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Advocating causal analyses of media and social change by way of social mechanisms

ABSTRACT

Studies of (new) media and social change should strive to introduce causality into the analysis. Studies relying on quantitative data tend to provide either too simplistic explanations or just point to correlations while qualitatively based studies tend to be so particularistic that the potential for generalizing findings from specific cases is negligible. In this article, it is argued that proper accounts should strive to suggest causal connections between social change and media practices – not by resorting to unrealistic cover law-explanations but by identifying and analysing social mechanisms. Done properly, such analyses would: heed acting subjects; explain these practices through expositions of the minute steps that link A and B; and be realistic accounts – both in the sense of being based on 'thick' descriptions and of being easily recognizable when compared to what is actually happening in everyday life.

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KEYWORDS

media practices theory causality social mechanisms change Botswana 1. I use 'new', 'social' and 'digital' media partly interchangeably to refer to media based on digital signals and/or on mobile platforms that have emerged within the last decades. My choice of which concept to use is first of all related to qualities that are relevant for the argument: in some situations the crucial functionality is the digital signal, sometimes it is the dialogical (social) quality that is important, and in vet others it is the technology itself that is most relevant. I see no point in making a hard and fast distinction between 'new' and 'old' media, simply because it is often difficult to know where to draw the line. For instance, conventional newspaper content might be read on a smartphone and hence the media consumption actually mixes elements of new and old media (unidirectional mass media, handled on a platform with functionalities other than the paper version). It is also worth pointing out that the word 'media' is used here in a broad sense of technologies that transfer information. Thus, Radio-frequency identification (RFID) and similar ICTs are also relevant for the study of media and development.

INTRODUCTION

[...] the advancement of social theory calls for an analytical approach that systematically seeks to explicate the social mechanisms that generate and explain observed associations between events.

(Hedström and Swedberg 1998: 1)

[...] to explain is not a mysterious cognitive feat, but a very practical world-building enterprise that consists in connecting entities with other entities, that is, in tracing a network.

(Latour 2005: 103)

Those of us who are interested in media and social change in Africa are faced by two facts: (1) there has been a virtual explosion in the spread and uses of new media¹ over the last two decades and (2) during roughly the same period Africa has experienced marked economic growth. This begs the following question: is there a connection? And if yes, what kind of connection? An ambitious question, indeed. But, if we were to take on the challenge, how should we, as researchers, go about finding answers to it?

It is not unreasonable to assume that there is a connection between the two facts - after all, development workers, techno-optimists and politicians of all sorts have for years praised the developmental potential of new media. It has been argued that digital communication and the Internet greatly enhance efficiency in bureaucracies and in the private sector. Moreover, stories about new media helping farmers and other citizens out of their economic misery are common. Examples are given (mobile money being a recurrent prototype of the blessings of personal media) and statistics are presented. However, neither the rhetoric nor the literature (academic and non-academic) on the topic is very convincing. There seem to be more wishful thinking and airy plans than facts, reality and good analyses. But what are the facts? Nobody seems to know. For one, national and regional statistics and other 'hard' information that are produced are often unreliable and methodologically flawed (Jerven 2015: 102ff). Second, information remains scarce - the new media landscape is changing so fast that academics cannot keep up with it. Last, but not the least, the results produced by research are perhaps not of the kind that generates over-arching understandings and explanations of how conditions are but develop as a mass of piecemeal information with varying degrees of relevance for the dynamics and consequences of media practices.

To be more specific: we (believe we) know that there are great potentials for increased administrative efficiency and enhanced profit margins for businesses. We also know that both productive potential and communicative efficiency are qualities that can be exploited by people in their everyday lives through more reliable and cheaper money transfers, quicker and more information about input and output prices, etc. What we do not know is how new media enter into the fabric of society. This is crucial as no sustainable economic growth and social improvement is possible if new technologies are not put to use in ways that actually affect society productively. Thus, a proper account of the relationship between development (as an approximate shorthand for increase in wealth and improvement in social conditions) and new media requires two things: (1) that we manage to gather and process enough reliable 'facts' about ICTs (Information and Communication Technologies) and their uses; and (2) that we investigate how and to what extent media practices become integrated in the everyday lives of farmers, local businessmen, students, local NGOs, local and central administration and bigger businesses, and how media affect interaction across borders and continents. An insurmountable task indeed – but then, Rome wasn't built in a day.

The latter task – to study how media become integrated into everyday life – implies an analytical premise, a challenge and a strategy. The *premise* is that we need to study practice. We need to study what people actually do and what effects these acts have. Statistics, discourse analysis and the like might well be part of such endeavours but only to the extent that they are relevant to the lived life in which media are put to use. The *challenge* is to account for change in a sensible, fruitful way. The research theme that we are confronting comprises two instances of change – namely a media revolution and socio-economic development – and the question is how they are related. This requires some kind of theoretical exposition of causality or, as a minimum, a sensible account for change, I suggest a non media-centric media approach (Morley 2009) in combination with a focus on social mechanisms to be the most applicable analytical tool set.

In this article, I will try to substantiate these views and perspectives. My relevant background is having headed a project² that focuses on the challenge outlined above: to what extent and in what ways do new media play a part in the changes that have taken place in Africa during the last couple of decades? The project (now in its last year) is comparative, with data collection taking place in four African countries. My role, besides being the project's Principal Investigator (PI), is to do research in Botswana along with Dr Storm-Mathisen. We encountered the problems that I have just outlined; statistical data were partly lacking and partly of poor reliability, and we soon discovered that the scenarios drawn up by Botswana authorities and in national statistics frequently matched badly with reality 'on the ground'. Seen from the capital or the Internet, it appeared that local government and schools were well stocked with digital tools. In fact, they were mostly not. Indeed, there were computers - in the offices and (some of the) classrooms - but they often did not work, or they were not accessible to those who were supposed to be using them, or they could not be repaired because service personnel and technicians were unavailable. Sometimes there was simply no electricity. Similarly, in government offices and health clinics it was the intention that all work be done electronically, so local and national information could be linked together. What we saw was employees using pen and paper and filing cabinets and sometimes did the extra work of entering information into computers - if there were any working computers around and they had time to spare.

In the following, I will use data from our fieldwork – and from previous fieldwork I have conducted over a period of 28 years – as a background: for reflecting on the potential gains to be made by going beyond 'facts and figures'; and for sketching out an analytical strategy that provides us with tools to understand the processes of change that are taking place. My core concept will be the 'social mechanisms', which exhibit a form of 'tendential causality': given that event A occurs there is a tendency for B to happen. A social mechanism perspective shall be conscious of the role of the acting subjects; have the potential not only to point out changes and correlations but to explain them, through expositions of the minute steps that link A and B, and through such an analytical strategy provide an explanation that includes an understanding

2. See www.mediafrica.no.

of the 'cogs and wheels' of a chain of events that together constitute a causal explanation; and be a realistic account – both in the sense of being based on 'thick' descriptions and of being easily recognizable when compared to what is actually happening in everyday life.

But before arriving there I need to cover some theoretical ground so as to make my stance understandable and plausible.

MEDIA, PRACTICE AND MEDIA PRACTICES

If one wants to study the social significance of media one needs to study media practices, a seemingly banal contention but nonetheless not uncontroversial. We therefore need to look a bit closer at some core concepts.

Media studies as an academic discipline is diverse, approaching media as institutions, as texts/discourses or through various forms of reception and audience studies. As media become increasingly ubiquitous in the contemporary world, media studies have steadily grown in importance and received competition and inspiration from other disciplines, such as history, law, sociology and anthropology. In the context of this article, its interpenetration with sociology and anthropology is of the greatest interest. Combining the 'social' expertise of the latter two and the media expertise of the former has proved fruitful. The outcomes were many, from the Frankfurt School's understanding of media from a Marxist class perspective, via audience studies and Domestication Theory to current media practice perspectives (e.g. Bräuchler and Postill 2010).

Practice is a polythetic concept but its core quality is that it highlights the logical primacy of people's actions. This might seem a trivial issue but in fact it runs counter to deep traditions in social science theory. With roots all the way back to Plato, a persistent and dominant idea has been that scientific endeavour consists of unfolding another reality, the forces or structures of which lie behind or beneath the reality that we observe and that explain the patterns and regularities that we detect *on the surface*. In the social sciences the idea of an underlying set of forces that in some way shape the lived world is clearest expressed in structuralism, in which the idea that *langue*, not *parole*, is the ultimate object of study since it is assumed that *langue* explains *parole* (e.g. Levi-Strauss 1968). As a theoretical school, structuralism (at least within the social sciences) seems to be dead. However, post-structuralism is still a strong – and in some cases, still dominant – trend within the social sciences. It is a broad category and a heterogeneous trend but what most versions have in common is that they hold ideas about the power of structure that seem to imply that the collective in some sense is prior to - and explain - particular social practices (Helle-Valle 2010).

Practice perspectives developed partly as a reaction to structuralism. Their weaker versions simply shift their emphasis from collective structures to people's doings and explain social form as a result of these actions. But there is also a stronger stance, which introduces an ontological and epistemological dimension to critiques of structuralist-inspired views. In this, the transcendental character of (post-) structuralism is contrasted to what has been characterized as flat ontology (DeLanda 2002; Harré 2009; Latour 2005), fundamentally inspired by late Wittgenstein philosophy (1968). In short, the argument is that it is a logical error to introduce causes that are of an ontologically different kind from those we seek to explain. As Latour eloquently puts it ' [...] the ways in which *la parole* meets *la langue* have remained totally mysterious ever since the time of Saussure' (2005: 167). The problem with such reasoning is

that the assumed structures (or 'culture', or whatever term one introduces to designate collective forces) are constructions that researchers introduce as shorthand for behavioural patterns or habits. The flaw lies in giving such constructed concepts *explanatory* or *causal* status. As Bourdieu puts it,

any scientific objectification ought to be preceded by a sign indicating 'everything takes place as if [...]', which, functioning in the same way as quantifiers in logic, would constantly remind us of the epistemological status of the constructed concepts of objective science.

(1977: 203, n49)

Failure to do so implies 'to slip from the model of reality to the reality of the model' (Bourdieu 1977: 29). In contrast, a radical practice theory argues that explanations should *only* contain elements that ontologically belong to the realm of what one seeks to explain. Thus, the flaw lies not in using such cover terms but to accord such analytical entities causal power. 'To collect up a set of rules and conventions as an institution is a harmless and useful classificatory device, so long as we do not slip into ascribing causal powers to it' (Harré 2009: 139). It is in this sense that the ontology is flat. This flatness requires that we study sociality as it flows by and attempt to explain by paying attention to action as it unfolds (and has unfolded in the past) by following actors, tracing networks and revealing assemblages (Latour 2005), thus putting together the details in ways that yield better insight into the flow of life.³

The next step is then to relate practice, as a theoretical stance, to media, as a social phenomenon, in the manner outlined at the beginning of this article. Many books have been written, and much of sense has been said (e.g. Bräuchler and Postill 2010; Couldry 2012; Slater 2013) but I will not attempt to recapitulate the various views developed in these works.⁴ Instead, I will give a capsule view of what I believe are the most essential issues that a practice perspective should address. As I have already argued, if media are to be relevant for development, and for social change in general, they must be viewed as an integral part of sociality. Hence media must be studied as an element of social life. This implies that media institutions and grand discourses (mass media content) must be part of the study, but only to the extent that they affect people's everyday life. We need to know how people use media and for what purposes. A farmer uses her smartphone to check prices for the products that she wants to sell, a father uses WhatsApp to phone his son who lives at a senior secondary boarding school far away, a pregnant woman phones the clinic about the AIDS medicines that she needs and a civil servant uses her computer as part of her job. These examples are all about new media in use, but their functionality, the ways in which they link into ongoing sociality and the effects they have vary greatly. We therefore need to get a grip on what people's concerns are - we cannot know the roles that media play if we do not know what tasks they are used for, which again hinges on their users' perspectives and motives. This amounts to what David Morley calls 'non-media-centric media studies' (2009: 114): to understand the social significance of the media we need to analytically embed their uses in concerns that have nothing to do with media as such. Concerns, understood here as activities that matter to people (Wikan 1992), are many and people different and so the challenge is formidable, especially since we know little about how different concerns and (media) practices affect each other and hence what the net result in terms of change is. This is where social mechanisms enter, to which I will soon turn.

- 3. The rationale here is that the term 'explanation' conventionally refers to causes of another order, and the critique is that this violates the logic of scientific thought. Thus. Wittgenstein stated that we 'must do away with all explanation. and description alone must take its place' (1968: §109, original emphasis), and Latour writes that 'the opposition between description and explanation is another of these false dichotomies that should be put to rest [...] If a description remains in need of an explanation, it means that it is a bad description' (2005: 137).
- 4. I will not attempt to describe the content of these books, partly because they are rich and complex and therefore should be read by those who are interested, and partly because I cannot see that any of them offer any clear strategy for how to do research that is in any way similar, or an alternative, to what I propose in this article

CHANGE, CAUSALITY AND SOCIAL MECHANISM

Societies constantly change and it is of interest to explain how and why. Structuralist-inspired perspectives tend to fail to provide good explanations, for two reasons. First, the very focus on systems directs the researcher's attention towards equilibrium and stability. Accounts of change therefore tend to be external to the systemic qualities. The analytical absence of actors does not help either. (As Harré states, 'Rules are used by people to guide their actions, not to produce them. [...] Only people can act' [2009: 135].) Second, with its reliance on transcendental entities such as 'culture', 'society', etc. the explanation becomes either invalid – for the reasons laid out above, the terms become fetishized in the sense that they are endowed with agency, the result being that we confuse 'the *explanans* with the *explanandum*: society is the consequence of associations [i.e. social practices], not their cause' (Latour 2005: 238, original emphasis). Or they are, at best, shorthand for unopened black boxes, i.e. unexplained chains of causality.

Change calls for explanation. When something 'social' is altered the scientist's job is to give a plausible account of how and why. But what constitutes an explanation is not clear. The dominant position among quantitatively oriented social scientists who emulate the hard sciences is to operate with an analytical framework of variables (not people) and seek to arrive at explanations by testing hypotheses that, ideally, were formulated before the research starts. The theoretical basis of such views is of the type that Carl Hempel (1966) termed 'covering laws'. A very different position is found among empirically oriented, qualitatively based researchers, who strive for particularistic, thick descriptions. Their aim is primarily to understand, not to explain. A third is the post-structuralist, discursively oriented position, in which causal explanations are often non-existent, or at least well hidden.⁵

In each one of these cases, it may be argued that causality is either a problem or not a central issue. The latter tends to dismiss causality as uninteresting while the 'anthropologist' will argue that reality is too complex to be reduced to a set of causal elements. For variable-based research to explain is considered important but is critiqued by others for postulating either only correlations and suggestive causality, or – because it is quantitative and based on variables – becomes so oversimplified that their analyses fit poorly with the realities on the ground (Hedström and Swedberg 1998: 15f).

In many areas of research, the issue of causality is not considered important but I claim that when the theme of interest is media and social change it is necessary to have some ambitions when it comes to cause and effect: we do after all want to say something interesting about how new media change social life. This is where social mechanisms enter the scene. I use this perspective in a rather eclectic manner – I believe that the gist of the perspective is promising but I am critical to many of its theoretical premises. I will make my objections clear by giving a brief account of what is meant by social mechanisms, apply it on an extended case from our fieldwork and then provide some critical reflections.

A social mechanism-approach seeks to combine the ambitions of the hard sciences, in terms of explanatory rigour, with the reality of the social sciences – which is first and foremost that we deal with people, who are reflexive, have free will and are hence in principle unpredictable. The perspective seeks to explain but do not presume to predict. The most profiled proponents of social mechanism-approaches come from a background in analytical sociology, a spin-off from rational choice theories and other 'hard' forms of sociology.

Some, like Jeffrey Alexander, have even turned this into a virtue, writing in Handbook of Sociology, 'sociology should pay less attention to "explanation" and more to "discourse"' (1988, cited in Hedström and Swedberg 1996: 282).

However, the approach also has links to Critical Realism and roots in more reflexive, critical forms of philosophy such as those proposed by Bakhtin, Vygotsky or Wittgenstein. Jon Elster, who was among the early advocates of social mechanism-reasoning, defines social mechanisms as 'frequently occurring and easily recognizable causal patterns that are triggered under generally unknown conditions or with indeterminate consequences' (2007: 36; see also Gross 2009). The crucial point is that social mechanism-thinking seeks to create an ordered, realistic model of what influences what in a complex social setting by identifying certain types of causal tendencies that we observe as occurring with some frequency, and identify the conditions under which mechanisms are triggered and the conditions under which they are suppressed or modified. Moreover, a central concern is to develop social mechanism-thinking into a tool for opening explanatory black boxes, which are alarmingly common in systemic-oriented social sciences. A black box-explanation is one in which a link is postulated between a cause A and an effect B but the minute steps that lead from A to B are not accounted for. Thus, to state that new media will tend to empower people within the political field is a contention about an explanans (introduction of new media) and an explanandum (empowerment), where the causal elements that together might explain the link are unaccounted for.

The reasoning behind social mechanisms is that due to social life's complexity and unpredictability it is in principle impossible to apply the logic of the hard sciences to social phenomena. Sociality is in other words not formed by forces that can be formulated as laws. For this reason black boxes cannot be entirely eliminated. Nevertheless, the ambition is to provide causal explanations to the extent that this is possible. Since laws cannot be arrived at, the best strategy is to identify recurring mechanisms and analyse how they mutually influence each other and generate certain social effects. One possible mechanism is that new media technology tends to empower the poor in the sense that social media can enable guicker and more flexible coordination of political protest - as during the Arab Spring (Castells 2015). There are, however, always contradictory mechanisms at work. Repressive regimes have more resources at their disposal and might close down the signals or track the identities of the protest's leaders. Thus, the first mechanism suggests that social media, under given conditions, can serve as a tool for the oppressed. But there is no necessary causal link between explanans and explanandum. This is why I use the term tendential causality.

In other words, social mechanisms do not postulate an absolute causality but claim that certain outputs will tend to emerge from certain inputs, given that the conditions are right *and* the mechanisms are not nulled out by other conditions or mechanisms. The net effect of such reasoning is that we can make more sense of what is happening by bridging the causal gaps that are left open by black-box explanations, hence giving more sense to the changes that can be observed.

As a first step towards applying mechanisms-thinking to my own material from Botswana, let me first present a typical account of the relationship between ICT and development within a variable-based logic. This extract is from a report by the World Economic Forum (WEF):

ICTs [...] [are] playing a key role in enhancing competitiveness, enabling development, and bringing progress to all levels of society. [...] The spread of ICTs have also had wide societal impact, especially on less-privileged segments of society. For example, farmers in developing countries have

benefited from new ICT services such as real-time information about commodity prices and weather, and from the ease of money transfers. The effectiveness of governments has increased as a result of their ability to provide citizen-centric online services and to involve citizens in governance. ICTs have become key enablers of business and employment creation, and of productivity growth. For these reasons, ICTs have significant potential for supporting inclusive growth. [...] But [...] it is mostly the rich countries that have been benefiting from the ICT revolution. Paradoxically, ICTs have opened up new digital divides. Although Internet access is expanding, 61 percent of the world's population is not connected yet. The distribution of high-speed broadband and the use of mobile applications and advanced data services vary widely across and within economies. And although schools and firms increasingly have access to the Internet, the skills required to leverage ICTs remain woefully inadequate in many organizations. [...] Some segments of the population may be exposed differently than others to labor market shifts induced by technological innovation, which can aggravate inequalities across groups with different levels of skills. Progress made in improving national competitiveness may create or deepen domestic inequalities if the unconnected become second-class citizens.

(Di Battista et al. 2015: n.pag., part 1.1)

Reports such as these are many and they no doubt provide important information about the state of the art on ICT's roles in society, and as such give grounds for action. It does in fact matter how many have access to Internet and who owns a computer - without the infrastructure there are no opportunities to take part in the digital revolution. However, the reason I choose to cite the WEF report at such length is that the perspective presented here goes to the heart of the matter discussed in this article. It clearly reveals the belief in numbers and faith in the positive contribution of ICT to development, but it also inadvertently exposes the weaknesses and limitations of this form of information. The report blatantly reveals that the black boxes are many and large – there are no real explanations, just pinpoint correlations of various kinds (e.g. the possible impact of class and education on the relationship between ICT and development). This is not to say that the report is of no worth (although much of its quantitative data base is most likely of dubious quality) but that such knowledge is gravely inadequate as a means for explaining what is actually going on. On the other hand, what the report highlights as important challenges may be interpreted as expressions of the logic of social mechanisms: the tendency that the poor are unable to benefit from the opportunities digital media provide, tendencies for lack of education to hamper the potential of ICT in government administration and business, etc. Also on the positive side, mechanisms are evoked. Thus, the presentation inherently assumes that if people gain more widespread and faster access to information this will most likely lead to improved production results, that if money flows more freely this will tend to contribute to economic growth, etc. Clearly, what is lacking in such presentations are actors, which might link these tendencies to social flows, and thus demonstrate how ICTs become, or may become, parts of everyday life. To do this it will be necessary to investigate concretely how media in various ways play parts in networks of linked actors. Such investigations will reveal which mechanisms are active and relevant and how every mechanism is a dynamic part of wider fields of practice.

However, to link this myriad of different mechanisms, operating within different areas of the social and associated with innumerable different concerns and social positions is truly a backbreaking endeavour. Sociality is simply too many-faceted and complicated to grasp in its totality and attempts to do so would require enormous resources and a large research staff representing a wide variety of academic disciplines and viewpoints (and not restricted to the social sciences). Lacking these resources, we face an acute need to simplify, to scale down, which in turn means that we must learn to assess the importance of various observed mechanisms. To perform such assessments in a reliable manner demands – I claim – that we have thorough ethnographic knowledge. What follows is a partial outline of how we can apply the logic of social mechanisms to an empirical field.

APPLYING SOCIAL MECHANISMS TO AN EXTENDED CASE

A family group

This family group's eldest are a married couple in their 70s, living in a village in the Kalahari.⁶ They have five children, two men and three women, between the ages of 35 and 50, altogether ten grandchildren and two great grandchildren. None of their offspring live in the village, one daughter resides less than an hour's drive away by car, while the others live in other parts of the country and some of the grandchildren have stayed for periods in Europe, the United States or Asia.

The old couple was not wealthy in their early years of marriage. Both came from relatively well-connected families but with little ready capital at hand they had to work hard as farmers. After some years, the man, who had acquired some education in a time in Botswana's history when few were educated, got a job in the local government administration and their economic standing improved. Not that the wages were all that impressive but the position gave him access to information and connections that soon had spin-off effects on the family's other income-generating activities, especially their cattle rearing.

Their five children have fared quite well. Two are teachers, one a soldier, one a businesswoman and one a civil servant married to a wealthy cattle owner. The grandchildren are also mostly in promising positions. One has become a computer expert in a private business in one of Botswana's cities and another is an up-and-coming entrepreneur about to start her own business in the capital. Several of them are obtaining, or have already obtained a tertiary education; the rest are still in primary or secondary school. One granddaughter, 18 years old, has (temporarily?) dropped out of secondary school after giving birth. The child's father is unknown to the rest of the family.

SOCIAL MECHANISMS AND MEDIA USE

In line with the arguments about the importance of identifying concerns and applying a non media-centric media approach we need to look at the interests and subject positions of the various members of the family group, then link these concerns to media use and lastly elaborate on them within the framework of social mechanisms.

Obviously, the family group's different members are positioned differently and have different concerns. The old couple is by and large fairly traditional in I have altered some facts about this family group to preserve their right to anonymity. These changes are of no consequence for the analytical points made. 7. This does not mean that 'culture' can serve as an explanation for what they do. Culture is a vague and flexible assemblage of views and values and only serves as a shorthand term that, if it is to be used in an explanation, must be specified in terms of content and contextual relevance (Helle-Valle 2017). their orientation and areas of interest. The man's main concerns are interacting with and being part of local social life. He is a prominent member of his church, he takes part in local court cases and meetings in the traditional political arena (*dikgotla*) and uses what he has of his spare time at his cattle post, situated about five kilometres from the village. He has an old truck that eases his transport back and forth. His wife has much of the same orientation – it is local social life that matters, although she is much less concerned with her cattle, which is not surprising as cattle is traditionally considered to belong to the masculine domain. (Although there is a rapid increase in women's involvement in animal husbandry in Botswana.) A source of disappointment to both is that none of their children live in the village and that they therefore see them and their grandchildren only rarely.

As to the couple's children, their orientations and concerns are much more varied. What they share is having been born and raised in Botswana and hence belonging to a cultural tradition with certain views and values.⁷ What they also share is that they are (relatively) well off and that most of them have tertiary education. Moreover, they comprise a relatively solid family group, hence ensuring a certain safety in dire times. Apart from those factors, the differences are as conspicuous as the similarities. Their lives, at different places and in different environments, entail different orientations. The daughter doing business, living in an urban space with two daughters but no husband, is busy building her business and taking care of her daughters who are in tertiary education. The soldier is secluded in the barracks most of the time but seeks to take responsibility for his young son, even though he is not married to the child's mother. He is vague when it comes to marriage, perhaps because he is in the military, making family life difficult but also because he is not certain that he wants to share his future with the child's mother.

The variation becomes even more pronounced when we turn to the third generation. The concerns of the granddaughter, who has dropped out of school because she has become pregnant with a man with whom she does not have a steady relationship, have become child-centred and anchored within the larger family group. She cannot provide for herself; she needs emotional, practical and economic support from her parents. Thus, for the time being at least, she lives a typical single mother's life, a situation that she shares with a large number of young women in Botswana. The other two adult grandchildren are in an entirely different position. The 28-year-old granddaughter has spent much of her youth abroad, in Europe, South East Asia and in South Africa (to which she still travels back and forth on business). So far, she has no place in her life for children and she is vague about when and under what conditions she might become a mother. The 24-year-old grandson has also spent time outside Africa, is well established with a good job in computing, but has ambitions to become an artist. For him too, the idea of having children and marrying is remote.

Thus, they all have different life trajectories but also share some common conditions in which these trajectories are grounded. The next step in my tentative analysis is to add two things to these life-worlds: the media and some analytical order. I will do this in two steps – first discussing patterns and dynamics related to media, and the concerns and actions of people, organized along three analytical dividing lines: generation, gender and class. Then I will alter the perspective of my presentation by linking the social mechanisms I thereby describe more closely to one concern.

The generational dimension displays clear patterns and dynamics: both elders have mobile phones, but no other digital media. They are not very competent at using them, restricting themselves to conversations and some texting. Their most important interest lies in keeping in touch with their children and grandchildren, and other relatives and church members. Their poor mastery of the new media in fact excludes them of some opportunities that, had they been better informed, would have benefitted them. For one, if they became active on social media (Facebook and WhatsApp being the most commonly used) they would have more frequent and richer opportunities for communication with their closest ones. Moreover, their cattle rearing would have profited from better mastery of the new media. As it is, the only advantage they see in the new media is that they allow them to communicate with the herd boy. However, this is rarely possible since there is no mobile coverage at the cattle post. Other cattle owners, whose herd boys can be reached by phone, emphasize the advantages of this. Unreliable herd boys are probably the most common complaint among cattle owners. Being able to check up on them by phone on a weekly or even a daily basis is considered a great asset.

The second and third generations all have smartphones, which they use for direct communication and internet browsing and social media. While the third generation are highly competent, owning or having access to computers and tablets as well and using every conceivable platform, the middle generation in the family group uses new media to a varying extent. The soldier is not an intensive user as he is most often stationed in the barracks and primarily uses his mobile phone to keep in touch with his child's mother since the child is still too young to use a phone himself. On the other hand, the daughter with the start-up business is, according to herself, totally dependent on her mobile phone and the Internet. For one, bookings and the actual running of the business, including the coordination of tasks during the rental periods, are mostly carried out by means of telephone conversations, texting and the Internet. In addition, she has started the process of setting up a homepage and a Facebook page for the business. Significantly, she has asked one of her daughters to do this for her.

If we turn to class as a social variable, one causal link is obvious. The poor can often not afford a phone, at least not a smartphone, nor do they have much money to spend on airtime. Moreover, the lower classes tend to be less educated and hence do not master the new media as well as the more privileged do. Finally, the privileged have networks with more resources; hence their ability to apply new media surpasses that of the poor, simply because they have access to more power and wealth through the media. Such variations also hold for the family I have described. Although the family group does not belong to the uppermost class, they have acquired education for their offspring, have valuable networks and can afford to buy whatever ICT devices they consider necessary.

Turning lastly to gender, I will just mention some important traits before I carry this discussion over into the next section, where I link it to sex as a concern. National statistics and our own surveys show very similar patterns of use among men and women. The slightly smaller number of female users can be attributed to their generally weaker economic standing. If anything, it is the insignificance of the difference that is surprising – given the difference in economic standing and the traditionally subdued role of women one would expect larger differences. To suggest explanations for this we shall turn to a

discussion of sex as a concern. Needless to say, my attention is not focused on the sexual act itself, but on the multitude of social linkages that bind sexual practices to the economy, politics, gender relations and the media.

SEXUAL PRACTICES AS A CONCERN

What I have just done is to point out a number of mechanisms related to three analytical dimensions: generation, class and gender. This presents a certain overview but, I contend, it lacks the ethnographic context without which it cannot offer a satisfactory explanation of how new media and social change are interrelated. In what follows I therefore introduce a historical and sociocultural framework that will provide a background (Searle 1992) for explanations of how and why various social mechanisms work in the ways they do. As such, frameworks are not unitary and homogeneous; I contend that the best way to approach this task is to focus on the concerns of the people involved (cf. Barth 1993). Obviously, concerns vary but a good yard-stick for identifying major concerns are to look at what people spend time, money and emotional energy on as this obviously matters to them (Helle-Valle 1997; Wikan 1992). Work, children and education are among these major concerns but for reasons that will become evident here I focus on sexual networking. After years of engagement in the village, over more than a quarter of a century, I can safely say that this is an important concern. Sexual networking is widespread and both men and women devote much time and attention to such practices, with men in addition spending substantial resources on such liaisons. Moreover, sexual practices are not an isolated, private matter, but are intertwined with economic, political and cultural activities and have important effects on sociality.

In pre-capitalist African economies labour power was the critical factor (in contrast e.g. to Eurasian economies that were short on land) and they have hence been labelled a 'wealth in people'-economies (Goody 1976; Guyer 1995). This implies that control of labour was an important economic and therefore also political focus. Control of labour was secured by the kinship institution, in which marriage, especially polygyny, was a crucial factor. In patrilineal systems, which were the rule in Botswana, marriage was a publicly acknowledged transfer of the productive and reproductive capacity of the in-married woman to the agnatic group. Bride price was a compensation to the woman's family for relinquishing these vital resources (Schapera 1966).

Capitalism made its presence felt in Botswana late in the nineteenth century, first of all through labour migration to the mines of South Africa. Young men travelled far, stayed away for long periods of time and came back not only with cash in their pockets but also with new ideas about what it meant to be a man. The gerontocracy of the past, in which the older generation guaranteed the sanctity of marriage as the framework for sex, was supplanted by an individualized, modernly oriented approach in which young men's seductive power was a key. In short, men would promise marriage, which according to convention marked the beginning of a sexual relationship (Helle-Valle 2003), and to prove the earnestness of their promise they would give gifts to the woman. Traditionally, marriage was a long process in which no singular event marked the transition from 'not married' to 'marriage'. Rather, a series of rituals and gifts were exchanged to 'mature' the marriage (Solway 1990: 44–45). Therefore, the gifts given by the man returning from the mines to his lover emulated the traditional marriage-related gifts without giving

the relationship a definite status through these gifts. What was new in this situation was that the man gave these promises, and the gifts, to the woman herself, not to her family group (Solway 1990; cf. also Helle-Valle 1999). In this way he could keep the relationship going for years without having to commit himself fully. Increasingly often, the result was abandoned mothers with one or more children without a legal father.

Men's seductive strategies made them unreliable as prospective husbands (who might break up the relationship at any time) and as husbands (who spent the household's resources on lovers). Women therefore became increasingly sceptical of marriage. Having generous lovers made it possible to act on this scepticism as it provided a material basis for staying single, even after giving birth. Consequently, women's identities were to an increasing degree detached from the idea of marriage, while being all the more centred on motherhood, which reinforced the attitude that men should be kept at an arm's length from domestic matters. As a result, fewer men are forced to take on responsibilities for children, but this has simultaneously weakened their control over both productive and reproductive resources: if they do not bear responsibility for children, they can neither command the next generation's labour power nor expect support from them when they grow older. The situation has driven male identity further away from the domestic domain and into public displays of wealth and sexual prowess. One result of this is that women are more attuned to long-term, strategical planning than men; they feel (rightly) that they are responsible for their children's future, while men are not so (Helle-Valle 2016).

Two points of relevance for this article should be highlighted. First, what I am describing is a set of mechanisms that are at play around gender and sex, with far-reaching consequences. Changes in gender identities, fundamental changes in the structure of domestic units and transfer of resources from men to women (encouraged by a relatively gender-progressive state policy) explain how Botswana, having been a thoroughly patriarchal society, has, in a relatively short period of time seen radical changes in women's position. Today, about half of Botswana's households are headed by females, more than half of the students in tertiary education are women and they are also quickly narrowing the gap in formal employment (e.g. van Klaveren et al. 2009).⁸

Second, and most importantly, differences in social position, and hence in concerns, also explain how new media affect women and men in different ways, and why. Mobile phones make people more accessible. Men's main deceptive strategy in the past has thus become much less effective. Before the mobile phone he could simply become unavailable. Often these men were migrant workers living for long periods in distant places, and this itself would in practice mean that they were impossible to reach. Letters were sent and sometimes local authorities might be of some assistance, but the result of men's evasive strategies was most commonly that the matter would not be brought to court at all, or would at least take years to finalize (Helle-Valle 2002; Schapera [1938] 1994). Today, when practically everyone has a mobile phone it is almost impossible not to be reached. Thus, for women who choose to bring their children's fathers to court the new media have made a positive difference. However, an increasing number of women choose *not* to take the fathers to court, especially when they consider the men to be unreliable, and will instead choose (at least for a period) to live independently, often keeping generous lovers whose gifts contribute to the household's income. For these women new media also tend to have a positive effect because the new devises ease communication among the women themselves and with their real or potential lovers

8. A note of caution is in place here: due to limitations of space, the analysis is simplified and focuses solely on one set of factors, while leaving out other, sometimes contradictory. mechanisms that are at work. Women are still in an inferior position to men in many areas of life. See Helle-Valle (1997, 1999, 2003, 2016) for a more comprehensive picture. 9. As Marshall Sahlins (1974: 210) states, 'It is scarcity and not sufficiency that makes people generous'. He points out the mechanisms that make people under uncertain conditions link into networks upheld by reciprocal obligations, i.e. 'generosity'.

(cf. McIntosh 2010). Interestingly, data from a web survey that we conducted in March 2016 (n=786) show that more than 90 per cent of our respondents state that they agree or strongly agree that the mobile phone is the main tool for communicating with lovers while the figures are low on the questions that ask about media use in connection with income-generating activities. This reveals some of the limitations of questionnaires. Since they consist of a given set of short, clear questions that must be answered by ticking off pre-defined alternatives, questionnaires generate discursive data and are hence not in themselves facts but the respondents' claims about facts or attitudes. Moreover, they require answers in linguistic, binary form about events and states of mind that are not necessarily translatable into language. But for my argument here their main weakness is that they are poorly suited to reveal indirect relationships between variables. What passes under the radar in this situation is the crucial importance of social capital. Not only is mobile phone use important for establishing and upholding economically profitable love relationships, it is also extremely important for finding piece-jobs, doing small-scale business, etc. These ways of using the new media are not necessarily directly attributable to income generation but are nonetheless crucial preconditions for it. Within a wider analytical frame, new media reflect the importance of networks in times of uncertainty,⁹ which is obviously the case in a setting in which a large part of the population is underemployed (Statistics Botswana 2014).

The new media's economic significance is in fact manifold. For one, it makes networking easier, for instance by quickly finding information about available jobs in the capital, or where to sell your agricultural products, or how to apply for a grant from some government service. This is an advantage for both men and women. Second, within the sphere of love relationships, the increased speed and scope of information flow makes networking easier (but also more risky), something that tends to be to women's advantage and men's disadvantage. It helps single mothers to bring men to court, assists independent women in securing income from generous lovers and consequently increases the flow of material goods from men to women. What makes the latter mechanisms especially important is that in contrast to the new media's more acknowledged advantages (as a tool for educated and other privileged people's work, which further empowers already well-empowered groups) the uses of mobile phones for maintaining crucial informal networks of the type described are especially important for the less privileged (Helle-Valle 2016).

This partial analysis suggests the advantages of social mechanism-reasoning. It helps the analyst to grasp the forces that create connections between people and between people and materiality, and point to the likely consequences of these interactions. On the other hand, it demonstrates how important detailed ethnographic and historical knowledge is to treat these mechanisms in sensible ways. It is not sufficient to point to mechanisms of a general sort and expect that we, by putting them together without anchoring them in a specific cultural-historical framework, will achieve a good analysis. Moreover, ethnographic knowledge is also crucial for properly combining the various mechanisms that are in operation, which is the theme to which I shall now return.

INTERSECTIONALITY

As I have previously pointed out, an important challenge for a social mechanism-based analysis is to single out the most important mechanisms and study how the interplay between different mechanisms generates social forms (cf. Barth 1993). Some mechanisms reinforce each other; others are contradictory in their tendential effects. So, let us now consider how the various mechanisms I have chosen to focus on affect each other.

One advantage of using a single extended case is that it supplies an ideal framework for studying how the interplay of different mechanisms affects the same people. 'Intersectionality' might be a term that covers this interplay of mechanisms. The concept was introduced to the social sciences through feminist theory. It was developed to reveal the multiple forms of oppression that black women were exposed to, in as much as gender, race and class mutually reinforced each other as mechanisms of discrimination and oppression (Crenshaw 1989). My use of the term leaves the political message out – in that I am interested in any and all ways in which the different mechanisms affect each other – but retains the idea that to understand a person's social standing one needs to examine how different social mechanisms together explain his or her social standing and situation. In other words, I use the term in a neutral and analytical sense (cf. Moi 2017).

Again, space restricts my analysis but here I will take a look at class and gender. As I pointed out, we find that (marginally) fewer women than men have and use new media (i.e. mobile phones) (Statistics Botswana 2016). The default interpretation is that this is an expression of gender inequality – which, of course, it is - but how and why gender inequality is expressed is rarely explored. My interpretation, based on ethnographic knowledge, supported by social mechanism reasoning, is that gender itself is not the cause of inequality, but that what normally distinguishes female- from male-headed households is that the ratio of producers to consumers in the former type is much less advantageous than in the latter. The reason for this is simply that it is only when there is a single mother in the household that it is categorized (both locally and in statistics) as a female-headed household, while if a couple resides in the household it is almost invariably classified as male-headed. This means that, ignoring all other variables, female-headed households are poorer since there are fewer breadwinners both in absolute numbers and relative to the size of the household. Thus, what is conceived as a gender difference is in fact a question of household composition. This does not alter the fact that there are gendered differences but it explains how and why, with reference to structural, class-related conditions, not necessarily to gender as a *cultural* difference (Helle-Valle and Borchgrevink 2018). This is most likely the reason why women own (marginally) fewer ICTs than men. In fact, as the differences in ownership of ICTs between classes are much more marked than between genders, and given that women to a larger extent belong to the lower classes, this should support the claim that women, in general, tend to be more oriented towards productive consumption and long-term planning than men. Women place higher priority on owning mobile phones because they consider them important for their own income-generating activities (they enhance social capital) and for their children's future. In sum, gender-specific income profiles, different identities and hence priorities, and class membership point in different directions but what I have done here is to suggest that the aggregate result leans towards a more productive relationship to ICTs among women than among men.

Finally, I want to give two brief examples, which extend the perspective from local interaction to national and global networks. First, the changing conditions for women in Botswana have also been influenced by another factor that has not yet been mentioned. The global focus on women's conditions in developing countries, which is effectively communicated by both the new and the old media, has led to a large number of projects earmarked for women in Botswana. As a local government officer in the village told us, it is much easier to get support from the various government schemes if you are a woman than a man. One effect of this is that a substantial number of men seek out women to team up with to apply for projects that require that the main applicant must be a woman. Thus, an unintended effect of these projects is that it encourages men to cooperate with women.

The old male in the family group described above can serve as an example of the other media-related mechanism. He did not use new media in dealings related to his cattle. The immediate reason was that there was no telephone coverage at the cattle post. However, what he did not know, or at least had not properly reflected on, was that efficient cattle rearing today is heavily dependent on new ICTs. Recurring problems of foot and mouthdisease have threatened Botswana's deal with the EU on cattle sales. This led Botswana to introduce RFID (Radio Frequency Identification) tagging of cattle as early as 2001 as a means for controlling the disease. Today almost all cattle in Botswana are identified with RFID-tags. This makes a big difference for every cattle owner, even though it is not necessarily very visible to them. For one, the Botswana Meat Company usually offers the best prices when farmers sell their animals but they require that the animals are tagged. Second, this tagging system has greatly improved the monitoring of cattle in general, leading, among other things, to better veterinary services. Third, an unintended effect of the tagging has been a reduction of cattle thefts by 60 per cent, which has benefited every cattle owner enormously (Practical Action 2004).

The purpose of presenting these two brief examples is threefold: first, they draw attention to the fact that 'new media' are much more than mobile phones and computers. Infrastructure, and detection devices such as RFID and NFC (Near Field Communication) are a few important forms of ICT – although largely invisible. Second, the examples add new mechanisms to the overall picture of the significance of media for development. Finally, both examples illustrate an analytical point of importance for this mode of analysis – they transcend the distinction between the global and the local. The global is not somewhere else, nor of another nature, but simply causal chains or networks that stretch out in space but have local significance. Local and global are simply analytical abstractions and should not be given explanatory power. Instead, it is by tracing networks and causal links that we discover the seamless connections between these two constructed concepts. In this way, by following actors and networks, we also do away with the unfortunate distinction between micro and macro (cf. Latour 2005).

CONCLUDING REMARKS

Analysis based on social mechanisms is no hocus-pocus. For one, the contrast between variable- and mechanisms-based explanations is perhaps not as clear as the latter's proponents like to think (e.g. Hedström and Swedberg 1998: 15–17). For instance, multiple regression analysis does go a long way to explain. What variable-based explanations often lack is, however, a toolbox for treating the interplay and dynamics of various variables/mechanisms. And more importantly, there is no guarantee that we can identify the relevant mechanisms at work, nor provide proper contextualization and

interpretations. I know that the tentative analyses I have presented here would have been impossible to carry out, even within a social mechanism framework, if solid ethnographic data collection had not been conducted. To select the relevant mechanisms, interpret them properly and analyse their interplay require a command of historical and ethnographic depth – a point well worth mentioning since the advocates of this perspective tend to use very simple and thin cases to illustrate their theoretical points. Finally, to complete my criticism of mainstream mechanism analysis, it seems that they, just like ethnographers, have an unresolved problem with generalization. The extension and context specificity of a mechanism's relevance represents an analytical and methodological challenge.

All this being said, I still believe that the idea of social mechanisms is important, especially within the field of media and development, since change is at its core and change begs causal explanation. If relieved of some of its most positivistic and formal aspects, two strong advantages remain: it foregrounds practices (not models, structures, cultures or discourses) and it presents ambitious but fairly realistic perspectives on causes and explanations (e.g. Harré 1970; and more recently Gross 2009). It can do this while maintaining a flat ontology stance, without resorting to conceptual fetishism, bypassing the unfortunate distinction between micro and macro, opening black boxes and, because it focuses on the interplay between various mechanisms, introducing a dynamic into the analysis that is rarely encountered.

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REFERENCES

- Alexander, J. (1988), 'The new theoretical movement', in N. Smelser (ed.), *Handbook of Sociology*, London: Sage, pp. 77–102.
- Barth, F. (1993), Balinese Worlds, Chicago: The University of Chicago Press.
- Battista, A., Dutta, S., Geiger, T. and Lanvin, B. (2015), *The Networked Readiness Index 2015: Taking the Pulse of the ICT Revolution*, Geneva: World Economic Forum, http://reports.weforum.org/global-information-technology-report-2015/1-1-the-networked-readiness-index-2015-taking-the-pulse-of-theict-revolution/. Accessed 12 June 2019.
- Bourdieu, P. (1977), *Outline of a Theory of Practice*, Cambridge: Cambridge University Press.
- Bräuchler, B. and Postill, J. (eds) (2010), *Theorising Media and Practice*, Oxford: Berghahn Books.
- Castells, M. (2015), Network of Outrage and Hope: Social Movements in the Internet Age, 2nd ed., Cambridge: Polity Press.
- Couldry, N. (2012), Media, Society, World: Social Theory and Digital Media Practice, Cambridge: Polity Press.
- Crenshaw, K. W. (1989), Demarginalizing the Intersection of Race and Sex: A Black, Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics, Chicago: The University of Chicago Legal Forum 14.
- DeLanda, M. (2002), *Intensive Science and Virtual Philosophy*, London: Bloomsbury Publishing.

- Elster, J. (2007), *Explaining Social Behaviour*, Cambridge: Cambridge University Press.
- Goody, J. (1976), Production and Reproduction: A Comparative Study of the Domestic Domain, Cambridge: Cambridge University Press.
- Gross, N. (2009), 'A pragmatist theory of social mechanisms', American Sociological Review, 74:3, pp. 358–79.
- Guyer, J. I. (1995), 'Wealth in people, wealth in things introduction', *Journal of African History*, 36:1, pp. 83–90.
- Harré, R. (1970), *The Principles of Scientific Thinking*, Chicago: University of Chicago Press.
- (2009), 'Saving critical realism', Journal for the Theory of Social Behaviour, 39:2, pp. 129–43.
- Hedström, P. and Swedberg, R. (1996), 'Social mechanisms', Acta Sociologica, 39:3, pp. 281–308.
 - (1998), 'Social mechanisms: An introductory essay', in P. Hedström and R. Swedberg (eds), Social Mechanisms: An Analytical Approach to Social Theory, Cambridge: Cambridge University Press, pp. 1–31.
- Helle-Valle, J. (1997), *Change and Diversity in a Kgalagadi Village, Botswana,* Oslo: SUM, University of Oslo, Dissertations and Theses, no. 1/97.
- (1999), 'Sexual mores, promiscuity and "prostitution" in Botswana', *Ethnos*, 64:3, pp. 372–96.
- (2002), 'Seen from below: Conceptions of politics in a Botswana village', Africa, 72:2, pp. 179–202.
- (2003), 'Social change and sexual mores: A comparison between pre-20th-century Norway and 20th-century Botswana', *History and Anthropology*, 14:4, pp. 327–47.
- (2010), 'Language-games, in/dividuals and media uses: What a practice perspective should imply for media studies', in B. Bräuchler and J. Postill (eds), *Theorising Media and Practice*, New York: Berghahn, pp. 191–211.
- (2016), 'Seduced by seduction being a man in Botswana', paper presented at the *African Studies Workshop*, Harvard University, Cambridge, MA, 26 September.
- (2017), 'Media cultures in Africa? A practice-ethnographic approach', in W. Willems and W. Mano (eds), Everyday Media Culture in Africa. Audiences and Users, New York and London: Routledge, pp. 27–46.
- Helle-Valle, J. and Borchgrevink, A. (2018), 'Household histories and methodological triangulation', *Forum for Development Studies*, 45:2, pp. 191–215.
- Hempel, C. G. (1966), *Philosophy of Natural Science*, Englewood Cliffs, NJ: Prentice-Hall.
- Jerven, M. (2015), Africa: Why Economists Get it Wrong, London: Zed Books.
- Latour, B. (2005), *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford: Oxford University Press.
- Levi-Strauss, C. (1968), Structural Anthropology, London: Allen Lane.
- McIntosh, J. (2010), 'Mobile phones and Mipoho's prophecy: The powers and dangers of flying language', *American Ethnologist*, 37:2, pp. 337–53.
- Moi, T. (2017), *Revolution of the Ordinary*, Chicago: University of Chicago Press. Morley, D. (2009), 'For a materialist, non-media-centric media studies',
- *Television & New Media*, 10:1, pp. 114–16.
- Practical Action (2004), 'Cattle tracking in Botswana', Practical Action, September, https://practicalaction.org/cattle-tracking-in-botswana. Accessed 12 June 2019.
- Sahlins, M. (1974), Stone Age Economics, London: Tavistock Publications.

- Schapera, I. ([1938] 1994), A Handbook of Tswana Law and Custom, Oxford and Hamburg: International African Institute, Oxford University Press and LIT Verlag.
 - (1966), *Married Life in an African Tribe*, Evanston: Northwestern University Press.

Searle, J. (1992), The Rediscovery of the Mind, Cambridge, MA: MIT.

- Slater, D. (2013), New Media, Development & Globalization, Cambridge: Polity Press.
- Solway, J. S. (1990), 'Affines and spouses, friends and lovers: The passing of polygyny in Botswana', *Journal of Anthropological Research*, 46:1, pp. 41–66.
- Statistics Botswana (2014), *Population and Housing Census 2011: Analytical Report*, Gaborone: Government Printer.
- —— (2016), 'Botswana household access and individual use of information & communication technologies 2014', July, Gaborone: Botswana.
- van Klaveren, M., Tijdens, K., Hughie-Williams, M. and Martin, N. (2009), An Overview of Women's Work and Employment in Botswana, country report No. 5, Amsterdam: Decisions for Life MDG3 Project.
- Wikan, U. (1992), 'Beyond the words: The power of resonance', *American Ethnologist*, 19:3, pp. 460–82.

Wittgenstein, L. (1968), Philosophical Investigations, Oxford: Basil Blackwell.

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