Enough with 'In-The-Wild'

Fiona Ssozi-Mugarura, Thomas Reitmaier, Anja Venter, Edwin Blake

Centre for ICT4D

University of Cape Town

Cape Town, South Africa

fiona.ssozi@gmail.com, treitmaier@gmail.com, anjaventer@gmail.com, edwin@cs.uct.ac.za

ABSTRACT

HCI is a field of study that is no longer confined to European or North American usability labs. HCI is practiced all over the world, and within Euro-American contexts, HCI research is also increasingly turning its attention to real world settings, outside of the controlled environments of the usability lab. One increasingly popular approach to designing and evaluating new technologies in real-world settings is called 'in the wild' research. We find this terminology uncomfortable from an African perspective as it evokes negative connotations of the contexts in which we study and the people we study with. Our intention is not to discredit this approach but rather to start a conversation around the terminologies we use to describe our research approaches and contexts. We consider it an ethical imperative to be conscious of the words we use to describe people and places, not only as HCI research expands its empirical focus to real world settings, but equally importantly to support HCI research beyond its traditional centres in Europe or America.

Author Keywords

In the wild; Africa; critique; terminology; post-colonial theory;

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous;

INTRODUCTION

I can't use that term! This was the start of an impromptu conversation that inspired us to write this paper. That conversation took place in a research lab at an African University between two PhD researchers: F, a Ugandan female, and T, a German male. F was going over the reviews her paper received after submitting it to a mainstream HCI conference. One reviewer had asked her to contextualize her work in the *in the wild* canon of research.

The problem, expressed in a nutshell, is that this term does not travel and suffers terrible slippage when it does.

F is an action researcher working with rural communities in Uganda [25]. A cornerstone of action research is immersing oneself into community practices [12] and being steered into a participatory process of working with the community. It is through this immersion that we cultivate relationships, build trust, learn from each other, and ultimately become sensitive to community values and practices. Coming from this action research perspective F was, however, unfamiliar with research from the *in the wild* canon.

As an African researcher working with rural communities, she has learnt the importance of giving back to those who have committed their time, insights, and provided her with assistance. Reciprocity, particularly in projects that emphasize community engagement, goes beyond what can be expressed or budgeted for in economic terms: gifts, mobile devices, money (including transport refunds) and We can also give back to communities, as meals. Scheyvens for instance suggests, through the research process itself by feeding back research findings to participants [24] (pp. 174). Reciprocity through the research process is conveyed through respect for the people we work with, their culture and knowledges. Thus, the values that F draws on in her research foreground ethical conduct and respect. Being mindful of what we do with or give to participants is one part of this process, but it also includes how we refer to research participants and the communities they live in.

Furthermore, reciprocity through feedback would necessitate sharing research findings and being personally accountable to community participants for those findings. One of the ways these findings are shared is through publications or presentations of all kinds. Even referencing works from the *in the wild* canon interferes with this reciprocity and accountability as they can easily evoke feelings of disrespect or being undermined.

It is from this perspective that F got uncomfortable with the term *in the wild*. What makes the term *wild* uncomfortable is the meanings it evokes, especially from an African perspective. Here the term is synonymous with words such as 'jungle' or 'un-civilized'. Such connotations are the polar opposite from what community engagement research is about or tries to portray. We understand that *in the wild* research also emphasizes working with communities. Yet,

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from Permissions@acm.org. AfriCHI'16, November 21-25, 2016, Nairobi, Kenya © 2016 ACM. ISBN 978-1-4503-4830-0/16/11É\$15.00 DOI: http://dx.doi.org/10.1145/2998581.2998601

because these communities are predominantly Western, we imagine that the term does not carry the same connotations for its Western participants. The fact, however, remains that outside of HCI's traditional centres the term can and does evoke negative connotations and kneejerk reactions of aversion.

The paradox is that the *in the wild* canon, as we illustrate in the next section, is not only an emerging community of research practice but as it matures is also one that grapples with similar issues to the ones F faces in her action research project with a rural community in Uganda. How can we situate methodologies to make them more appropriate? How can we engage communities effectively and be sensitive to salient ethical issues, especially when such issues span a range of areas from participant consent, and reciprocity to sustainability (community technology handovers)?

In the remainder of this paper, we draw on our conversation and the debates it triggered in our multidisciplinary research centre. Through our different personal encounters and disciplinary orientations to the term *wild*, we trace its history, contextualize its current use and popularity, and critically unpack its connotations and relate them to deeper issues between mainstream HCI research and HCI research in Africa.

IN-THE-WILD: A RETROSPECTIVE

Before we formally critique the terminology of the *in the wild* canon, we follow its provenance right back to its foundational literature. Yvonne Rogers, who first theorized *in the wild* research [21], adopted the term from Edwin Hutchins' seminal work: Cognition in the Wild [13]. It is here where T first encountered the term. We recount this first-hand experience to show the allure of the term and the approach to research it espouses.

T can still vividly remember being instantly captivated by the book. Its cover image shows rough seas that are juxtaposed with a perfectly orderly navigational map. The title is split between the juxtaposed images. 'Cognition in' captions the map, and 'the Wild' captions the rough seas. Within the first two paragraphs of the introductory vignette, the reader is in for a wild ride. Placed on board the bridge of the USS Palau as it is returning to port, Hutchins describes a manoeuvre that was interrupted by the ship's engineer of the watch: "Bridge, Main Control. I am losing steam drum pressure. No apparent cause. I'm shutting my throttles" [13] (p.1). After a flurry of frantic activity, the captain and crew were able to bring the USS Palau to a safe stop. What an achievement. What a relief!

In the following chapters, Hutchins develops his theory of distributed cognition that contributes to the field of cognitive anthropology and has been taken up by HCI in the mid-2000s [17] (p.73). The theory centres on the argument that cognitive activity, or rather how that activity is studied and constructed in the laboratory, does not generalize to the

situations it is confronted with in real world contexts. It instead requires an approach that accounts for the social, cultural, and material environment in which tasks, such as bringing a ship without power to a safe halt, are accomplished. After publication of *Cognition in the Wild* in 1995, mainstream HCI research responded to this call by incorporating distributed cognition theory and approaches to studying cognitive phenomena in-situ to, for instance, provide a "detailed articulation of a cognitive system" that could then provide a basis "from which to generate design solutions" [22](pp. 42).

Implicit in the distributed cognition approach is a commitment to the view that what people perceive in the world is imposed by the mind rather than given in experience. Such a view is, of course, not without critique, for instance from contemporary anthropology [14](p. 161-2) and from within HCI by researchers located in the third paradigm/wave [5]. A cornerstone of that line of research is what Harrison et al. call putting users and interfaces into their proper place [11].

For Harrison et al. 'putting users in their place' emphasizes how "people's understanding of the world, themselves, and interaction is strongly informed by their varying physical, historical, social, and cultural situations" [11](p.388). 'Putting interfaces in their place', on the other hand, is "grounded in the recognition that the specifics of particular contexts greatly define the meaning and nature of an interaction" [11](p.388).

The debates surrounding the relative merits and appropriateness of second paradigm, cognitive and third paradigm, cultural/experiential research have been vigorous and lively. The *in the wild* approach grew out of these debates in general and in response to a provocatively titled paper, in particular. That paper asked '*is it worth the hassle*?' to conduct in-situ usability studies, if they add little value compared to lab-based ones [17]. In their response Rogers et al. demonstrate '*why it's worth the hassle*' [23] and describe how strict usability studies of technologies even when conducted in-situ obscure salient social and cultural phenomena that enable, surround, and give meaning to their use.

Tapping into a 'third-paradigm' zeitgeist, and drawing on these important debates Rogers coined the *in the wild* term and approach. It is an approach to designing technologies that brings Harrison et al.'s [11] above characterization of users and interfaces together. In Roger's view, "prototyping in the wild is on the rise where objects, artefacts, and other inventions are assembled and then tried out in the settings for which they are envisioned." [21](p.58). *In the wild* studies, in turn, "show how people come to understand and appropriate technologies in their own terms and for their own situated purposes" [22](pp. 73).

A search through the six major HCI conferences since Rogers coined the term in 2011 reveals that 35 papers have referenced the term in their titles or abstracts; and 2 sessions have carried the *in the wild* name. It is safe to say that *in the wild* research approaches have not only contributed to and shaped important debates within HCI but have since made the transition from a nascent research theory/approach to an established and important community of practice.

	2012	2013	2014	2015
CHI	7	5(1)	8	10
DIS	4(1)		1	

Table 1: 37 in the wild papers (and sessions) at CHI and DIS.

CRITIQUING THE TERMINOLOGY

If we return to Hutchins book, we find that in later chapters Hutchins develops a second account of how cognitive activities, or more specifically navigation practices, occur in the wild. Drawing on the work of the anthropologist Thomas Gladwin, Hutchins places the reader in a canoe off the coast of picturesque islands inhabited by the Puluwatans of Micronesia. While both Gladwin and Hutchins celebrate the complex processes by which the Puluwatans navigate between the islands they inhabit, the wild in which these activities are located is different from the wild the reader experienced earlier in the book aboard the USS Palau. For the wild we encounter aboard the canoe is inextricably linked to a dichotomy of the colonial enterprise that places the *domestic* on one side and the *wild* on the other. These two words might seem neutral on the surface, perhaps even useful to differentiate between wild and domestic animals, but this very dichotomy was used as measure of distance between civilization and savagery [14](pp. 62), most famously by Charles Darwin.

Hutchins is aware that the term *wild* in the title of his book might be read as similar to the '*pensée sauvage*' (savage mind) à la Lévi-Strauss [13](pp. xiv). This is not what he intended; instead, he sees it as a term that highlights the distinction between studying cognition in the lab and in the everyday world. Despite Hutchins intentions, the deeper issue is that in everyday Euro-American contexts the quirkiness or catchiness of the term depends on the sense of adventure the researcher embarks on when visiting *wild* places much like Lévi-Strauss did. Here in South Africa or Uganda, where the traumas of colonialism and new forms of neo-colonial practices are an everyday reality, the term isn't quirky or catchy but evokes knee-jerk reactions of aversion.

The Wild has baggage

Of course Africa, just like any other continent, has *wild* places and *wild* animals. However, the problem is that the view that Africa is *wild* is largely imposed from without.

The phrase 'wild Africa' elicits visions of exotic animals, untamed land, and the primitive. Or at least that is what one might jump to, based on the dominant narratives of the past century [2]. African contexts, people and places have predominantly been written about, represented and theorized from a Western perspective [18,19]. A substantial body of colonial-era literature and visual imagery have, for example, articulated what a 'civilized' or 'scientific' gaze gauged of the continent: *wild*, ungoverned, savage [1].

It has been the constructed "wildness" (and resultant Othering) of African people and their customs, in opposition to the 'civilizing' powers of the colonizer, which have justified centuries of racial insubordination, captivity and enslavement [7]. Without dwelling on the sordid details, it would be fair to say, that the term '*in the wild*' has baggage in the context of Africa.

Language in and of HCI

Sensitivities toward language and action, especially when such language harks back to a colonial world order, remain paramount. Irani et al. remind us of this fact in their influential paper that brought post-colonial thinking and theory to the attention of mainstream HCI [16]. This sensitivity to language in the work of decolonization is found in the work of great African thinkers on liberation such as Ngũgĩ wa Thiong'o [20] (pp.16), Steve Biko [4](pp.107-108) and Frantz Fanon [7](pp.90). A critical engagement with such thinkers is paramount to not only decolonize design, but to in the process also enrich it [3]. It is with these thinkers in mind that we appeal to mainstream HCI, to continually and consciously reflect on the consequences of the language HCI develops and adopts to not only avoid troublesome terminology, but to also support and engage with HCI beyond its traditional Euro-American focus.

RELATED WORK

Critiques of terminology, often accompanied by clarion calls, are an established genre of writing both within HCI and beyond, for instance within the humanities. In this section, we position our paper alongside works within and beyond HCI that critique the terminology behind 'natural user interfaces' as well as 'digital natives' and 'digital immigrants', to show that a critique of terminology can form a valuable contribution.

We see parallels between our critique of the *in the wild* canon and Hansen's polemical commentary on HCI's over reliance on the words *natural* and *objective* [9], particularly in the context of so-called 'natural user interfaces' or 'natural interactions'. These terms, in Hansen's view, suffer slippage and become problematic when subjected to questioning: if a user can't use a '*natural* user interface' such as the Kinect, perhaps because they are missing a limb, does it in turn make the user un*natural*? Are *objective* studies that set aside our very humanness something to strive for? It is precisely these questions that Hansen & Dalsgaard unpack in a later paper, as they interrogate exactly what the term *natural* foregrounds and what it obscures [10].

A kindred work in educational research by Brown and Czerniewicz [6] critiques and deconstructs the discourse surrounding the increasingly popular term: digital native. This label is designed to categorize young people who have grown up using digital technologies and who are now entering higher education. The digital native finds its contrast in the digital immigrant, a term used to categorize the old, past, and obsolete. However, in our South African context (and presumably the argument extends to previously colonized countries), 'native' is synonymous with colonialism, apartheid, and domination. In the West, where the digital native term was coined, it connotes images of superiority and the future. In the South African context however, it was immigrant 'settlers' who thought of themselves as bringing civilization and in the process constructed themselves as superior to the natives who were in turn constructed as backward. The 'digital native' term is therefore not only muddled but also offensive [6](pp.359).

CONCLUSION

Our aim in this paper is to make a specific contribution: to show that, because of its colonial connotations, we find the terminology behind *in the wild* research approaches deeply discomforting. For those of us who have the incredible privilege of working or studying at a publicly funded research institution in Africa, Green et al. [8] reminds us that this privilege carries with it a responsibility: that our work and how we present it takes account of perspectives that have historically been marginalised. To our knowledge there is no research from Africa that contributes to or identifies itself with the *in the wild* canon. We therefore suggest that to enrich its discourse, to show sensitivities to marginalized perspectives, and to support HCI beyond its traditional borders, the *in the wild* community of research practice needs to adopt an alternative term.

We are mindful that in making this specific contribution that is grounded in our perspectives and sensitivities we developed through conducting research in Africa, we are relegating other concerns into the shadows. These concerns are methodological and speak more broadly - that is, beyond the *in the wild* canon – to the language we adopt in HCI research. After all, even the pervasive mantra of socalled user-centered design still implicitly casts the 'user' as a consumer of objects designed for them [15]. Yet the artful (re-)appropriations and vernacular forms of design-in-use that we see in the resource constrained communities we work with tell a different story, namely that of design byusers. If we reflect on the line of enquiry we pursued in this paper, our discomfort with the term wild isn't just limited to its colonial connotations, it also turns on the fact that the term enacts a distance between designers/researchers who are set over and above users/researched.

Especially from the point of view of Participatory Action Research (PAR), there has never been, nor can there ever be such a thing as 'the wild'. The relationality and reciprocity that PAR foregrounds simply wouldn't allow it. The irony is that the reviewer of F's paper, who we mentioned in the introduction, was, in a way, correct to suggest that specific *in the wild* research paper. For in that paper we encounter researchers engaging with communities and asking questions that we also grapple with in our studies: "If we are designing interventions intended to have some positive impact on the lives of users, what happens at the end of the study" [26] (p.1549)? Yet this humble question is at a deep, ontological level incongruent with the language of the approach and the distance this language enacts. Especially now that the value of in-situ studies within HCI research is generally accepted, the usefulness of the term *wild* – originally and laudably intended to motivate researchers to leave the confines of their usability labs – is waning.

If the *in the wild* community of research practice is to take our appeal seriously and adopt an alternative terminology, it would be a wasted opportunity to blindly replace one term for another, say in-the-*world* instead of in-the-*wild*. As outsiders of that particular community of research practice, we too are reluctant to suggest alternative terminology. Instead, we recommend – and this can be a lesson for research communities in general, to consciously and continually reflect on the ways in which the language and terminology we adopt in our research configures, constrains, and enables relationships between people, places, and technology. It is with this sentiment in mind that we say: enough with 'in the wild'.

ACKNOWLEDGMENTS

We would like to thank reviewers for their insightful comments and discussions. We are also indebted to our colleagues, especially Marion Walton and the members of the co-design group at the ICT4D Centre (University of Cape Town) for engaging with us on this topic and provoking us to dig deeper.

REFERENCES

- 1. Elazar Barkan. 1992. *The Retreat of Scientific Racism: Changing Concepts of Race in Britain and the United States between the World Wars*. Cambridge University Press.
- Noah R Bassil. 2011. The roots of Afropessimism: the British invention of the "dark continent." *Critical Arts* 25, 3: 377–396. https://doi.org/10.1080/02560046.2011.615141
- 3. Nicola J. Bidwell. 2014. Moving the centre to design social media in rural Africa. *AI and Society* 31: 51–77. https://doi.org/10.1007/s00146-014-0564-5
- 4. Steve Biko. 1987. *I Write What I Like*. Aelred Stubbs (eds.).Heinemann.
- Susanne Bødker. 2006. When second wave HCI meets third wave challenges. In *Proceedings of Nordic conference on Human-computer interaction: changing roles* (NordiCHI '06), 14–18. https://doi.org/10.1145/1182475.1182476

- Cheryl Brown and Laura Czerniewicz. 2010. Debunking the "digital native": Beyond digital apartheid, towards digital democracy. *Journal of Computer Assisted Learning* 26, 5: 357–369. https://doi.org/10.1111/j.1365-2729.2010.00369.x
- 7. Frantz Fanon. 1952. *Black Skin, White Masks*. Grove Press (US).
- Lesley Green, David W. Gammon, Michael T. Hoffman, Joshua Cohen, Amelia Hilgart, Robert G. Morrell, Helen Verran, and Nicola Wheat. 2015. Plants, people and health: Three disciplines at work in Namaqualand. *South African Journal of Science* 111, 9–10: 1–12. https://doi.org/10.17159/sajs.2015/20140276
- Lone Koefoed Hansen. 2014. What's in a word? Interactions 21, 1: 22–23. https://doi.org/10.1145/2541248
- Lone Koefoed Hansen and Peter Dalsgaard. 2015. Note to Self: Stop Calling Interfaces "Natural." In *5th Decennial Aarhus Conference on Critical Alternatives*, 1–4. http://dx.doi.org/10.7146/aahcc.v1i1.21316
- 11. Steve Harrison, Phoebe Sengers, and Deborah Tatar. 2011. Making epistemological trouble: Thirdparadigm HCI as successor science. *Interacting with Computers* 23, 5: 385–392. https://doi.org/10.1016/j.intcom.2011.03.005
- Sue Holwell. 2004. Themes, iteration and recoverability in action research. In *Information Systems research: Relevant theory and Informed Practice*, Bonnie Kaplan, Duane P.Truex, David Wastell, Trevor A.Wood-Harper and Janice DeGross. (ed.). Kluwer Academic Publishers, Boston, USA, 353–362.
- 13. Edwin Hutchins. 1995. *Cognition in the Wild*. MIT Press.
- 14. Tim Ingold. 2000. *The Perception of the Environment: Essays on Livelihood, dwelling and Skill*. Routledge.
- Tim Ingold. 2012. The Perception of the User-Producer. In *Design and Anthropology*, Wendy Gunn and Jared Donovan (eds.). Ashgate, Surrey, UK, 19– 33.
- 16. Lilly Irani, Janet Vertesi, Paul Dourish, Kavita Philip, and E. Grinter, Rebecca. 2010. Postcolonial computing: a lens on design and development. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '10), 1311–1320. https://doi.org/10.1145/1753326.1753522

- Jesper Kjeldskov, Mikael B. Skov, Benedikte S. Als, and Rune T. Høegh. 2004. Is It Worth the Hassle? Exploring the Added Value of Evaluating the Usability of Context-Aware Mobile Systems in the Field. In *Mobile Human-Computer Interaction -MobileHCI 2004*, Stephen Brewster and Mark Dunlop (eds.). Springer Berlin Heidelberg, Berlin, Heidelberg, 61–73. https://doi.org/10.1007/978-3-540-28637-0_6
- 18. Paul Landau and Deborah Kaspin. 2002. *Images and Empires: Visuality in Colonial and Postcolonial Africa*. University of California Press.
- 19. Valentin Y. Mudimbe. 1988. *The Invention of Africa: Gnosis, Philosophy and the Order of Knowledge*. Indiana University Press.
- 20. Ngugi wa Thiong'o. 1986. Decolonising the Mind: The Politics of Language in African Literature. Heinemann.
- 21. Yvonne Rogers. 2011. Interaction design gone wild: striving for wild theory. *Interactions* 18, 4: 58–62.
- 22. Yvonne Rogers. 2012. HCI Theory: Classical, Modern, and Contemporary. Synthesis Lectures on Human-Centered Informatics 5, 2: 1–129. https://doi.org/10.2200/S00418ED1V01Y201205HCI 014
- 23. Yvonne Rogers, Kay Connelly, Lenore Tedesco, William Hazlewood, Andrew Kurtz, Robert E. Hall, Josh Hursey, and Tammy Toscos. 2007. Why It's Worth the Hassle - The Value of In-Situ Studies When Designing Ubicomp. In Proceedings of the 9th International Conference on Ubiquitous Computing (UbiComp'07), John Krumm, D. Abowd Gregory, Aruna Seneviratne and Thomas Strang (eds.). Springer Berlin Heidelberg, 336–353. https://doi.org/10.1007/978-3-540-74853-3
- 24. Regina Scheyvens. 2014. *Development Fieldwork*. Sage Publications.
- 25. Fiona Ssozi-Mugarura, Edwin Blake, and Ulrike Rivett. 2016. Supporting Community Needs for Rural Water Management through Community-Based Co-Design. In Proceedings of the 14th Participatory Design Conference (PDC'16), 91-100. https://doi.org/10.1145/2940299.2940311
- 26. Nick Taylor, Peter Wright, Patrick Olivier, and Keith Cheverst. 2013. Leaving the wild: lessons from community technology handovers. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '13), 1549–1558. https://doi.org/10.1145/2470654.2466206