

Learning Challenge: Möbius Knitting

(Word count: 1099)

Distributed Choice and Motivation

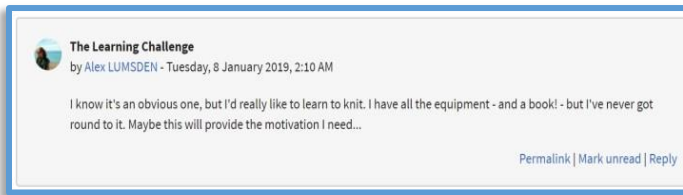


fig. 1

Choosing knitting for the challenge came from the ULOE forums (see fig.1) and sparked with a memory of my desire to knit. When my classmate posted their choice, it clicked. The incentive

stemmed from the ULOE assessment but knitting resonated because I also had sufficient external and internal resources of support to complete the challenge (Lu & Chen, 1996). I refer to this process as 'distributed choice' both to disavow any idea of free-will being involved but also to invoke the work of Donald Norman on Distributed Cognition (Norman, 1993). My mental interplay with the digital space and others in it, led to this 'click' moment. The choice was not solely dependent upon 'knowledge in the head' in the form of a dormant desire, but also that 'in the world' which reminded me of my wish to knit (Norman, 2002: 79).

Intrinsic motivation was further engendered by the exploration of knitting and maths via coding (Koch, 2017 and Nargi, 2016), also inspired through the ULOE forums (see fig.2). I serendipitously stumbled upon the last thing that

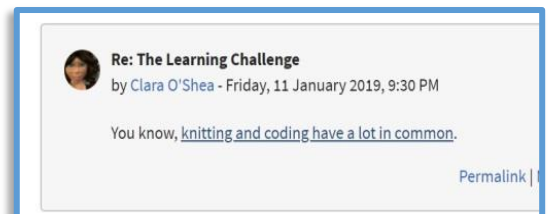


fig. 2

'hooked' me into knitting: the Möbius scarf knitted by [Cat Bordhi](#) (see fig.3), uniquely created by knitting a loop without needing to stitch the ends together.

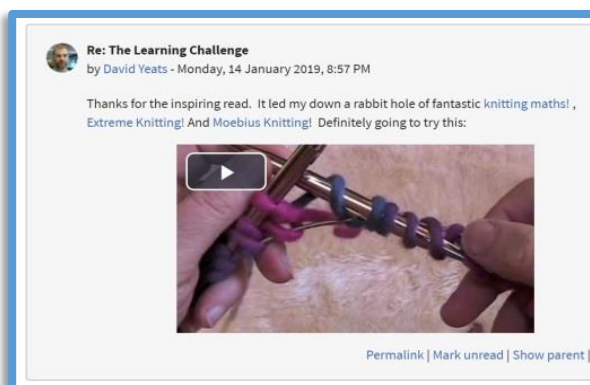


fig. 3

Serendipity and the 'unexpected' are key theoretical themes which underpin this 'distributed choice'. Here, "by supporting strategies found to increase the likelihood of serendipity" in digital spaces, my tutors "also encourage [me] to integrate these strategies into [my] work and everyday lives" (Makri, Blandford, Woods, Sharples, &

Maxwell, 2014: 2193). Thus serendipity played a role in inspiring the challenge and carrying it out.

Sociomaterial interpretations of the challenge can also be examined because the 'relationship of trust' between human and non-human actors is fundamental to Möbius knitting.

Of course, these interpretations are retrospective as back in January I had little notion of my choice being anything other than 'mine'.

Failing, Seeking Mentorship

I quickly gave up on the notion of learning to knit on my own.

Having observed [Bordhi's video](#), I acquired a large set of circular needles and made the error of using thin 4 ply yarn and casting on without a pattern. After two abortive attempts at the Möbius with these, I had learnt a great deal about untangling yarn from circular needles (see fig.4) and needed to try something simpler.



fig.4

Scoles interpretation of 'Translation' in Actor Network Theory is useful to reflect upon at this point. That is, how the human and non-human actors change each other through moments of Translation. I wanted to do something in relationship with the needles and yarn, but they refused to match the "obligatory passage point" I had developed in my mind. In the process, they changed my conception of what was possible and I changed what they had been prior to their recruitment and mobilisation (Scoles, 2019). The other actor in this network was the extrinsic motivation to reflect on the task in order to write for this assignment. As Reiss reported, this may have the effect, not of negating intrinsic motivation, but perhaps of distracting the learner (Reiss, 2012: 154). This is a kind of 'internal Hawthorne effect': knowing I was supposed to observe myself to comment on my behaviour altered the flow of that behaviour.

Thicker ply yarn, straight needles instead of circular, and my mum to work through a simple cast-on with me created the scaffolding to enter 'objective' then 'subjective' Zone of Proximal Development (Chaiklin in Kozulin, Agueyev, Gindis, & Miller, 2003: 39). The objective ZPD occurred through being in a comfortable social situation with mum. The subjective ZPD was entered when my mirror neurons were stimulated and I imitated her manipulation of the needles and yarn (Keyzers & Gazzolla, 2010).

It was also the language mum used that mediated a more fluid experience of knitting than I could get from Bordhi's video. The socially-grounded cognition mum and I share, through our spoken language, meant that knitting jargon ceased to be opaque (Crook, 1994: 38). This foreshadowed numerous benefits I was to glean from communities of practice, including tips on how to avoid injury through poor knitting posture.

Finding Flow in the Peripheries

Patiently finding the flow was the next stage to satisfying my "basic psychological needs" as a learner (Ryan & Deci, 2012: 4). I honed my motor skills so I could envision a garment forming. I decided on a beanie and, taking a gamble, found that by gradually reducing the number of stitches on each row I could form a flat triangular shape. This enhanced my sense of self determination (Ryan & Deci, 2012: 4). Serendipity occurred while knitting at work as a colleague invited me to a monthly craft gathering. Here I explained to experienced knitters what I was doing



fig.5

and sought their advice. Despite being a mere beginner, I had become aware of my legitimate peripheral participation (Lave & Wenger, 1991:). I was informed of the 'mattress stitch' which I could use to turn my triangle into a hat (see fig.5 & fig.6). All of these experiences contributed to satisfying my needs as a human for "competence, relatedness, and autonomy", ensuring motivation to continue my practice (Ryan & Deci, 2012: 4).



fig.6

Passing on the learning

My knitting student said "as I was watching you the cast on I got flustered and confused, but as soon as you passed it over to me and gave instructions it alleviated my anxiety". The reason for this may be the cultivation of 'self efficacy' in the student (Schunk & Usher, 2012). Also of note was my student's cycle of self-regulation: the greater their perception of their ability to knit on their own, the greater their belief, and thus the greater their actual ability to do



it (Zimmerman & Kitsantas, 1997: 35). As a teacher, I had to remember how to cast-on and experimented with remembering intuitively (Iran-Nejad, 2000: 81).

2nd Möbius

This is when I discovered a sociomaterial 'relationship of trust' with my circular needles, the technique of Cat Bordhi and the culmination of an Actor Network.

Having garnered the appropriate 14 ply yarn and a few key skills to starting and finishing a garment like casting-on and -off, I sought to re-ignite my relationship

with the Möbius. I learnt that having trust in the technology and its agency, as long as I could stay the course, could produce something

wearable (Fenwick, 2012: 76). Completing a Möbius scarf and later receiving a gift of yarn were key instances when I recognised a learner identity had shifted to Discourse and Affinity Identities as a knitter (Gee, 2000: 100).



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