





DIGITALALTER**NATIVES**with a cause?

BOOK ONE TO BE

edited by Nishant Shah & Fieke Jansen





Digital (Alter)Natives with a Cause? Book 1 – To Be

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PREFACE

In the 21st Century, we have witnessed the simultaneous growth of internet and digital technologies on the one hand, and political protests and mobilisation on the other. Processes of interpersonal relationships, social communication, economic expansion, political protocols and governmental mediation are undergoing a significant transition, across in the world, in developed and emerging Information and Knowledge societies.

The young are often seen as forerunners of these changes because of the pervasive and persistent presence of digital and online technologies in their lives. In popular discourse and practice around these young people and their digitally-mediated lives, there has been the imagination of a digital native somebody who is born 'with' technologies. This idea of Digital Native has been helpful in looking at the new practices of knowledge production, community building, sharing, participation and collaboration that have emerged with the rise and spread of digital and internet technologies. However, more often than not, these young people are imagined as inhabiting certain bodies - White, middle class, educated, English-speaking, (mostly) male elites who live in environments of portable and pervasive computing. Their practices and engagements with technologies are taken as the norm by which the policy and research in other parts of the world is also framed.

The Digital Natives with a Cause? is a research inquiry that shifts the parameters of this imagination and uncovers the ways in which young people in emerging internet and communication technology (ICT) contexts make strategic use of technologies to bring about change in their immediate environments. Ranging from personal stories of transformation to efforts at collective change, it aims to identify knowledge gaps that existing scholarship, practice

and popular discourse around an increasing usage, adoption and integration of digital technologies in processes of social and political change.

In 2010-11, three workshops in Taiwan, South Africa and Chile, brought together around 80 people who identified themselves as Digital Natives from Asia, Africa and Latin America, to explore certain key questions that could provide new insight into Digital Natives research, policy and practice. The workshops were accompanied by a Thinkathon - a multistakeholder summit that initiated conversations between Digital Natives, academic researchers. scholars, practitioners, educators, policy makers and corporate representatives to share learnings on new questions: Is one born digital or does one become a Digital Native? How do we understand our relationship with the idea of a Digital Native? How do Digital Natives redefine 'change' and how do they see themselves implementing it? What is the role that technologies play in defining civic action and social movements? What are the relationships that these technology-based identities and practices have with existing social movements and political legacies? How do we build new frameworks of sustainable citizen action outside of institutionalisation?

One of the knowledge gaps that this book tries to address is the lack of digital natives' voices in the discourse around them. In the occasions that they are a part of the discourse, they are generally represented by other actors who define the frameworks and decide the issues which are important. Hence, more often than not, most books around digital natives concentrate on similar sounding areas and topics, which might not always resonate with the concerns that digital natives and other stake-holders might be engaged with in their material and discursive practice. The methodology of the workshops was designed keeping this in mind. Instead of asking the digital natives to give their opinion or recount a story about what we felt was important, we began by listening to their articulations about what was at stake for them as e-agents of change. As a result, the usual topics like piracy, privacy, cyber-bullying, sexting etc. which automatically map digital natives discourse, are conspicuously absent from this book. Their absence

is not deliberate, but more symptomatic of how these themes that we presumed as important were not of immediate concerns to most of the participants in the workshop who are contributing to the book.

The conversations, research inquiries, reflections, discussions, interviews, and art practices are consolidated in this four part book which deviates from the mainstream imagination of the young people involved in processes of change. The alternative positions, defined by geo-politics, gender, sexuality, class, education, language, etc. find articulations from people who have been engaged in the practice and discourse of technology mediated change. Each part concentrates on one particular theme that helps bring coherence to a wide spectrum of style and content.

The first part, titled To Be, looks at the questions of digital native identities. Are digital natives the same everywhere? What does it mean to call a certain population 'Digital Natives''? Can we also look at people who are on the fringes – Digital Outcasts, for example? Is it possible to imagine technology-change relationships not only through questions of access and usage but also through personal investments and transformations? The contributions help chart the history, explain the contemporary and give ideas about what the future of technology mediated identities is going to be.

In the second section, *To Think*, the contributors engage with new frameworks of understanding the processes, logistics, politics and mechanics of digital natives and causes. Giving fresh perspectives which draw from digital aesthetics, digital natives' everyday practices, and their own research into the design and mechanics of technology mediated change, the contributors help us re-think the concepts, processes and structures that we have taken for granted. They also nuance the ways in which new frameworks to think about youth, technology and change can be evolved and how they provide new ways of sustaining digital natives and their causes.

 $\it To Act$ is the third part that concentrates on stories from the ground. While it is important to conceptually

engage with digital natives, it is also, necessary to connect it with the real life practices that are reshaping the world. Case-studies, reflections and experiences of people engaged in processes of change, provide a rich empirical data set which is further analysed to look at what it means to be a digital native in emerging information and technology contexts.

The last section, $To\ Connect$, recognises the fact that digital natives do not operate in vacuum. It might be valuable to maintain the distinction between digital natives and immigrants, but this distinction does not mean that there are no relationships between them as actors of change. The section focuses on the digital native ecosystem to look at the complex assemblage of relationships that support and are amplified by these new processes of technologised change.

We see this book as entering into a dialogue with the growing discourse and practice in the field of youth, technology and change. The ambition is to look at the digital (alter)natives as located in the Global South and the potentials for social change and political participation that is embedded in their interactions through and with digital and internet technologies. We hope that the book furthers the idea of a contextbased digital native identity and practice, which challenges the otherwise universalist understanding that seems to be the popular operative right now. We see this as the beginning of a knowledge inquiry that incites new discussions, invokes cross-sectorial and disciplinary debates, and consolidates knowledges about digital (alter)natives and how they work in the present to change our futures.

Nishant Shah Fieke Jansen

INTRODUCTION

In this first book of the Digital (Alter) Natives with a Cause? collection, we concentrate on what it means to be a digital native. Within popular scholarship and discourse, it is presumed that digital natives are born digital. Ranging from Mark Prensky's original conception of the identity which marked all people born after 1980 as digital natives to John Palfrey and Urs Gasser's more nuanced understanding of specific young people in certain parts of the world as 'Born Digital', there remains a presumption that the young peoples' relationship with technology is automatic and natural. In particular, the idea of being 'born digital' signifies that there are people who, at a visceral, unlearned level, respond to digital technologies. This idea of being born digital hides the complex mechanics of infrastructure, access, affordability, learning, education, language, gender, etc. that play a significant role in determining who gets to become a digital native and how s/he achieves it. In this book, we explore what it means to be a digital native in emerging information societies. The different contributions in this book posit what it means to be a digital native in different parts of the world. However, none of the contribution accepts the name 'Digital Native' as a given. Instead, the different authors demonstrate how there can be no one singular definition of a digital native. In fact, they show how, contextualised, historical, socially embedded, politically nuanced understanding of people's interaction with technology provide a better insight into how one becomes a digital native.

The term 'Digital Native' has come under much critique in the last few years. Different but strong voices have pointed out that as a name it is highly misleading, makes opaque the processes of the youth's engagement with digital and internet technologies, and excludes people who do not live in incessantly connected environments. Different

alternatives have been suggested to better capture the practices and identities of this rapidly growing population of young people who understand and negotiate with the digital terrain as a default mode of being. We recognise the validity of all these critiques and endorse whole heartedly, that as a name 'Digital Native' remains flawed. And vet, we continue with the name because we believe that replacing this name with another is only going to be an epistemic change which tries to disown the earlier legacies and baggage that the name carries. Instead, we decided to work with the name 'Digital Native' in order to make transparent the ways in which it affects research, practice and policy in the Global South. The different contributors in this book take up this challenge to stay with the name, but to change what it means. They provide a critique of the universalist imagination of a digital native that presumes that a young, middle-class, white, educated, English speaking, (mostly) male user located in a developed information society is the prototype for digital natives across the world. They question the presumptions that are embedded in mainstream academic and popular discourse and offer new ways of producing multiple digital native identities. They further look at developing new lenses that provide a more comprehensive and digitally native way of understanding the contemporary world of theory and practice, where youth led, civic driven, technology mediated actions are rapidly producing new ways of articulating state-citizen-market relationships.

Anat Ben David makes a strong case for rescuing digital natives from a globalist fantasy and placing them within a located geo-politics. She argues that larger social and political contexts frame identities for the populations that engage with digital technologies in order to make a change in their immediate environments. For her, the question of identity is firmly entrenched in everyday practices and negotiations and cannot be detached from the same. Thus, the Digital Native cannot be a universal category and different people become digital at different paces and within different spaces. Shafika Isaacs approaches the same problem from a different angle. She begins by looking at how a narrow imagination of the digital natives within

international development policies often misses out on the grassroot level practices and perspectives that emerge from young people's everyday practice. Isaacs also looks at how the Digital Native discourse neglects digital outcasts by reducing the intimate and affective relationships of the technology users with technology, to questions of access and affordability.

Her urgent suggestion of looking at digital transformations finds resonance with Kerryn McKay's analysis of the space of personal expression and mobilisation online. Mckay looks at the human side of the information economy, exploring how people find spaces of personal narration and expression online. Looking at a particular Twitter user who was tweeting as a diasporic Egyptian in South Africa, McKay explores the processes by which the contexts of personal histories and legacies frame the political ambitions and aspirations of digital natives. An interview with Seema Nair also shows how in the developing countries in South Asia, there is a need to move away from the larger Information and Communication Technologies For Change (ICT4D) based infrastructural rhetoric and concentrate on building critical and digital literacy for the users of these new technologies. Nair takes us through different case studies, drawing upon her own experiences within the field, to show how mere access does not make one a digital native. She looks at the digital native as essentially subverting existing imaginations of power-technology-identity. She proposes to use it as a name that is able to question the status quo and build new articulations of power.

Adding to this equation of digital native identities as located within the triangulation of State, Public and Rights, is Nilofar Shamin Ansher, who questions the physical-virtual protocols installed in the imagination of who is a digital native. She produces an ethnography of the self, as she constructs a cyber-twin using an Artificial Intelligence platform, that gives us insights into the dynamics of digital identities and relationships. Her essay provocatively looks at the control, containment and regulation that are imposed by the sheer design and structured reality of digital platforms and tools. In sharp contrast is a photo-essay by Leandra (Cole) Flor, who

produces the material contexts within which digital natives operate, navigating between the digital and the physical seamlessly as they go about their everyday tasks, reminding us that the digital native is one of the many identities that they wear. Parmesh Shahani's reflections from within a corporate space extrapolate what is visible in these two contributions – that the corporate has a role to play in defining and shaping digital native identities. However, there is more to the corporate involvement in this process than market politics. Shahani looks at the potential of corporate engagement in processes of change, to give a new perspective that looks beyond the demonised conditions of censorship and market expansion that are generally attributed to them.

The *To Be* book begins the journey of critical engagement with digital natives and their causes, opening up new avenues for discussion, debates and questioning of the dominant discourses on digital natives within certain parts of the world. It draws together seven innovative and informed perspectives that offer new ways of thinking about the digital native identity. Through case studies, analyses, research frameworks, reflections and documentation, they not only emphasise how digital natives become digital but also show how digital natives, even though they might be using same tools and technologies, are varied in their interaction, engagement and relationship with these technologies that support their causes.

1.1 DIGITAL NATIVES AND THE RETURN OF THE LOCAL CAUSE

by **Anat Ben-David**FSSAY

Prologue

In December 2010 I attended a conference titled Digital Natives with a Cause? Thinkathon. It was organised by Hivos and the Centre for Internet and Society (CIS) in The Haque¹. During the event there was much debate amongst the participants around the current definition of a digital native. This got me thinking. Is a definition necessary? If yes, does it encompass the current phenomenon of young people who are engaged with digital technologies for promoting social change? Do all digital natives care about social change? Does it exclude other types of actors who share similar practices but are not considered digital natives? Does the definition entail that there are practices unique to digital natives, which justify this distinct ontological and epistemological group? When the *Thinkathon* concluded, some of these questions remained unsolved, and I was still puzzled by them. A few weeks later, an idea of a possible answer came from an unexpected quarter.

I was walking in our neighbourhood in Tel-Aviv with my four-year-old daughter, when she suddenly asked me why there was so much graffiti on the streets. "Graffiti?" I asked, puzzled, since I had not noticed any graffiti in our neighbourhood before.

She had noticed the graffiti as the small fences were just her height. From a taller point of view of an adult, I had only noticed the blooming hibiscus bushes that grew above them. Then she asked, "Don't you think graffiti makes our streets very ugly and dirty?" "Yes, it's very ugly," I replied, amused by her environmental concerns. Then she asked me to post a message on the internet on her behalf, calling for people to demonstrate against graffiti. At first I laughed, but she was very serious about it. Amused by her request, I took her picture standing next to the graffiti and posted her cute request on Facebook, which received 'Likes' and comments from the usual suspects in my immediate social network.

But she was more serious than that. When we arrived home, she started preparing signs for demonstration, asking if people were already coming and if the roads will be blocked with traffic. At that point it was clear that it would be difficult for me to realise her fantasy for social change. I explained that in order to organise a mass demonstration we have to ask for a permit from the police. "Ok," she said, and together we wrote a letter to the police (which I never sent, of course). Days passed and nothing happened, but she kept on asking whether they had replied and when the demonstration was going to take place. She is still waiting for it to happen.

To me, this story serves as a frame of reference for understanding digital native practices. As uncomfortable as I may feel about the current definition of digital natives and the connotations attached to it, I follow Nishant Shah's position that it might be better to accept the "found name", rather than to replace it, while at the same time attempt to unpack the baggage of presumptions attached to the current definition and reload it with new meanings (Shah, 2010, pp. 18-25). If we must accept the term as such and the demographic dichotomies it alludes to (i.e., natives as opposed to non-natives, digital as opposed to analogue, young versus older users of digital technologies), then the story about my daughter is a story about an "everyday Digital native", who is, as Shah described, "not perhaps just a user of digital technologies, but a person who has realised the possibilities and potentials of digital

technologies in his/her environments" (emphasis mine) (Shah, 2010, p. 19). The emphasis on the immediate environment, or the situated location – the granular cause, as seen through digital native eyes — is perhaps one of the lacunae often ignored in the current discourse about digital natives. Accordingly, this chapter conceptualises the term 'digital natives' in a way that attempts to reload it with new meanings about digital native practices as such that have a commitment to grounded places and situated knowledges. By tracking the parallel developments both in digital technologies as well as digital activism in relation to place, this chapter wishes to reintroduce the meaning of 'the native place' into the discourse on digital natives.

Introduction

The term 'digital natives' consists of an adjective and a noun, whose connotations, taken both separately or together, periodise the point in time in which the term emerged. It was coined by Marc Prensky in 2001 to refer to a young generation of students who "are 'native speakers' of the digital language of computers, video games and the internet (Prensky. 2001, p. 1)2. In its original context, thus, both 'digital' and 'native' refer to language - the language of these technologies is digital, and those native to it speak it fluently. However, the choice of words has broader implications. The 'digital' in digital natives also refers to the current evolutionary phase of Information and Communication Technologies (ICTs). Had Prensky coined the term ten years earlier, digital native would have probably been called 'Cyber Natives', 'Virtual Natives', much alike other prevalent terms of that time, such as 'Cyber Activists' or 'Virtual Communities'3. Similarly, the 'native' in digital natives connotes things other than fluency in a native language and the natural process of acquiring it. The literal definition of the noun, rather, refers to being born in a specific place4.

The purpose of this chapter is to conceptually unfold the broader meaning of the term 'digital natives' both by a historical contextualisation of the 'digital', as well as by a discussion of the geopolitics of the 'native'. The terminological analysis, grounded

The *Thinkathon* at the Hague, was an attempt to bring together different stakeholders who work with digital natives, in a conversation around and with digital natives. The three day 'unconference' helped us gain a few insights into the larger field of youth, technology and change. Some of the key-learnings that have also helped us form the structure of this book are:

- 1. It is not only naive but also counter-productive to think of digital natives as only engaging in peer-2-peer networks with other digital networks. We need to start contextualising them in larger histories and legacies to see the connections that they can establish with other actors in the field.
- 2. Digital natives do not wear that name as a primary identity. For most of them, it is one of the several hats that they wear. It is possibly more fruitful to understand digital natives as a lens that allows them to systemically renegotiate with existing structures that they occupy.
- 3. There are more similarities than differences in the ambitions that digital natives and traditional activists have for social change and political participation. The apparent schism is often the result of difference in vocabulary and tools. Processes to bridge the conversations between the two would lead to more enduring efforts at producing civic change.
- 4. The place and context of digital natives is crucially important in understanding their role and engagement with processes of change. Affective states of personal transformation are often guided by desires, ambitions, aspirations, emotions that are deeply located in the geo-political locations of the digital natives.
- 5. Change is defined only by identifying the existing conditions. Change is not universal and can be recognised and executed only in relation to the status quo. This is why the questions of 'where and when?' are as important as the questions of 'how?'

Anat's essay draws from and adds to all these different learnings and provides insight into the mechanics and approaches that researchers need to

by a historical contextualisation of digital activism and the history of digital technologies in the past decade, serves to argue that in its current form, the term 'digital natives' may represent a renewed dedication to the native place in a point in time when previous distinctions between 'physical' and 'digital' places no longer hold (Rogers, 2008). As claimed by Palfrey and Gasser (2008), digital natives no longer distinguish between the online and the offline and relate to both as a hybrid space. This definition relates to older debates about the introduction of ICTs that guestioned the differences between the 'virtual' and the 'real', the 'online' and the 'offline' (Rogers, 2009). The claim made by Palfrey and Gasser is ontological and epistemological; since digital natives do not differentiate between online and offline realities, the definition implies a new spatial epistemology. If this is the case, how does a digital native - spatial epistemology manifest itself in various forms of digital native activism?

Before attempting to answer this question in the following part of the chapter, I return to the terminological analysis of the existing definitions of digital natives. If the 'nativeness' of digital natives relates to their fluency in 'digital language' and their 'being at home' in digital spaces, how are their predecessors defined? Prensky, for example, contrasts digital natives with a previous generation of 'digital immigrants' - "those of us who were not born into the digital world but have, at some later point in our lives, become fascinated by and adopted many or most aspects of the new technology" (Prensky, 2001, pp. 1-2). Palfrey and Gasser add a third category to describe the predecessors of digital natives - 'digital settlers', those who grew up in an analog world but have helped shaping the contours of the digital realm, but unlike digital natives, they "continue to rely heavily on traditional, analog forms of interaction" (Palfrey & Gasser, 2008, p. 4).

The distinction between 'native', 'settler' and 'immigrant' does not only separate chronological generations; it also re-awakens the debate between the offline and online realities that preceded the emergence of the term. From a spatial point of view, it also distinguishes between the places of birth of

different generations. As inferred from Palfrev and Gasser's definition, digital natives are presumed to be born into a hybrid space comprised of enmeshed digital and physical components, while digital settlers and digital immigrants are perceived as having travelled to those spaces from the offline world. The terminological premise is that natives are better acquainted with their place of birth than immigrants, or settlers, and refers to the extent to which they are "at home" with digital technologies. However, it would not be far-fetched to assume that the imagery of the native, the immigrant and the settler also borrows from colonial history, or any other history of territorial disputes for that matter. The chronology of such demographic developments entails that a space is first inhabited by natives, the 'indigenous inhabitants', who are later joined by settlers (often times not without struggle), and much later eventually joined by immigrants. In the digital context, however, the chronological order is reversed. For digital natives were not born into a digital 'terra nullius'; digital spaces were conceived, shaped and already inhabited by those referred to as 'settlers' and 'immigrants'. Ironically, it is the settlers who set the grounds for natives, and whose practices precede those of the natives.

This chronological paradox of being native to a place already created and inhabited by others may explain the tension between other connotations of 'digital natives' that arose as the term evolved. As Shah claimed (Shah, 2010, p. 15), the naming of a group as "natives" entails an act of "othering" and in the case of digital natives, the "othering" was loaded with expectations to have unique, "indigenous" characteristics that would ontologically justify their classification, while at the same time adopt and continue the practices of their predecessors, the "settlers".

As a consequence, the mystification or laments about the new generation of digital activists were performed vis-à-vis what was already performed digitally, which explains terms such as "slacktivists" (Shah, 2010, p. 17), or Bennet's explanation of digital natives' politics as "self-actualizing citizens" versus "old century dutiful citizens" (Bennett, 2008). As proclaimed by

Shah, to better understand digital natives, a fresh look at what digital natives do may be more useful than the constant (and often failed) attempt to define who digital natives are (Shah, 2010, p. 20).

Perhaps one way of doing so is by shifting the weights in the definition of digital natives from "being digital" to "being native", focusing on the geographies and places digital natives are native to - not as being surrounded by a media-rich environment, but as operating in a hybrid geography of physical and online spaces. In the following, I argue that digital natives have a granular dedication to their local places and local causes, a dedication that can be seen as a form of counter-practice to previous forms of cyber-activism, shaped by transnational activist networks using ICTs for promoting global causes. To make the case for digital native practices as a renewed dedication to the local. I now turn to a historical account of previous practices of digital activism for social change led by Civil Society Organisations (CSOs)5.

By comparing two key-events of social protests and large-scale mobilisation of activists using ICTs, one marking early forms of digital activism in the late 1990s, the other marking one of the most recent forms of digital activism to date, it shows that both digital technologies and agents of social change have structurally changed from the transnational to the local, and from the institutional to the individual. I then claim that the current discourse about digital natives can be better understood by placing it in a specific point in time, and a specific place in the constantly-changing digital space.

From Seattle to Tahrir Square

The anti-globalisation protests against the WTO summit in Seattle in 1999 marked the beginning of an era of what was then termed 'cyber-activism' led by CSOs⁶. During the protests, a diverse range of activists, groups, organisations and social movements coordinated actions against the WTO summit using

think through while working in this field.

One of the ways to understand the distinction between the ontological and epistemological identities would be through two distinct questions. The ontological is understood in the question "Who becomes a digital native?" The epistemological would be at the level of "What are the actions that the digital natives do?" The distinction is important because most research is unable to bridge the gap between the two.

For many digital natives, the social network works as a safety net – they might never use their social networks in order to mobilise crowds for change, but it is the space that they think of as the first platforms of expression. They are familiar with the potentials of the network, as they organise their social life using these platforms. It is this potential that needs to be tapped into when thinking of social media integration with activism and change-making.

Digital natives recognising their own power to produce change is the first step. Then comes the next question: "Who do they approach to actually effect the change? Where do the learnings go from here?" Giving money to the four-year-old is not going to solve the problem. Trying to institutionalise the process is also not going to lead to anything fruitful. What is needed is infrastructure that makes digital natives critically aware of their own role in the processes of change and harness the potentials that their everyday practices of digital and online technologies offer.

The immediate environment is important because we want to locate the people in their everyday reality. However, the immediate environment is not limited to the physical geography; it is also the digital environments.

Maesy Angelina (Book 2, To Think) in her own research on the environments of digital natives' actions talks about how this emphasis on the environment also allows us to reverse the focus: Instead of thinking about how technology works

laptops and mobile phones. Some of the actions were directed at coordinating protests on the streets; others were directed at disseminating information about the demonstrations and the anti-globalisation movement on the Web. The media took up the stories put together by the various organisations, which eventually led to the establishment of www. indymedia.org, the alternative media outlet for social activists (van Laer & van Aelst, 2009).

Twelve years (and many other digital campaigns and protests) later, the masses took on the streets of Cairo to protest against President Mubarak's regime. They too used the internet and mobile phone technologies to coordinate the protests. People from all over the world watched the events through Al Jazeera's satellite TV channel as the Egyptian authorities first switched off the internet in Egypt to prevent the protests, then saw Mubarak step down?

Are these events comparable? Do they represent a 'generational gap' between public protests facilitated by ICTs in the 'digital settlers' era, and their current manifestation in a digital age inhabited by 'digital natives'? If we accept for a moment the dichotomous demographic definitions of older versus younger inhabitants of the digital space, then an analytical comparison of the events may highlight the differences between older and younger generations of digital activists, to better understand what is unique to digital native activism that was not already performed before. At first sight, however, the differences between Seattle and Cairo do not seem significant: both are events of public protest facilitated by ICTs, both were propelled by a loose network of activists working on a joint cause, both are examples of civic initiatives that proved effective and powerful in promoting a cause against well-established institutions such as governments. governmental organisations, or the mainstream media. Such similarities question the extent to which current forms of digital activism are unique practices that justify the dichotomous definitions of older versus younger users of digital technologies. Yet an examination of the differences between the events reveal that in a decade's time, technological and social factors are responsible for a gradual shift in the types of actors, the types of causes involved in the process, and the digital spaces in which they operate.

Although the internet and mobile phones played a role in both the cases, what was called 'The Internet' in 1999 was slightly different from its current form. Within a decade, digital technologies have transformed from a decentralised network of computers connected to the internet and a parallel-but-separate network of cellular communication devices, to enmeshed networks that combine both. Taking into account that in 1999 there were few, if none, wifi hotspots, the activists in Seattle had to use laptops with a LAN or modem connection to the internet to coordinate their actions (mobile phones were only used for voice communication, not for uploading data or seeking information). The Web was less social, too. While current protests in the Middle East and North Africa were mostly coordinated through social media platforms. Twitter and Facebook⁸ especially, in 1999 most of the coordination of actions was performed using email distribution lists, e-bulletin boards and NGO's websites. The actors were different, too, since the main level of coordination of actions in Seattle was performed by a core network of CSOs, with a loose network of other CSOs and individuals attached to them [Clark] & Themudo, 2003, p. 116). The activists in Egypt, on the other hand, were not necessarily mobilised by civil society organisations, but by a critical mass of citizens, individuals, who communicated with their immediate social networks to mobilise and coordinate the demonstrations.

One other difference relevant to the case I wish to make for digital natives is that both the actors as well as the causes in the two instances represent a shift from the transnational to the local. While Tahrir square has become both the physical site and symbolic location of the Egyptians' liberation from their local regime, Seattle had transformed into a battle site only because it hosted the WTO summit and attracted a network of transnational

activists to protest against it. Put differently, while the protests in Cairo were about Egypt, the protests in Seattle were not about Washington; they were about anti-globalisation.

The scholarly literature on social transformation facilitated by ICTs that spurred in the aftermath of the 'Battle of Seattle' highlighted the importance of the structural fit between ICTs and social movements. This 'perfect match' has been given many names, one of them was "the dot cause", coined by Clark and Tehmudo (2003: 110):

"The term 'dot cause' can apply to any citizen group who promotes social causes and chiefly mobilises support through its website. Such group fit Keck and Sikkink's (1998:2) definition of 'transnational advocacy networks' as including 'those relevant actors working internationally on an issue, who are bound together by shared values, a common discourse, and dense exchanges of information and services'. In social movements, dot causes can be important mobilising structures, attracting new support, coordinating collective action and producing and disseminating new framings".

In many ways, the new technology, perceived as decentralised, global, and flattening time and space, only facilitated the already-existing structures of transnational networks of civil society organisations. Thus, the "settlement" of civil society organisations in cyberspace and their transnational networking on the Web was perceived as a 'natural move'. However, digital technologies did not transform civil society organisations' modus operando: their networked structure has remained the same (albeit greatly facilitated by the new technologies), their causes have not changed, and their actions are still directed at the same institutions (government, inter-governmental institutions, and the mass media) (Garrett, 2006).

To contextualise the current discourse on digital natives, I suggest a rhetorical 'thought experiment', by applying the terminology used today to refer to Digital Natives versus Immigrants or Settlers on the various stakeholders that used ICTs for social change in the late 1990s. In such a case, transnational networks of CSOs were the 'natives' since their

and what people do within the technologised environments, we also need to start looking at what technologies can do for us and how people are using them for their purpose.

The hybrid space, despite its fusion idea, actually reinforces the idea of the physical and the digital because it still presumes some hybrid overlaps. Digital natives don't think of these two as separate spheres. They don't think of the virtual and the physical. They just think of things as they are without worrying about which is which. It is the difference between geo-location services and digital-cartographic services. One just has a realisation that there is a world and it has different dimension. The other is trying to simulate the physical into the digital.

In our conversations with different digital natives, we have realised that there is a certain way by which the digital natives are always imagined as young. However, there were different kinds of digital natives - those who literally built the internets and are no longer in their teens. We fondly call them 'digital dinosaurs' but this is only an ironic name. These first builders of the internets and cyberspaces have completely disappeared from our imagination of technology-mediated relationships despite the fact that they are more native to the digital and internet technologies. They in fact have more control because unlike the new generation of digital natives, they were also heavily involved in the production and construction of digital spaces and tools, whereas the new generation is increasingly becoming a consumer of technology and producer of content.

The terminological premise is also that these hybrid spaces are internationally the same. It presumes that these digital natives are the same everywhere. So, for example, it is easily presumed that Facebook users all around the world must be doing the same things because they are using the same platform. But even a cursory look tells us that this technological determinism is a fallacy. People produce protocols and practices based on their needs and desires

networked, transnational structure was not alien to the transnational and networked structure of the new technologies. Other institutional stakeholders, such as governments, inter-governmental organisations, or mass media corporations, had difficulties adjusting their fixed structures and business models to emerging ICTs in the same way the current discourse about 'digital natives' refers to the generation of 'digital immigrants' or 'digital settlers'.

Over time, however, the paradigms hailed for the structural fit between CSOs, transnational advocacy and ICTs have started to collapse. Transnational collaboration was effective, but in certain cases it hit a wall, especially when local issues and causes were addressed by the international community. As Garrett points out: "Protests occur regularly around the world, but activity generally doesn't continue at a single location for extended periods, and a particular location is unlikely to see more than a few protests a year" (2006:210). Rogers and Marres (2008), for example, report how NGO-Web involvement in the controversy around the Narmada Dam in Gujarat, India resulted in the abstraction and generalisation of the issue to the extent that it no longer addressed the situated problem. In a different study on the involvement of transnational network advocacy in the Palestinian-Israeli conflict, we found that local Israeli NGOs involved in objecting Israel's construction of the structure between Israel and the Palestinian territories were left out of the debate (Rogers & Ben-David, 2008). Local issues, then, remained less welltreated by the transnational community, using the global structure of ICTs.

At the same time, the World Wide Web has become less and less wide. Very much following the logic of "daily me" Web cultures described by Cass Sunstein in Republic.com 2.0 (Sunstein, 2007), Ethan Zuckerman speaks of an "imagined cosmopolitanism" effect of digital technologies, reflecting on the need to tune into local reports from all over the world in order to widen the potential of the Web as a global technology (Zuckerman, 2010). Zuckerman is especially referring to Global Voices Online⁸, the blogging platform he cofounded in 2004, hosted at the Berkman Center for Internet and Society at Harvard Law School. Global

Voices Online shares and translates local citizen media and blog posts from areas in the world which usually do not make it to the global news? Yet, a study of Global Voices Online, performed in 2006 by the Govcom.org Foundation, which examined the extent to which the local reports are discussed in other places, showed that the conversations did not travel far – they were rather clustered regionally (Rogers & Govcom.org Foundation, 2006).

From a technological point of view, the effect of the narrowing Web described by Zukerman is explained by a gradual process of localisation of Web-based and mobile communications technologies. Richard Rogers (2008) describes the evolution of the politics of Webspace by dividing it into four periods, starting from the perception of the Web as a global, hyperlinked space, followed by a period in which the Web was perceived as a public sphere, then transformed into isolated islands of content that marked the "Web as social networks" period, followed by its current politics of localisation, what he also terms "the revenge of geography", where the Web's organising mechanisms, such as search engine algorithms and IP-based Web-services no longer distinguish between Web-spaces and geographical spaces. From a Webspace perceptive, then, the 'Battle of Seattle' is placed in the "Web as public sphere" period, whereas current events in Egypt, Tunisia, and other countries in the Middle East and North Africa represent the "revenge of geography" period. The rapidly localising digital technologies, characteristic of the period in which the discourse about digital natives emerged, is also characterised by increasing control of nation-states on digital technologies (as evident in Egypt's Internet shut-down, to name one example), as well as by the increase in access to the Internet through mobile phones which in many developing countries is now more prevalent than access from PCs (International Telecommunications Unit. 2010).

Arguably, the growing localisation of ICTs has transformed the structural fit between transnational advocacy networks and ICTs. Until recently, civil society organisations have been the hegemonic agents for social change using ICTs. They were quicker than governments and other institutions in adopting digital

technologies, and thus changed power relations between them. Alternative media outlets such as the Independent Media Center (Indymedia)¹⁰ which was established in the aftermath of the 'Battle of Seattle' successfully competed with the traditional hegemony of mass media outlets such as newspapers and broadcast electronic media, and were effective in mobilising and informing sympathisers of various causes from around the world. However, as ICTs became more local, the hegemony of transnational networks and organisations withered, and the agency of change shifted from the organisational level, to the individual (Angelina, 2010). In the same way that institutions such as governments and mass media corporations have had to adjust to the new digital spaces a decade ago, civil society organisations now need to rethink their paradigms to adapt to the current developments in digital technologies. Last decade's natives, then, become 'settlers', or 'immigrants', in contemporary digital space, while at the same time new actors need less adaptation in using the new technologies for social change. In the short history of the Web and of digital spaces, then, this is perhaps the moment in time when the discourse about digital natives comes into the picture.

New forms of digital activism are less reliant on existing structures of organisation, fund-raising, and framing of campaigns. Instead, activism for social change by actors termed as 'digital natives' is characterised by individuals and groups promoting immediate, local causes, relaying information and mobilising for action through their immediate social networks.

Such activities changed the ways 'campaigns' were thought of so far. Current debates on whether launching a Facebook group may or may not attract a critical mass of members that will eventually lead to social revolutions have not yet been resolved, but the spontaneity of action, the granular level of the causes, as well as the lowered threshold of the agents and initiators, are typical of the current trends in digital activism that are different from previous practices from a decade ago.

which emerge from different locations and contexts.

This is also an interesting addition to the "born digital", "being digital" debate. I wonder if we can talk a bit about "being native" and "becoming native". Can a person naturalise him/herself into being a digital native?

Kara Andrade (Book 3, To Act) in her reflections, charts her own journey into 'becoming digital' as well as 'becoming native'.

This is also a good spot to talk about the relationship between the global and local. People often think that digital natives are essentially global and removed from their local. But most of the stories are actually about the local that reaches a global audience.

The notion of loose network or loose affiliation has been criticised by the likes of Gladwell. The main point of criticism being: How can a loose network really affect difficult change? Sami Ben Gharbia, a defender of online freedom of speech, defies this argument by stating that it is the loose network that enables successful digital activism initiatives. "The digital activism field in the Arab world forms one of the most decentralised, unstructured, and grassrootsoriented dynamics of change that even most of the cyber-savvy local NGOs and opposition parties have a serious trouble in "infiltrating" or exploiting it for their own benefit. Consequently, this has made this movement independent, attractive, and resistant to any kind of control. But independence does not necessarily mean disconnection or isolation".

http://samibengharbia.com/2010/09/17/the-internet-freedom-fallacy-and-the-arab-digital-activism/

Loose affiliation might actually define new forms of activism. The Pink Chaddi Campaign in India is a nonviolent protest movement launched in India in February 2009 in response to notable incidences of violent conservative and right-wing activism against perceived violations of Indian culture. A group of

Examples from all over the world abound. Among the less-celebrated of the countless examples is a digital initiative called Gaza Youth Breaks Out (GYBO)11. What started as a provocative manifesto posted on Facebook by individuals who knew they should remain anonymous for the durability of their cause¹². became a youth-movement of young Palestinians who wished to break out the current situation in Gaza, being critical not only of Israel's closure policy. but also of the fracture between Hamas and Fatah. Their concern was to make a specific place – Gaza – a better place to live in. The manifesto was circulated outside Facebook and has reached audiences from all over the world; it both enabled the local mobilisation of youth in Gaza as well as raised support for the humanitarian situation in Gaza in ways that reached beyond the well-worn political debate about Gaza. When Facebook eventually froze their account, GYBO moved to Twitter, Youtube and other digital spaces, but their geographical cause has remained the same.

In less than six months, GYBO transformed from a digital initiative to a social movement, without adapting the structure of a civil society organization. It did not have a media strategy, did not have accountability commitments to funders, it did not launch a planned campaign.

Rather, they made use of their situated knowledge – both of their life in Gaza, and of the digital tools they have at hand, to promote social change in their local place.

The historical contextualisation of digital activism does not serve to claim that current practices replace previous ones. Digital natives do not replace previous actors for social change such as CSOs and transnational advocacy networks. Rather, it sketches the spaces in which digital natives operate, one that is both digital and geographical and that is populated not only by natives, but by other types of actors and stakeholders characterized by their respective practices. With these renewed meanings loaded into the concept of digital natives, the following part concludes this chapter by returning to

the conceptual discussion of digital natives and their digital places of birth.

Conclusions: Hybrid spaces, situated knowledges

This chapter attempted to reintroduce a spatial context to the term 'Digital natives'. The shift from focusing on 'native actors' to 'native places' enables bypassing some of the problems and ambiguities attached to the term. Instead of struggling with the problems of ontological dichotomies and exclusions that come with the characterisation of a group of actors and users, it treats the 'digital native space' as a continuous space that is constantly evolving and that simultaneously hosts a complex network of actors and practices, digital natives among them. As Palfrey and Gasser claimed, and as described by Rogers from a Web space point-of-view, this space is characterised by hybridity, both of digital and geographical spaces, of various digital mechanisms and technologies and of a heterogeneous set of actors.

This is very much in line with Shah's conceptualisation of a digital native space as a flatland, a "free floating space, which is at once improbable and real, and where the elements that constitute older forms of change processes, are present but in a fluid, moving way, where they can reconnect, recalibrate and relate to each other in new and unprecedented forms" (Shah. 2010, p. 30). As demonstrated in the previous part of this chapter, forms of public protests facilitated by digital technologies may not be completely new, but they introduced an unprecedented dedication to the local place. This dedication, however, does not entail that the knowledge produced by local forms of actions are confined to local spaces. The protests in Egypt were inspired and influenced by the events which took place in Tunisia a month earlier, where digital technologies also played a significant role in disseminating information and mobilising action. The GYBO initiative in Gaza started more or less at the same time and had similar characteristics, but the type of action and knowledge about the local issues was adjusted to the situated place. In that sense, knowledge produced by current forms of digital activism travels from one place to another, but is constantly localised and transformed to fit the local actors and their causes.

This type of knowledge is very different from the previous dominant use of digital technologies by transnational networks. As described above. transnational networks of activists often times failed to effectively address, or even see, the situated causes and issues of local places. The current dedication to the local place can be thus interpreted in terms of a counter practice, one that alludes to Donna Haraway's concept of situated and subjugated knowledges (Haraway, 1991). Transnational advocacy networks on the Web may be described as adopting "the view from above, from nowhere, from simplicity" (Haraway, 1991, p. 195), while granular activism dedicated to local places may be described in terms of the grounded knowledge, that albeit its partiality, encompasses greater complexity.

This brings me back to the anecdote about the hibiscus flowers and the graffiti which I described in the prologue to this chapter. Despite my commitment to environmental issues which I try to pass on to my daughter, my taller gaze was a 'gaze from nowhere' and failed to notice the graffiti that she found so disturbing and demanded an immediate action for change. Admittedly, my response to her dedication entailed an act of 'othering', of treating her devotion to remove the graffiti from the streets as something that is by all means very cute, but incapable of understanding the complexities involved in the real politics of change. The conceptualisation of digital natives as a young generation of users may entail a similar act of 'othering' that views their politics of change as different, while at the same time failing to notice that despite their difference, they are very real. I suggest that by shifting our 'othering' gaze from the indigenous actors called digital natives, to the indigenous landscapes in which various types of actors operate, we can benefit from learning about the complexity, heterogeneity and multiplicity of situated knowledges and practices that take place in hybrid geographical and digital spaces.

I conclude by returning to the terminological

women were attacked by this right-winged party in a pub in Mangalore. In response, a group of young women started a Facebook group in which they asked 'friends' to join in their peaceful protest and send pink underwear on Valentine's day to the head of the right winged party. The Facebook group attracted over 30,000 followers and over 3,000 pink panties where sent. This action gained widespread media attention and the right-winged party had to publically distance themselves from the people who were invoking the political party's views on cultural singularity to justify their violence against women. Maesy Angelina (Book 2. To Think) argues that the cases of digital activism like the Pink Chaddi Campaign or as described by Sami Ben Gharbia have an alternative approach to social change and organising a social movement that cannot be understood through the current stereotypes of activism.

The internets should be in plural forms. The very granularity of practice, of experience, of expectations, of portability, are all different. This essay particularly brings to us the idea of how the internets cannot possibly be conceived of as one smooth evolutionary framework. Different versions, experiences, executions and structures of the internets exist simultaneously for us. They change and mutate through time. This also means that the digital natives who belong to these digital environments are also different and change with time and place.

These observations ties in with the larger research framework of the project where we have identified that one of the biggest disconnects between existing actors and digital natives is that despite infrastructure building and promotion, the CSOs in emerging ICTs like India have not taken to digital technologies. And this is not just an access or an immigrant problem. There are complex structures at work about why these actors shy away from technologies that are seen as neo-liberal and elite, in the first place.

This approach of research and investigation

problem of digital natives. Consider, for example. how the current generation of digital natives would behave ten or twenty years from now, when they are no longer 'young' and when digital technologies and spaces would probably be very different from the way we know them today. Would they still be considered 'natives' in these future spaces? Would they rather become 'immigrants' or 'settlers' in the spaces considered their place of birth, as is the case now with CSOs having to adapt their campaigns and strategies to social media platforms? It may very well be so that the paradigm of the 'native', with its connotations of subjugation of power and chronological orders attached to it, will be abandoned in the future. For now, the term is here to stay. As Shah claimed, we would rather treat the concept of digital natives as an umbrella term, or a "placeholder" (Shah, 2010, p. 13). Following Shah, and by focusing on the return to the local cause, this chapter treated the concept of digital natives as "a holder of place".

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- ¹ Digital Natives with A Cause Thinkathon. URL http://www.hivos.net/Hivos-Knowledge-Programme/Themes/Digital-Natives-with-a-Cause/News/Digital-Natives-with-a-Cause-Thinkathon.
- ² Note that the 'nativity' referred to originally is that of a language, rather than a place of birth, a point to which I return.
- ³ The turn from the 'cyber' and 'virtual' to the 'digital' is based on Rogers (2009). For an overview of the umbrella of terms related to 'digitaldigital nativesdigital natives' see Shah, 2010.

- ⁴ See, for example, the Merriam Webster Dictionary definition for 'Native'. http://www.merriam-webster.com/dictionary/native.
- ⁵ This chapter does not map all forms of dDigital nNative activism, but focuses mostly on forms of public protests facilitated by digital technologies.
- ⁶ This is not to claim that cyberactivism was 'born' in Seattle. Older practices of cyberactivism date back to the 1980s. See, for example, Rheingold 1993.
- ⁷ See, for example, ("Can Egypt's Internet Movement Be Exported?"., 2011) and ("Social Media, Cellphone Video fuel Arab protests". 2011).
- ⁸ Global Voices Online. URL http:// globalvoicesonline.org/. Retrieved May 2 2011.
- ⁹ In March 2011, for example, Global Voices Online reported that the Cameroonian government banned access to Twitter via SMS, an issue that did not travel outside Cameroon in the news space. See Global Voices Online. March 10, 2011. "Cameroon: Netizens React to SMS-to-Tweet Ban". URL. http://globalvoicesonline.org/2011/03/10/cameroonnetizens-react-to-sms-to-tweet-ban/. Retrieved May 2 2011.
- ¹⁰ Independent Media Center, URL http://www.indymedia.org/en/index.shtml. Retrieved May 2 2011.
- 11 "Gaza Youth Breaks Out" (GYBO) on Facebook.com. URL http://www.facebook.com/pages/Gaza-Youth-Breaks-Out-GYBO/118914244840679. Retrieved May 2 2011.
- ¹² The Manifesto was eventually removed from Facebook.com. But it is still blogged on the group's Wordpress platform. URL http://gazaybo.wordpress.com/about/. Retrieved May 2, 2011.

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establishes technology as a paradigm that cuts across culture, politics and ideologies in order to produce a world-view. Such an inquiry helps us build the idea of technology not as a tool but as an integral part of our mechanics of living.

Ben Wagner's contribution (Book 4, To Connect) in this project examines such an idea of cosmopolitanism as normative and restrictive. Wagner examines how certain kinds of glorified and codified processes and identities actually produce exclusions by keeping those who do not conform to them, out of the digital natives sphere. Simultaneously, these norms also put significant pressure on those who bear the label of 'Digital Native' to perpetuate the values and roles ascribed to them, thus taking away the possibilities of innovation and creative experimentation.

Eddie Avila (Book 4, To Connect), the director of Rising Voices, a programme that is emerging under the Global Voices Online umbrella, presents very effective case-studies to show how technologies for development play a dual role: On one hand, they help users customise them for local usage and on the other, give them a global audience to which they can reach out with their efforts and ideas. This dual nature of technologies has enabled their widespread integration in processes of social and political change.

The idea of localisation is perhaps better understood from the kind of debates that arose in the recent WikiLeaks controversies and debates. The location of the server, the jurisdiction under which Julian Assange could be tried in the court of law, the residence of data, the hosting of the website, all negotiated the complexity of space when it comes to digital and internet technologies, especially when we start looking at the future of cloud computing.

We cannot overemphasise the location of internet and digital technologies within a larger media complex. What is written on Facebook is often important not because of what happens to it on Facebook, but what

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can happen to that information as it travels across the various digital and online platforms.

Many digital natives turn to the internet as their default space of belonging and expression. Many digital activists use the web because they think it provides anonymity and it helps them spread their word across the presumed unregulated geography of the internet.

However, it is necessary to highlight the fact that the internet, just like the physical counterpart, is equally regulated and controlled. Digital natives are going to often be in conflict with private actors who have the ability to freeze their accounts, governments that can trace them back, and different social structures who will control their activities.

One of the examples that emerged in our conversations at the Workshop was how YouTube blocked human rights documentation videos because the content was often violent and disturbing. Similarly, sexuality rights activists have had their accounts frozen or their posts removed because a large audience of fundamentalists online objected to the content there.

It has become necessary that all the actors collectively become a part of these deliberations and processes because often the containment and censorship is unintended. Parmesh Shahani (Book 1, To Be) in his reflections on "corporate affairs", discusses this from a corporate perspective and the role of integrated knowledge practices and makes a strong case for this.

Steve Vosloo (Book 4, To Connect), in his case study on a mobile literacy platform in South Africa highlights a similar trend: People grow and the platforms grow with them. We often see younger users completely oblivious of platforms and services that were the biggest names just a decade ago. Digital natives will thus also start proliferating on different platforms and new tools. What will bind them together is their relationship with the local and their faith in technologies (both as tool and paradigm) giving them powers to make a change.

1.2 SHIFT HAPPENS: A DIGITAL NATIVE PERSPECTIVE ON POLICY PRACTICE

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Shafika Isaacs

FSSAY

The uprisings by digital natives in the Arab World shed new light on the revolutionary potential of digital technologies accompanied by a new questioning of dominant conversations about the role of Information and Communication Technologies (ICTs) and social transformation. One of the many places where these conversations are located is within the domain of ICT policy, practice and change.

The purpose of this article is to discuss the broader socio-economic and cultural contexts that inform ICT policy agendas in developing countries and their relevance to digital natives. It also discusses how the aspirations of digital natives are reflected (or not) within the practice of policy and policy change.

This article is a result of my perspective and experience as a social change practitioner. Over the past 15 years, I have been involved with numerous developing country projects and policy development processes related to the integration of ICTs within a broader social transformation agenda. Here I try to raise some critical insights and invite you to share your responses.

How the MDGs and WSIS Frame our policy conversations

- 1. Eradicate extreme poverty and hunger
- 2. Achieve universal primary education

- 3. Promote gender equality and empower women
- 4. Reduce child mortality
- 5. Improve maternal health
- 6. Combat HIV/Aids, malaria and other diseases
- 7. Ensure environmental sustainability
- 8. Develop a global partnership for development

AND achieve all this by 2015.

These eight goals were adopted by 192 governments belonging to the United Nations (UN) at a Millennium Summit in 2000. They are referred to as the Millennium Development Goals (MDGs) and each goal contains clear time-bound targets. For instance, the target for Goal 1 is to reduce extreme poverty and hunger by half by 2015. And in the managerialist language of indicators, this means reducing by half, the number of people in the world who live on less than \$1 US dollar a day.

The MDGs serve as a clarion call to all stakeholders. worldwide to work together to reach these goals by 2015. To date, the UN has mobilised support and partnerships with the global multinational private sector, donor and development agencies, civil society organisations and national governments in support of the MDGs. In this sense, the MDGs provide a global framework for the development of national social and economic policies. Their 'time-bound and quantifiable targets' serve as a quide against which all governments should measure progress in their countries. The UN and their partners believe that if these goals are achieved, world poverty will be cut by half, tens of millions of lives will be saved, and billions more people will have the opportunity to benefit from the global economy (UNDP, 2010). Whenever I read the MDGs, the song by the late great Michael Jackson comes to mind: 'Heal the world; Make it a better place; For you and for me and the entire human race'. Who knows, perhaps Mr Jackson was influenced by the sentiments of the MDGs when he composed this song?

On a regular basis, the UN convenes a summit where its MDG partners gather to take stock of progress with meeting their development goals. A number of reports are produced to indicate progress. For

instance, the latest UNICEF Report on the condition of youth worldwide reveals that almost half the world's adolescents of secondary school-age don't go to secondary school; they are vulnerable to human trafficking and recruitment into armed groups; that about 150 million young people between the ages of 5 and 14 are engaged in child labour. These statistics do not include the countless numbers of adolescents who are denied adequate nutrition, who lack access to basic health services and care and who become mothers in childhood (UNICEF, 2011).

Similarly, the UNESCO's Education For All Global Monitoring Report reflects amongst others, on the millions of children and youth who are of school going age and are not to school and the millions who drop out of school, especially girls, in developing countries. Their 2011 report states that 10 million children and youth of school-going age drop out of school in Sub Saharan Africa each year. (UNESCO, 2011)

In this way, especially as we draw closer to 2015, the global imagination in the official world of governments and their partners are harnessed towards reaching the MDGs. From a digital native perspective, the MDGs are highly relevant. All the eight goals relate to the present condition of millions of children and youth who are born into the digital era and reflect on the likelihood of a very bleak future if the lives of the current generation of young people are not improved.

The reality of global competition: Another side of the story

However, the MDGs are just one side of the story. Alongside and in contradiction to the MDGs, are the realities enforced by rapidly advancing digital technologies, rising global competition and the encroaching demands of a globalising knowledge-based economy framed within a related neo-liberal consensus. Crudely stated, the latter refers to an ideological framework that advocates a reduced role for the state, higher levels of private sector involvement in the economy under conditions of market dominance. These pressures of global competitiveness have an overwhelming influence

We have often been asked why we should be talking to the world of policy, when we want to work with digital natives, who so obviously don't work with policy actors. We want to emphasise that the disconnect between the world of policy and the processes of change initiated by the young is a fallacy. There are at least three ways in which we identify the engagement and interaction between digital natives and the world of national, international and regional policies.

- 1. The first is digital natives' involvement in the processes of policy making as digital natives. If this population is developing new ways of viewing our world, then their opinions, experiences and attitudes should be reflected in the policies, especially technology policies which significantly shape the futures of their digital engagements. Prabhas Pokharel's contribution (Book 3, To Act) unpacks this set of ideas by looking at concrete case-studies from his own experience.
- 2. The second is digital natives' involvement in policy making as citizens. We often forget that those who wear the digital native identity are also citizens in their own rights. With new processes of participation mediated by digital technologies, they can produce more participatory structures to influence and shape policy. Joanna Wheeler's research (Book 2, To Think) on 'Looking like a Citizen' delves deeper on this question.
- 3. The third is digital natives as affected by policies. Policies have a direct impact on questions of access, affordability, intellectual property, etc. It is also necessary to look at how these policy ambitions and goals affect the ways in which digital natives perceive themselves as agents of change. Shafika Isaacs's piece begins here, where she reflects on the relationship between international policy visions and localised digital natives' activities within Africa.

We find this an interesting beginning point because while there are many policy recommendations, there isn't enough attention being given to the technology policies in the region and how they shape and affect the processes of change.

on the policy approaches adopted by governments across the globe.

The economic events of 2008 provide a worthwhile example of how the realities of the global economy influence policy change. In 2008, the collapse of large banks in Europe and the USA, led to one of the most unprecedented crises in the financial and economic history of the world. This collapse contributed to the failure of key businesses, declines in consumer wealth estimated in trillions of US dollars, and a significant decline in economic activity, leading to a severe global economic recession in 2008. It is widely believed that digital technologies made it possible for a financial collapse of this magnitude. Another feature of the crisis was the cuts in government spending on social programs in education, skill development and health care.

The World Bank stated that this economic crisis led to the impoverishment of another 10 million people, thereby indicating a major setback in the global challenge to meet the MDGs. This again reflects the harsh realities of meeting these goals within the current world economic and social framework. In a more recent report, the World Bank states that almost 40 percent of developing countries were exposed to the poverty effects of this global economic crisis (World Bank, 2011)

And as recent as April 2011, the then-head of the International Monetary Fund (IMF), the currently-disgraced Dominic Strauss Khan stated that, "Especially because of youth unemployment... there is now a risk that this will be turned into a life sentence and that there is a possibility of a lost generation". This was said in the context of the World Bank predicting a full blown economic crisis. (World Bank, 2011:6).

Again, this reinforces how the lives of young people and digital natives are inextricably linked to developments in the global economic system.

ICT 4 Development

Within these contradictory tensions, resides the 'ICT for Development (ICT4D)' conversation. Whilst we have seen how digital technologies have contributed to the colossal failure of the global financial system, the ICT4D lobby claims that digital technologies also have the potential to improve the lives of poor people and can help reach the MDGs – under certain conditions. For many years, we chorused that expanding access to digital technologies for poor people worldwide – whether they are rural subsistence farmers, disadvantaged students in schools, disadvantaged youth not in school; functionally illiterate women in rural areas, unemployed youth, or nomadic children – would 'empower' them to change their lives.

The contribution made by the World Summit on the Information Society

Linked to the MDGs, a related global process focused on ICT4D. It assumed the form of a World Summit on the Information Society (WSIS) which involved an estimated 12,000 delegates from national governments all over the world, the private sector, civil society organisations and community based organisations who met in 2003 in Geneva, Switzerland and again in Tunisia in 2005. As part of the MDG process, WSIS adopted a Declaration of Principles and Plan of Action that focused on how digital technologies can be made accessible universally, especially to poor people, and how they can be harnessed to 'empower' communities and build inclusive 'knowledge societies'.

The *Plan of Action* included the adoption of 10 targets:

- 1. To connect villages with ICTs and establish community access points
- 2. To connect universities, colleges, secondary schools, and primary schools with ICTs
- 3. To connect scientific and research centres with ICTs
- 4. To connect public libraries, cultural centres, museums, post offices, and archives with ICTs
- 5. To connect health centres and hospitals with

ICTs

- 6. To connect all local and central government departments and establish their websites and email addresses
- 7. To adapt all primary and secondary school curricula to meet the challenges of the information society, taking into account national circumstances
- 8. To ensure that all of the world's population has access to television and radio services
- 9. To encourage the development of content and put in place technical conditions in order to facilitate the presence and use of all world languages on the internet
- 10. To ensure that more than half the world's inhabitants have access to ICTs within their reach

We can see from these targets that much of the emphasis was on ACCESS to technologies and to internet connectivity.

The *Declaration of Principles* explicitly states with reference to youth and digital natives:

"We recognise that young people are the future workforce and leading creators and earliest adopters of ICTs. They must therefore, be empowered as learners, developers, contributors, entrepreneurs and decision-makers. We must focus especially on young people who have not yet been able to benefit fully from the opportunities provided by ICTs. We are also committed to ensuring that the development of ICT applications and operation of services respects the rights of children as well as their protection and wellbeing." (WSIS, 2003)

This text recognises the diverse roles of youth as early adopters and leading creators of digital technologies and that among the world's youth, there remain many who are not yet able to benefit fully from the opportunities that digital technologies can provide. Beyond this,

the way young people would appropriate technologies and use them not just for seeking jobs and becoming entrepreneurial but also as a mechanism for assertion of their interests, self-expression and self-identification is not as explicit in the Declaration.

The inclusion of policy actors goes hand-inhand with corporate actors as well, because both of them are involved in the processes of personal transformation and digital identities. This approach moves away from a more infrastructure oriented discourse and looks at how these different stakeholders contribute to understanding Digital Native identities. Parmesh Shahani's experiences (Book 1, To Be) as an academic within a corporate set up introduces us to some of the projects in India that have seen the involvement of the corporate spectrum in processes of change.

Why has Shafika Isaacs chosen the MDG's and WSIS to understand how it frames our policy conversations? International change making processes and the role of technology are the two main arenas in which the policy conversation takes place. The MDGs are eight targets that have been set in order to eradicate poverty and meet the needs of the poor by 2015. The MDGs have been signed by all the member states of the United Nations (UN) and most international development effort need to attribute to the realisation of these goals. The WSIS were two United Nations sponsored conferences on the information society. Here all the stakeholders, countries, policymakers, corporate actors and freedom of speech advocates came together to discus the implications of the information society. The main aim was to bridge the global digital divide.

Within mainstream and traditional policy documents, the young are always going to be framed as victims or caught in circumstances which they need to be rescued from. The complete lack of agency that is imagined in these pictures needs to be questioned. The problem with these statistical evidences and goals forgets to look at defining questions around why children and young people participate in certain processes and what their vision of change is; what are the kinds of roles that they can play in achieving that vision. Ivet Piper's work (Book 4, To Connect) with the STUCKYOUTOO community shows how the young, even when in conditions of crisis or danger, have the ability to emerge as

This and other clauses on youth in the WSIS Declaration of Principles and related Plan of Action, is the outcome of extensive lobbying by the WSIS Youth Caucus (WYC) in which youth voices from developing countries were vocal. The experience of the WSIS Youth Caucus reflects their recognition of the strategic relevance of the WSIS process from the perspective of its influence on national policy agendas. In this sense the WYC recognises the value of the policy space as a space for engagement and contestation as it endeavours to express the interests of the diverse range of young people in the world, particularly those who are socially, economically and culturally disadvantaged.

The MDGs and WSIS Declaration of Principles and Plan of Action highlighted to government decision-makers the value of harmonising their national processes within these broadly-agreed global frameworks. In this sense, WSIS influenced the development of national ICT policies. For example, John Dada¹ writes specifically about how it has influenced policy development in Nigeria (Dada, 2008).

Why national ICT policies matter to digital natives/digital outcasts

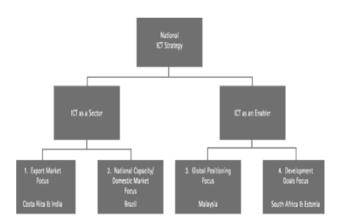
From a government perspective, national ICT policies matter. They matter for the following reasons:

- Policies provide an enabling environment for the growth of initiatives and projects that can promote the use of ICTs in different socio-economic spheres such as in education, agriculture and health;
- National ICT policy frames the way governments can intervene and build partners to support their interventions in promoting ICT access to poorer communities
- National ICT policy becomes a reference point against which progress can be tracked
- National ICT policy also rallies the nation around clearly defined goals

The International Telecommunications Union (ITU) who hosts the WSIS on behalf of the United

Nations agencies, confirms that as of April 2010, 163 countries have developed ICT policies and national 'e-strategies' and 13 countries are on their way to formulating and adopting such policies. Much of the emphasis of these policies relates to the strategic economic positioning of their countries and the integration of ICTs into national development plans for poverty reduction. For instance countries like Rwanda and Namibia have their national ICT policies linked to their respective visions to improve their strategic economic position in the global economy. Here their stated objective is to become middle income countries by 2020 and 2030 respectively and they both articulate the role that ICT investment would play in enabling them to reach their vision.

Figure 1 below shows the different emphasis the governments have tended to take in their articulation of national ICT policy and strategy



Adapted from International Telecommunication Union (ITU) (2010)

The diagram shows that national ICT policies and strategies have tended to focus on building and developing a local ICT sector. Countries like Costa Rica, India and Brazil have opted for this approach. Or they tend to emphasise the enabling role of ICTs with Malaysia, South Africa and Estonia placing emphasis on this. Evidently there is often a stronger economic imperative articulated in national ICT Policy.

National policies are written mainly and sometimes only from the perspective of national governments. In many cases, there have been consultations with various stakeholder groups and in some cases, voices of youth organisations and civil society have been vocal for often, these groups in society are at the receiving end of policy implementation plans.

In this sense, being aware of national policy on ICTs is important for digital natives. And often, in cases where these do not reflect the aspirations of digital natives, they can be contested by digital natives.

But ICT policies also matter to digital natives. Digital natives are often at the receiving end of ICT policies.

The national policy space remains an important terrain of engagement for young people. When viewed from a digital native perspective however, our concern is about disconnect between policy sentiments, the practice of policy and the unanticipated shifts that policy practice have catalysed.

The practice of policy

Much of the conversation about ICT policy has focused attention on the formulation and adoption of policy which is referenced to, as an often stale, prescriptive policy document. The ICT4D community has more recently focused on policy implementation, monitoring and evaluation both of which are often linked to policy formulation but raised as distinctly separate at the same time.

Evidently, much less attention has been given to policy as a living process of evolving practice, reflection and continuous improvement. Even less consideration is given to the ICT policy space as a complex change process and oftentimes, a disruptive and revolutionary process.

change makers. A look at the processes they develop to cope, negotiate and reconcile their realities gives us a better idea of youth agency and power.

This is an interesting correlation because otherwise digital natives are generally imagined as only connected to the online world and their own participation within the Web. The framing of digital natives against the MDGs shows that digital natives share similar concerns and problems as the traditional actors but their modus operandi is different.

One of the learnings from reading policy documents and understanding their interaction with the world of digital natives, is that they ground the so-called digital into material realities. The kind of changes that we have seen in the Middle East and North Africa in 2010-11, have an impetus in social and political crises. The digital allows for new structures of empowerment but needs to be contextualised in the geopolitical turmoil of the people.

Global policies also play the role of a catalyst, where a badly structured execution can aggravate people into action, or they make people aware of the rights which should be afforded them and are denied.

An interview with Seema Nair (Book 1, To Be) offers us insights into how policies can often lead to revolutions. She suggests that the entire ICT4D policies in a country like India, failed because they concentrated only in building physical infrastructure. The absurdity of setting up computers in villages that do not have electricity does not require any further explanation.

Ben Wagner and Hernan Bonomo (Book 4, To Connect), in this book, also resonate the critique of ICT4D that Seema Nair (Book 1, To Be) makes. Wagner looks at international policies like these as a form of normative globalisation that constructs new identities and processes of exclusion – something that Isaacs refers to as the 'digital outcast'. Bonomo argues that such policies are often oblivious to

Egypt is perhaps a good example of this. Egypt has been hailed as an example of 'international best practice' (sic) with reference to its ICT policies, their related ICT policy implementation plans, and their models for public–private partnerships. Much of these conversations were preoccupied within the spaces of officialdom and engaged within the confines of the MDG and WSIS parameters and targets. What these conversations did not consider, were the shifts in power relations that greater access and investment in ICTs would catalyse at 'grassroots' level. The ICT roll-out plans of the Egyptian government towards a 'Smart Egypt' proved to be its Achilles' heel.

The recent revolts by youth in Egypt and Tunisia catalysed uprisings across the Middle East and North Africa. The Arab Spring refers to this revolutionary wave of youth-led protests which emerged since 18 December 2010. These protests led to a toppling of governments in Tunisia and Egypt, a pending transfer of power in Yemen; a civil war in Libya; an uprising in Syria; major protests in Algeria, Armenia, Bahrain, Iran, Iraq, Jordan, Morocco, and Oman; and minor protests in Azerbaijan, Dijbouti, Kuwait, Lebanon, Mauritania, Saudi Arabia, Sudan, and Western Sahara. The protests have shared techniques of civil resistance in sustained campaigns involving strikes, demonstrations, marches and rallies, as well as the use of social media, such as Facebook, Twitter, and YouTube, to organise, communicate, and raise awareness in the face of state attempts at repression and internet censorship.

The Arab Spring highlights crucial questions about the practice of ICT policy.

Are ICTs and ICT policy politically neutral?

We seemed to talk about ICT access, production and consumption as if these issues are politically neutral and within this vein, as if they are gender neutral.

The Arab Spring certainly demonstrates abundantly how power relations are infused within the design, production and use of ICTs. It also shows how digital spaces are also spaces of political contestation and social mobilisation. This confirms the work done by Mansell and Wehn in 1998 where they highlight the notion that

technologies have within them, socially-embedded relations that mirror the power relations in economy and society.

Marcelle (2002) Hafkin (2002) and Isaacs (2002) have also shown the gendered nature of ICTs Marcelle refers particularly to gender biases and asymmetrical gendered power relations. Hafkin shows how ICT policy is not gender neutral.

In North Africa and Middle East – the gendered dimension is also glaringly apparent with girls and young women playing a prominent role in staking their claim to ownership and use it as a means of self identification and articulation of their aspiration towards social and political change.

And within the domain of the political, our conversations do not include discussions about the nature of the nation state who legislate its ICT policy. We do not talk about how ICT policy is also a function of the role and nature of the states who legislate them. The Arab Spring's focus is on the struggles against one party states and lifelong dictatorships. The slogan of the demonstrators in the Arab world has been: "The people want to bring down the regime". The widespread use of Web 2.0 technologies, which enables the democratic participation and expansive social networking, has proven to be reconcilable with democracy and transparency, essentially a sentiment expressed by many digital natives in blogs and tweets.

As I write, Egyptian digital natives are hosting a tweet Nadwa involving many young Egyptians in a highly organised and structured debate both face-to-face and in Twitterverse about their aspirations for a future post-Mubarak Egypt, giving further expression to the desire of young Egyptians for political change that is real and meaningful for them.

Towards multi-stakeholder-ism, yes, but are all stakeholders equal?

Our dominant conversations emphasise ad nauseum the need for policy, practice and change to be an inclusive multi-stakeholder process, particularly one which should include a partnership with the private sector. Often these conversations are held in a way that suggest that all stakeholders are equal, that they have shared interests and that they can be encouraged to have shared interests. This may be the case, but in focusing the conversations in this way, it glosses over very real areas of competing and conflicting interests and a highly uneven distribution of power within these partnership arrangements.

Too often, community involvement whilst highlighted as important, assumes the form of a token, symbolic inclusion. A number of policy toolkits which highlight the value of multistakeholder partnerships, gloss over the reality that these 'partnerships' are always contested terrains and this contestation needs to be surfaced more as a way of exposing the complexities and contradictions of our realities.

The Arab Spring demonstrates again how we have moved beyond the token inclusion of community voices in the practice of policy, because community and youth voices have chosen to usurp these spaces to vocalise their interests as well.

What about values?

Glaringly absent from our policy conversations too, is the conversation on shared values. These have not surfaced in a conscious way and because of this it is assumed that the values within multi-stakeholder policy processes are shared. The Arab Spring was also driven by a desire for sound ethical values to underpin political change. This is evident in the chants against corruption and nepotism that have also characterised the regimes in this region.

existing eco-systems, support structures and interconnections which enable digital natives to become who they are. By isolating them and decontextualising them from their environments, we fail to see the complex structure of negotiations which are a part of in their everyday lives.

In our conversation with participants in the Taipei workshop on 'Talking Back', similar instances of internet censorship and repression have been found in China, India, Taiwan, South Korea, Thailand, etc. However, the similarity of action and platforms must not be confused for similarity in usage and context. On Facebook revolution is not the same as a Facebook revolution elsewhere in the world. The World of Web 2.0 is so highly customised that digital natives accessing same platforms and using the same tools from around the world, still have extremely contextualised usage and integration of digital technologies in their life. Esther Weltevrede (Book 2, To Think) reinforces this idea in her work with the Digital Methods Initiative, which shows that the digital objects might be the same but share multiple meanings and legacies for different users.

I have been told anecdotally that in a recent survey of communities in Brazil, values emerged as their top priority over topics that included poverty reduction. This points to the need for a more conscious conversation.

What is meant by 'Empowerment'?

The ICT4D community has placed great emphasis on the ability of technologies to 'empower' poor communities. Many policy processes and practices have not articulated clearly what empowerment means and how this is understood from varying perspectives. The Arab Spring has shown the desire for digital natives to be 'empowered' but this notion of empowerment is a process that will be self-determined by the digital natives themselves.

This raises the point about digital natives and digital outcasts. I raised the notion of digital outcasts at our Digital Natives workshop in Johannesburg, a workshop which formed part of the process towards writing this book. For me this concept has many meanings.

It refers to those born into a digital age who to date are excluded from access to technology devices and the internet and hence, through this, they suffer further economic, political and social exclusion.

Yes, this reference considers the MDG and WSIS focus on social exclusion and the digital divide. Some, like Brown and Czerniewicz (2010), refer to these groups as 'digital strangers'. And in this sense too, the current debate within the UN as to whether access to the internet should be considered a human right, forms a crucial part of this conversation. But our friends and comrades in Johannesburg and elsewhere have also given another, ADDED meaning to this concept.

They refer to 'Digital (alter)natives'. My interpretation of this is that these too are 'digital

outcasts' because they are not part of the official discourse on the alternative, revolutionary capabilities of digital technologies — outcast from officialdom and hence the 'alternative'.

Future points for consideration

Below I propose a few points for consideration in our engagement with policy, policy practice and change, from a digital native perspective. These points for consideration are targeted at the many stakeholders and interest groups engaging with the challenges of ICT for Development.

Let's make it more real

This discussion highlights the need for further engagement and thoughts on a host of areas that will add value to our practice of ICT policies. Within the policy terrain, an open conversation that is more aligned with the realities of our experiences of change, disruption and failure, that the appropriation of digital technologies catalyses, would be a crucial point to continue from where we are at presently.

Let's recognise that politics matter

A more explicit recognition that the 'digital is political' (Shah, 2011) would add value to our reflections and engagement with the multiple realities that confront us in the space of policy practice and change.

In this sense too, more open engagement with our understanding of the nature of the nation state and how it is challenged by widespread access, use and ownership of digital spaces, is required.

Furthermore, within this, an explicit surfacing of different perspectives, including political perspectives and recognition that these will always be sites of struggle, would be far more reflective of reality.

Let's talk more about 'Empowerment' and 'Values'
Now that the Arab Spring has happened, we are
all engaged with sharing our understanding and
views on 'empowerment' of communities, youth and
women. I am proposing that the ICT4D community

expend more energy into conversations which clarify what this means and how values and ethics are and should be considered within this.

Conclusion

We are indeed living in interesting times. We are certainly at an important crossroad as we endeavour to harness the power of digital technologies to 'heal the world and make it a better place'.

¹ http://www.tve.org/earthreport/index.cfm?cat=thisweek

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1.3 I'M ARTICULATING MY HOT SKILLS, BUT ARE YOU LISTENING?

by **Kerryn McKay**ESSAY

In recent months, varied events on the Dark Continent have threatened to turn the political status quo in some African (and Middle Eastern) countries on its head. The 'anything can happen now' feeling that comes from witnessing such events makes one believe that a new era of political participation and self-determination for the developing world is imminent. This belief is reinforced by the acknowledgement that these political upheavals have been arguably initiated by young, digitally connected citizens in the Middle East North Africa (MENA) who have harnessed the power of the internet to build a momentum that has triggered the tipping point¹ towards change.

And yet, as many academics and pop culture writers have reminded us, revolution of the masses throughout the centuries has sought, and succeeded, in overthrowing governments or rulers and ushering in new socio-political regimes, without the help of the internet and social media. "It's only a tool! A tool!" those against this idea cry. So yes, we agree that digital technology can be viewed as a new tool to aid an old practice. But we also recognise that this tool has enabled the voice of the people, nay, let's go so far as to say the personal voice of thousands of people, and plunged it into the foreground of the revolution.

Moreover, the people doing the talking are very different from those in the past. Evidence suggests that, for example, the age of the French revolutionaries 2 200 years ago was an average of 42 years. Today, the new revolutionary is a young. digitally-connected animal. It is estimated that 30 percent of Egypt's 80-million population is under the age of 20 with a median age of 243. This is also the average age of Egyptian Facebook users. Thus, we can acknowledge, through anecdote, that it is these young people who have mobilised, risen up and, most compelling of all, put a digital spin on the notion of revolution, possibly changing the nature of the beast for all time. Can this not only be a revolution of the political, but an evolution of the Digital Native? This essay reflects on the personal and the collective transformations and evolutions that are premised on the use and adoption of digital and online technologies by users who find themselves native to these new environments.

Can we take them seriously?

Over recent years, digital natives have been portrayed at best as self-involved and disinterested, at worst undisciplined and recalcitrant, openly flaunting and disregarding rules and regulations to fulfil their own digital needs. Perhaps it's not surprising that these same digital natives have used their own channels to once again 'flaunt and fulfil' on a very dramatic scale. Globally, Egypt's 'digital revolution' has been praised. Pithy blog posts have appeared over the past few months, written by anyone from marketers to academics, reducing the 'Facebook Revolution' phenomena to ten-point hints, tips, and steps. What will happen next, though, is anyone's guess. The question perhaps uppermost in my mind is: Will digital natives continue to be regarded by those who influence policy and law-making as somewhat awkward obstacles to the writing of policy and law? The policy maker seldom grasps the nuances of the digital native practice whilst the idea of them being 'obstacles' insists on criminalising any behaviour that is deemed anti-social.

Over the last few years, research into their digital practices and habits has indicated that young people do, technologically speaking, whatever they want, when they want and however they want. For example,

British research on illegal file-sharing clearly shows that young people aged between 14 and 24 years will not change their file-sharing habits anytime soon4, despite legal threats on the one hand and the provision of new, free services on the other (developed to encourage them away from illegal downloading). In other words these young people are being threatened and cajoled into refraining from illegal activity by policy-makers and media owners, to no avail. The research though, inadvertently reveals a subtext of British digital natives operating within their own set of values. They want to own their music, not stream it. They will download and share illegally, because they should not have to pay for the privilege, but they will simultaneously be prepared to buy a CD for their own collection, because owning the music is paramount. What emerges is a set of principles that drives a constancy of practice, instead of chaos and anarchy as the policy- and law-makers deem it.

Another research⁵ conducted in North America questions whether digital natives are involved online in cultural and political causes. What emerges is that these young people are engaged with things that matter to them, in a way that attracts or absorbs them. Perhaps the most significant finding is that there appears to be a stark discrepancy between how the researchers define the term 'political engagement' (what it constitutes, how it is played out and then interpreted), and the practical manner in which American digital natives actually engage politically. Activities by 18 to 24-year-olds such as 'buycotts', or boycotts conducted through purchasing decisions — and belonging to popular movements such as the Harry Potter (HP) Alliance – a movement to fight social justice through love - don't fall into the traditional notions of political engagement.

Can research accurately interrogate behaviour if the behaviour itself is not represented as part of the research discourse?

Tuning in to Revolution 2.0

Revolution 2.0 gave digital natives a platform in the 24/7 world we inhabit, where it was necessary to

One of the ambitions of the workshops was to investigate what constitutes change. While instances of dramatic change that are powered by collective action are immediately recognisable, a lot of 'change' is at the level of the personal. The less visible processes of personal transformation need to be understood and taken seriously because they often become the precursors to a larger social movement or interaction.

The digital natives have unanimously announced that change is a default mode of being. We need to make a distinction between change that is the general flow of events and change that requires energy, effort and attention. This kind of change is predicated on the individual's capacity to recognise this change and their own capacity to produce and effect it. Digital technologies have resulted in many new structures by which people can engage with processes of change, which cannot be understood or spotted by existing structures of development and social movement. In order to identify the new processes of change, we need to develop new lenses of understanding what change means and who the actors of change are.

In the Scouting report and Knowledge Report that we produced at the beginning of the of the Digital Natives with a Cause? Research project, we identified this as a concern articulated by many different stakeholders. Policy makers often think of the digital natives as informants or recipients of policy intentions. However, this feels more like a tokenism that, in its attempt to include digital native perspectives, actually excludes them from participation in policy processes. Shafika Isaacs (Book 1, To Be) discusses this in more detail as she looks at the roles and practices of youth in the context of international policy forums like the Millenium Development Goals (MDGs) and the WSIS.

With the successful and strategic use of digital technologies in mass mobilisation and activism, many 'best-practice' documents have emerged in the recent past. These one-size-fit-all documents presume that the revolutions happen because of the

listen to these voices as they informed us of events while they unfolded. This was an unprecedented opportunity for digital natives to be recognised as important producers and disseminators of information, because, as I have cited above, much of the reportage and documentation that came out of Egypt at the time largely came from young, digitally-connected people. This was political engagement the way everyone understood it; not an anti-social activity that cannot be condoned. Yet even this documentation was presented in a unique way, reaffirming that digital natives will engage when it suits them, and how it suits them.

Manal Hassan is one such example of a digital native doing what she wants, how she wants. Manal, who is in her late twenties, is an Egyptian who used her own network and narrative to tell the larger story of revolution, in her own discourse and on her own terms. In February 2011, Manal's Facebook updates recorded the moment-by-moment journey from South Africa (where she was staying at the time) back to Egypt in early February to be close to friends and family during the social upheaval. Her Facebook updates provide an account of her journey home.

February 1: On our way to the airport, we fly to #egypt tonight. #Mubarak u r going down #jan25

February 2: Testing sms over roaming, plz comment on my facebook status with "sms roaming works", i get notifications by sms

February 2: Back in Egypt in mom's house, and internet is back in some places. #jan25 #Egypt

February 2: Pro Mubarak demo attacked us in Tahrir square & was defeated; arrested, was hand over to the army. #Egypt #jan25

February 2: Pro Mubarak thugs brought horses in their attack!! Horses were taken as war prisoners & now revolutionaries' kids r riding them #jan25

February 2: URGENT CALL we need more ppl to go to Tahrir sq. now & spend the nite, our safety is in our numbers #Egypt #jan25

February 2: It's a war zone in Abdel Monem Riad & Talat Harb st @alaa is there attacked by pro Mubarak thugs throwing rocks at them #jan25

February 2: My husband @alaa is now under attack by Mubarak thugs & some ppl dare to ask me to tone

it down #a7a #jan25 #Egypt

February 2: many injured near the Egyptian museum #HELP #jan25

February 2: heard @alaa is OK so far from his mom, ppl r gathering @ HMLC to move to Tahrir sq in large groups, on my way there. Dont go alone #jan25

February 2: Passed many checkpoints, atmosphere in the streets not so good, the #Mubarak brainwashing is working on many #jan25

February 2: Going to Tahrir sq with the medical supplies convoy. Many check points it's gonna b a long ride #jan25

February 2: Angry mobs are the scariest thing ever #jan25

February 2: They r using live ammunition again, a guy with a rifle shot one dead, 3 more were injured & the army just watches #jan25

February 3: After last night brutal battles where many fell dead, we welcomed the new day with this chant: The ppl want to prosecute the murderer #ian25

February 3: Tonight we are having a sitting in front of the parliament, hope we can free it soon... it's rather cold #jan25

This language and these thoughts, like many recorded during the Egyptian uprising, are brave in their simplicity and truthfulness. Observations such as "angry mobs are the scariest thing ever" and "Mubarak u r goin down" paint a vivid image for us that can be understood easily. So we listen to – and commend – these voices because it suits us. But do we always listen with such an open spirit? Are we non-digital natives affording other digital natives the same opportunity to be heard, if we don't find the context meaningful? Because make no mistake: Digital natives, in both the North and Global South, are articulating their views and beliefs through whatever medium they are able to access. They are critiquing the world in which they inhabit.

I have no hot skills...or do I?

To understand how the world of the digital natives works, I cite two examples of digital natives living in different worlds— one from North America and the other from South Africa. These are self-made, low

budget videos that show digital natives doing what they do best – using various social media platforms available as a means to put across their own particular and personal points-of-view. The video entitled "I have no hot skills" is produced by a young North American girl.

In this video, she critiques the need for social status prevalent amongst North American youth She offers very little in her video, but it is exactly this emptiness and surface irrelevance that gives her short message its strength – an understated commentary that could be well overlooked or misinterpreted by many.

"I have no hot skills": (close up to camera)

http://www.youtube.com/watch?v=h9Rbzos1LBc &feature=related



"You know I was just thinking, I don't have all sorts of fancy technology and ways to, um, to make really awesome videos with music and all sorts of stuff like that. So I guess that really puts me down a few notches on the cool scale. Whatever. Actually I only have a four megapixel digital camera. That's how I take my videos. I don't even have a webcam. It's just this and it is how I have to record. Umm ... so ... I just wanted to tell you that, don't expect anything great; this is about all I've got for now. Unless I have an extra wad of dough to use on some equipment. So...anyway, uh, I uh, I could pretend that there's like some music or I could like, hold on so. 'One day (turns head from camera, comes back to camera), one day (turns head

mere presence of digital and internet technologies. They encourage organisations and institutions to do a blanket social media integration without giving adequate thought to their needs, intentions and practices. This often results in facetious and redundant building of digital assets which stay under-utilised and often counter-productive. In one of the workshops we were told the story of a bilateral international agency working with the youth, adopting one such best-practices module and spending a considerable amount of money with a Web 2.0 Consultant who eventually produced a Facebook page that had lesser community members than an average individual friend-network.

The illegal file sharing case is highly symptomatic of the disconnect between policy and practice. If we look at the letter of the law – promoted so highly by the license holding corporate sector, the digital native who engages in sharing, remixing and reusing becomes a pirate. However, when we start looking at the viewpoint that this huge population has, we realise that they actually have a different understanding of the intellectual property relationships that we have now established as default. It is in the questioning of these structures, enabled by digital technologies, that digital natives begin the political processes of subversion and questioning.

The cultural is the new realm of the political. These are often missed both in policy and practice. It is a challenge for researchers and practitioners to accommodate everyday cultural practices and environments in our regular engagement with digital natives.

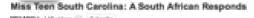
Prabhas Pokharel in his essay published in the Thinkathon Position Papers calls this 'discursive activism'. Looking at a case-study of a friend in Nepal, he makes a case that what we do on Facebook most of the time, is share lives. But then, when there is a crisis, the ability to disseminate information, fast and furiously, allows us to use the same platform to create these moments of discursive activism that

from camera and back, changing her voice), one day (turns head from camera and back with higher voice), one day (turns head from camera and back with lower voice) I was walking down the street STREET street' (using different tones) ... You can do that. S'kind of ghetto. But I did it. Pretty cool."

In the second video a young South African male responds to a video of Miss Teen South Carolina's Question and Answer session during a beauty pageant. The video, "A South African responds" is a satirical response to the racial and geographical stereotypes unwittingly articulated by Miss Teen South. It's high energy and off-the-cuff delivery underplays the resentment and anger in the videographer's voice. This is, in fact, an astute political commentary on the ongoing perpetuation of stereotypes by the developed world towards those living in a developing-world.

"A South African responds": (in put-on 'Southern' North American accent)

http://www.youtube.com/watch?v=imNDF8gr-nY&feature=player embedded





"Yo, I would just like to have a word with Miss Carolina out there. Miss Carolina is right: We in South Africa need so much education. We don't need education, we need educations. That's how much education we need. Because first of all, you know, I'm thinking: Where I can find education? Or educations in this case coz I need so much of it. Then I thought, you know, Miss South Carolina's got a point. If I had a

map. I would know where to find education! But I don't have no map, so I cannot find education. So that got me thinking. Maybe I should look at some of my books. Maybe I'll find education there. And I got my book (picks up book and shows to camera), you know: Globalization. And I've heard that there's a map, looks something like this (indicates the front cover depicting a map) and a map is where you go to find things. And I'm looking in the book (flips through pages) and there's nothing. (Picks up another book.) I've got my book on philosophy, there is no education. (Picks up another book.) And I thought, you know what, maybe if I got To Kill a Mockingbird (holds up the book), maybe I'll find education, but there's nothing. Maybe if I look at The Great Gatsby (holds up the book) I'll find education and I cannot find it there. Then I decided what am I gonna do. Maybe if I look at Guns, Germs and Steel (holds up the book) then I'll find education. But I cannot find it there. I don't know what to do. I don't know where to find education. I don't know where to find it. I think Miss. South Carolina's got a point. I need a lot of education. I need to look in a map somewhere and maybe I'll find education. Miss South Carolina, you hit the nail right on the head. You make some respect Miss South Carolina. You rock the party."

These are two examples of what could be seen as rather unexceptional digital natives engaged in rambling or self-involved reflection. They are certainly not contributing to the mobilisation of a revolution; they do not inform us of ground-breaking events as they happen. But are they any less meaningful, in their way? Are they not offering us – like Manal — a site of resistance wherein they take a political stance against something that is important enough to warrant their attention and commentary?

Will we still listen after the revolution is over?

Now that the heady days of the uprising are over, we need to ask ourselves: what would happen should the actions of digital natives such as those coming out of Egypt, be the same but in a different context?

Would such overt activities by digital natives be tolerated under other circumstances?

One thing is the key: Thanks to the contribution by the Egyptian digital natives to mainstream thought and discourse, the potential power of a digital native is perhaps being recognised for the first time. The question is, will this potential be nurtured by policy- and law-makers to form a meaningful engagement, or will it remain an unspoken awkwardness that hinders rather than helps the writing of policy and law?

- ¹ An article on CBS News entertainment highlights the irony in Malcolm Gladwell's comments in 2010 how social media sites could never play a meaningful role in revolution, a few months before the Egyptian revolution that is being billed as Revolution 2.0: http://www.cbsnews.com/8301-31749_162-20034398-10391698.html. The added irony is that Egypt reached the perfect 'tipping point' to trigger an uprising according to Gladwell's definition in his book The Tipping Point.
- ² Age taken from the paper entitled "Anatomy of a Revolution" adapted from Brinton Crane.
- ³ From an article by Niall Mulholland on internet site SocialistAlternative.org, entitled, "Egypt: Revolutionary Masses Move
- ⁴ According to an article written by Torrent Freak [http://current.com/130ce4c], and also accessed at the website Music Business Research [http://musicbusinessresearch.wordpress.com/2011/01/21/music-experience-and-behavior-in-young-people-in-the-uk-a-workshop-presentation/]. The survey, entitled "Music experience and behaviour in Young People, Survey Results 2009" can be accessed at the latter url along with results of survey.
- ⁵ An article by Lauren Barack following the research findings: http://www.libraryjournal.com/slj/reviewsdigitalresources/884988315/digital_natives_politically_active_not.html.csp

leads to change.

This is a new idea of context. Context not only in terms of what makes a digital native but what makes the voice of the digital native important. If Manal was tweeting outside of the MENA context, would it still be important? Would we still hear her?

Digital natives who live in the USA are also producing similar changes. Just because the book is located in the South doesn't mean that we neglect them or think their contributions less important. However, we need to be careful in saying that the North American digital native is not a norm or a model that is the same everywhere, even though often they are forerunners of technology innovation

Nonkululeko Godana from South Africa (Book 3, To Act), in her reflections also shows the power of digital story telling. The ability to tell express experiences, ideas, opinions and doubts through multiple platforms enables many digital natives to form their own processes of engaging with the public sphere.

This idea of nurture, of support and of a intertwined ecosystem forms the basis of the fourth book in the collection - To Connect. Different stakeholders provide insights into questions of sustainability, development and institutionalisation. At the Thinkathon where we had representatives from different sectors, we learned that often people are talking about the same thing but their vocabularies are so different that they fail to see the synergy in their efforts. At other times, they seem to be using the same words but infuse them with meanings which are so different that dialogues become difficult. In order to build a network or community working in the areas of technology, change and youth action, we have to start creating safe spaces of dialogue and support. It is about nurture and support; and more than anything else, about listening.

1.4 MIRROR EXERCISES

by

Leandra (Cole) Flor PHOTO ESSAY

You would think, this story is so superficial, there's more to a digital native than meets the WiFi-eye. But if you think about it, since the rise of the machines some decades ago, can you actually recall one day of your life that you didn't switch something on?

Perhaps, you're correct. Perhaps, a digital native's time of the day does not only constitute tapping keys and screens. They have other things to do, they have a purpose. They use digital devices in their profession for efficiency and effectiveness. They also use these devices to aid their causes and campaigns, like raise voices of the marginalised and share pertinent information to facilitate learning on- and offline. They believe in Creative Commons; uploading watermarked photographs is the biggest oxymoron. They believe in downloading. They believe in building, creating, breaking grounds for pathways of communication because one portal can never be enough. They question governments and mobilise citizens; they educate themselves with issues that plague their society, and they do something about it - it may be a meme on Facebook, a hashtag on Twitter, or a satirical post on their website. They have an inexplicable affinity with digital devices; they learn and relearn things on their own. They sometimes bust their own myths and beliefs by interacting with people with one click of a button. They champion ideals, they speak their minds, they search for stories and never settle for anything less than ten links. They are skillful, multi-talented, and multi-faceted, and they are not afraid to show it. They can bore someone with questions but they will never be tired of seeking answers. They will never be satisfied with a simple

Yes, and will never take No for an answer. They are not going to believe what they read in the paper, the Web, unless it's properly backed-up with sources and literature. Their idea of fun does not always include social drinking and loud club music, a good read will keep them company. They are not nerds, geeks, dorks or whatever-Western-high-school-moviestereotypes that coexist with the term digital. Their nativity is not defined by age, race, ethnicity, gender or social class.

And if you feel like these descriptions have come close in capturing a digital native's profile, or you itch to disprove them, then you are a Digital Native.

THINA



Can you still remember a day when you woke up and you did NOT grab your mobile device, sitting beside your nightstand, near the pillow?



COLE

When was the last time you were preparing for school, work, without thinking of who emailed you?



To check the time, hit the snooze button; and reply to an SMS sent while you were sleeping?



Left a comment on your latest post?



Have you ever had enough sleep on a weekday?



How many hits have your homegrown productions received overnight?

THINA COLE





Do you wish you had more than 24 hours a day?



Is having a desktop not enough that you have to own a laptop as well?



And you just have to own at least two mobile devices; for work, personal contacts and entertainment?





When was the last time you ate breakfast? Without your mobile device within a meter of radius?

THINA



When was your desk ever without wires and cables?

COLE



When did you write a journal entry on an old-school notebook?



When did you last eat lunch on time?





Have you ever IM'd a colleague who is only a few meters away from you?

THINA COLE





Can you recall the time you were hanging out with your friends without a buzz, a ring, interrupting the conversation?



Have you gone home without checking your emails and other accounts?



How about messaging someone "text me when you get home?"





When was the last time you went to see the latest flick at the cinema?

THINA



Have you ever gone straight to sleep without working on a few more tasks...

COLE



Do you still jot down your things-to-do?



....or catching up with some friends online?



Or thinking about them just makes you feel tired?



But you know you always check your mobile device before you sleep? Or plug it in when the battery's (almost) drained.

45

THINA COLE





And that tomorrow, things will be the same thing all over again, but your timeline won't be.

WELCOME TO THE WORLD OF THE DIGITAL - WHERE HITTING TWO BIRDS WITH ONE STONE IS SO TEN YEARS AGO.

AFFAIRS

by

Parmesh Shahani

REFLECTION

Editors' Note

This reflection piece looks at the ways in which corporate actors contribute to defining the digital native identity by providing infrastructure and support to the rapidly digitising world of the digital natives. It brings to our attention that the companies that 'run' the internet need to be accounted for while talking about digital natives' identities and practices. Shahani's emphasis is more on the positive role that companies can play, clearly exemplified in security and privacy between Google and Wikipedia in China and West Asia as well as in the more localised instances that are mentioned in this essay. However, we also need to realise that companies often serve as gateways of information and access and have a huge monopoly over the control and regulation of data and usage online. Questions of data retention, data exploitation, targeted marketing etc., need to be thought through when looking at the state-marketcitizen relationships. Shahani's reflections also remind us that while corporate structures might be faceless entities, they are run by individuals who also have other identities- communities they belong to and politics they practice. At the end of the day, companies are run by people and this means that there is room for social good, political aspirations and cultural practices in corporate engagement with social transformation. The essay reiterates that when we talk about co-creation, be it in the form of collaborative sharing of information or peer-2peer user generated content online, the corporate

has a significant role to play in it. Innovation, Experimentation and Production are all tasks that the private players excel at and these have dramatic repercussions on who gets to become a digital native and what kind of identities they get to inhabit.

In this short note, I want to argue – from a personal perspective and as someone who sits inside the corporate world as well as in academic forums involving digital natives – that the relationship between corporations and digital natives need not be and in fact, isn't oppositional. There are many points of intersection, and these intersections can be mutually beneficial.

There are several assumptions that people who are involved in theoretical and activist issues around digital natives have about the corporate world. To many of them, the corporate world is a uniform and monolithic entity that is greedy, power hungry, money obsessed and completely delinked from issues dealing with social change. From this somewhat Naomi Klein-ish pulpit, corporations are perceived to be disinterested in digital natives, unless these coalesce into something that can be called a 'target market' and even here, they scoff at the word 'target', which implies something to be shot at. So corporations are framed as hunters, the digital natives are the hunted and people interested in issues of social change such as academics, policy makers and activists think that it might be best to keep the hunters away from the hunted.

On their own part, the public face of most corporations' engagement with their digital native 'target audiences' is largely through creating advertising and even though some of it is extremely innovative (such as Old Spice's recent YouTube campaign that used Twitter feedback to film a range of online video responses to their cult Old Spice Guy spot or Burger King's by now classic Subservient Chicken video website from 2004), it is still predominantly unidirectional. This can seem to validate concerns about corporations being profit hungry hunters and not much else.

However, if you scratch below the surface, you might unearth deeper links. Corporates provide money to several research initiatives that study digital natives. They do so in multiple ways. Sometimes they fund universities like the University of Southern California, which has the Annenberg program on online communities as one of its study programs and also has a steady stream of industry executives flowing through as guest faculty. Sometimes they give scholarships or awards to specific universities or for specific purposes.

Sometimes, corporations fund foundations. The MacArthur Foundation facilitates several digital literacy projects for instance. At other times, corporations fund research consortia in which they can be directly involved. So at Massachusetts Institute of Technology (MIT, I was part of the team that helped build the Convergence Culture Consortium as a collaborative effort of corporations and university professors and students to understand different aspects of media convergence. I am trying to build out the India Culture Lab in a similar manner, by seeking the collaborative support of Indian companies like Godrei.

There is also an increasing trend among corporations to hire anthropologists to understand the world around them better, and this includes the world of digital natives as well. Genevieve Bell at Intel is the poster child of the in-house cultural anthropologist movement, which seeks to map long term cultural shifts in society, as opposed to short-term consumer behaviour. Corporations like Nokia and Microsoft, and advertising agencies like the Portland-based Wieden and Kennedy are regular users of anthropologists and in fact, Grant McCracken has written a book called *Chief Culture Officer* about a new kind of role and department that will emerge within corporations to track these kinds of changes.

Corporates might not be doing this for philanthropic reasons. They may have selfish motives, such as in order to really engage with their future audiences, the drivers of growth, they need to understand much more than their consumption patterns...they need

to understand their dreams. Corporations now seek innovative ideas on what to make and sell from their customers. They hire expensive "design thinking" consultants like Ideo and Frog Design to tell them what to do, or how to do what they do better. They seek what management guru Clayton Christenson calls "discontinuous innovation" and sometimes to do this, they follow the process of what another management guru – CK Prahlad – has called "cocreation". In this process of co-creation, it is vital to have a meaningful and productive exchange with current and possible customers, and many of these customers today are digital natives.

I see nothing wrong with this enlightened self-interest and think that it can lead to genuinely exciting research work and possible change. Everyone has an agenda, including NGOs, so perhaps we can take off the halos from some of the stakeholders within the digital native conversations and start thinking of every player as significant in their own way and for their own sake? If we do, we may find windows of opportunity opening up.

Let me give you an example. There is a businessman called Kishore Biyani in India who runs the retail conglomerate the Future Group. Biyani is funding the *Dream:In* experiment, which aims at harnessing the dreams of thousands of ordinary Indians and turns them into models for revolution and change. *Dream:In* is a multi-stage project and I have found it fascinating to participate in and observe.

The first phase took place during January 2011 when *Dream:In* sent 101 selected students that they called Dream Catchers out to interview thousands of Indians about their dreams for themselves and India. The Dream Catchers put together 33 video interviews that served as a snapshot of Indian aspiration, including a canteen manager who wants to become a social advocate, a flower seller who dreams of Paris, a coach who hopes to train Olympic-level female wrestlers, and more. Then the Dream Catchers assembled at the *Dream:In* conclave in February 2011, that aimed at collating these dreams, and collaboratively build an innovation system that quickly turned individual dreams into scenarios for the future with concrete

plans for investments and real businesses.

In addition to the 101 Dream Catchers, the conference had entrepreneurs, venture capitalists, designers, business leaders, activists, students, professors, government leaders, and not-for-profit workers working to interpret the dreams and to transform them into projects with economic, social, cultural, and environmental value. I was a speaker at the conference and the positive energy was electrifying.

One of the initiatives planned was a Dream:In Fund that will finance these new ventures. According to them, the organisers got Biyani and others to pledge money to finance 50 "dream-to-market" investment opportunities. While crowdsourcing ideas and taking them to the market is not new, I am pretty keen to see what will result from *Dream:In*. Is it 100 percent altruism from Biyani to fund something like this? Of course not. For someone whose main area of business is selling products to people, tapping into the collective dreams of India will serve as market research of the highest order. But if some good can also come from this initiative, what is the harm?

There are many initiatives like *Dream:In* that use corporate money to do social good in different parts of the world, and I'm all for them, just as I'm all for the pure-profit crowdsouring business models that companies like Threadless use to make money from the community of digital natives that they serve.

Within traditional corporations, I am beginning to see that engagements with digital natives are not cookie-cutter. At Mahindra and Mahindra, where I worked earlier, the engagement with digital natives was housed within the office of corporate strategy and had been given a simple name: 'Rise'. At Godrej where I currently work, engagements with digital natives have included setting up online virtual worlds like Gojiyo, commissioning ethnographic studies of young consumers and setting up a youthful design-thinking team in house. Not all these experiments may work. But the fact is that companies are willing to invest their time and money in them, and that's encouraging.

I also perceive a global shift in terms of how

businesses think of themselves and their role in the world of today and tomorrow. Post the global financial crisis two years ago, across business schools and in corporate board rooms, these identity questions are being debated in a way that they haven't been for a long time. Several of the companies founded in the recent past have been predicated on the premise of "doing good" – either explicitly, as social entrepreneurship companies, or implicitly, as with Google. The implications of this philosophy are manifested explicitly, with Google's 20 percent free time rule, or implicitly, like Wael Ghonim, Google's marketing head for Egypt, playing a key role in the recent revolution in that country.

Global CEOs are going out of their comfort zones and taking on more public roles. Some like Nandan Nilekani leave the corporate world on the invitation of the national government to set up national institutions like UIDIA, which is working on establishing a unique identity document for every Indian, by using the power of technology. Some like Michel Bloomberg fight elections and win positions of authority, such as the mayorship of New York, from which they are able to make sweeping changes. Others like Anand Mahindra turn to the internet and become influencers through tweets and posts.

I am citing all of these examples to show that clear distinctions are no longer possible between what is corporate and what is not. I am of the firm belief that any sustainable model of development needs corporations as key players. I urge the people working with digital natives to look upon the corporate world with hopeful skepticism. Please engage with them to realise that a lot of exciting work can be possible through collaboration with them and not just sponsorship or patronage.

Often this engagement is a question of a low hanging fruit. It will not cost much for someone in the corporate world to read a book, will it? But what will it take for the C Suite at Walmart to read Mary Gray's wonderfully researched *Out in the Country?* This book maps out experiences of young people living in American small towns and talks about how, in addition to physical spaces like Walmart (where

they sometimes dress up and have drag parties), rural LGBT youth also explore online spaces to shape their queer identities. Perhaps we can start this renewed process of engagement between the corporate world and other stakeholders with just this simple agenda – of reading books, reports and blogs that describe the complex lives of digital natives with as much regularity as they read business books like Blue Ocean Strategy. This might then lead to a more direct engagement between companies and the lives of those they seek to serve, including digital natives.

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A CYBER TWIN

by **Nilofar Shamim Ansher**ESSAY

Revisiting an avatar and understanding the design of identities online while documenting the creation of a cyber twin

MyCyberTwin.com is a web-based artificial intelligence service founded by tech-duo Liesl Capper and John Zakos in 2005. Launched in April 2007, the service now claims in excess of 34,400 users who have a 'cyber twin' or a chatbot. Promoted as a service that seamlessly represents users anytime online, and across multiple platforms, including web, mobile, Instant Messenger, and virtual environments, mycybertwin. com can be deployed for the personal and home user, social media addict, large-scale corporations and businesses, government portals and so on.

Each of us exhibits a digital signature that is peculiar to what or who we are online. These take the form of avatars. My avatar receives its cues from its offline 'twin'. However, I neither deliberate over its responses nor do I have a conscious say in its growth. The body of reference that builds from my online detritus does not always accumulate in a controlled environment. The mycybertwin.com web service allows me to do just that: Artificially engineer a twin and let it loose on cyberspace as my virtual representation. I revisit myself as I go about engineering a cyber twin from scratch.

Introduction

Would you agree when I say that the way we represent ourselves has much to do with the idea of how well we think we know ourselves and perhaps. less to do with choice or control? Consider this: We deliberate over our clothes, are picky about our food groups, finicky about television shows, have preferences for certain books, and who we hang out with. Our preferences are largely responsible for self-representation and act as guidelines for others to categorise us. What about decisions and preferences that are not deliberate? The way we react to distressing news (a death in the family): how we face challenges (poor scores in exams); our attitude towards physical exercise; or how we plan a camping trip. All these are non-verbal and visceral cues that add up to people's perception of what makes us who we are. So, representation can be controlled as well as be non-deliberate in real life.

How do we map representation online? How are our avatars perceived? Do we have autonomy to represent textual and non-textual information about ourselves in the manner we want to? Lately, it seems social media websites are edging out organic interactions to emerge as de-facto profilers of our preferences and footprint. Little trails lead people into forming definitive ideas of what makes you tick (Liking a Facebook page about Seinfeld must mean I am a fan of stand-up comedy, right?), and larger clues help reinforce semi-permanent prejudices (not having a Facebook account must mean I am anti-social, right?). Our avatars grow from the cues and stimuli we provide from this side of the screen, and then transform into independent personalities in their own right. The online community will soon have a predictive model for my avatar's attributes and place it within specific parameters of what they perceive to be my (my avatar's) normative behavior online.

Is there a set of visceral cues that leads us into understanding what goes into the making of our avatar, and further, how its normative behaviour comes to be codified as something peculiar to the online world? Think, typing speed or how quickly you respond to a friend's prompt in an IM;

familiarity with cyber-slang and chat-lingo; the signature emoticons you use and the way you sign off an email; status updates and what you choose to hide or display on your profile page; how often you appear online or offline; the number of followers and friends you accumulate, and the groups you belong to; whether you make your sexual preferences obvious; whether you donate regularly to Wikipedia and BitTorrent. The questions do not deliberately emerge from an either/or prompt, but reflect an unvoiced sentiment that the stronger your presence online, the further well-defined your avatar appears, and in turn, perceptions attached to your online self.

It is at this point that I voice concerns: When addressing the avatar, do we always have to bring in an element of division or comparison with the self? Are the lines so neatly divided down the centre of either/or? Historically, much of this dialectic tension between the real and the virtual could be laid at the doorsteps of science fiction. We are weaned on the artificiality of machine intelligence, cyber-entities and bots, as they have no flesh, blood and soul to qualify as 'real'. Virtual is now synonymous with fake, unreal, artificial and non-human. This dichotomy of viewing our own selves as unreal when we operate on the surfaces of the World Wide Web is also largely responsible for the way we articulate perceptions of identity online.

Do we articulate the possibility of an avatar's existence independent of the avatar's creator? Do we pause before referring to our avatars as 'it', instead of 'he' or 'she'?

The case-study that follows details my exercise in understanding how we define and design identities online. I did this by signing up on MyCyberTwin, a web service that allows you to 'engineer' your avatar - what they refer to as cyber twin. The artificial intelligence that forms the brain behind the cyber twin would be fed with information pertaining to our habits, nature, attitude and preferences, and be taught into becoming us through lessons, text

chat and constant feedback. While we are familiar with simple chat-bots and animated avatars that have a basic profile or script to work on, this web service offers something unheard of: An artificially intelligent avatar wiped clean of any personality, save for a generic, lab-built one that can be modified and re-cued into emulating us. Can it debunk my belief that our avatars have organically-nurtured identities, not artificially-cultivated one? If it's bound to grow, whose trajectory does it emulate – mine or an internally coded one, or something altogether different, neither rooted in the semantics of reality, nor of artificiality? Let's find out¹.

What shall I call my twin?

Engineering deals in specificity and precision. Engineering a twin also demands the same. It needs measurements to define its boundaries. which we do by selecting a personality type: "warm. but cheeky" (out of a possible six choices). There are pre-defined traits and responses associated with choosing a personality type and certain characteristics have already been pre-fed into the twin (for a particular personality) by the web service developers. I also assign the twin my age (relevant, perhaps, in setting boundaries of acceptable and associated behaviour related to age) and location relevant again, as the city I belong to or the country I reside in drives a portion of my 'local' conversations online, the kind of activities I indulge in the offline world and what I share of those online, and the perceived ethnic identity conferred on me because of where I come from. The third attribute I assign is sex, female in my case. In a detailed study, it would be interesting to note how the pre-fed responses vary for a male and female cyber twin, and how it drives identity formation.

The most taxing part of the engineering exercise begins with filling up a 79-set questionnaire where I respond to questions on my religious affiliations, political views, sexual orientation, educational background, languages spoken, affinity to family and home, relationship status, my views on sex,

When it comes to questions of digital identities, most scholarship looks at the digital as the extension of the physical. There is a logical presumption that the 'real' exists within the material world and the 'simulation' extends to the digital domains. Nilofar Ansher's essay topples this equation by looking at the world of artificial intelligence and exploring the 'relationship' that we have with technology.

Instead of going through the usual tropes of usage, access, adoption, etc., Ansher begins to ask the simple question: What is at stake when we talk of a digital native identity? She locates herself as an avatar – a digital identity that is not merely an extension of the self but also shaping the self that it is supposed to represent. Ansher's ethnography of the self, as she sets out to create and interact with her own cyber-twin opens up new ways of thinking about digital identities.

Especially for digital natives who often seamlessly travel between the online and offline worlds, it means that we do not have to look at them as either physical users of digital technologies or digitised representations effecting change in the physical world. They are in a dialogue and exchange between the two.

Connect this with Marc Stumpel's idea (Book 2, To Think) of protological control. There is control that is embedded in the very design of systems. These controls, even when they are coded in technology, are often invisible and hence operate as digital visceral or non-deliberate operatives that determine our identities online.

The interactions with the cyber twin, especially the creation of a digital avatar like this, unravels the complex processes by which designs of trust, belonging and friendship are generated online. As the notion of the 'human' starts to blur and non-human networks begin to simulate human responses and interactions, we need to develop new ways by which to establish affective and intimate connections with the object of interaction. This essay shows in

spirituality, politics, humor quotient, and so on. A mix of hypothetical situations and my imagined emotional responses to the same are thrown in. The questionnaire does leave room for more than one response (three options to a given question), which gives me room to account for mood swings, eccentricity, a bit of mischief, and other variations to how I might behave in various chat environments.

Knowing that the cyber twin requires a very specific set of 79 questions also helps me test the validity of responses within a tight framework of reference. The cyber twin runs on scripts running in *my* heads and operates on the assumption that it mimics my offline self. I chat with my twin assuming that it will respond to questions the way I do, however, this is where I come to the first roadblock – I have to stick to a personality type. Operating as it does on the parameters of a 'warm, but cheeky' avatar, its responses are completely off the *assumed* set of responses *I think* I would give to the same prompts, keeping in mind that I consider myself as a 'warm but cheeky' personality.

of the personality indicator that necessitate very specific responses. So, whose notion of identity is my cyber twin living up to – mine or the programmers' who are behind the application? What could be the reason for restricting responses and pre-feeding fixed personality types? Perhaps it leaves less room for errors when there are fewer permutation and combinations to engineer the twin with. But it also drives home stereotypes of loosely-defined characters.

By limiting my choice, the web service forces me to work within artificial constraints and engineer my twin in the world-view of the program. We are never given access to the 'how' of its functioning; what psychology and sociolinguistic texts does the program pick up references from? The twin takes turns, sometimes picking up cues from what we feed it, and other times, relies on the program to supply it with 'plausible' responses. Eventually, I was left with no choice but to adapt my responses to the twin's and I started mimicking her, supplying responses to

Personality Type

Choose a personality which best describes how you are, most of the time:

- O Slightly friendly, but neutral: If you are not sure which personality to pick, or if you want to impose your own personality fully.
- O Warm-hearted, Intellectual: You like to think, to read, to explore. You are a warm-hearted person.
- ® Cheeky, Intellectual: You like to think, to read, to explore. You are witty, even acerbic at times.
- O Warm-hearted, Down to Earth: You are warm hearted & practical. Your thinking is down-to-earth rather than complex.
- O Cheeky, Down to Earth: You are cheeky, & dislike people who waste your time. Your thinking is down-to-earth, not abstract.
- O Evilt: You are evil and cheeky. You do not care for happiness or do-gooders. You can be mean, but that is to be expected of any evil genius.

Update

There are six personality types to choose from, with specific character definition of what each personality entails.

Performance and text

I certainly don't perform to a fixed notion of that personality; it's more fluid. How do we make sense of an 'out of character' behaviour and the responses to such situations? And while pre-meditation hardly figures as a driving force of performance, the cyber twin is primarily driven and bound by the codes

her questions with answers that she would give. This was simple, as she used a very limited vocabulary and response sets.

Take for example, one of the often repeated chat my twin and I have: "Why is English the language of the internet?" as this is one of the questions I fed on the back-end for the twin to ask during a chat. There are only two ways she has responded to this: "I don't know, you tell me' and 'Internet is outstanding, don't you think?" The first response would have pushed forth the chat, encouraging the respondent – me in this case – to prolong the chat with varied responses. The twin's response, however, is a 'factual' statement for her, something that her database doesn't allow her to question, it's a given that the internet is outstanding for her, but does she believe that herself? I test this by replying to her statement with the same sentence, "Yes, the internet is outstanding", to which she responds: "The internet is an amazing tool, you can learn many new things online".

It becomes obvious that the twin is programmed to pick up on keywords and has stock answers for them. Is there a foolproof method of ascertaining 'how' humans would respond to hypothetical events? Memories, experiences and knowledge help posit plausible answers. This knowledge plays a big role when we fill-up the multi-response questionnaire; however, they are at best hypothetical reflections and cannot be looked as THE truth. Certainly, in our numerous interactions online, there are variations as per our mood, the situation, past experience, what we feel about the person, and so on. Will the twin fall back on the 'moods' and 'attitude' programmed into its intelligence while chatting? What memories does it have to fall back on? What if I choose to feed it information that slightly varies from the truth? Would that impact how I get represented online? The thing with information is that it is in constant flux and doesn't locate itself within the frameworks of truth, whereas our engagements online have less to do with accuracy, and more to do with the perceived conviction in the truth of our statements at a given time. How can the cyber twin understand these fluid contexts? It operates on data feeds and not on the human attributes of emotions

Performance theorist Richard Schechner says that "performance, that is, how people behave and display their behaviour, is a fundamental category of human life" If our actions and behaviour online are also snippets of performance, is there a script that we follow for reference? In essence, is it my performances that gets textualised through my

detail, how difficult it is to distill human interaction into set and logical designs, but it also exposes the larger theories of loose affiliation and network building online. The ability to create environments, processes, identities and interactions that can simulate a given expectation of reality is slowly emerging with ubiquitous computing and reflects in the experiments that are being documented in this essay.

There are certain presuppositions that often plague studies of digital and online identities. It is almost always presumed that digital identities are performative, and this makes them unauthentic. However, the performative is posited against a romantic 'real' identity which is authentic. It is good to realise that the choices that we often make in the online world are equally present in the offline. What about things that we do offline that affect the online interactions? The gender that you belong to, the cultural codes that you subscribe to, the language that you speak, the speeds at which you access the web... these also add to your avatarification apart from the designs and protocols. Kara Andrade's personal histories (Book 3, To Act) on being and becoming different people at different times and on different sides of political, social, cultural, gender and digital borders also dwells on this in greater detail.

avatar or does the avatar learn to read the script herself and follow previous leads? While I would like to believe that our behaviour online is more fluid rather than staged, isn't it true that we take the online stage anticipating an imminent performance? We expose ourselves and engage in monologues and let the audience know when the curtain's about to drop, and rise again. The ploy becomes part of how we are perceived, and the script an integral part of how we construct ourselves online.

With the cyber twin, it's always the script that comes first. Instructions and code are plugged into her before the performance begins. I neither direct her and neither does she organically follow my cues, during the chat; rehearsals have already ended back-end. She doesn't add layers to her identity so much as reinforce the various traits that go into defining it. Friends, who chat with me online don't just recognise the text as coming from me – the reason is a certain tone, brevity or flow, the pauses I ensure during distressful conversations, the frequent bursts of excitement.

So, why promote the cyber twin as a service that can represent us across any online platform? My twin has a long way to go before she stops reasoning out a 'correct' response (response that would be considered generally acceptable) and instead, answer intuitively, based on the situation, context or person's background. Chat transcripts clearly show that the cyber twin does not estimate or verify the age, cultural background or geographical location of guest users for a more specific and personal conversation. The service soon begins to mimic a chat service where you meet random strangers and have a good time.

End note

Human and machine relationship has been one of testing and comparison. We marvel at a machine's strength and ability, but find them wanting in humaneness. We want the machines to be able to emote like us, feel like us and even ponder over the eternal questions of life and the afterlife, and yet retain their immortality over humans. Their calculative, logical or cognitive intelligence was never at question, but their lack of emotional quotient will always remain a bone of contention and a bargaining chip for humans. We are already seeing the first generation of robots being used in medicine, engineering, and the service sectors in the developed countries. But they all represent a chrome-finished metallic hunk operating under the control of human minds and instructions. They don't yet have the promises of Isaac Asimov and Douglas Adams born fruit – of sentient intelligence who know what ennui is, what loneliness is, who fear death, who would understand parental love.

The whole exercise begins with data feed as the basis for building identity and that turns out to be an Achilles' heel in my perception: That our presence online is mainly guided by textual cues and our avatars are nothing more than chatting machines. But our avatars are us in all that we think, hope, imagine, dream and do. They exist, solidly, in another realm, but are identical to us. The cyber twin fell far short of its promised glory and slipped into the category of a chat robot. She is plugged as artificially intelligent but constantly needs incentives, inputs, instructions, and a text-map for initiating conversations.

Imagine an actor who has to essay the role of a real life character on stage. While he can adopt the mannerisms, learn the language and mimic the several physical traits of the original, he can never hope to imbibe the life essence that goes into making the original man what he is. And it's really hard to compile and define our life's essence, isn't it? We don't always jot down our milestones or life turning moments. We retain it in memory and it forever changes us. That change cannot be replicated physically or mirrored, unless you live through it. Sharing does not equal to understanding and doesn't lead to appropriation of identity. To me, the cyber twin is an actor, not the original.

The ontology of a cyber twin also leaves me vastly confused. Is there a finite point in time

or understanding when we know the twin has appropriated the meaning of being us and can stand for us, instead of us? If and when the cyber twin exists independently from its author, does it accumulate memories and form impressions? The web service mentions that the twin keeps a record of all the people it chats with and remembers conversations. Does it remember the essence of conversation and what was conveyed - subtext and context - or does it remember conversation as information? I have seen it pronounce me rude and curious, but that's because it captures the right keywords in the chat: "I am curious about your love life." I say to her, to which she responds: "You are a rather curious person, curiosity killed the cat." These are obviously stock quotes and canned responses. How many variations of these could I teach her before she evolves to makes comebacks and retorts with one-liners? Can a machine 'learn' to be humorous?

What of empathy and a feeling of mutual affection? What can possibly motivate the twin to enquire into someone's health, how my friend fared in his exams, express concern for the well-being of my cousin's children, or just put in a kind word if my sibling is going through a rough patch at work? While my avatar had personal investments in all her online connections, the twin will function purely on a 'response to stimulus' basis. Courtesy might be built-in, but concern cannot be. Similarly, are there non-textual cues about the twin that I am unfamiliar with? Several in fact, like I mentioned before, I don't have access to her blueprints. Any entity evolves with frequent stimulus. Would the twin outgrow the primary inputs programmed into her and learn to appropriate feedback via newer chats? Does the web service make room for internal shifts in perspectives and allow recalibrations of how a twin can expand its communication and relationship building process?

If learning for the twin takes place through teaching and retention of lessons, does the cyber twin have human-like memories that help it remember? What are the ways of learning and recall for a machine? Do memories modify behaviour and perhaps, change the quality of data stored within her? Because that's how tricky human memories are; we remember things

One of the most important lessons that we had learned from the workshops and this essay reiterates is that even within the Web 2.0, where we are supposed to be completely in control, there is a lot happening to ourselves that depends upon other people. We don't necessarily need to make the distinction between what we do to the avatars and how they grow in interactions with the other elements online. Marc Stumpel's research (Book 2, To Think) on the design of social networking sites and sites of control, explains this in greater detail. He identifies that the actor within a social networking system is a part of a larger network that comprises of many other non-human agents and that our identities within such systems are formed in interaction with all the actors of the system.

We could also make a similar argument around Facebook and Twitter. It is good to realise that we construct ourselves, not as how we want to, but as the design of the platform proscribes for us. However, what is also necessary to realise is that this is not limited to the online world. We have similar constraints in the offline world. What bodies we occupy, what names we call ourselves, languages we speak, families and religions we belong to, etc. It isn't very surprising then that the service reflects these designs which are almost hardwired into our everyday fabric.

Here is an experiment to think about – If we actually got a free field, would we use descriptions and parameters too different from the ones offered by these websites? Try to define yourself without using any of the parameters Facebook has for you and see what happens.

This dialectical relationship between the online and the offline selves is something that many power users of technology have talked about. This is the beginning of a model, where a digital native is not seen as residing in an either/or pull between the digital and the physical. Instead they are viewed as a combination unit where the experiences and capacities in one system help them to navigate and grow in the other.

Anat Ben-David (Book 1, To Be) in her analysis of

quite differently the farther we are from the event in time, space and emotions. Would I be able to track its digital future and posit a behavioural trajectory? Will the avatar be sentient in its understanding of existence, rights and leisure? Would my avatar be as valued, if I outsource its existence to a cyber twin? All these questions prod us into being convinced that the twin does have the ability to do what it takes. But evidence speaks otherwise.

Storage and archive also bring to mind another concern – privacy. How is the cyber twin processing all the chat conversations? The founders of the web service state that all chat transcripts are also accessible to them for "purposes of research", but that's clearly violating privacy rights of a visitor who might share personal information with the twin thinking it's trustworthy. I can vouch for my tact, could I also do the same for the twin's? I don't own her. I don't make decisions for her. I am just a response mechanism engaged in dialogue with her. I can't teach her 'good' and 'bad' behaviour not even sure cyber twins can imbibe goodness or badness. But of course, an 'evil' personality type would most probably understand harm. There are too many gray areas and issues that are not addressed by the developers.

The cyber twin uses her textual hand to grope through the gallery of meaning making. But that's not why I disinherited her to the stake of taking over as my cyber twin. The fact is, she hasn't earned the right to represent me. There is nothing at stake for the twin, except perhaps a jolt of excitement to her programming codes if she hits on the right response code. For me, an uncharacteristic move from the twin could mean loss of credibility, for all the years the avatar put into reaffirming my identity either side of the screen.

¹ For the purpose of clarity and this study, I have differentiated the usage and context of avatars. Cyber twin refers to the web service, whereas avatar is what I make of myself online.

digital natives' locatedness, frames this identity as a hybridity. For her, the combination of the performance, text and software builds a new digital identity which is often contingent upon designs that others create for us. Parmesh Shahani (Book 1, To Be) offers a different perspective and talks about co-creation, to highlight the fact that our identities and articulations are generally acts of co-creation and we need to move away from the idea of complete autonomy and control when it comes to questions of defining who we are.

In another conversation that started in the Latin American workshop but continued on the Facebook group, many digital natives discussed the idea of a right to be disconnected and forgotten. The digital and online worlds are spaces that never forget. In caches, in histories, in search engines and archives, our actions and selves are stored long after we have forgotten them. We leave traces and vestiges online.

Digital natives often put trust in the information highway and don't look very closely at the Terms Of Service which often seem to override the laws! These new grey areas of governance, control and jurisdiction are posing some of the most radical and critical ideas in contemporary discourse and policy. Ideas like post-human and cyborgs are proposing new kinds of life forms and agencies which cannot only be attributed to the human subject. For instance, are you responsible for things that your avatar does - somebody sharing porn on your website, for example - when you are not aware of it? If somebody violates your avatar, do you know where to go and ask for justice? The new age world of digital identities and cyber twins is going to posit these questions to understand how we can build frameworks to accommodate for digital native identities.

² http://www.news.cornell.edu/chronicle/02/1.31.02/ Schechner.html

1.7 IN PURSUIT OF CHANGE...

by

Seema Nair and Nishant Shah



Seema Nair was a facilitator at the Taipei workshop that was structured around 'Talking Back'. Drawing from her own experiences as a feminist, as a researcher in areas of development, and as a officer with Hivos, working on issues of technology, Nair suggested an alternative framework that moves away from existing perspectives and discussions around youth, technology and change, especially in Asia. In this discussion, we draw from specific Indian examples to look at how the dominant frameworks can be challenged so that we can talk about identity-technologychange beyond access, affordability and skills. Some of the examples might be very geo-politically located, but we have tried to provide a reference list at the end for further reading.

Nair particularly brings in the ideas of history, context, and ability of people to develop critical and digital acumen. The possibility of dreams and the need to build infrastructure that makes people recognise themselves as more than mere 'users' of technology. The

discussion begins with larger ideas around what it means to be a digital native in non-pervasive environments like India, and then moves on to providing a larger critique of the technology environments that we are building without being more nuanced and sensitive to the environments within which digital natives operate.



Nishant Shah is the Director-Research at the Centre for Internet and Society, Bangalore. He is the lead researcher for the *Digital Natives with a Cause?* Project.

Nishant Shah (NS): One of the problems that we have had with this 'found name' Digital Natives is that we are not always sure what we are invoking when we use the name. The general perception in existing discourse and practice seems to favour a certain kind of homogenised identity defined by geo-political locations, youth, class, affordability, language, etc. However, the *Digital Natives with a Cause?* Knowledge Programme is trying to deconstruct this identity and try and look at the multiplicity of practice and people who can appropriate digital natives as a name for themselves. In your own work, Seema, I am sure you have thought of this yourself. If we were to indeed start looking at re-naming the name, so to say, how would it shape out?

Seema Nair (SN): I wouldn't completely disagree with the perception because it exists that way. Even within my work and travel which is predominantly in rural India, I see that any intervention with technology in villages attracts young people. I think it is natural that the new generations would be the power users of technologies, from telephones, to video, to television and the internet. So there is

currency in retaining the idea that the term Digital Natives does not have to be limited to the youth. It will be youth centric though.

NS: I completely agree. Even in our efforts, while we have tried to be all inclusive, it is the young people who have interacted and responded most to this name. A lot of it might have to do with the fact that the young also see themselves as more involved with digital and internet technologies.

SN: Absolutely and I think the undeniable thing is that young people instinctively use technologies differently. I can see, in everyday practice, a difference between a generation that might be functionally using the internet – to write emails and surf online – and a generation that just pushes the boundaries of the medium and what it can do. The young feel more in control and they constantly experiment with these technologies.

N5: And these experiments are not always for an external change or social good, right? One of the things that we have learned in this project is that change is subjective. People define change for themselves. And the more innovative uses of technologies are towards personal change rather than large scale social transformation.

SN: Yes, I don't think all digital natives use technologies for social change. Whether they are socially responsible or politically active is a different story. But what remains important is that they are pushing the limits of the existing landscapes and producing processes by which change happens. More often than not, this change is in the realm of the personal, but it has the potentials to transform at a larger level as well.

NS: Embedded in this idea of change is of course the presumption that these people have the cultural, financial and educational capital to access these technologies and become aware of their own capacities for building change—which is why it is also necessary to talk about people at the fringes. And that is one of the things that you brought to the workshop in Taipei – a deconstruction of the Digital Native as not only somebody who has access to technology but

also somebody who knows that s/he has the power to effect change through that technology.

SN: For me, we really need to focus more on people who are on the fringes of technology usage because they are invisible to most actors in the field of Information and Communication Technologies for Development (ICT4D). The current discourse of technology is so entrenched in the Development policies and practices that they seem to depend on literacy and access as the only two obstacles to technology-based development. Both with the state and with the development sector, there is a neglect of the larger socio-political and cultural reasons which place these people at the fringes in the first place. The location at the fringes is not a location of technology. It is a result of a series of disempowerments - caste, class, gender to name a few. There are no articulations of the circumstances. which make people live on the digital fringes. Any technology study which seeks to understand how people can effect change first needs to look at whether they have the power to effect change. Technologies can bring about a shift but we also need to make sure that the people have the power to access these shifts. I am still to see a frame that articulates the power dynamics around who gets to claim him/herself as a digital native or claim relationships with technology that is beyond access.

NS: I see resonances here with something that came up in the workshop in Africa. Shafika Isaacs, who is also contributing to this book, was a facilitator there and she brought up the idea of a digital outcast. For me this was a very potent and powerful metaphor because it is not just talking about the haves and the have-nots, which is the larger vocabulary of development. The digital outcasts are people who do have access to technology, are apparently empowered because of their engagement with technology, but actually remain doubly disempowered and neglected because they are not even looked at as people who need to be included in development plans. It also reminds me of Hannah Arendt who has such a brilliant formulation around power, where she says that the truly stateless people are those who have the rights granted by the State, but do not have the 'right to rights' and hence, remain forever, un-actualised.

SN: That is why we need a new articulation and framework. Look at 'Gender' for example. There is a lot of work done on ICTs and women. Most of it remains entrenched in how to give access to women. But nobody bothers to see how the technological questions can be integrated into existing concerns. When integration does happen it is at the level of a functional application. The true efforts should be at re-articulating the existing guestion and seeing what roles technology can play in them. Take violence, for instance. We need to understand are young women articulate themselves differently through technology. Where are the gaps around questions of violence? How does technology mediate their relationship with violence? The gaps are so inadequately addressed. Most solutions just seem to suggest that giving access to cellphones will automatically grant them empowerment. This is where the fringes are. The digital natives who are given access, who are granted skills, but are not trained to undergo personal transformations which are required in order to make use of those skills effectively.

NS: There is an additional layer of problem here that we perhaps need to tease out, and that is at the level of the methodology. I think one of the problems with technology studies or ICT4D projects has been that they treat people as representative samples of a larger population. The need is always to scale up, replicate, find one-size-fits-all solutions. And in this, something valuable is lost.

SN: What we need is a balance between the macro and the micro, which are both, in isolation problematic. The micro features so much on an individual's personal universe and articulations that it indeed loses out on any possibilities of social action. The macro robs the process of all individual personality and desire, and so we miss out on the real catalyst for the change. We need an approach that has to be at the level of the individual but also constantly place the individual in existing networks, contextualising them within movements and circumstances rather than treating them as units of technology implementation.

NS: I find that observation very useful. There has been so much pressure on young people to be constantly performing, to be efficient, to be engaged that sometimes we forget that they are young. So it is fine when Facebook becomes a site of mobilisation or collaboration, but if they spend time on it for personal and private usage, it immediately comes under severe scrutiny. For me, it is necessary to capture the personal narrative and stories, as much as it is fruitful to look at the larger processes of change.

SN: For me, there was a moment of clarity, where something in reality happened. I was engaged with the project on CyberMohalla (Cyber Communities) that the Delhi-based new media and research organisation Sarai had started in the city. It was a process that encouraged and enabled people to write in their local languages using the digital platforms of expression and publishing. There was this one particular blog in Hindi on World Cinema that I came across. Something happened there. Three different spheres came together. A low-income working class boy wrote in Hindi, on a technologised sphere, about World Cinema. When you unlayer it, you realise that some sort of politics are involved, contexts are involved. What needs to be looked at is not merely capacity-building in technology usage but the knowledge capacity of a person to think and to explore. It becomes necessary to look at the personal impulses as this voice cannot be separated from the political opinion and the position in the world that the writer is occupying.

NS: That is such a brilliant example. It touches upon the idea of knowledge capacity very interestingly. With the *Digital Natives with a Cause?* programme that is something we have been learning as well. There are many spaces which look at just investing in young people and their use of technology but there is very little attention on either their personal capacity building towards producing change or on the support systems that shall sustain their efforts. For us, it has become increasingly important to locate notions of change and engagement in processes of personal transformation and contexts.

SN: Yes, it will take time for technology to integrate itself into the larger processes of social change. There are enough builder consortia which think that building of platform and infrastructure without investing in political mobilisations and change will solve this. What we need to invest in is creation of the possibility of dissent. We need to develop structures by which alternative viewpoints can be presented. The internet is an interesting leveller but tools cannot achieve it by themselves. The use of ICT in promoting democracy and transparency is admirable, but it needs to be integrated with the everyday and material practices. In India for example, you might want to do a campaign like Jaago Re, which seeks to mobilise people towards voting, but these campaigns do not identify the systemic problems with voting patterns in India - people vote on basis of caste and money power is often used to buy votes. What we want is to develop community driven processes that address the systemic problems rather than just trying to address the symptoms.

NS: This is the point we have been making in the Anna Hazare campaign against corruption that was recently orchestrated across the media landscape in India. One man's stance against corrupt governmental processes suddenly mobilised the entire country to support a Bill in the Parliament! But the majority of supporters did not make informed choices. The validation of it was only in number. There was no distinction between technologies of mobilisation and technologies of information.

SN: Yes and the entire spectacle became so mainstream that there was no space for alternate narratives. Many people provided a critique of the campaign and of the processes that Hazare was initiating. The intelligent voices that expressed dissent were shut down by public sentiment. There was a blind spot in recognising the critiques. And that's how technologies need to be understood.

NS: In your Taipei presentation, you mentioned technologies as gendered. I am guessing that's the direction you are going in with this argument. And it is something that I subscribe to very strongly. When we talk of technologies of inclusion, we also need

to look at technologies of exclusion. When we talk about technologies of gender, it is also important to look at gendered technologies.

SN: Gender is everybody's business and should be included in everything. That, for me, is a given. But there is a certain way by which gender needs to be included and articulated. It needs to be unpacked the political economies of technology, the business of production of frameworks, and the consumption of it. The problem with current articulation has been that there hasn't been enough detailed deconstruction of technology. Technology is always referred to as being in flux but we don't have any understanding or mapping of the flux. For Internet Governance, for instance, the view point on gender will be very different from a capacity building point of view. Can we talk about questions of gender segregation in engineering education? What about the gender inequity in technology practices? What about questions of access and experience? In the contemporary feminist approach to technology there is a consistent disinvestment from the flux. The 'woman' is imagined as an unchanging category that can become the site of technologybased development. In the process, the intended beneficiaries are often neglected or forced to become identities that they are not.

When I talk about gendered technologies, I am referring to the way in which gender becomes the site upon which technologies operate. This is different from just saying 'Gender and Technology' which presumes that they are two separate spheres and that we need to bridge the gap between the two. Gendered technologies suggest that gender and technology mutually define each other and that we need to integrate the ideas of gender in discussions of technology, and the question of technology when talking about notions of gender.

NS: Gender *does* allow us to make such an argument about deconstructing technologies. I see it as a significant point of departure from regular development-based approaches to technologies. In South Asia, especially in India, the ICT4D impulses of technology have been so strong that it becomes

difficult to locate digital natives and their cultural practices and interventions. Once in a while, you have stories like the Pink Chaddi Campaign or the Blank Noise Project, which allow us to rethink the technology-gender paradigm, but there is so much more to them than just the feminism angle. Even feminism needs to be integrated within larger processes of social change.

SN: I find it essential to think beyond a technology point of view and think, in depth, decode, reconstruct and re-articulate the lives that people are living through their blogs, exhibitions and everyday practices. There is one story that stays with me which lets me make this point. I know a guy called Nagaraj, who is originally from Kollar, a small village in South India. He first came in contact with us because we were setting up a community radio station. He was from the village and had migrated to a larger town as a bartender. He came back to volunteer with the radio station. After the tenth grade he had dropped out of formal education but had trained himself in electronics. He was able to fix wires. But from there, he eventually worked his way to become a studio manager. He experimented with radio, with cellphones and built information societies. His trajectory has been incredible. He has now moved to Bangalore. He worked with a media collective and started exploring issues of theatre, local language blogging, etc. He trained himself intensely with Content Management systems. And at that juncture, when he could have joined the corporate sector, he chose to work with a sexuality minority organisation called Sanagama and now helps them develop their digital resources. He draws from his own experiences as a dalit and technologies helped him transverse the mainstream and the borders in his head, to become the support for other underprivileged in the society.

NS: It is stories like these that inspire me to continue in this inquiry around digital natives. There are so many of these tiny tales of triumph that don't feature in larger conversations around change but are so significant – because if it has happened once, the chances of it happening again and with many more people are so much higher! One of the things missing

from the current discourse on technology and change is this understanding of the new trajectories that people find for themselves and the role that digital technologies can play in it.

SN: It is what I call the projectisation of every syndrome in the development world. There is no doubt that digital technologies are enablers. However, in the programmatic implementation across governance, ICT in education, physical infrastructure building, etc., the emphasis gets stuck at enabling. We have to get beyond the idea of access. It is not about access to technology. It is about the people's ability to relate to technologies. It is about building imaginations so that access can lead to change.

NS: And we already see this in social movements across the board, don't we? There is a certain disintegration of social movement within the urban landscape itself. Technologised mediations have allowed so many young people to come and redefine the contours and the stakes of these social movements. It is not always inclusive and comprehensive, but it definitely shakes up that which we have taken for granted.

SN: Yes, if you look at social movements per se across the board, from sexuality to caste to informal sector to human rights – the next few generations are completely redefining the articulations of the future. The present articulations are from people outside and they are trying to grapple with the problems. The future is in different voices coming together from the inside to define and deal with an entire spectrum of social change rather than the projectised niche change makers that we are looking at right now.

NS: And yet, it is not to say that we are looking at complete dissonance. The disruptures also in many ways engage with existing forms of political identities and processes, right?

SN: Absolutely. The knowledge gap is not at the level of practice – though it surfaces there. It is at the historical discontinuity that digital technologies

are often placed within. We need to produce more contextual and historical perspectives of who these people are and what makes them the way they are. Like with digital natives, their articulation should not only be in paradigms of technology. It is time to push the understanding within those societal and structural inequities and inequalities that market their experience. It does not mean that the digital native has to be necessarily underprivileged or victimised, but they need to learn how to position themselves within the conflicting power structures and processes that shape and often enable them to become who they are. And if we manage to do that, I can say, very simply, the future is bright.

Reference list:

- 1. The Pink Chaddi Campaign started in February 2009 and was a non-violent protest against an increase in incidents of violence against women who were identified by a right-wing fundamentalist organisation in India, as violating 'Indian Culture'. The catalyst was the beating up of women in a pub in the city of Mangalore and led to a series of actions from the people mobilised through the campaign. You can find more details about it on the Wikipedia page here http://en.wikipedia.org/wiki/Pink_Chaddi_Campaign The official page of the campaign is available here http://thepinkchaddicampaign.blogspot.com/
- 2. Jaago Re in Hindi means "Wake up". It is a citizen awareness campaign that was launched as a collaboration between a consumer brand Tata Tea and a citizen's action organisation Janaagraha, in order to mobilise Indians to exercise their right to vote in the political elections. You can read more about it here http://www.jaagore.com/jaago-re-story
- 3. Anna Hazare is a political leader in India, who recently went on an indefinite hunger strike to protest against the government's blind-eye to rampant corruption in the country. His task got a lot of publicity from the traditional media, but also inspired people around the country to mobilise using social media tools, to show their support to the cause. There

are many conflicting versions and interpretations of the politics involved, but the fact remains that Hazare's message was greatly distributed via the social media in the country.

- 4. Dalit The Wikipedia page on Dalit explains that Dalit "is a self-designation for a group of people traditionally regarded as Untouchables. Dalits are a mixed population of numerous caste groups all over South Asia, and speak various languages." You can read more about Dalits and the caste politics in India at http://en.wikipedia.org/wiki/Dalit
- 5. Cybermohalla Mohalla in Hindi, means neighbourhood. The Cyber-mohalla project, housed at the new media collective called Sarai, in New Delhi, was one of the first instances of looking at networked and digital neighbourhoods in the country. You can get a sense of the project's complex dynamics and visions from their website available here http://www.sarai.net/practices/cybermohalla

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