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Methodologies for cultural and social studies in an age of new technologies

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Methodologies for cultural and social studies in an age of new technologies

In my chapter for the 3rd edition of the Handbook of Qualitative Research I argued that the distinctive feature of cultural studies was the way in which it combined a hermeneutic interest in lived experiences, a poststructuralist analysis of discourses, which mediate our experiences, and a conjunctural/realist investigation of historical, social and political structures of power (Saukko, 2005). I continue to think that the focus on the interaction between the lived, the discursive and the conjunctural is important for any critical cultural and social study.

What has changed in the ten years since the previous chapter is the increasing prominence of new technologies, which mediate everyday lives, the global economy and research itself. The most obvious of such new technologies are digital media, but they also include new medical technologies, ranging from online, commercial genetic tests to new reproductive technologies, which are argued to transform 'life itself' (Clarke et al., 2003; Rose, 2007).

In this chapter I will discuss, how the legacy of cultural studies (CS) helps to critically analyse social life in the age of new technologies, and how new technologies push CS to new methodological directions. In doing so, I will not only draw on cultural studies but also on the related discipline or paradigm of science and technology studies (STS).

In the first edition of the handbook, Fiske (Fiske, 1994) wrote about how cultural studies analysed media "audiences" in terms of texts (discourses), audiences

(experience) and production (context/economy). Indicative of how new technologies complicate methodologies is that these three areas are increasingly intermeshed. Individuals no longer simply interpret (possibly in creative ways) media texts, produced elsewhere. Rather, they also create meanings and practices themselves through digital devices and platforms designed by (mainly) commercial companies. This new situation directs, first, attention to analysing discourses not only as semiotic i.e. shaping meanings but also as material i.e. embodied in the often taken-for-granted design of, for example, digital platforms guiding meanings and actions. This methodological focus on the material infrastructures and artifacts, which shape our lives, research and economies articulates the "materialistic" (Gillespie et al., 2014), "practice" (Schatzki et al., 2001), "ontological" (Mol, 2002; Woolgar and Lezaun, 2013) and "affective" (Gregg and Seigworth, 2010; Grossberg, 2010a) turns in cultural and social studies.

Second, CS has traditionally explored the creativity of ordinary people's experiences, whilst acknowledging that experiences are always shaped by social discourses and context. Methodological approaches, such as actor-network-theory (Latour, 2005), postmodern forms of grounded theory (Clarke, 2005) and multi-sited ethnography (Marcus, 1998), expand this mode of analysis, exploring how experiences are shaped by multiple, diverse "elements." Talking about elements expands the methodological focus to "odd bins" human and non-human actors at different levels of analysis. These elements, such as technological artifacts (devices, platforms), natural phenomena (trees, scallops (Callon, 1986)), other people, regulations and sensations, shape experiences but are not necessarily captured by the traditional categories of social context or variables. The task then becomes to map the different elements that come together to "configure" (Woolgar, 1990) or "enact" (Mol, 2002; Mol, 2008) a specific experience of e.g. illness or a virtual world. The critical or political or policy question that follows from this asks, whether some ways of enacting a particular phenomenon are better or worse and for whom (Haraway, 1997; Mol, 2002).

However, social or technological phenomena are more than a sum of their parts or elements, and the CS principle of analysing any topic in relation to “conjuncture” i.e. the historical, political formation of the times (Grossberg, 2010b) accounts for the critical edge of the paradigm. The challenge when studying new technologies is that the current conjuncture, described by terms, such as “network society” (Castells, 1996) or “Lifeworld Inc.” (Thrift, 2011) is facilitated or underpinned by technologies. For example, enhancing a sense of creativity and agency, typically seen as hallmarks of political empowerment, form key parts of “Lifeworld Inc.” i.e. strategies used by the new “security-entertainment complex” to engage and track people online for their own ends (Thrift, 2011). In this situation paying attention to the novel features of the conjuncture helps to critically analyse phenomena that from the outset might seem exciting or empowering.

In what follows I will discuss how to study social phenomena in the contemporary age of new technologies, exploring the three challenges in greater detail. But before doing that I will take a brief detour into the historical and contemporary cultural studies, forged from three contradictory philosophical traditions and associated methodologies or “validities.”

Cultural Studies and Three Validities

Cultural studies as a field of study or paradigm was established in the 1970s in the UK. It grew out of social sciences, which at that time were dominated by functionalist positivism and Marxist political economy. As Stuart Hall counted it forged humanism, post-structuralism and Marxism into a productive programme of research (Hall, 1980). The humanist dimension of cultural studies was interested in the ‘creativity’ of ordinary, usually underprivileged, people, articulating a hermeneutic or dialogic methodological quest to be true to the experiences or voices of people. The structuralist strand in CS examined how linguistic structures, interlaced with power, made the world “mean” in specific (e.g. racist) ways, grounded in a discourse analytic methodology seeking to uncover such structures. The Marxist commitment

examined how any phenomenon studied was connected with larger social, economic and political structures and was underpinned by a realist methodological goal of exposing these “real” structures and processes (Hall, 1980).

The three-tiered methodological approach underpinned the golden era cultural studies on “resistance,” such as Willis’ study on working-class school boys’ pranks (Willis, 1977) and Radway’s study on women’s reading of romances (Radway, 1991). Both scholars sought to understand a dismissed practice of an underprivileged group (disobedience at school or reading of cheap, romantic fiction), noting it resisted middle-class norms at school or sexist relationships. However, Willis and Radway also pointed out that the resistance remained “imaginary” i.e. it did not change classist education or gender relations (Radway, 1991; Willis, 1977).

These early works reveal some of the methodological contradictions in cultural studies. Willis’ and Radway’s analysis of their participants’ experiences was intricate, seeking to understand the world from their perspective. Yet, critics pointed out that they read their own politics (Marxism and feminism) into their participants, lamenting they did not change class structures or unequal relationships (Ang, 1996). This highlights the difficulty of being “true” to participants’ experiences or voices and, at the same time, critically interrogating the social discourses or structures that shape those experiences.

Following in the footsteps of e.g. Lather (Lather, 1993) and Lincoln (Lincoln, 1995), I have elsewhere argued that the three philosophical currents in CS translate into three different, contradictory “validities” (Saukko, 2003; Saukko, 2005). In traditional methods talk “validity” refers to research’s ability to “accurately” represent reality and it can be enhanced by, for example, using different methods (e.g. quantitative and qualitative) to see if they corroborate each other. Talking about validities highlights that there is not one authoritative way of accessing reality or judging good research but different research philosophies or methodologies articulate different validities i.e. criteria for good research. The hermeneutic principle or validity in CS evaluates the

goodness of research in terms of how well it captures or gives “voice” to the participants’ realities. The critical reflective or discourse analytic validity values research, which unravels taken-for-granted (e.g. sexist or colonialist) notions or discourses, which make us perceive realities in particular ways. Finally, contextual validity values research that exposes “real,” structures, processes and inequalities (Saukko, 2003; Saukko, 2005).

These validities may contradict each other. Thus, Willis’ and Radway’s project of understanding the school-boys’ or romance readers’ experiences is contradicted by their interpretation of their activities as imaginary resistance to class-structures or sexism. This does not mean that one cannot critically analyse experiences in relation to social structures or discourses. However, it does remind researchers to be mindful of the way in which different methodologies/validities bring to the fore or configure different realities.

Further, as already indicated, studying new technologies complicates these methodological currents, as experiences, discourses and conjunctures are increasingly intermeshed. I will turn to this next.

Reflecting on Technologies

Critically reflecting on discourses traditionally refers to exploring the historical and political nature of taken-for-granted phenomena, such as anorexia (Saukko, 2008), museums (Bennett, 1995; Bennett, 2014) or the pink ribbons breast cancer campaign (King, 2006). Typically these analyses focus on the symbolic. In my earlier work on anorexia, for example, I explored how the traditional psychiatric notion of anorexics as overly compliant girls, fallen victims of oppressive beauty ideals had its origins in the post-war fear of mass culture, associated with femininity (Saukko, 2008). Examining the historical underpinnings of the discourse helps to challenge it

being taken as a simple “truth” about anorexia and to untangle its both empowering and disempowering aspects for society and for anorexic women.

CS scholars have acknowledged that discourses do not simply refer to ideas but are “material-semiotic” (Haraway, 1997). This observation becomes particular pertinent when studying new technologies, which constitute the material infrastructure, subtly mediating everyday lives. To illustrate the methodological challenges and opportunities of analysing the historical, normative agendas embodied in such infrastructures I will discuss our research on screening for heart disease risk in the UK.

Our study was conducted in the context of UK health policy, keen to save lives and healthcare costs amidst an “epidemic” of unhealthy behaviours. The interdisciplinary, mixed methods project examined whether assessing family history would “add value” to screening for heart disease risk and e.g. encourage lifestyle change (Qureshi et al., 2009; Qureshi et al., 2012). In the study clinicians assessed participants’ risk using a cardiovascular risk calculator, based on cholesterol and blood pressure levels, smoking status, age and gender (Heart, 2005). Our nested, follow-up qualitative interview study explored experiences of those patients, who were calculated as at high risk i.e. had a higher than 20% chance of developing heart disease in the next ten years. We found that most commonly our participants had not changed their lifestyle but had begun taking cholesterol lowering statins, one of the most prescribed medicines in the UK and USA (Saukko et al., 2012).

Some of our participants told that they had tried lifestyle changes but found them unpleasant and ineffective. ‘Howard,’ a handyman in his early sixties, had initially changed his diet with his wife but had gone back to his usual eating, after taking a statin, which brought his total cholesterol level from seven to three:

H It’s a bit of an experiment on my side, really, 'coz, um, [the cholesterol]

> went down to three. So now I've gone back to what I was doing before. Then when I have it taken again, if it's gone up. I know it's me lifestyle, so I'll alter me lifestyle. It's no use altering your lifestyle and starving yourself of something you like if you don't need to.
> I Yeah, if the cholesterol is three?
> H If the cholesterol stays the same, then I know ... the tablets are keeping it in check.(Saukko et al., 2012)

This story and others seem disappointing from the point of view of our study objective of encouraging healthy lifestyles. In the spirit of good qualitative research we sought to suspend judgment about our participants' "bad" lifestyle and be open to their views. Participants often found healthy food foul tasting and doing exercise inconvenient, particularly working-class participants noted that healthy food was expensive, hard to find and alien to their family habits. Many of our participants also resisted the patronising, moralistic lifestyle advice, noting that they did not understand why they should give up foods they like if they could lower their cholesterol with tablets (Saukko et al., 2012).

However, on further reflecting on the study we noted that the way in which the risk was calculated also directed participants to take pharmaceuticals. The participating clinicians and clinical studies reported that cholesterol only goes down by about 10% with significant lifestyle change, whereas statins can lower the values up to 30% (Hooper et al., 2000). If one is calculated to be at high risk, the only way to get from high or "red" (the calculator included a device for visualising the risk for patients) into lower yellow or green levels is through taking powerful drugs. Social, historical research on cardiovascular risk calculators chronicle that they were developed to mediate between the interests of pharmaceutical companies, clinicians and public health or insurance providers to determine a level at which point the benefits of statins outweighed their costs (Greene, 2007)(Will, 2005). Thus, the device was developed as a prescribing tool, "configuring" (Woolgar, 1990) our "at risk" participants in such a way that it was impossible for them to reach the "target" levels without drugs.

The methodological lessons learnt from this are three-fold. First, qualitative social research on health frequently examines how patients understand or experience “a risk.” However, such research takes the clinical risk as a “fact.” Taking a poststructuralist stand we analysed how the risk was constructed as a fact i.e. how the risk assessment technologies and framework “created” the risk in a particular, political way, expressed in risk percentages and cholesterol levels. The tools also configured patients at “high risk” in a way that invited them to lower their “numbers” to “target” levels with pharmaceuticals. This does not mean that the technologies determined our participants’ experience or actions, but together with other elements in the participants’ social context (e.g. turkey sausages and soy milk, which were more expensive, more difficult to find and less tasty than pork sausages and full-fat milk), they directed the likes of Howard to lower their risk with drugs. Taking this methodological perspective also changes the recommendations of the study. Analysing patient understandings of or beliefs about risk focuses attention to cognition (“patients’ heads”) and typically recommends fixing the problem with better advice and communication. Examining how the risk has been put together directs critical attention from fixing patients’ heads to the risk assessment framework itself.

Second, the study highlights the contradictions of mixed-methods research. It is suggested that quantitative studies focused on “outcomes” can be complemented by parallel qualitative studies, highlighting “processes,” which lead to outcomes (Murphy et al., 1998). However, a poststructuralist qualitative perspective is hard to reconcile with this idea, as it may question the way in which the “outcomes” (e.g. risk reduction in terms of percentages) are constructed in the first place. There is ample literature on how mixed methods can accommodate different philosophies, validities or divergent result (Tashakkori and Teddlie, 2010), even if this perspective has been questioned (Denzin, 2009). In all cases, it is rare to see positivist quantitative research (purporting to accurately or representatively describe the reality) mixed with research that critically reflects on how methodologies create realities. A rare exception in this respect is Nightingale’s study, which combined the use of remote sensing and qualitative interviews with local people to make sense of forest use in

Nepal. Nightingale concluded that remote sensing did not provide an objective method for mapping the forest but created it in a particular way (in terms of density and renewal of the forest), which served the interests of the administrative elite interested in sustainable cultivation of timber. This view contrasted with the local people's way of assessing the forest in terms of access and multiple uses (Ahlborg and Nightingale, 2012; Nightingale, 2003).

Third, technologies emphasise the materiality of discourses. Thinking in terms of materialities broadens the analysis from examining the political nature of discourses on heart disease risk toward exploring how such risk is concretely created and acted upon by physicians inputting values into an algorithm, created by scientists and approved by the UK government National Institute of Clinical Excellence (NICE), and clinicians offering patients lifestyle advice and medications. Such approach moves analysis from sometimes fairly abstract analysis of ideas towards exploring concrete tinkering, such as how the risk algorithm operates, how the numbers are actioned in clinical practice and everyday life, how they are associated with negotiations between social actors (pharma, governments) and connected with e.g. pay for the general practices. Such analysis opens an entire infrastructure up for analysis, which is rarely attended to when exploring discourses. Arguably such infrastructures and practices are increasingly important in making sense of, for example, digital media. In this realm it is crucial not only to study e.g. representations and identities individuals create in social media but also to examine how the design of the platforms is created, evolves and shapes concrete actions (Van Dijck, 2013).

Overall, critical reflection draws attention to the way in which taken-for-granted ideas and infrastructures create, configure (Woolgar, 1990) or enact (Mol, 2002) the phenomenon we study, such as risk or forest. If these phenomena are viewed as created or enacted, rather than given, the question becomes: Are there better and worse ways of enacting them?

Experiences, Elements and Sites

The hermeneutic principle or validity seeks to uncover or give voice to marginalised participants' experiences (Saukko, 2003). By listening to participants' voices scholars often seek to capture an alternative, better or more equal way of creating realities. Researchers have developed innovative ways of making research more permeable to participants' views by, for example, conducting research in collaboration with participants and experimenting with alternative forms of representation to capture realities through, for example, performance (Denzin, 2013).

However, capturing participants' perspectives only tells so much, as our participants (nor us as researchers) are never fully aware of the forces that shape our understandings and actions. I have elsewhere suggested exploring how experiences are intertwined by social discourses and historical contexts (Saukko, 2003). Now I am suggesting we should study how experiences and other "elements" interact in a specific instance or location. The reason why I have chosen to speak about elements rather than discourses and contexts is that this term opens up the analysis for a wider variety of heterogenous things that shape and are shaped by experiences, such as human and non-human actors (people, technologies, sausages, trees), tastes, government guidelines and wealth. The task then becomes to study how these elements come together to "enact" (Mol, 2002), "configure" (Woolgar, 1990) or "co-produce" (Jasanoff, 2004) particular realities. In sketching this approach I am drawing on multi-sited ethnography (Marcus, 1998), postmodern versions of grounded theory (Clarke, 2005), actor network theory (Latour, 2005), notions of multiple ontologies (Mol, 2002; Woolgar and Lezaun, 2013) and deleuzian inspired ideas about "assemblages" (Law, 2004).

To illustrate this mode of analysis I will continue with my discussion on heart disease prevention. In our study we found a group of participants, who had not taken medications (for various reasons) but had changed their behaviour e.g. started walking more (in a group), going to the gym (with adult daughter), lost weight and ate more healthily. These participants assessed the effects of their actions not by

cholesterol or risk levels but by embodied experiences. They noted how they could "walk without huffing and puffing," lost weight or "felt so much better" (Saukko et al., 2012).

There is ample literature in medical sociology on how lay people assess their health using embodied sensations in relation to conditions from blood pressure (Morgan and Watkins, 1988) to recovery from heroin addiction (Nettleton et al., 2011). Embodied sensations are sometimes lauded for articulating neglected lay experiences of illness (Frank, 1995); at other times sensations are viewed as potentially misleading, as they do not "really" indicate e.g. blood pressure (Morgan and Watkins, 1988). So, clinical members of our team commented that participants talking about "feeling better" did not have any idea if their "real" risk or cholesterol had decreased. Rather than interpret these experiences as either voicing silenced experiences or being misguided, they can be seen as "enacting," (Mol, 2002) health and risk differently than the formal risk calculation.

Further, if we assume that health and risk can be enacted differently (rather than presume we know what health and risk "are") the question becomes: Which way of enacting health and risk is better, how and for whom? (Haraway, 1997) Our participants' embodied assessment and practices addressed physical and mental health more broadly than the pharmaceutical targeting of cholesterol. Many of our late mid-life participants complained about multiple health problems, such as joint and back pains (which affected mobility), heartburn, indigestion, breathlessness, anxiety, depression and alcoholism. Eating less stodgy food, drinking less alcohol and moving about more, particularly in the company of other people, could alleviate these problems, which often significantly affected our participants' quality of life. Thus, the embodied way of enacting health and risk might better improve the everyday health and well-being of individuals.

However, "doing" health based on embodied sensations also has its problems. It remains wedded to the currently dominant idea that health is down to individual's

actions and responsibility (Lupton, 2013). Many of our participants discussed issues they associated with their risk or lifestyle, which were largely beyond their control, such as hard or stressful labour, redundancies, making ends meet, anxieties, addictions and family misfortunes and responsibilities. A group of our participants (which we termed “lost”) experienced significant difficulties, such as physical and/or mental illnesses personally or/and in their family, poverty or lack of housing/homelessness. These participants were overwhelmed by circumstances and were disengaged from prevention and often from their clinicians, who in some cases neglected/avoided them. These “pharmaceutical,” “embodied” and “lost” ways of enacting health amongst our participants illustrate how diverse elements came together to configure health and risk differently. The different configurations also highlight different (and sometimes contradictory) “bads” and “goods,” such as assessment frameworks driving pharmaceuticalisation, alternative, embodied ways of assessing health and structural inequalities and personal tragedies making it impossible for individuals to take care of their health.

Analysing elements and enacting bears family resemblance to identifying qualitative “variables,” (Miles et al., 2013) which initially informed our analysis. “Identifying explanatory variables” and “mapping elements/connections” both refer to the basic qualitative craft of sorting out “what stuffs are relevant here”; yet, the approaches have important differences. There tends to be a close fit between the research question (what makes an educational intervention effective?) and qualitative variables (budgets, motivation, support) (Miles et al., 2013). The look for elements involves paying attention to odd bins stuff e.g. foul-tasting sausages, algorithms, national guidelines, walking groups, pharmaceutical companies, embodied sensations and an illegally parked trailor serving as a home. As such, in true spirit of qualitative research, it helps to think outside of the box and take research to unexpected directions.

To further address how the elements based approach is different from other, prevalent modes of analysing technologically mediated experiences I will discuss Boellstorff’s acclaimed ethnogaphy on the virtual world, Second Life (SL) (Boellstorff,

2008; Boellstorff, 2012). SL is a multi-user game where players create avatars, create/buy homes and establish relationships. Boellstorff's vividly describes e.g. relationships on SL, ranging from falling in love to sexual harassment and subcultures, such as BDSM i.e. sadomasochistic communities. The book also details the technicalities of, for example, flirting by shifting between typing one's contribution to a group and instant messaging ('imming') to another avatar. Boellstorff concludes that SL articulates the 'Age of the Techne' i.e. time when the fundamental human capacity to 'craft' "can—for the first time—create new worlds for human sociality" (Boellstorff, 2008). However, he also critically discusses how this crafting constrained by a particular version of 'creativist' or 'prosumer' capitalism, which informs the platform owned by a private company, Linden Lab. Thus, SL is predicated on people owning and acquiring private property and earning and using 'lindens' (virtual currency) to acquire and sell things created (from virtual 'hair' to land and labour).

Referring to Margaret Mead (the title of his book, Coming of Age in Second Life, plays with the title of Mead's book on Samoa (Mead and Boas, 1973)), Boellstorff states that his aim was, in the spirit of classical anthropology, to "instil a sense of wonder" regarding a new world. He underlines that he deliberately focused solely on the SL, excluding e.g. residents' offline lives, arguing that virtual cultures are no less "real" than offline ones. However, in dwelling just on SL Boellstorff has the same problems as Mead's work. Mead (commendably) focused on young Samoan women's experiences of adolescence and sexuality. Yet, Mead bypassed the perspectives of other groups on the islands (e.g. those of older, powerful men) and the colonialist missionary, economic and military activities in the Pacific of the time (Schwartz, 1983). Neglecting these internal conflicts and external connections missed critical discussion of key forces, which shaped Samoan life and sexuality.

There are many studies, similar to Boellstorff's, which examine the creative or participatory nature of virtual environments from YouTube (Burgess and Green, 2009) to fan communities (Jenkins, 2006). This scholarship has been criticised for making spurious claims about the participatory nature and "political" effects of the cultures

studied (Couldry, 2011). The trouble here is that studies on digital cultures often presume that the fact individuals are actively “doing” or creating something on the Internet (rather than passively consuming content) is intrinsically empowering. However, to assess the implications of online cultures for individuals and digital and social worlds one needs to study their connections to other elements (economics, politics, everyday lives), which shape virtual worlds and their residents.

Complex conjunctures

Following from above one of the goals of cultural studies and critical social sciences generally is to reflect on any phenomenon studied within the wider social, economic and political context or “conjuncture” (Grossberg, 2010b). Context is a fairly vague concept in social sciences; so I prefer the more specific term conjuncture, which Grossberg defines as “those contexts, those moments, comprised of multiple contradictions and struggles, articulated together to create a formation, defined by an “organic” crisis (Grossberg 2013, 89). Conjuncture refers to a socio-political period, such as neo-liberalism, which emerged after the break-up in the US of the New Deal social contract and the emergence of a more individualistic, liberal era (Grossberg, 2013; Hall, 2011)(Grossberg, 2010b) with all its contradictions, such as the Silicon Valley entrepreneurial counterculture embodied by Linden Lab and discussed by Boellstorff (Boellstorff, 2008).

Methodologically, analysing such conjunctures is important for three reasons. First, conjunctural analysis mitigates against remaining solely focused on the micro e.g. the intricacies of online worlds and invites exploration of how the phenomenon studied sustains or challenges broader structures of power. Second, conjunctural analysis calls for critical self-reflection on how research itself is implicated in the socio-political conjuncture and its sensibilities. Third, cultural studies does not examine the conjuncture, such as UK Thatcherism (Hall, 1988), as a monolith but as put together from contradictory elements, which account for its appeal and solidity.

New technologies, such as digital and biomedical technologies, pose a particular challenge as well as an opportunity for conjunctural analysis in that they are frequently argued to drive conjunctural transitions into e.g. “network society” (Castells, 1996), “Lifeworld Inc” (Thrift, 2011), or an emergent “technological” age (Grossberg, 2013). New technologies are argued to facilitate current changes characterised by the passing of centralised forms of governance (the state, large-scale industry, military, professional medicine) and the emergence of de-centralised modes of governance marked by privatization, the networked firm, public/private security and self-health (Rose and Miller, 1992). These social, cultural, economic and political shifts are contradictory. The erosion of centralised authority has sometimes fomented participatory culture and individual agency and creativity, however, it has also led to increasing levels of surveillance (commercial, security), tendency to blame the individual and glaring inequalities, sometimes produced by technologies, such as the organ transplant economy (Scheper-Hughes, 2004). Attending to these contradictory, conjunctural trends, imbricated in the technologies themselves, is methodologically difficult.

To illustrate some of the challenges of doing conjunctural analysis on new technologies I will discuss the case of commercial, online, direct-to-consumer (DTC) genetic tests. In many ways these tests embody key trends in contemporary societies in that they are private and commercial (as opposed to public), offered directly to individuals (rather than through an expert, such as a doctor), emphasise the ability, creativity and responsibility of individuals to act (to find out about themselves, take care of their health) and marketed via sometimes sophisticated digital portals to largely wealthy, white, educated, Western consumers. Scholars and policy makers have criticised the health-related DTC genetic tests (that identify increased or decreased risks of various diseases) for not being scientifically valid, misguiding consumers and causing unnecessary anxiety (US Government Accountability Office, 2010). Since around 2000 small biotech companies have been able to sell DTC genetic tests online amidst heated debates and an-going attempts to regulate them in the US and Europe (Hogarth et al., 2008). In 2015 the situation

was such that the US Federal Drug Administration (FDA) had in 2013 banned the market-leading DTC genetic testing company, 23andMe (financially backed by Google) from selling health-related tests due to insufficient evidence to back up its marketing claims (Food and Drug Administration, 2013). However, in 2014 23andMe began offering the tests in the UK.

Spurred by the policy debates research on DTC genetic tests focused on consumer effects and motivations and “truthfulness” of marketing in order to advice policy. The studies largely supported a null hypothesis i.e. the tests did not render individuals anxious but neither did they motivate healthy behaviours (Bloss et al., 2011; Kaphingst et al., 2012). Most (largely wealthy and educated) customers did not interpret the tests deterministically (Kaphingst et al., 2012); they bought the tests to find out about health but also out of professional interest or just for fun (McGowan et al., 2010; Su et al., 2011). Content analysis of the marketing of the tests revealed that it often did not discuss the limitations of the tests even though the larger companies, such as 23andMe, fared better in this respect (Lachance et al., 2010).

Typical of positivist research these projects did not reflect on, whether these classical questions of psychological and behavioural effects and truthfulness were the appropriate ones to ask in relation to these tests. Taking a conjuncturalist position the question becomes: What do these tests tell us about the times we live in? Answering the abstract question will then go some ways towards answering a more concrete question of what these tests do to consumers or how they “configure” (Woolgar, 1990) them.

In an on-going research (Saukko et al., 2010), I have asked these questions based on analysing the 23andMe portal as a US and UK customer since 2009 (one’s results are uploaded onto a “live” online account, which provides access to many interactive features as well as constant updates on one’s results). I have argued that the tests configure medical knowledge not as “evidence” but as speculative (providing e.g. individual test results with “star rating” on how “confident” one could

be in them). They also configured their customers not as passive patients but as co-creators of the service (Prahalad and Ramaswamy, 2004) e.g. inviting customers to further analyse their results using various tools, which allowed analysis and sharing of test results as well as “raw DNA.” Finally, the tests did not only seek to produce the psychological effects of anxiety or behaviour change but also “flow” i.e. engrossment with the service, driven by pleasure and curiosity (Hoffman and Novak, 2009).

The way in which the 23andMe portal configured its customers (sceptical, active and curiosity-driven) seems to mitigate against claims about customers misunderstanding or becoming anxious of the DTC genetic tests. This interpretation may have a grain of truth in it. However, if one investigates 23andMe from a conjuncturalist perspective, the tests do not conform to modernist model of medicine, grounded on expert authority and truth (Jewson, 1976). Rather, 23andMe portal is an example of a digital “experience environment” where consumers can “co-create” services and products (Prahalad and Ramaswamy, 2004; Ritzer and Jurgenson, 2010; Thrift, 2006), which underpin a new mode of controlling and sensing the world that Thirft has termed Lifeworld Inc (Thrift, 2011). Lifeworld Inc is characterised by video games, virtual worlds, mobile social networks and (self-)monitoring apps, which produce experiences of open-ended creativity and pleasure or flow. Yet, it is largely driven by a “security-entertainment complex,” which constantly invigilates (tracks and directs movements, clicks) as well as creates moments of affect, affinity and engrossment (Thrift, 2011).

Coming back to 23andMe, its platform very much formed a part of Lifeworld Inc, inviting customers to be critical and active, creating sometimes wild theories of genetics together and swapping DNA and genealogies in a prolonged immersion. At the same time, the actions and interactions on the site hardly ever questioned the value of genetic information per se; thus, whilst giving users a sense of control, thrill and discovery, 23andMe only opened certain paths, closing others.

The methodological advantage of exploring 23andMe from a conjunctural perspective is that it highlights how the critique of DTC genetic testing companies based on concerns about anxiety or deterministic misunderstanding of genes is behind the times. The fact that at least some consumers may be playing with their genetic test results and actively doubting and creating their own speculations about them with others does not necessarily mean that concerns about such tests are unwarranted. Rather, the way in which corporations seek to swoon and control their consumers has changed, and social sciences need new critical concepts to keep up with such developments.

Whether new conjunctural concepts, such as Lifeworld Inc (Thrift, 2011), creativist capitalism (Boellstorff, 2008) or prosumer capitalism (Ritzer and Jurgenson, 2010) signify a new conjuncture or a permutation of the classic neo-liberal one is a matter of definition. In all cases, critical analysis of current conjuncture alert us to new ways in which economies, politics and everyday lives are being shaped.

Conclusion

So, where will methodologies in cultural and social studies be in ten years? In this chapter I have combined the methodological insights of cultural studies (CS) and science and technology studies (STS). Despite their differences, the two paradigms share the reflexive premise that languages, scientific methods or technologies do not reflect reality but configure it in particular ways. The question then becomes, what kinds of methodologies are emerging and what kinds of realities they configure?

Current buzz-words in social science methods are “big data” and mobile methods, which are both enabled by new technologies. Big data is related to mobile methods, as it is often produced when movement across geographical or virtual space is tracked, ranging from “trends” in Twitter to flow of urban traffic. From a positivist point of view, big data promises to gauge objective or unbiased data, as it is

frequently produced without individuals knowing about it e.g. when clicks on the Internet are tracked. From an STS perspective, Ruppert et al (Ruppert et al., 2013) have noted that big data does not capture the reality but configures it a different way than traditional social science methods. Surveys and interviews produce an individual, who “reflects” on his actions and attitudes, but big data configure a “doing” post-humanist individual by monitoring actions (e.g. clicks) without interest in cognitive, reflective processes.

Ruppert et al (Ruppert, 2011; Ruppert et al., 2013) state that surveys and interviews as well as big data are methods for “governing” populations (Foucault et al., 1991). Surveys, such as the Census or opinion polls, configure or enact populations and categories, such as the “poor” (Dean, 2013), which can be targeted for interventions. At the same time, the top down categories may become bottom-up basis for claims for reflective identities and “rights,” such as gay rights. Big data does not primarily govern through configuring identities but through intervening with actions by e.g. sending targeted ads or counter-terrorist forces after individuals based on their online behaviour or by immobilising a person’s car with a tracking device if they have not paid their debt (Prainsack, 2015). It remains unclear what shape the bottom up politics in relation to big data might take.

Qualitative methods are no less implicated in governance than quantitative ones. Traditional qualitative interviews, seeking to recover in-depth subjugated experiences may consolidate population categories e.g. when anorexic women rehash or confess internalised diagnostic notions of what is wrong with them in interviews (Saukko, 2000). Scholars have noted that in an “interview society,” media forms, such as talk-shows, and research methods converge, making individuals confess normative notions of identity (Gubrium and Holstein, 2003). However, television talk-shows are waning, whereas ubiquitous mobile “apps” are crowding the media landscape. The emergent methods in the age of the “app” (Gardner and Davis, 2013) are often phenomenologically inspired, creative, mobile methods. These methods employ digital media (mobile phones, head cams) and include photo diaries and walking methods (Ingold, 2010), which seek to capture “real-time” neglected, non-symbolic, affective or gut-level dimensions of experience, such as embodiment, moods or movement, such as the experience of speed cycling (Spinney, 2011). These methods can convey subjugated experience, such as those of Muslim women

in the post 9/11 USA (Kwan, 2008). However, they also match the contemporary efforts in marketing, health education and security that seek to identify affective moments, associated with particular behaviours, such as purchase, smoking or terrorist activity (Poynter et al., 2014), to be able to interfere with them. Again, there is an affinity between emerging research methods and emerging methods of governing.

The point of this conversation is not to argue that research based on big data and mobile methods or surveys and interviews is compromised or "bad." Rather, I want to emphasise that the contribution of cultural studies and science and technology studies for general social methods is a sharp focus on how methods and associated validities and technologies configure realities. STS is strong in examining how the nuts and bolts of technologies and politics (e.g. how risk calculators work and what are the human and non-human actors that have contributed to the technology) shape realities. Cultural Studies is at its best in reflecting on the broad political and epistemic agendas that underpin methods. However, both paradigms help to abandon the positivist pretense that methods accurately or validly represent the reality. By examining how methods and associated validities configure realities, CS and STS highlight their contradictions and hidden agendas and, following Donna Haraway's classic agenda (Haraway, 1988), pave the way for responsible research, which asks what kind of realities our work helps to create and for whom.

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