

# ***(Dis)connective Practice in Heterotopic Spaces for Networked and Connected Learning***

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## **Abstract**

This paper explores the implications of learners' and educators' appropriation of Social Networking Sites (SNS) for informal open, networked and connected learning through the lens of learner practices within sociotechnical assemblages. Relevant themes identified from the literature are the impact of an advocacy approach in open, networked and connected learning; the mutuality of openness and closure; time-space online; connective and dis-connective practices and heterotopias.

A theory of Disconnective Practice has been developed by Light in relation to SNS that helps us to understand practice through considering disconnection as well as the more usual perspective of connection. Mejias' critique of the nodocentric view presented by SNS can help by alerting us to the concept of paranodes, spaces that lie beyond the logic of the network. Providers of SNS benefit from connection, media production and sharing by members that enhance their advertising services.

I explore heterotopias, unsettling fragmentary places, in open practice using two vignettes of PhD students, one in a social context and another in a research context. The first vignette explores the global nature of context and culture collapse across SNS, as a student moves to a different country and culture to undertake PhD study. This vignette highlights the impact of the combination of persistent data and (hyper)connection to extended and invisible audiences. The second vignette explores how different regimes of Open Access publishing operate within the politics of Higher Education (HE) contexts.

Although heterotopias are important to open, networked and connected learning they can be difficult to achieve: disconnective practice can help. Networks crave connection and resist our scrutiny. Thus learners need to be able to practice disconnection as well as connection, and be able and prepared to challenge the logic of SNS and institutional systems.

How can digital literacy practices of learners and teachers take account of learning on SNS when the focus of SNS is to benefit advertising services that are the actual customers?

## **Keywords**

Connection, Disconnection, Openness, Heterotopias, Informal Learning.

"The heterotopia is capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible" (Foucault & Miskowiec, 1986)

## **Introduction**

In this paper, I address the concept of disconnective practice in networked and connected learning, exploring informal learning practices in topics of interest to learners and on the fringes of formal education, performed partially through social media, including SNS.

Goodyear, Banks, Hodgson, & McConnell (2004) define Networked Learning (NL) as

learning in which information and communications technology (ICT) is used to promote connections; between one learner and other learners, between learners and tutors; between a learning community and its resources.

Although the NL conferences have rightly earned a reputation for critical and scholarly work in the field, an emphasis on connection has, perhaps not surprisingly, persisted. Disconnection has received much less attention. In the selection of papers published in book form from NL Conference 2014, there were 129 references to the

stem 'connect' and only 3 references to 'disconnect', all of which were used in a negative connotation, none relating to disconnection from online sites (Hodgson, de Laat, McConnell, & Ryberg, 2014). This suggests that practices of disconnection online may merit more attention than they currently receive. A utopian view of NL is general though some acknowledge its shadow side (Ferreday & Hodgson, 2010; Mackness & Bell, 2015).

Light (2014) has laid out a theory of Disconnective Practice (relating to SNS) that helps with our understanding of how states of disconnection come into being and are maintained. The disconnections can be between humans and non-humans; and may occur on SNS and the physical world. Disconnection is inextricably linked to connection: enabling it or making it a possibility (Light, 2014, p150). Most SNS are based on an economic model in which, in return for free access, members create content that has economic value for SNS owners (Facer, 2011) and hence SNS promote connection and sharing of rich media like images and videos.

Connected Learning engages in advocacy for informal learning within interest groups of young people, using new media with the support of friends and caring adults. The belief is that the combination of interest and social support will encourage resilience and make learning more effective, adapting to different learning contexts (Ito et al., 2014). This advocacy approach is echoed in the development of connectivist Massive Open Online Courses (cMOOCs) (Downes, 2013) that are based on the principles of diversity, autonomy, openness and connectedness. (Mackness, Mak, & Williams, 2010) found that although these principles were present as characteristics of a cMOOC, they presented paradoxes that were in tension with each other and difficult to resolve in practice.

The concept of a Massive Open Online Course was taken up enthusiastically by elite universities from 2011 onwards in a form that is often called an xMOOC, characterised by the outsourcing of technology platform and an instructivist pedagogy, employing short videos and computer-based assessment (Siemens, 2013). xMOOCs are offered in partnership with for-profit organisations funded by Venture Capital such as Coursera and Udacity, or not-for-profit organisations like edX and FutureLearn (Siemens, 2013, p 7; Weller, 2014, p 94).

Advocacy of openness in education has been associated with optimism and conviction, rather than displaying a critical understanding of what it might mean in practice; and as tending to obscure educational closures (Bayne, Knox, & Ross, 2015). Another view of Open Educational Resources (OERs) characterises them ideally as pedagogically and technologically neutral, and as smoothly sharable, hampered only by arcane legal restrictions (McGreal 2013, p xvi). To help to understand sociotechnical relations in openness Jones (2015) uses the idea of assemblages, meaning emergent social forms that are assembled out of various relationships and associations between, human, non-human and hybrid entities. For example for an OER, this view challenges technology as neutral, emphasising its socio-political contexts of creation, appropriation and use.

In recent years, universities have been characterised by some as unsustainable and resistant to change, and in need of reform if they are to survive (Blass & Hayward, 2014). Online learning is proffered as an 'upwardly scalable technology driver' that can enable disruptive innovation in HE in the US context (Christensen, Horn, Caldera, & Soares, 2011). The problem is framed as 'education is broken', with the solution as technological innovation, the ahistorical Silicon Valley narrative evident in the hype around MOOCs, a narrative framed by those with a vested interest in technology as solution (Watters, 2013; Weller, 2015). Facebook has shown increasing interest in education in the last few years, most recently in a software initiative that enables students to work with teachers to tailor personalised activities and quizzes that can be automatically graded. Commentators have described this venture as 'not quite philanthropy and not quite business' (Goel & Rich, 2015).

Jones (2015) sees openness in education as a public good that should be publicly sustained and that relies on public support via institutions in the context of the twin preoccupations for austerity and market growth following the global financial crisis 2008/9. He concludes that we need more than technologies to support open interactions - we need "public policies that support open relationships". Since the global financial crisis, a systemic crisis has arisen in Higher Education (HE) that is exhibited in increasingly casualised and precarious employment, and reduced labour rights in an attempt to restore profitability (Hall, 2014). Teaching and support roles are already contested.

The intention in this paper is not to idealise the autonomous learner, nor to eliminate the teacher. I am not promoting informal learning as a replacement for institutions and formal learning but rather wish to explore informal learner practice that is enacted (partially) on multiple SNS. Students and, in some cases, teachers adopt

Facebook groups, Twitter hash tags, Google hangouts and other 'free' services in the hinterland of social exchange and formal learning. I wish to explore some of the implications of such informal appropriation of SNS and think about how things might be different.

Cronin (2014) examined open online spaces such as SNS from the perspective of opening the classroom to support students in practising their Personal Learning Network (PLN) as they develop new identities in HE. 67% of 18-30 year olds surveyed across 18 countries in three regions had used a personal mobile technology that day to access a social network, and 89% are concerned about the security and privacy of their data online ("2014 Survey Findings | Telefonica," 2014). Some of these will enter HE with their own experiences and knowledge of informal learning to contribute, as advocated by CL (Ito et al., 2014). Learning in networks going out from classrooms and coming in via students' experiences offer complementary perspectives that can inform each other.

I explore the literature on heterotopias, especially as they refer to learning and the Internet; on connective and disconnective practice; and on openness in education. The two vignettes presented are based on a combination of events from observation (with details changed for reasons of anonymity), news stories and academic studies, and are used to highlight a variety of experiences and responses to SNS.

## Openness

Openness of education in the digital age has generally been seen as an unequivocal good by those who are working to increase lifelong learning and support peer learning and co-production of knowledge (Edwards, 2015) but a recent Special Issue has opened up a critical debate about what openness means in education and its implication for policy and practice (Bayne et al., 2015). In his discussion, Jones (2015) identifies three core meanings: open as choice, open as not requiring prior qualification and open as freely available. Edwards (2015) asserts that openings entail closures and vice versa, and that we can empirically examine the interplay of the two. He also argues that the redefinition of knowledge that accompanies the array of digital technologies now used in education and the practices around knowledge infrastructures lead to an increase in inscrutability in the curriculum. Software itself can be inscrutable through the often invisible algorithms it uses and through the data it stores and uses, all of which go through a series of categorisations, assumptions and other closings as it is digitised, processed and interpreted.

## Connection / disconnection

The Internet, computers and Internet-connected phones and tablets appear to offer us an abundance of connection as long as we can understand how to use them. We can be networked 24/7 at home and away, as long as we can afford to pay for our broadband and phone contracts. Connection has come to seem like a utility in wealthy countries. Hyperconnection, where people could have hundreds of acquaintances across continents with whom they can share information on leisure and work interests is a phenomenon for some in the digitally saturated and networked world but not all experience this world in the same way. It raises questions about what it means to be human in this changed and changing society

“How can I know now?”, “How ought I to do, now?” and “How may I hope, now?”, where “how” refers to ways in which things are done and, more precisely, to the power relationships which make things possible or impossible (Ganascia, 2015, p66).

Connection and disconnection are often seen as a binary - that we are either connected or not connected but in practice connection is done in conjunction with disconnection (Light, 2014). Light's theory of disconnective practice inverts our usual understanding of networks from context to disconnection 'in order to understand how a given context has come into being' (Light, 2014).

A rich example of disconnective practice is given in an Actor Network study of informal work-related practice online via the practice of deleting. The politics of the delete button-learner assemblage are complex - offering protection against information overload, and managing relevance, presence and intrusion. It can open and close spaces but also reduce pedagogic value from the deleted postings and connections (Lynn Thompson, 2012).

Context collapse, a phenomenon of connection, is the flattening of multiple audiences into one (Marwick & boyd, 2011). Multiple audiences can be across a site like Twitter or Facebook, or between sites that are linked

through connections or connected services. Context collapses can be unintentional, context collisions; and intentional, context collusions (Davis & Jurgenson, 2014). Privacy is seen as both a social norm and a process (boyd & Marwick, 2011) that can be characterised as a strategy (Lievrouw, 1998).

The theory of the spiral of silence that characterises traditional media as muting the minority in the spiral (Noelle-Neumann, 1974) has been revisited in recent research, confirming that people were less likely to enter into discussion of Edward Snowden's 2013 revelations of widespread government surveillance of Americans' phone and email records on social media than they were in person (Hampton, Rainie, & Lu, 2014). Connection does not ensure confidence to speak.

## Heterotopias in open, networked and connected learning

Foucault introduced the concept of heterotopias in a broadcast talk about utopia where all of the examples he gave of heterotopias involved some disruption in time and space (Johnson, 2006). The space in which we live is heterogeneous, as we live within a set of relations that delineates sites. We cannot reduce these sites to each other or superimpose them on one another. Heterotopias are presented as real but 'other' places, spaces for transgression, in contrast with utopias that are presentations of society as perfection but are unreal spaces (Foucault & Miskowicz, 1986). In the early days of the Internet, a common binary of communication was between real world (face to face) and virtual spaces (such as chat rooms) but more recent research and practice has pierced this distinction. Advocacy of connection and openness can tend towards utopian views, downplaying problems that may occur. Our practice spans physical and online colocation, and some have portrayed Internet-related places as heterotopias, for example Internet cafes (Liu, 2009) and Facebook (Rymarczuk & Derksen, 2014). Massey (2005) sees space as a multiplicity, a 'simultaneity of stories-so-far', recognising that space and time interpenetrate each other.

it is space that presents us with the question of the social. And it presents us with the most fundamental of political of questions which is how are we going to live together.

SNS may be seen as spaces where we perform our identities, but mobile personal technologies enable us to be in different SNS at the same time as we are physically present at our desks or in the park. So can heterotopias span multiple SNS? Paranodes are conceptual spaces between nodes in a network that are ignored by the nodocentric network, being beyond its logic. A paranode is seen as empty, a space to be bypassed by links but it is actually busy, responsible for the history of the nodes it lies between (Mejias, 2013). Mejias (p. 154) gives many examples of paranodes, including a family member who refuses to join an SNS and obsolete technologies. He further proposes that monopsony (where there are many sellers and one buyer) has become the dominant market structure for user-generated content. So for example, if people want to surrender their video content to public consumption, youtube becomes the only sensible choice; and if people want to connect with others and share thoughts, images and video then Facebook is an obvious choice. This is no accident: the model of social media participation is one where profit margins depend on more users joining, providing content that interests and attracts other users, and demographic data that enables targeted advertising to them:

In other words, if we are not paying for a product, we are the product. Access to free social media services exist only because companies have figured out a way to monetize our participation (Mejias, 2013, p33).

We can argue that heterotopias are not constrained by boundaries of an SNS site but are people's 'real' experience of multiple SNS and bodily experience simultaneously, and influenced by their imagined audiences? They are not located solely in geographical or online spaces but also in the reality of the digitally-saturated hyper-connected life where we may pay transient attention to spaces, multiply connecting and disconnecting as we go. NL offers the possibility of opening up heterotopic spaces where transgressive communication is possible, realising opportunities for different learning and reflection (Ferreday & Hodgson, 2010). The following two sections describe vignettes of networking practice around education that are discussed using concepts of openness, (dis)connection and heterotopias.

### Vignette 1 - Going over, coming out

Swami Kamala grew up in the suburbs of Jaipur to relatively wealthy parents who had travelled widely and were keen for their son to study in the UK, after he completed his M Tech (Computer Science) at Jaipur

National University. Swami was a keen user of social media at school, with Orkut being the social networking service of choice in his wide friendship group. He had very occasionally commented on blogs in India, and had registered with Disqus, the comment engine. Swami became aware during his teens that he was attracted to men rather than women but he didn't feel able to tell his parents that he was gay, and the culture at his school was persistently homophobic. Although same sex relations have a genealogy in Africa, this had been obscured by colonialism and post-colonialism (Chakraborty, 2014). Swami didn't come out as gay either at school or at university where he made a wider circle of friends but he did find a close friend in whom he was able to confide his sexual identity and his occasional clandestine adventures. He sometimes wondered if his mother suspected that he wasn't heterosexual but his extended education allowed him to deflect questions about when he would marry and father children.

Swami was keen to explore societal implications of computing and the Internet so he applied to a multi-disciplinary research centre in a UK university, and started a self-funded doctoral programme in late 2013. His early doctoral training was a broad mix of advanced technologies, social theories, philosophy and multiple methodologies, and he met students and academics who had very different world views but seemed to be able to work together. His intellectual life was invigorating though he also experienced casual racism in his day to day life in the UK.

Swami was able to explore his sexual identity much more freely, initially through university groups and activities, and subsequently through a gay social scene in the city where he lived, and in online spaces and networks. Swami joined the Tumblr blogging site encountering a very different network of people from his school and university friends on Orkut - these seemed like two very separate circles. Swami felt comfortable to comment on gay issues on Tumblr in what seemed like intimate conversations. He had even shared that he was gay with his fellow PhD students and his supervisor: no-one was shocked. He also joined Facebook, connecting to many of his new colleagues and friends, with whom he could share jokes, links, images and videos that included gay-friendly references. Then in 2014, Google shut down the Orkut social network (Summers, 2014) and Swami's Orkut friends migrated to alternative social networks, largely to Facebook. Swami's formerly separate Indian and UK contexts were gradually collapsing. His former Orkut contacts were asking him to connect on Facebook. Without Swami being aware, Disqus became a more significant connector, as he engaged more on Tumblr and his Indian network diversified their networks beyond Orkut. One day, the inevitable happened - a friend from Jaipur National University who had become curious about changes in what Swami said and shared on Facebook clicked on his identity link at Disqus that revealed the stream of comments he had made at various Tumblr blogs. "OMG," he said to a mutual friend, "I think Swami is gay." The news spread like wildfire amongst his friends and his confidant contacted him privately to let him know that the cat was out of the bag.

Swami was horrified - he had been planning to come out to his family and friends in India since he had become much more comfortable with his identity but now he was alarmed that someone would tell his parents before he could. He contacted an Indian lecturer at his university who had chatted to him after an interesting workshop he gave. They talked through Swami's situation and came up with a plan. Swami contacted his younger brother to talk through his plan to tell his parents. His brother told him that it was no surprise to him, and agreed to be supportive within the family. Swami booked a Skype call to his parents and told them as calmly and clearly as he could. His father responded with silence and his mother wept quietly: this was the first of a series of difficult conversations but with all their love and Swami's persistence, over time his parents gradually came to terms with the idea that their oldest son was gay. Some of his friends from Jaipur unfriended him on Facebook but others came to accept him and altogether Swami was much more comfortable in his own skin, even starting a relationship a few months later.

## **Vignette 2 - A door half closed**

Bethany Miller was born in 1991 in Workington, Cumbria, UK and couldn't remember a time before Google and Wikipedia. She read anything she could find and did well at school, becoming the 'goto' girl for finding things on the Internet. She became passionate about freedom of access to information and decided to apply for Library Studies to pursue this interest. During her undergraduate years, Bethany joined a feminist group and read more widely than the Library Studies curriculum that contained few references to feminism. She managed to find an excellent supervisor for her final year dissertation on Women's Experiences of MOOCs that included a novel survey of women MOOC participants. Bethany published her work in an open access student research journal and gained a PhD studentship at a prestigious university to do research into digital archives at a well-known museum.

Bethany started her PhD supervised by a lively woman lecturer, Mary Wynyard. Mary had a pragmatic approach to life and she shared Bethany's feminist sympathies. Bethany wasn't quite so comfortable with the co-supervisor Professor Green who was quite old school and though happy that museum archives could be digitised, had a different approach to academic publishing. On the other hand, she was grateful that he had brought in the funding that provided her studentship. She saw little of him, building a productive relationship with Mary, doing her research and presenting at local conferences. Two years into her PhD, Bethany saw a call for papers from an open access feminist journal that would allow her to combine her undergraduate project work with her current research. She brought an idea for a paper to Mary and they worked on it together. In the meantime, Mary mentioned this writing project when she was being appraised by Professor Green. He told her coldly that she was wasting her time submitting to a low-ranked journal: at Mary's stage in her career, she should be concentrating on publications for the Research Excellence Framework. Mary revealed that Bethany was committed to open access publishing and Professor Green came up with a solution. If he was named as third author, they could submit to a high ranked journal that offered open access for a fee. Somewhat reluctantly, Mary shared this solution with Bethany who was torn. She didn't see why someone who hadn't written anything for the paper should be named as an author but she wanted to help Mary whose contribution to the paper had been so valuable. Bethany's ambition to become a lecturer suddenly seemed less golden.

## Discussion

Swami's is a classic tale of unintentional context collapse. He thought he was maintaining separate audiences as he moved across continents in pursuit of education and identity development but the Disqus comment engine and his school/university friends' migration to other SNS connected to Disqus led to a collision of his previously separate audiences. The Tumblr blogs where he could explore his queer identity appeared to be a heterotopic space but became superimposed on to his historic Disqus identity that aggregated his comments on various sites, past and present. What could he have done differently? If he had been aware of the implications of the multiple and changing connections of Disqus to SNS and blogging site, he might have chosen to delete his profile where his comments were aggregated, thus reducing the chance of context collapse. This would have left his comments in situ at various sites, where they could only be deleted one by one before he deleted his profile, and not afterwards. Swami's development of his personal and sexual identity through face to face and online networks helped him to deal with the collateral damage of context collapse, leading to a healing if slightly uneasy fusion of his new and old identities. The apparently heterotopic space of transgressive queer Tumblr blogs was denied by their reduction to other sites via the linkage of the Disqus comment engine. Tumblr was superimposed then on Facebook and on Disqus itself. A risk of hyperconnection and self-conscious presentation of self to a wide and invisible audience in open and interconnected SNS is that we might enter the spiral of silence, choosing a lowest common denominator of safe topics.

Facebook, Disqus and other SNS are what Boyd & Ellison (2007) call networked publics that have four properties that distinguish them from face-to-face public life: persistence, searchability, replicability, and invisible audiences. The persistence of his Disqus data and his school/university friends' connection to SNS that linked to Disqus created a disjoint between Swami's imagined audience and his extended but invisible audience. On the other hand, the supportive network that he had built around his sexual identity was there to support him in his unanticipated exposure. Swami was searchable across Disqus and Facebook, having a real name identity on each. SNS, however much they try to pull our content into their own sites, crave connection. Even when we delete our identity on an SNS, our traces can be persistent to and replicable by the SNS even though invisible, since they could still be of economic value.

Bethany is an advocate of openness and connection, seeing them as forces for good. She was thrilled to publish her student research in an Open Access journal but her engagement with feminist theory, and what she found in her dissertation study raised questions for her about MOOCs and other educational contexts. Bethany was learning that publishing in general, and open access publishing in particular, was political, and took place in institutional and commercial contexts. Her preference was to publish Open Access only but her relationship with Mary highlighted for her the importance career-wise of publishing in a more richly connected prestigious journal.

As a PhD student, Bethany could choose to publish in the Open Access journal where her heart was. Things might change as she approached graduation and she started to think about her future career. Bethany learned that OA does not magically democratise publishing: existing structural inequalities can be reinvented and reinforced in a changed context.

## Conclusions

It is not always possible to manage completely our digital selves, or to have free choice of infrastructure. We may be drawn to where we see interesting connections, and our choices are inevitably political and contextual: students may be required to participate in infrastructures as part of the requirements on their course. Heterotopias, spaces where we can transgress, are important in learning and in identity development; and they can counter the illusions of utopias. Unfortunately, the inscrutable knowledge infrastructures that exist in SNS with their desire for hyperconnection of members and their content may offer superficially heterotopic spaces but ones that can collapse into others, becoming themselves illusions of heterotopias. Furthermore, the infrastructures' desire for us to make more connections, and for collecting and retaining our data for its economic value may serve to resist our choices and evade our scrutiny. The driver is the collection of data to enhance the advertising services that target people's purchasing behaviour on and off the network. This data and its further interpretations and categorisation is often out of our sight. Provision of heterotopias, spaces for transgression that don't succumb to spirals of silence, may require conscious and careful disconnective practice. The monopolies that are pervasive SNS seek hyperconnection and resist disconnection. Heterotopias can become utopias as networks exercise their desire to become 'the' network.

The impossibility of completely managing our digital selves and choice of infrastructure does not give us an excuse not to try. Participation in social networking has been seen as digital literacy practice (Knobel & Lankshear, 2008). Social media literacy is in part acquired by connection and openness but reflection and disconnection can be part of this. We are part of these complex assemblages that can add more connections to other people and to assemblages that are beyond our knowledge. We can play a part in shaping them as they change, with disconnection being an important tool in this shaping.

So a question is - how can digital literacy practice, of learners and teachers, take account of the context of SNS where the driving force is to improve content and connections in order to benefit advertising services?

My answer is that digital literacy can be extended to include reflection on and critique of connection and openness and that disconnection can play a part in this. Now we can think about how this can happen.

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