhoegowab and the associated racial attitudes also towards Nguni-speakers or 'Cape Flats people' – the latter often not considered 'authentic' indigenous cultural holders in South Africa. This problem of cultural prejudice towards others develops characteristically in the curation of an egalitarian digital archive when people have different relationships with technology and most people represented by the archive are socio-economically disadvantaged. This reality negatively impacts long into the future on people's access to digital technologies and their digital skills development.

Additionally, working with the colonial archive presented its own unique challenges. This approach was a debate as the strong Africanist argument was that we should not engage the colonial archive at all as we have established indigenous literature from the 1800s to draw from. However, in the colonised San and Khoi language and cultural archives the situation is different due to genocide and associated deep erasures of which only rock paintings, the Bleek and Lloyd archives (1911) and traces of memory amongst descendant communities exist. During the co-design project development process, it was common to have debates about how these realities affected communities and to refocus on the overall significance of the project and the fact that it could not be influenced by racial polarisation of 'us' and 'them' as this would distort and threaten its inclusive, egalitarian, reflexive and restorative justice epistemological standpoint and commitment.

4.2 Affordance of Empowerment

The archival space presents a platform for “uncapturing” knowledge caught up in knowledge production by those other than from within the indigenous knowledge system communities. Highlighting the indigenous place names which were erased through colonial invasion and the animal names lost (often due to extinction) are examples of this restorative justice aspect of the project and its link to redress through conducting research through the lens of African feminist knowledges.

The knowledge reclamation process employed in the project started with selected colonial archival sources which emerged from as dialogue process of debates that took several workshops. These sources were identified by community researchers who have their roots within San and Khoi communities and have an ‘insider’ perspective as to which colonial sources contain the most relevant detail as deemed significant by the knowledge holders. Once usage permission from all relevant copyright holders were secured over a few months, the team then extracted informational aspects of knowledge and used this as starting points for knowledge reclamation by the community people themselves. The extracted information was broken down to its data

components within databases for it to be digitally represented. The critical data points form the place names data set which include indigenous Southern Africa place names, the associated map coordinates, the correct orthographic representation of the indigenous names as compared to versions that have been used in the original text, and the descriptive information collected associated with the place name.

Figure 2 showcases the approximately 3 500 place names that were extracted and recreated with the archive. This digitisation process is only the first step in the greater objective of knowledge reclamation and should not be confused as being the process of decolonising indigenous knowledge. The map coordinates extracted have been found to be approximate coordinates and not exact location of the places themselves as these are often contradicted in oral tradition. The descriptive information collected in the original text are dislocated from the people who named the world. The next step towards decolonising this knowledge aims to correct these distortions by inserting the knowledge of the knowledge directly into the knowledge production process to trouble the ontological assumptions in the colonial archive. Currently, Bradley van Sitters, as the researcher who is rooted within the San and



Figure 2: The map of indigenous place names as depicted by the UCT DLIS Ibali system (left image) and Google Maps (right image)

Khoi language activist community is collecting the desired information to represent the Southern African landscape through the indigenous knowledge lens of the people in the conceptualised '100 stories' project. The animal name data set is displayed digitally different as it is curated on the original source material contained in the representation of animal names and their various linguistic representations in Southern African indigenous languages. The classification system the San and Khoi communities are generating in the process is based on their own knowledge development processes, which will link to animals and places, building on Ouma Katrina and other indigenous women's knowledge of landscape, plants and animals. Nickerson (2005:3) points out how such basic knowledge in indigenous knowledge is crucial for early childhood development which bodes well for developing school resources from this research project, in a projected later phase. This indigenous knowledge production process brings to the fore the African Feminist spiritual ecology the San and Khoi people had with the land they inhabited for thousands of years which is grossly misrepresented to various degrees in the patriarchal knowledge production processes of the Global North. This anomaly presents an increasing ethical concern in 'digital colonisation' (Schelenz and Schopp, 2018: 1413).

5. Decolonial Methodological & Capacity Building Framework

An important empowerment opportunity is the project's internship component. The intended grassroots reach of this was derailed by the COVID19 pandemic and its resultant social restrictions. In response to the global pandemic, the project was redirected to focus on the postgraduate student body of UCT.

i.e. who are self-identified Khoi and San. In 2021 the development team included four such women, connected to African Feminist intergenerational knowledges, studying at the postgraduate level. Each received practical training in a focus group in over 40 co-design workshops, each of close to four hours of hands-on digital archival curation training by linguist Martin Gluckman. The workshops involved two interrelated concurrent processes: online co-design dialogues with the community and practical training. This was a key successful aspect of the decolonial methodology as it involved the hands-on training of a community of four women of descendant and slave heritage in the region; three of which constituted the youth of South Africa. We consider this intervention important as the younger generations, amongst indigenous communities, are becoming increasingly mobile technology-empowered, as in the case of Aboriginal Australians (Nickerson 2005:3). Three of the women were registered scholars of which one (studying Archaeology at Masters' level) started as a museum administrator at the commencement of the project and has since been promoted as curator at the national Iziko Museums. A second student was a PhD in decolonising community engagement in Archaeology and a third, a practising teacher and Masters' student in Ethno-musicology. The fourth team member was recruited from the university's Library and Information Systems Masters' coursework class and has contributed significantly in terms of disability experiential knowledge. She has since been promoted as digital project manager for both the San & Khoi Centre and the 100 years digital curation project of the Centre for African Studies.

In addition, the dialogues with the A/Xarra Restorative Justice Forum and 'deep listening' workshops with indigenous and

First Nations scholars globally (in particular with Florence Glanfiel, Judith Atkinson and Tracey McIntosh) during 2021 assisted these trainees to pivot their professional knowledge and skills towards promoting the decolonial agenda within academia. As Stanley (2020: 123) argues that co-design in digitisation demands several cycles to build trust, reciprocity, understanding, testing and accepting the co-designers' values and skills. The co-design model employed was different to Maasz et al. (2018) in that the digitization co-design collaboration started from the inception point (project concept origination) rather than from stage four (design).

The 40 workshops included digital hands-on curation training of indigenous language activist, chair of the A/Xarra Restorative Justice Forum Language Commission, Bradley Van Sitters, and Khoekhoegowab-speaker and teacher Pedro Dausab. The capacity building process also involved meeting the terms of the San Code of Ethics (2017) by providing N|uu speaker Ouma Katrina and her daughter with a laptop and data to do translations and to give interpretive input to the digitised content. This was facilitated by the A/Xarra Restorative Justice Forum researchers and activists Tauriq Jenkins and Bradley Van Sitters. From March 2022, one additional young woman (in her early twenties) from the descendant community on the Cape Flats is being similarly trained as part of an Honours internship course in 'Public Culture'.

5.1 Self-Determining Actors

In our collaboration with Ouma Katrina, we explored how the elderly are custodians and intergenerational African Feminist knowledge keepers. This was especially evident in our engagement with Ouma Katrina in fieldwork undertaken by Bradley

Van Sitters and Tauriq Jenkins with whom she shared her knowledge of land and place via the linguistic knowledge of her ancestral language, N|uu. This embodiment of knowledge moves beyond the confines of the frozen colonial archive and to a more embodied and living practice. Furthermore, our engagement with a female knowledge holder is a subversion of the dominant white, western male patriarchal imagination of indigenous communities, languages, and practices. In the team's co-design process, we instead foreground the work of feminist decolonial scholars such as Bam who speaks of the wisdom and knowledge which resides in *Auszi* (2021:3); Magoqwana (2018) on repositioning the knowledge of *uMakhulu* and the rematriation theory within a South African context, of Muthien (2021). This thread of engaging with the indigenous 'herstory' from diverse lenses encompasses the restoration of African feminist knowledges of the past, present, and future – as ever present and ongoing.

5.2 Archival Architecture and Technical Methodology

The San tsî Khoen Digital Archive is housed in an Omeka-S environment fortified with the International Image Interoperability Framework (IIIF). Omeka is an open-source infrastructure for the digital humanities designed for the purposes of scholarly publishing and cultural heritage work. The Omeka-S is a web publishing version of Omeka that makes use of JSON-LD as its native data format in order to embed the project within the world of Linked Open Data. The interoperability of the archival contents is enhanced by each resource being assigned a uniform resource identifier (URI) with a Resource Descriptive Framework (RDF) as a core software element (Omeka, n.d.). IIIF enriches the user experience by

providing richer functionality for the image, audio and audiovisual material within the archive (International Image Interoperability Framework, n.d.). The archival architecture described is the product UCT Digital Library Services (UCT DLIS) digital humanities scholarship through its Ibali Digital Collections system.

The project team is enriched with the addition of a Digital Scholarship Specialist who is a member of the UCT DLS. The San & Khoi Centre partnered with UCT Libraries which has created and manages the digital humanities infrastructure. This partnership afforded the project team access to Geographic Information Systems (GIS) support which is embedded in the service of UCT DLIS. This partnership honours the decolonial spirit of collaboration and partnerships over that of professional competition and working in silos. The partnership affords both departments opportunities to contribute what each party does best towards the collective project archival output. The GIS generated the geospatial analysis and map creation as seen in Figure 2. It is their analysis that secured the project findings that the existing map coordinates for indigenous places are not precise. Therefore, the location points shown in Figure 2 are indicators of an area within which the exact place may be located. Oral tradition indicates that the indigenous knowledge that is available in existing publications has been distorted to various degrees through the knowledge production mechanisms of the Global North. As such the findings support the great need for existing indigenous knowledge to be decolonised and deploying GIS technology beyond what is critiqued as ‘technicist legitimisation of historical power’ in which the elite excludes the marginalised (Weiner et al. 1995: 29-30). This process of landscape

knowledge restoration can therefore only be truly effective in agitating against a ‘top down’ approach when the knowledge holders outside the university themselves drive the process. There have been previous research studies applying GIS technologies in South Africa for ‘development purposes’, but these have been confined to redress on land restitution (triangulated with oral tradition) and therefore only reaching back historically to the 1913 Land Act and the Bantustans as in the case of the Kiepersol case study (see Weiner et al. 1995) for the purposes of land and agrarian reform.

The partnership also ensures that the San tsî Khoen Digital Archive is preserved beyond the confines of the San & Khoi Centre and the development team. Under the auspices of UCT DLIS the integrity of the archive contents will be ensured by a process of migration to more current digital formats that are developed to be compatible with emerging technologies in the field of digital humanities. In this way the risk of the archival contents becoming redundant due to its format is reduced as university-generated knowledge tends to be centralised and therefore inaccessible to the general public. Open access information within a university managed knowledge system is embedded within said system in an organisation of nested sites. This produces long URLs that are not easy to remember or to be found as a result. A concern within the project team existed prior to the decision to house the San tsî Khoen Digital Archive within UCT's DLIS Ibali system. The team did not regret its decision to partner with UCT DLIS as it enhanced the project's capability to showcase endangered languages. However, the accessibility concern is still a relevant one when the archive's URL is <https://ibali.uct.ac.za/san-khoen-digital-archive>.

Beyond the digital archive the project also uses www.archive.org and YouTube as digital platforms to widen public access to informational users. The interviews held with language speakers of the endangered languages are shared to YouTube and the collection of published material available through open access means are made available via www.archive.org. The map of indigenous South African place names generated is also available on Google maps. A mobile app is being developed on the location data collected. The inclusion of other digital tools alongside a digital repository to document the languages being recovered decentralises the knowledge management process at the institutional level, which systematically contributes to releasing captured knowledge. Due to the infinite nature of decolonising knowledge the development process of building the archive is as dynamic as the knowledge production process itself. For example, there is no clear completion of tasks once they are ingested into the archive as the process of representation is being constantly reconfigured based on community engagement with the content and its interpretation. The paradox of this reality is demonstrated with the development of the required digital language tools required to sustain endangered language reclamation and revival. The written format of San & Khoi languages employs a set of diacritics to denote its various click sounds. The technology and the skills exist to design a typing tool to streamline digital written communication in these languages; similarly with the case of a dynamic digital dictionary. Evidence of this is the computational linguist within the team having created said tools. Ironically, the tools developed for the project currently exist outside of the institutional technical infrastructure due to a lack of a

supportive environment. Discussions with relevant people with UCT Information and Communication Technology Services (UCT ICTS) reveal that while creating the virtual environment required is doable, the process of adjusting the current technological infrastructure is the challenge.

Storytelling and weaving narratives are an essential component of knowledge sharing within indigenous communities. Elements of these are mirrored in the San tsî Khoen Digital Archive. Data elements are woven together with contextual narratives within the website level of curation. It is here that the richness and complexity of the San and Khoi languages can be highlighted as well as the position of language to express identity and to build social bridges. The process of adding language material to the digital archive risks the tendency to be reductionist. It is therefore necessary for information to be broken down into a curated data set in order to become an object or item in the archive. There is the potential for loss of valuable contextual information in the reductionist process of populating the archive that could possibly undermine its valuable contextual indigenous knowledge systems.

Once the back-end is populated the archival architecture provides a secondary layer of curation in the form of a website interface. Here, data can be aggregated in various curated collections for the benefit of those who visit the site.

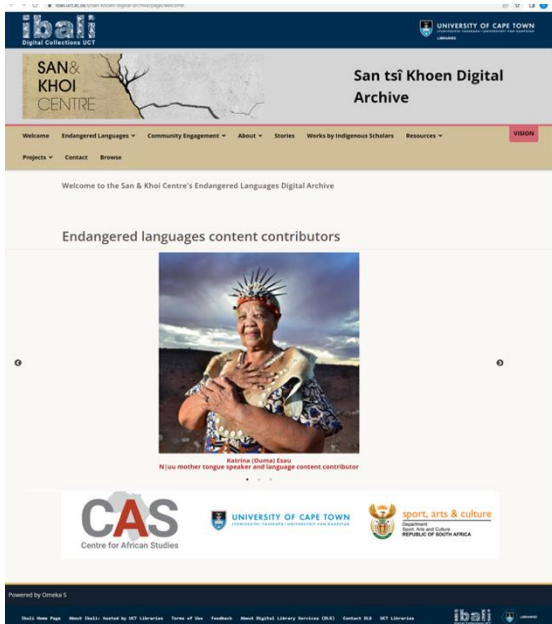


Figure 3: The San tsî Khoen Digital Archive landing page. Disclaimer: the site has not gone live yet.

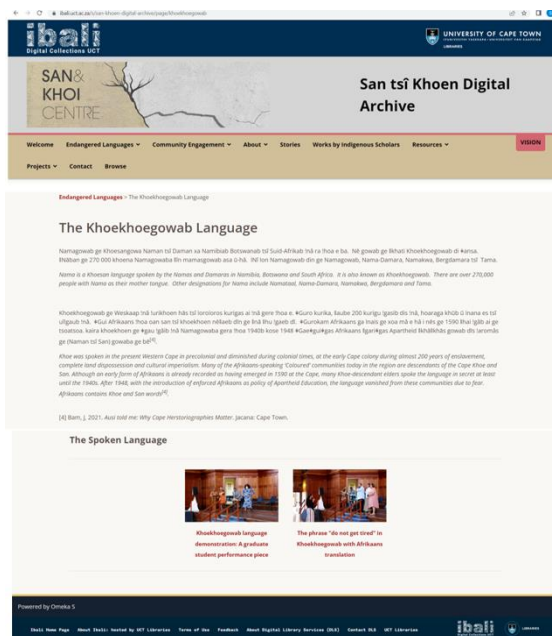


Figure 4: The Khoekhoegowab Language page on the digital archive. Disclaimer: the site has not gone live yet.

6. Conclusion

The purpose of this paper is to provide a critical perspective on how the San tsî Khoen Digital Archive was developed as an African feminist knowledges digital archive project from the unique point of view of the women project team members (as the authors of this

paper) who identify with marginalized knowledge systems while simultaneously working in the dominant Global North knowledge system. What we found in our action research process is that while digital tools can be successfully used to restore endangered languages and related feminist heritage archives in South Africa, this does not in itself translate to the actual decolonisation process. Much depends on increasing the capacity of human potential (especially of both young women and elders of descendant communities) and to provide them with the opportunity for the integration of their intergenerational African Feminist knowledge as a necessary long-term co-design strategy. This approach would sustainably narrow the digital gender divide and contribute to building capacity in restoring indigenous knowledges. Similarly, decolonising the digital humanities requires a strategy to shift its primary focus from the co-creation of knowledge between various stakeholders to include capacity building of indigenous knowledge holders so that they can engage more powerfully within the digital humanities without proxy. This would be a contextual imperative in developing a decolonial digital archive with the hope to provide support for the case for these languages to become South African official languages in the longer term.

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Eshcha Adams is a young indigenous scholar, a professionally qualified teacher and has recently completed her Masters' degree in Khoi and San Ethnomusicology at UCT.

Notes

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<https://www.un.org/development/desa/dspd/2019/01/2019-international-year-of-indigenous-languages/> [accessed 16 May 2022]

ii The training workshops were facilitated by Martin Gluckman in a co-design process in dialogues with the A/Xarra Restorative Justice Forum and Pedro Dausab.

iii <https://www.gov.za/documents/national-heritage-resources-act> [accessed 16 May 2022]

iv The paper uses the various forms of Khoe, Khoen and Khoi as these are not standardised and fixed in their various uses by communities in South Africa.

v The first-born daughters and female knowledge-keepers (Bam 2021, xi). *Ausi* is a term of respect reserved for the first-born daughter who, in turn, ensured that there was respect for elders in the family. The

custom of showing great respect for elders and old people and for their knowledge of plants and landscape, in general, is still found among indigenous-descendant people (Bam 2021:3).

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