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SURFACING THE MULTIPLE: DIFFRACTIVE METHODS FOR RETHINKING PROFESSIONAL PRACTICE AND KNOWLEDGE

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In this chapter we argue that professional knowledge is necessarily singular and multiple. We add that this is an inherent characteristic of professional knowledge heightened by recent developments. Our point of departure is that practical knowledge is over-determinate by nature: multiple and often dissonant causes, forces, histories intersect at the point where practice is accomplished. In the process, the adoption of a given *modus operandi* leads to the deferral and suppression of all the possible alternatives. In this sense, the ideal of professional practice as a stable, coherent, bounded phenomenon is largely a myth and a convenient fiction that is part and parcel of the process of normalization and disciplining that is inherent in professionalization. To become a professional means both expanding and constraining one's repertoire of conducts. This is because on the one hand, becoming a professional allows one to expand the possibilities of action (i.e., 'what to do next') by tapping into the repertoire of actions developed by former members and sedimented in the professional community's collective experience. On the other hand, joining a profession means observing certain canons and norms and to submit to the profession's authority – something that automatically limits what is do-able, say-able and often thinkable (Foucault's disciplinary project).

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This unexplored multiplicity has particular implications for the identity formation of the novice practitioner who could wonder what is being transmitted during interactions with role models and mentors. Tapping this multiplicity therefore poses both a theoretical and practical problem. Finding a way to expand the possibility of action is in fact a critical step towards realizing the ‘post-modern professional’ (Scanlon 2012).

In this chapter we suggest that one way of doing so is through the process of self-confrontation generated by the ‘Interview to the Double’ (ITTD) technique. The ITTD is a methodological device that helps practitioners come up with a rich description of their own practice with which they can then be confronted. The process of generating an ITTD and feeding it back to professionals exposes the inherent multiplicity of practice so that it can be appreciated by the practitioners themselves. The process is thus a powerful research tool but is also a way to generate diffraction and, under the right conditions, support the expansion of the practical understandings and options for action. A diffractive methodology is useful as it draws attention to difference in what might be otherwise conceived to be homogenous practice. Our argument is illustrated by examples drawn from a study conducted among midwife mentors in the UK.

THE SINGULAR AND MULTIPLE NATURE OF PROFESSIONAL KNOWLEDGE

Stanley Fish once argued that relativism is a position that one can entertain but not occupy (Fish 1980:319). In real life, faced with urgent and pressing problems, practitioners must enact a specific course of conduct and perform a specific action. In other words, faced with the practical concern of “what to do next”, practitioners – unlike academics and other detached observers – cannot escape making choices. Practice is thus inherently singular at the moment (or point) of its accomplishment.

The argument of course is not new and has been made before. Heidegger (1929), for example, uses the expression ‘ready-to-hand’ [*zuhanden*] and ‘present-to-hand’ [*vorhanden*] to contrast these two modes of encountering the world. *Ready-to-hand* describes the condition of practitioners immersed in a world of immediate and present practical concerns, i.e., things that they care about and they want to take care of. By contrast, *present-to-hand* captures the detached observer’s ‘view from nowhere’ that is enshrined in traditional philosophy. One of Heidegger’s

main concerns in his writing was to recover and reaffirm the precedence of the former over the latter. Bourdieu (1980) also emphasized the unitary nature of real-time action when he suggests that the practitioner's view is fundamentally different from that of the spectators given that the latter can survey things in their totality. Practitioners in fact act 'on the spot, in the twinkling of an eye, in the heat of the moment, that is, in conditions that exclude distance, perspective, detachment and reflexion.' (p.82). In Schatzki's view, practices 'inexorably' constitute conditions of life and worlds (1996:115)².

This view – which suggests that real-time practice is inherently singular at the point of accomplishment – co-exists with another view that characterizes practical action (and specifically professional activity) as inherently multiple. The latter is implicit in the work of scholars who studied the process whereby practitioners in general – and professionals in particular – are socialized in their activity. Building on Mead's intuition that individuals develop their identity and acquire mastery through interaction with a number of significant others (Mead 1934), authors such as Markus and Nurius (1986), and Ibarra (1999) suggest that becoming a professional entails experimenting with a variety of possible, provisional professional selves. Possible selves direct attention to certain role models, help newcomers to choose what to do in certain situations and set tacit standards against which they judge their own conduct, for example, 'Did I act like the person I want to become?' (Markus and Nurius 1986). Provisional selves, on the other hand, are new and makeshift identities that newcomers use, especially during career transitions (Ibarra 1999). These are rehearsed and refined with experience until they consolidate as the main way in which people define themselves in their professional role (Ibarra 1999:767). In both cases, becoming a professional entails developing and putting to the test a repertoire of actions that set the horizon within which actual activity is accomplished.

While entertaining and experimenting with possible selves has been typically associated with socialization and role transition, a growing number of scholars suggest that this condition applies to all practitioners all the time and does not stop when socialization has ended. The point has been comprehensively elaborated by Clot (1999) and the French school of the "Clinique de l'activité". Clot builds on Vygotsky's (1997) view that "At

² Of course these authors do not discuss professional knowledge but it is safe to assume that to the extent that professional workers are also practitioners (of a special kind), these principles apply to them as well.

every moment the individual is full of unrealized possibilities” and that action requires resolving the conflict between multiple possible actions at the crossroads of multiple conflicting horizons (p. 70). Clot argues that Vygotsky’s view requires that we distinguish between the activity that is realistically possible (*le réel de l’activité*) and the activity that is actually carried out in a specific situated scene of action (the realized activity or *activité réalisée*). The latter is in fact only a subset of the former. The activity that is realistically possible also includes “what is not done, what one tries to do without succeeding ... what one wanted to do or could have done, what one thinks it is possible to do somewhere else. To this must be added – a frequent paradox – what one does to avoid doing ... (Clot *et al.* 2001:18).

The real-time accomplishment and realization of professional work thus takes place at the intersection of a) impersonal prescriptions, routines, and rules that define expectation of the organization in terms of task; b) transpersonal influences that carry the historical memory of the practice (often framed in discursive terms) under the guise of a specific professional genre; and c) the interpersonal interactions and dialogues with other professionals (Clot and Kostulski 2011). While these conditions frame a specific site for the practitioner to act, they also bracket, suspend or suppress other possibilities: “the development of the activity that came to dominate is governed by conflicts between concurrent activities that could have accomplished the same task at other costs” (Clot and Kostulski 2011 p:685). Professional activity is thus inherently singular and multiple. Indeed “activities which are suspended, thwarted or hindered, and even counter-activities, must be included in the analysis” if we are to make sense of both professional effectiveness and well-being (Clot *et al.* 2001: 19).

This Vygotskyian view, which is rooted in a psychological view of professional work, resonates with the work of social scientists from other traditions who also put forward the idea of the plural nature of professional knowledge and identity. Abbot (1998) and Freidson (2001), for example, suggest that professionalism is fundamentally a disciplinary project which – while granting a given group of individuals jurisdiction over a certain body of knowledge and action – also constrains the group’s repertoire and discourse. Thus on the one hand, becoming a professional entails expanding the scope of action as a result of socialization and mastery acquisition. On the other hand, it entails eliminating other possible selves to fit in with professional canons. Yet alternative possible selves remain available to practitioners, if only in terms of examples not to be emulated (the ‘alter’ of the professional ego).

According to other authors, this inherent multiplicity of professional knowledge is amplified by the current historical conditions. Franzak (1996) and Scanlon (2012), for example, suggest that we increasingly live in a world of negotiated identities where we must continually construct and revise visions of self (Scanlon 2012:16). This is all the more true for professionals of all sorts. To the extent that professions are faced with the temporalization and relativization of their knowledge base, the weakening of their truth claims, and the ‘rebellion of the clients’ (Pfadenhauer 2006:568 in Scanlon 2012), being a professional requires nurturing a repertoire of possible individual identities that need to be not only consciously entertained and nurtured but also carefully and skillfully managed. Developing possible and provisional selves is thus not the preserve of novices and professionals in transition but rather the permanent condition of the post-modern professional (Scanlon 2012).

In short, while professional practice is inherently singular when it is accomplished (*in actu*, as the Romans used to say), it is also inherently multiple *in potentia*. Producing a coherent and accountable course of action and maintaining a coherent and accountable professional self therefore constitute special types of work. The questions are: how can such multiplicity be unearthed and made visible? How can we capture such work and what are the practical effects and benefits of doing so?

HOW TO SURFACE THE MULTIPLE NATURE OF PROFESSIONAL KNOWLEDGE

The task of surfacing the inherent multiplicity of professional knowledge poses several methodological and practical problems.

For one thing, work in the early 21st Century requires presenting and sustaining a unified self that meets the legal requirements of accountability. Displaying an unstructured or uncertain or mutable identity is seen as a sign of weakness and even of mental illness. Identity work (that is, the work that goes into creating the appearance of stable and well-bounded identity) thus by definition produces an erasure of multiplicity and transforms the on-going process of identification into a reified image – an identity as something that we possess (Jenkins 1996). Observation alone is thus ineffective as from the ‘outside’ we can only appreciate the result of the process. In order to unearth this ‘parliament of professional selves’ and the unrealized possibilities of action that lay behind the activity accomplished in a specific scene of action, we need to

produce some form of interruption or breakdown that allows for the underlying process to become visible. This can be achieved through some form of self-confrontation, a process that interrupts the continuity of the process of identification by creating distance between practitioners and their perceived 'self-in action' (Clot *et al.* 2001). The process requires a protected (i.e., construed and negotiated) situation or setting where the expectations of modern work conditions are consensually suspended. Presenting the image of a coherent stable and authoritative self is in fact something that is expected as a matter of fact in modern workplaces. Interrupting this process in natural settings is extremely difficult as it generates strong resistance and can cause very strong reactions as Garfinkel's student quickly discovered (See Garfinkel 1967).

Finally, even when practitioners are convinced of the benefits of perceiving themselves as post-modern professionals, the problem is that such multiplicity is usually invisible to practitioners. Switching between possible professional selves is a form of tacit knowledge that practitioners may acknowledge but seldom articulate. As Suchman (1987) convincingly argued, work becomes invisible with distance and members systematically disregard the type of work they do not see or that they take for granted. Practitioners understand and apply the term 'work' in relation to their professional activities in a very selective manner and hence try to tap into the plurality of their expertise through their accounts by undertaking a specific selection and deletion process. In other words, practitioners cannot see what they are blind to and asking them to take an introspective stance and look harder 'inside themselves' may be ineffective, frustrating and even seen as an utter waste of time.

1.1 The interview to the double

One method that has shown promise in view of overcoming the issues discussed above is the 'interview to the double' technique (Oddone et al 1977, Gherardi, 1995; Nicolini, 2009). Originating in the 1970's, the interview to the double (ITTD) is a projective technique rooted in the Marxist tradition (Nicolini, 2009) which was first developed by the Italian work psychologists Oddone and colleagues in 1977. During training workshops in a factory setting, the ITTD successfully helped to uncover some of the more hidden aspects of local practices that were being transmitted to novice workers. Whilst helping workers to increase awareness of their own expertise and its bargaining value vis-à-vis the management (Oddone et al, 1977, p 127), the ITTD also allowed the

workers to reflect upon and enhance the understanding of their own practice, uncovering new possibilities of action that were available to them (Nicolini, 2009). The developmental aspect of the technique was later advanced by a group of French ergonomists (Clot 1999, 2001; Clot and Faita 2000) who employed as a method of changing and improving work practices within the approach of the Activity Clinic (Nicolini, 2009).

Rather than focusing on the person introspectively, the interview to the double encourages participants to position themselves 'outside of their body'. This is achieved by instructing the double (the researcher) to take their place at work, in this study, on a day when mentoring a student and in particular, to avoid being found out (Nicolini 2009:196). In practice, the ITTD requires interviewees to imagine that they have a double who will stand in for them at work on the next day. The interviewee-instructor is then asked to provide the necessary detailed instructions which will insure that the interviewer-double is not unmasked. This approach helps practitioners to 'observe' their own practice (Nicolini 2009) and to establish a dialogue with oneself which renders one's own personal experience alien. In so doing, alternative forms of signification can emerge and the normative constraints that imprisoned professional thinking are lifted so that new possibility of action and new ways of being a competent practitioner can emerge.

According to Nicolini (2009), the ITTD is particularly effective in surfacing the normative dimension of practice, that is, the imperatives behind activity, the rules and conventions, and moral justifications upheld within a specific local occupational community. Rather than offering an insight into a presumed inner self, the ITTD thus brings to the fore the main 'normative and technical regimes of conduct' (Du Gay 2007: 11) regulating the production of professional selves displayed for all practical purposes. In so doing, it offers the opportunity for practitioners not only to think 'outside the box' but also to appreciate the nature of the box itself.

Nevertheless there is an important caveat for the use of the ITTD. Although originally developed to capture the practical knowledge in the workplace, it should not be used as a standalone technique (Nicolini, 2009). This is due to a need to build up trust (for this more demanding type of interview) and avoid misunderstandings over the wording of the monologue. Further, using a 'toolkit' approach avoids interpreting the phenomena from an *etic* or an outsider's view (Nicolini, 2009). The ITTD has thus achieved more recent success contributing to a richer

understanding during ethnographic studies (e.g. Gheradi, 1995, Nicolini 2009, Nicolini 2011, Nicolini 2012).

SURFACING MULTIPLICITY

In this section we illustrate the capacity of the ITTD to surface the multiple nature of professional knowledge and provide insight into the unexpressed professional selves that all practitioners carry with them. We do so by reporting the results of a study conducted among English midwives. Midwifery constitutes an interesting case as the profession is located at the intersection of different and often conflicting world views and some of the 'grand dichotomies of Western thought' (Weintraub 1997: 1).

Reflection at work has become increasingly important for midwives and has been an integral part of continuous professional development and education since the 1980s (Philips *et al.* 2002). Indeed, reflection is an implicit requirement for the annual supervisory meeting and engaging with the process of Post-Registration Education and Practice (PREP). Learning and socialization could therefore be argued to be dependent upon reflection. It is expected that midwives should, after deep reflection, pass on their expertise novices during supervisory practice. Yet midwives, when acting as supervisors and mentors, are also expected to project a very specific professional self that complies with the image of their work carefully nurtured by their professional association. So it may be asked, what is transmitted during novice supervision? How is identity revealed and what is the role that student midwives learn from? What is the specific social scene of action that constitutes their novice supervision?

1.2 Method

In our small exploratory study, eight midwives with ten years or more experience were interviewed by the double (the researcher) taking the specific activity of mentoring of student midwives as a focus. Each interview took roughly an hour and yielded a monologue from the participant which was sporadically interspersed with prompts from the 'double' when seeking clarification. Prompting the participant is an important feature of the ITTD, as it encourages the interviewee to instruct in the second person, thus maintaining distance and encouraging reflection throughout the interview (Nicolini 2009). Whilst instructing the

double, the midwives frequently closed their eyes when trying to instruct in the second person so that they could better concentrate on articulating their tacit knowledge. This projection serves to stop them merely parroting the instruction manual and avoiding a particular version of events (Nicolini 2009). The ITTD was followed up by a second reflexive interview where the instructions gleaned from the ITTD were discussed. This second self-confrontation interview also lasted between forty and sixty minutes. Both interviews were tape recorded and transcribed verbatim. The data was analyzed using thematic analysis and any sub-themes were seen as an extension to the analysis and the data was re-interrogated (Lincoln and Guba 1985).

1.3 Instructing the double

The ITTD helped the midwives to articulate their concerns behind the transmission of practice during mentoring. The midwives provided a plain description of their work that although not comparable to that of a professional ethnographer (as discussed earlier), is nevertheless much denser than the one obtained through traditional semi-structured interviews. Here is an example:

We have got to the ante-clinic, and you will need to set up your room you will find that there is... there's a trolley with antenatal records, information leaflets... blood forms, and you will need to wheel that into the room. You will need to set up your equipment to enable you to do your examinations and then if you can, organize your paperwork and your bottles ahead of time for blood taking. Now the student midwife can help you with this but you need to remind her what the bottles are for... And she will need to be reminded, in case she forgets that a urine sample is always taken and sent off for microscopy.

The ITTD gave an insight into how the midwives have come to be who they are at work. Many of their concerns appeared to be linked to authoritative knowledge and indeed, the technical and power regimes they had moved through during their careers. For example the following excerpt reveals the concerns with following correct procedure:

I am meticulous about writing records **correctly**, that's always been a point that other people have made. I got pulled up once for not ticking a box, even though there was a great long story about the situation, all the correct protocol was followed ...

In general, the responses to the ITTD were characterized by a strong moral tone and there was some evidence that accounts were partially idealized to portray a more harmonious description of the mentoring process. Students for example were often instructed to 'work as a team', although the midwives were clear that the mentoring is strongly unequal and therefore conflicts and incidents like the one described above are very common.

Heroic images of the profession were also often used for the novice's consumption:

Community midwives don't stop for a break on their way to the visits, in-between and if possible you could maybe pull the car over in a lay-by for 2 mins to unwrap your sandwiches. It's not ideal [but]... I always do this

One aspect that emerged clearly from the ITTD is that the instruction given to student midwives goes far beyond just clinical practice. Indeed, they learn how to act as midwives and the normative skills involved. Thus, the double was often instructed how to look and act like a midwife, often from the moment of leaving home. An example of this was when one of the midwives asked the double to wear little make-up for work. After prompting, she revealed that this does not reflect local policy but is rather a concern and habit she picked up when a former mentor taught her not to show her sexuality when dealing with vulnerable people.

Overall, the results of the ITTD constituted a rather optimistic and glorified account of practice. While accounts of conflict occurred in the reflective interviews, the general tone was quite assertive. The midwives had presented to the interviewer what they expected a novice should have heard. One in particular gave a strongly normative version of what a midwife should be. This however, was expected from the ITTD and instead of being seen as a weakness, the very constraints of the ITTD can be used as a platform for producing diffraction (Nicolini, 2009). This can be obtained by feeding back the usually stern view of the profession given during the ITTD to the practitioners

1.4 When the microphone goes off

As soon as the voice recorder was switched off, the midwives immediately began to reflect on what they had spoken about. The midwives recognized the stylizations of their accounts, whilst also finding the reflective potential of the ITTD useful and enlightening as a lens through which to zoom in on their tacit practical knowledge. As one of the midwives put it:

I was quite shocked actually, yes, yeah, because I was amazed how much I talked, and then it got me thinking, I was thinking about what did I say and I didn't say this and I didn't say that...[laugh]

The midwives also recognized how difficult it is for practitioners to speak about their own job and how much of their work becomes invisible to themselves.

Yes it did because when you, you've been doing a job for a long time you do it almost with your eyes closed and you have your own way of doing things it is sometimes good to have students; students challenge you and you have to explain what you are doing and I always like having a student for that reason.

The mention of the importance of having a student here is critical as it reiterates that any form of self-confrontation leads to critical scrutiny. It also suggests that reflection carried out alone is likely to fail as one cannot see that she cannot see.

1.5 The self-confrontation

The most interesting aspects of the process emerged when the ITTD was fed back to the interviewees³. Once they had got over their surprise and bafflement, the midwives started to recognize that their narratives could have been different and yet still be perfectly plausible:

I was just really aware that you know, that some things I thought of, I thought I could have said that and I didn't say....

³ In our case, for reason of time the interview was transcribed and given to the nurses. Clot *et al.* (2001) suggest going through an intermediate step whereby the practitioners are asked to transcribe their interview as this constitutes a powerful trigger for reflection.

I thought, then I came back into the car ... and I didn't say that and I was just looking at things that I did and I was thinking you just carry on in your own merry way.

The midwives also openly recognized how much their professional identity and practice was speaking through them, without them being fully aware of it:

No, [laugh]..... no what did I say ?
I'm not aware of [having said it], and part of it was maybe that that was how I was mentored

As soon as they became aware of what identity had spoken through them during their mentoring activity, the midwives were able to articulate different and alternative conducts open to them and to the novices. In the following extract a midwife, who had previously bowed to authoritative and medicalized knowledge, performs the alternative identity of a more autonomous midwife:

Do not assume the doctor has got the information ...because they don't do any maternity care anymore...they need to be advised of the changes in practice that occurin fact you will find if you can do this with the student, she can see the importance of a midwife's knowledge base. So she can see it is quite alright for the midwife to discuss on a professional level with the GP, her point of view, for care of the pregnant lady, that's something I have always done.

In another example, after emphasizing the importance of following the protocols during the interview (see the first extract above), the same nurse went on to suggest students follow their 'inner voice', a course of action that clearly reflects a form of knowledge that belongs to a very different a paradigm of what it means to be a midwife: 'I say to them, listen to your inner voice, you've got that thing that, I call it my "hum", if I'm going "hum" I'm not sure, there's something not quite right, listen to that and then act.'

In general, during the self-confrontation all of the midwives openly discussed alternative professional ways of doing and being. This ranged from references to other midwives who they did not wish to emulate – expert midwives from both current and historical contexts – to alternative models of midwifery. Jen, one of the interviewees, talked about her fight to be the holistic type of midwife she had always identified with and her wish

not to become 'a clone' of the medical model of obstetrics. This was voiced through her concerns regarding the spread of the medical model that she hears in students' language and discourse.

1.6 Anchoring identity to artifacts

Interestingly, the midwives anchored possible recognizable practices (and professional identities) to objects and artifacts. Three of the midwives mentioned the preferential use of the Pinard stethoscope (a traditional tool, also known as a Pinard⁴ horn or fetoscope), a choice which they confirm is driven by a commitment to practicing holistic midwifery. One of the midwives explicitly linked the use of this traditional tool (rather than electronic Doppler) to fear of midwives losing the very skills that underlay their professional identification. Another midwife said that she always buys a Pinard stethoscope for her students to remember her by but also because: 'It's yours, it's the tool of the trade and actually says that you know one of the oldest professions goingyou're very proud of being a midwife, you tell everybody that you're a midwife'.

Indeed, the above statement suggests that the Pinard stethoscope appears to be a symbolic instrument through which midwives manage their identity as a member of a traditional and expert profession and through which they hope to perpetuate the activity. Although other midwives were more than happy to use the electronic stethoscope to listen to the baby's heart, they knew that the fact that they could also use a Pinard stethoscope made them (and the novice) feel different and unique.

FROM REFLECTION TO DIFFRACTION?

Summarizing from the above, professional knowledge-abilities and identities were openly switched during the 'interviews to the double' and a variety of ways of being a midwife (and mentor) became increasingly detectable as result of the self-confrontation. This multiplicity brought to the surface through ITTD-based self-confrontation was visible to both the researcher and the practitioner. As a result, the midwives started narratively performing different professional selves and progressively expanded (at least verbally) the horizon of possible conducts open to them and to their ideal novice. This did not escape the midwives, who clearly explained what happens when one is presented with a representation of one's work: 'I

⁴ Named after the Adolphe Pinard, the French physician who invented it in 1895.

think it made me look... at what I did and what I'm doing now and I just was thinking – Oh, is that what I do?...

On the surface the above observation made by the midwife would suggest that the ITTD triggered some form of reflexive practice or reflexive learning (Cotter and Cullen 2012). Reflexive learning is an internally experienced, actively subjective process in which things become apparent as we are 'struck' (Cunliffe 2003:36) and thus 'moved to change our ways of being, talking and acting'(ibid). As a practice, it entails entering a dialogue with others and "periodically stepping back to ponder the meaning to self and to others in one's immediate environment about what has recently transpired" (Raelin 2001:11). The aim of different forms of reflexive practice is to provide time and space for 'indwelling' (Polanyi 1974 in Cotter and Cullen 2012:234).

We suggest, however, that the ITTD triggers a different, albeit related phenomenon. The self-confrontation does not produce reflection so much as diffraction. As Barad put it: "A diffractive methodology [is] a practice of reading insights through one another while paying attention to patterns of difference" (including the material effects of constitutive exclusions) (Barad 2011:3).

While the end of both reflexivity and diffraction is to help "participants unpick the underlying assumptions of the organized contexts in which they manage and work" (Cotter and Cullen 2012:231) this is achieved following two divergent strategies. Reflection and reflexivity are in fact inclined towards articulating the unexplored meanings that are inherent in the practice itself. This attitude stems from the phenomenological origin of the approach, which facilitates the dialogical search for new meaning through 'digging deeper' into what people already do. Diffraction, on the other hand, is 'more attuned to differences' (Haraway 1992:299) and more interested in bringing out the fundamental divergence of practices over time. Diffraction is thus attuned to widening possibilities rather than articulating meaning. The elaboration is dispersive; it multiplies what a practice may be rather than trying to reveal its inner core. In this sense 'diffraction moves from identifying what was present and contained within an interaction to analyzing intra-actions as a process of producing differences' (Keevers and Treleaven 2011:509). The self-confrontation triggered by the ITTD is designed to produce multiple perspectives by introducing a copy that interferes with its original. The diffraction is thus a result of the difference between two representations that should be the same. The shift is not from one stable way of being a midwife to another; rather the multiplicity is left hanging so that it can become a resource for

future action. Learning is obtained by grasping multiplicity. Equally, the critical reflexive effect – that is, the appreciation of the social, political and cultural context and the discourses that saturate practice (Cunliffe and Jun 2005) – are obtained from *within* the practice. The distinction between medicalized and non-medicalized discourses in the modern practice of midwifery are manifest in two competing modes of justification, which become transparent to midwives and from which they can learn (Jordan 1989).

CONCLUSION: WHICH PROFESSIONAL WILL TEACH ME TODAY?

A multiplicity of competing knowledge and abilities co-exist in uneasy tension behind the authoritative normative accounts produced to support the myth of a coherent and bounded professional practice (and practitioner). Acceptance of this fact raises a number of issues and challenges for the process of professional learning.

First, one needs to recognize that the process of mentoring in particular and instruction in general are necessarily situated activities and performances in the both the agential and theatrical senses of the term. Teachers, mentors, and instructors selectively choose which identity they play out and communicate to the novices, although such choice is tacit and often and invisible to them. This however presents a further conundrum. Absorbing a practice requires one to accept the authority of certain standards against which one's performance may be judged. One cannot be initiated into a practice without accepting the initial incapacity to judge correctly. As McIntyre put it: 'If, on starting to play baseball, I do not accept that others know better than I when to throw a fast ball and when not, I will never learn to appreciate good pitching (or to hear good music, or to recognize a nice building) let alone pitch' (MacIntyre 1981:190). Performing a univocal, coherent and bounded professional identity for the novice may thus be a myth but this it is to some extent a necessary one or at least one that serves a purpose. On the other hand, producing 'clones', as one of our informants put it, is dangerous not only ethically but also practically. Learning to replicate the mentor's habits means that when a student moves into a new context, her practice may not be legitimized by other midwives.

Acknowledging that practice is inherently multiple on several grounds thus requires dealing creatively and often explicitly with these two opposite requirements. Interestingly enough, we found that some of the midwives in our study were painfully aware of the need to address this issue as well as

the problems it spawns. This is because midwives already live in a world of competing bodies of knowledge and fragmented identities. For example, Jen, the midwife mentioned above, cautioned the novice against becoming her clone; indeed she instructed the double thus: 'Say to [the novice] you're not going to try and become a little Jen'. She then proceeded to encourage the novice to adopt fragments of practice from the various experts she will work with and to be selective in terms of whom she may choose to emulate. Susie, another of the interviewees, asked the double to tell the student to adopt her own habits, which are indeed very set patterns of practice justified by her belief of what is right and good. But she also cautioned that midwifery mentors are seen as 'next to God' and therefore asked that the student be openly explicitly warned not to worry as there are 'no set patterns of practice'; then pausing to say that she was aware that the student may feel anxious about contradictory teaching and reflected on the stress and confusion that this may generate. Both midwives thus struggled to combine an awareness of multiplicity with the need to perform univocality. Neither they nor we have a solution on how to strike a balance but our discussion and their comments suggests that the search for the post-modern professional cannot be divorced from the search for the post-modern mentor or instructor.

Second, our discussion and research emphasizes the active and proactive role that novices perform and must play as authors of their own socialization. This idea, which is implicit in the notion that novices experiment with provisional selves Ibarra (1999), adds a further layer of complexity to our understanding of the process of professional socialization. While for the (reflexive) teacher the issue is: 'What identity will I perform today?', for the learner the question is: 'Which professional identity will be performed for me today?'. This poses a question that is specular to that discussed above, that is, how and to what extent can novices be exposed to multiplicity without affecting their learning process (and confidence)? How can novices be helped in taking both relativist and non-relativist approaches? Creating the post-modern professional will thus also require delving into the nature of what one might term 'the post-modern novice'.

Third and last, attempting to grasp professional practice in a way that goes beyond individuals' discretionary decision-making, beyond stable communities and given knowledge draws the attention to the critical role of tools and materials in both anchoring and displacing professional identity as a stable, coherent and univocal phenomenon.

As we have shown in the foregoing sections, symbolic and material artifacts often operate as powerful anchors of professional identities (Swidler 2001). While mediating the scene of action, a universe of knowledge and histories of use (Kaptelinin and Nardi 2006), Pinard stethoscopes and *robozos*⁵ (and of course classes and books) foster the performance of one specific genre of practice, which in turn is linked to a specific professional identity.

However, tools can also derail, interfere and surface the co-existence of different professional identities. As we have seen, tools such as the ITTD not only reveal the plurality of professional self to the researcher but also act as a diffractive tool for the practitioner. Tools such as ITTD and other techniques such as video-reflection and the use of movies in the process of socialization (Scanlon 2012b) subvert normative readings and accounts of our everyday practices and thus render one or more alternative courses of action plausible.

Finally, tools may also help to address some of the issues raised above. If handling competing identities in discourse is difficult (after all, we live in a society which still abhors dissonance and conflict) maybe we should turn towards tools. Deliberately equipping novices with tools carrying different identities may help individuals come to terms with professional alternatives and contradictions more effectively than merely exposing them to different discourses.

⁵ Note: In Mexico a *robozo* is a shawl or scarf used for various midwifery tasks.

REFERENCES

- Abbot, A. (1988). *The System of Professions*. Chicago: University of Chicago Press.
- Barad, K. (2011). Erasers and Erasures: Pinch's Unfortunate 'Uncertainty Principle'. *Social Studies of Science*, 41(3), 1-12.
- Bourdieu, P. (1980). *Le Sens Pratique*. Paris: Minuit.
- Clot, Y. (1999). *La Fonction Psychologique du Travail*. Paris: Presses Universitaires de France.
- Cot, Y. & Faïta, D. (2000). 'Genres et styles en analyse du travail. Concepts et méthodes'. *Travailler* 6 7-42.
- Clot, Y., Faïta, D., Fernandez, G., & Scheller, L. (2001). 'Entretiens en autoconfrontation croisée: une méthode en clinique de l'activité'. *Education permanente*, 146, 17-25.
- Clot, Y., & Kostulski, K. (2011). 'Intervening for Transforming: The horizon of action in the Clinic of Activity'. *Theory and Psychology*, 21(5), 681-696.
- Cotter, R., & Cullen J. (2012). 'Reflexive Management Learning: An integrative Review and a Conceptual Typology'. *Human Resource Development Review*, 11(2), 227-253.
- Cunliffe, A., & Jun, J. (2005). 'The Need for Reflexivity in Public Administration'. *Administration and Society*, 37(2), 225-242.
- Cunliffe, A. L. (2003). 'Reflexive inquiry in organizational research: questions and possibilities'. *Human Relations*, 56(8), 983-1003.
- Du Gay, P. (2007). *Organising Identity: persons and organizations after theory*. London: Sage.
- Fish, S. E. (1980). *Is there a text in this class?: the authority of interpretive communities*. Cambridge, Mass ; London: Harvard University Press.
- Franzak, J. K. (2002). 'Developing a teacher identity: The impact of critical friends practice on the student teacher'. *English education*, 34(4), 258-280.
- Freidson, E. (2001). *Professionalism, the third logic: on the practice of knowledge*. University of Chicago Press.
- Garfinkel, H. (1967). *Studies in Ethnomethodology*. Englewood Cliffs, New Jersey: Prentice Hall.

- Gherardi, S. (1995). 'When will he say: "Today the plates are soft"? The management of ambiguity and situated decision-making.'. *Culture and Organization*, 1(1), 9-27.
- Heidegger, M.(1929/1996). *Being and Time*. Albany: SUNY Press.
- Ibarra, H. (1999). 'Provisional Selves: Experimenting with Image and Identity in Professional Adaptation'. *Administrative Science Quaterley*, 44(4), 764-791.
- Jenkins, R. (1996). *Social Identity*. London: Routledge.
- Jordan, B. (1989). 'Cosmopolitcal Obstetrics'. *Social Science and Medicine*, 28(9), 925-944.
- Kaptelinin, V., & Nardi, B. (2006). *Acting with Technology: Activity Theory and Interaction Design*. Cambridge MA: MIT Press.
- Keevers, L., & Treleaven, L. (2011). 'Organizing Practices of Reflection: A Practice Based Study'. *Management Learning*, 42(5), 505-520.
- Lincoln, Y. S., & Guba E. (1985). *Naturalistic Inquiry*. London: Sage.
- MacIntyre, A. (1981). *After Virtue: A Study in Moral Theory* (1st ed.). London: Gerald Duckworth & Co Ltd.
- Markus, H., & Nurius, P. (1986). 'Possible Selves'. *American Psychologist*, 41(9), 954-969.
- Mead, G. H. (1934). *Mind, Self and Society*. Chicago: University of Chicago Press.
- Nicolini, D. (2009). 'Zooming in and Zooming out: Studying Practices by Switching Theoretical Lenses and Trailing Connections'. *Organization Studies*, 30(12), 1391-1498.
- Nicolini, D. (2011). Practice as the Site of Knowing: Insights from the Field of Telemedicine. *Organization Science*, 3(22), 602-620.
- Nicolini, D. (2012). *Practice Theory, Work and Organization: An Introduction*. Oxford: Oxford University Press
- Oddone, I., Re, A., & Briante, G. (1977). *Esperienza Operaia, Coscienza di Classe e Psicologia del Lavoro*. Turin: Einaudi.
- Pfadenhauer, M. (2006). 'Crisis or Decline?' *Current sociology*, 54(4), 565-578.

- Phillips, D., Fawns, R., & Hayes, B. (2002). 'From Personal Reflection to social positioning: the development of a transformational model of professional education in midwifery. *Nursing Inquiry*', 9(4), 239-249.
- Raelin, J. (2001). 'Public Reflection as the basis for learning'. *Management Learning*, 32(1), 11-30.
- Scanlon, L. (2011). 'Becoming' a Professional. In L. Scanlon (Ed.), *"Becoming" a Professional. An Interdisciplinary Analysis of Professional Learning* (13-32). London: Springer.
- Scanlon, L. (2011). White Coats, Handmaidens and Warrior Chiefs: The Role of Filmic Representations in Becoming a Professional In L. Scanlon (Ed.), *"Becoming" a Professional. An Interdisciplinary Analysis of Professional Learning* (Vol. 109-127). London: Springer.
- Schatzki, T. (1996). *Social Practices: A Wittgensteinian Approach to Human Activity and the Social*. Cambridge: Cambridge University Press.
- Suchman, L. (1987). *Plans and Situated Action: The Problem of Human Machine Interaction*. New York: Cambridge University Press.
- Swidler, A. (2001). *What Anchors Cultural practices*. In Schatzki, T.R., Knorr-Cetina, K. and von Savigny, E. (eds). *The Practice Turn in Contemporary Theory*, pp74-92. London: Routledge.
- Vygotsky, L. S. (1997). *The Collected Works of L.S. Vygotsky: Problems of the Theory and History of Psychology*. New York: Plenum Press.
- Weintraub, J. (1997). The theory and politics of the public/private distinction. In J. Weintraub & K. Kumar (Eds.), *'Public and private in thought and practice: Perspectives on a grand dichotomy'* (1-42) Chicago: University Of Chicago Press.

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