WHOSE IDENTITY? RESPONSE TO ANNA CHRONAKIS KEYNOTE ADDRESS AT MES7

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INTRODUCTION

The genre of "response to a keynote address" is quite open for interpretation. Let me start by saying that I sympathise with the implications that Anna draws from her study. In particular, it seems important that teacher professional development programmes view teacher change as identity work, not as acquisition of functional competencies in technology use. Such a view encourages identity scaffolding and thus broadens the space for the unthinkable and yet-to-be-thought. I have chosen to focus my comments to Anna Chronaki's keynote address from a methodological perspective by looking at how she defines identity and identity work and what these concepts are doing for her. This approach springs from my own struggles with the same concepts, in particular how to give them operational definitions that allow the to recognition of instances of identity and identity work in the data.

IDENTITY AND IDENTITY WORK

Anna did a small scale ethnographic study on a group of seven teachers doing a three month teacher training course on integrating digital technology into mathematics education. In a post-structuralist discourse analysis frame she studied "how teachers appropriate technology and how they weave subjectivity as part of their professional growth" (p. 4). Her data tell a story about how the group of teachers grapple with the different discourses they encounter in the course and which they – because they are teachers and have to act – have to reconcile into some sort of workable whole. The discourses that become actualised in the course are about consumer society; youth culture as problem and hope; digital technology in general and in particular in relation to mathematics teaching. In regards to the latter, they try to envision possibilities in regards to students' motivation and their own pedagogy, and they are confronted with questions about the function and status of proof.

Anna wanted to "analyse empirically identity-work as an anti-essentialist process where fragility, fragmentation and hybridity can be recognised" (p. 2). The word identity figures 77 times in the text (85 if identities are included) of which 24 are in the combination identity work. While Anna discusses a range of aspects of the notion of identity, and in strong terms distance herself from notions that involve an autonomous or individual self, she does not come up with clear-cut definition of identity. She sees identity "as a way to account for human subjectivity" (p. 14) but neither does she distinguish clearly between identity, subjectivity, subject, subject position and self nor clarify their interrelationship. What is clear is that identity is collectively (re-)constructed, shifting, and unfixed:

> While subjects construct identities collectively and in response to societal restructuring, uncertainty plays a significant role, turning identity into a shifting, unfixed, and unending entity as it involves the reconstruction of meaning over space and time. (p. 4)

In terms of Brubaker and Cooper's (2000) analysis these formulations sum up to a "weak" understanding of identity. "Strong conceptions of "identity" preserve the common-sense meaning of the term – the emphasis on sameness over time or across persons" (p. 10) whereas weak understandings "by contrast break consciously with the everyday meaning of the term" (p. 10). Of the five key uses of identity as an analytical concept, that they list, Anna's use clearly belongs to the fifth.

> Understood as the evanescent product of multiple and competing discourses, "identity" is invoked to highlight the unstable, multiple, fluctuating, and fragmented nature of the contemporary "self." This usage is found especially in the literature influenced by Foucault, post-structuralism, and post-modernism. (Brubaker & Cooper, 2000, p. 8)

Among the instances of identity work in the text, are several attempts to pin down what is meant by this construct. In formulating what might be research questions, the production of meaning characterising identity work is described with the acts of *identifying* with conflicting discourses, *taking of subject positions*, and *embodying* of tools and pedagogies

> How do teachers engage and identify with such diverse and, at times, conflicting discourses? What subject positions do they take? How do they perform identity work as they strive to embody 'new' tools and pedagogies and how do they abandon any 'old' ones? (p. 4)

In a number of instances identity work is defined as articulation of meaning. The most important examples are – with my italisising -

> Identity work is viewed, here, as *a struggle towards articulating* meaning around hegemonic and marginal discourses concerning school mathematics and technology. (p. 1)

> Mathematics teacher change … is a relational process of articulating meaning. Articulation is a temporary fixation of discursive elements in an attempt to form connections that constitute a contingent and context-specific unity. … As such, our research task, as we try to interpret identity work, is to plot *how the agentive subject fabricates meaning*, focuses on articulations that constitute particular positions in complex interactions and accounts for their potential effects at the socio-cultural and political levels. (p. 6-7)

> [The teachers] also face the *struggles over producing meaning around multiple and conflicting significations of hegemonic or marginal discourses*. Could we, then, consider such process of struggling a path for identity work? (p. 14)

> Teachers' identity work involves the *production of meaning* not as self-referential individual property, but as *relational* –a cat's cradle- *towards locating status amongst diverse stakeholders and subject positions*. (p. 14-15)

From these examples is it clear that identity work is the production of meaning, in particular in situations where conflicting discourses compete for hegemony. The work part of identity work, that which requires an effort, the struggle in Anna's terms, and hence that which would qualify as work, is the act or activity of articulating, producing, fabricating meanings, or fixating discursive elements into connections of unity. It would then follow logically, that the identity part of identity work is the outcome of the work, that which is articulated, produced, etc., that is the meanings, the situated connected unities of discursive elements.

Hence, while the construct of identity mainly is defined indirectly and by what it is not, identity work has an operational definition that enables the distinguishing in the data of what is and what is not to be counted as identity work. It allows for identifying in the data temporary fixations of discursive elements that attempt to form connections that constitute a contingent and context-specific unity. As far as I can judge, this is what Anna does. The teachers in her study are fixating discursive elements into context-specific unities. The question for me is what is gained from labelling this production of meaning as identity work, and consequently equating identity with meanings. In the next sections, I consider these issues further.

"IDENTITY TURN"

In reviewing the growing interest in seeing mathematics education in various socio-cultural perspectives evident through the 1990s, Stephen Lerman (2000) coined the notion of "the social turn in mathematics education" for the mathematics education version of a phenomenon found in diverse academic disciplines "away from a focus on individual behaviour … toward a focus on social and cultural interaction" (Gee, 1999, p. 61). Anna identifies Wenger's (1998) book on *Communities of practice: Learning, meaning, and identity* as the germ of another "turn" in mathematics education research, the identity turn. Although others have noticed the increasing use of identity as a research lens in mathematics education research, as far as I know, the notion of an identity turn has been used previously in this field. The only use of the notion that I could find is in a review by Moje, Luke, Davies and Street (2009) in the context of literacy studies. They saw the "identity turn" in literacy research as developing out of the social turn in this field moving researchers attention to "literacy practices as tools or media for constructing, narrating, mediating, enacting, performing, enlisting, or exploring identities" (p. 416). Similar reasons to include the notion of identity seem to have been at play in mathematics education. Grootenboer, Smith and Lowrie (2006), for example, described identity as "a connective construct for examining the interplay between [e.g. beliefs, attitudes, emotions, cognitive capacity and life histories] and the effect such a nexus might have on mathematics teaching and learning" (p. 612).

In examining the different conceptions of identity in identity-and-literacy studies, Moje et al. (2009) found an array of conceptualisations of identity that spans a range of often rather different understandings. They note that everybody acknowledges the social, fluid and recognised nature of identity, and agrees that identity is lived out by

individuals, but there are multiple positions about what exactly is the social, the fluid or the recognised.

> To acknowledge identities as social, fluid, or recognized is only part of the theoretical story; the what of identity can be represented in myriad ways, even when one accepts identity as social, fluid, and recognized. (Moje, Luke, Davies, & Street, 2009, p. 419)

Given that the intended outcome of the social practice of school mathematics also is conceived of in the form of literacy, that is, as more than a collection of skills and cognitive processes, (e.g. OECD, 2003), I wonder what are the similarities and differences between identity-and-literacy studies and identity-and-mathematics studies. Would a review of the latter literature show a similar range of "the what of identity"? Paola Valero's (2009) reflections on the chapters in Black, Mendick, and Solomon (2009) book indicates that this would be the case.

I also wonder if there would be similar concerns as to "the what of mathematical literacy" as Moje et al. (2009) express in regards to literacy-and-identities studies:

> And the what of literacy is equally problematic. More important, what do the possible ways of conceiving of identity mean for how literacy-and-identities studies are conducted? What, if any, assumptions about literacy are embedded in these different views of identity as social, fluid, and recognized? What, if any, assumptions about identity are embedded in different views of literacy? (Moje et al., 2009, p. 419).

They conclude by calling scholars to more rigorously "clarify what it means to write about and study people's identities in relation to their literate practices" (p. 432).

As noted above identity is not particularly clearly defined in Anna's text and its relation to 'neighbouring' constructs such as self, subject, subjectivity is not clarified. If my deduction about the definition of identity work is accepted, identity equals meaning articulations. While the archaeology of meaning certainly has its merits – and I think Anna demonstrates that – I do not find the equating with identity or identity work warranted.

WHOSE IDENTITY?

A definition effectively equating identity with articulated meanings raises a methodological issue of an ethical nature. This is similar to (and inspired from) Bill Atweh's (2011) reflections on identity in educational research in which he questioned whether "the identity as seen by participants coincide[s] with the identity as seen by others [the researcher]" (p. 44) and raised a concern about "the lack of clarity about what aspects of the lifeworld [the construct of identity] proposes to refer to" (p. 44). Let me illustrate with an example. A teacher, Petros, in Anna's data seems to be telling a story about a teaching episode:

> Petros …: '[…] In this technology lesson […] you must see them [implies the pupils]… all of them […]. Focused […] Ah, do you believe it?! […] This thing happened! This thing happened in a mathematics classroom at a vocational school'. (p. 8)

It appears that Petros was quite enthusiastic about the episode and that he found it successful. However, to Anna his story exemplifies that

> Transforming school mathematics from an entirely abstract to an experiential construction accessible to all students (and not restricted to the gifted ones) was perceived as *missionary obligation*. Technology, at this space and time, was *mythologized* as a *saviour* that could provide *heroic* solutions to such persisting needs. (p. 8; my italics)

In this case the teachers' meaning articulations regarding their professional context is not the object of curious inquiry. Rather they are judged against the superior understandings of the researcher. Leaving that aside, another issue is that Petros might not recognise his "sayings" (Kemmis & Grootenboer, 2008) as an articulation of meaning, let alone as identity or identity work. Yet, that does not mean that Anna does not have a point. From a discourse analysis perspective, it could be argued that Petros was articulating situated meaning and that this meaning could be described in terms of a mythologised heroic quest with missionary obligations. The issue for me is that these sorts of insights come at a price that Petros and his fellow teachers have to pay in terms of losing control over their identities. Given that identity is "a category of social and political *practice*" (Brubaker & Cooper, 2000, p. 4 italics in original) and that "semantically, "identity" implies sameness across time or persons" (Brubaker & Cooper, 2000, p. 18) the teachers might not share Anna's theoretically informed construct of identity. Furthermore, this price seems unnecessary. After all, the analytical job in Anna's analysis is done by discourse analysis and not by the constructs of identity and identity work. Hence, abandoning these constructs as *analytical tools* would allow for both a respectful account of the teachers "sayings" as well as a theoretically informed analysis of these "sayings" attempting unravelling their composite discursive layers and social function.

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