Deciphering teachers’ paths to their disciplinary professional identities can make important elements of their tacit knowledge explicit and available to their students.

**Intuitions and Instincts: Considerations for Decoding Disciplinary Identities**

Ron MacDonald

Interviews of teachers seeking to help students overcome learning bottlenecks are the first steps in a process of Decoding the Disciplines (Pace and Middendorf 2004) pioneered in the History Department at Indiana University. The aim of a Decoding interview is to build precise understanding of the bottleneck in question and to identify the operations or steps experts would take and students must master to get through the bottleneck. Teachers then determine how, as experts, to model the operations or steps for their students, how to provide effective opportunities for students to practice and receive helpful feedback on the operations or steps, how to assess student progress, and how to share results with other teachers in the program or discipline. The steps needed to get through the bottleneck may be identified in a Decoding interview by inquiring of the teacher interviewee what steps she took in overcoming the difficulty when she was a learner or apprentice herself, or by asking her what an expert would do to overcome the difficulty, or both (Diaz, Middendorf, Pace, and Shopkow 2008).

Decoding the Disciplines interviews conducted with faculty members at Mount Royal University (described in Miller-Young and Boman, this issue) bumped up against not only the interviewees’ professional identities as teachers, always by definition in play in the interviews, but specifically their disciplinary professional identities as, say, nurses or journalists. Interviewers in these situations (including the present author) did not pursue discussion of disciplinary professional identities as such in much depth or breadth. We might have done, though, because unpacking the ways and means by which disciplinary professional identities are
constructed and frame professional practices has the potential to reveal important knowledge often hidden from the identities’ bearers and, therefore, from their students who are trying to find their way into the professions and disciplines in question.

The principal purpose of this chapter is to suggest how key conceptualizations of identity in contemporary variants of identity theory might offer tools with which Decoding interviewers could explore professional disciplinary identities more deeply and widely, thus uncovering additional elements of interviewees’ professional tacit knowledge which otherwise go unreflected and remain mysterious to students.

**Identity and learning**

Connections between higher learning and identity are increasingly well established and are understood in increasingly complex ways. Psychology undergraduates who self-identify strongly as psychology students have been shown to learn more deeply, and their deeper learning has been shown to further strengthen their self-identity as psychology students (Platow, Mavor, and Grace 2013). Teaching to foster in students “the disposition to learn for oneself” and the ability to monitor one’s own learning and studying and to adapt these activities to make them as effective as possible are key in the practice of excellent teachers and manifestly engage students’ identities as students (Entwistle 2009).

Learning often or perhaps always is “initiation into a practice”, among other things, and any practice is “intertwined” in a specific way or ways with the learner’s self and sense of identity (Smeyers and Burbules 2006, 448-449):

Some practices thrive on the possibility of multiple or alternative identities; others exemplify and enforce a more static identity. In both cases our relations to others and to ourselves will be changed. Practices transform the self . . . (449).
In other words, learning in professions is taking on “professional ways of being” (Dall’Alba 2009a, 2009b). Higher learning means entering into “the roles of the game” (Tandoc 2014).

Prediger (2001) offers what might be considered a limit argument as to the involvement of identity in learning. She argues, and cites others in mathematics, philosophy, and anthropology in support, that mathematics, the discipline that might be considered the purest of all in terms of learning, actually needs to be understood as a culture, “and whenever we expect students to learn mathematics they are confronted with an intercultural learning situation” (163):

[T]his perspective runs counter to the classical approach to mathematics, which views it as objective science, in which ultimate truths are discovered and indubitable knowledge is collected in a cumulative fashion. . . . [E]ven in mathematics, results are sometimes falsified, and the main criterion for the correctness of mathematical proof is social acceptance within the community (165).

Prediger (2001) notes that intercultural learning can’t confine itself to the cognitive realm, but must also address and if possible change attitudes and behaviour. Students must learn "what specific characteristics are associated with the mathematical approach to the world”, how to apply “mathematical strategies and concepts to everyday thinking”, and how to look at the world through “mathematical glasses” (167-168). The achievement of these aims is an intercultural enterprise because students come to the table already immersed in, constructing their identities in, their everyday cultures.

All of the ways in which identity is entangled in learning make hurdles, often very high hurdles, for students, and while the learning and teaching element of this entanglement has received much attention, not as much work has been done on understanding the identity element. The relatively less thorough exploration of the identity element in learning matters for two
significant reasons. First, a new identity, or new, important aspects of identity, can be very
difficult for students to take on board.

Two of the originators of the Decoding the Disciplines process have reported with
colleagues on their exploration of one key aspect of students’ identities in the Indiana University
Affective Learning Project (ALP). That research identified emotional barriers to student
acquisition of disciplinary professional ways of thinking in the discipline of history, and noted a
growing literature on the affective dimensions of conceptual change. A key source of the
emotional learning bottlenecks analyzed in the Indiana ALP was the preconceptions students
brought into the tertiary classroom from their primary and secondary school experiences of
learning history and from their out-of-school lives in specific class, ethnic, racial and other social
locations (Middendorf, Mickute, Saunders, Najar, Clark-Huckstep, and Pace 2015).

Second, the relatively less thorough exploration of the identity element in learning
matters because important parts of that element may be invisible to experts already established in
a discipline: the identity is lived rather than being necessarily reflected upon. Experts, then, face
some difficulty in helping their students over the identity hurdle.

**Professional Identities in Decoding Interviews**

It has been notable in Decoding the Disciplines bottleneck interviews conducted at Mount Royal
University how readily the interviews have encountered aspects of interviewees’ disciplinary
professional identities. Two examples will show what is meant.

A Decoding interview with a nursing teacher and professional nurse whom we will call
Louisa concerned a chronic problem in a foundational introduction to pathophysiology and
pharmacology: students had persistent difficulty in relating what they learned about processes in
the human body at the cellular level to symptoms of illnesses they were expected to diagnose.
Following Decoding the Disciplines practice, interviewers asked Louisa to think about her own ways of thinking and practicing when it came to diagnosing illness. There was discussion about whether nurses typically in practice would think about a patient’s symptoms on the cellular level and relate cellular-level thinking to the symptoms. Louisa said many nurses would not think through the problem on a cellular level. Interviewers pursued the matter.

Interviewer: Does … a nurse – a practicing nurse – day to day need to know those cellular processes? What does a nurse on a ward do, versus what you are asking them to do in the class?

*When we are teaching it is sort of backwards to the way nurses work on the unit, because nurses working on the unit need to make decisions quickly, and it is all about being able to know what you need to look at in order to make a decision in order to take care of a patient properly. . .Often times students are in the dark about that because they don’t have the experience to feed back on . . .*

Discussion ensued around the complexity of the relations between cellular theory and nursing practice, Louisa concluding that what she might be asking students to view as a linear process in her classes is not in practice anything like a linear process and is further complicated when considering the social factors affecting the patient. Louisa was asked to describe how she learned diagnostic practice as a nurse.

*I learned a lot from my practice in Emerg when I first started there . . . My first day I brought my textbooks thinking that if I had a patient I would look things up and figure it out, and I remember a nurse there said, I had a patient I would look things up! ’ and then . . . literally I was taking care of patients by noticing what I saw and learning from some constellation of symptoms and . . . signs.*
Interviewer: Does one get better and better at that kind of thing?

I think so . . . because . . . they develop an intuition and they have taken care
of a patient before and like, theyn’t put my finger on that, but I know there is some
thing wrong and I know that patient is going to go sour; ’ and sure enough that patient
goes sour even though they don’t have any clear indication, they can’t back it up with
any evidence, they just have a feeling . . . and that is when an expert is talking.

Louisa’s skills as a nurse are lived. Nurses’ intuition is a celebrated element of nurses’
disciplinary professional identities, and a subject of theorizing in nursing scholarship (Payne
2015).

A Decoding interview with a journalism teacher and professional journalist we will call
Bonnie focused on her students’ difficulties in developing ideas for good news stories. The
ability to develop ideas for interesting, topical news stories is fundamental to success as a
journalist. The ability has names in journalism practice: a nose for news, gut instinct; and it is a
subject of theorizing in journalism scholarship (Schultz 2007, Kronstad 2014). Bonnie was asked
why, in her view, students lacked the nose for news.

They don’t seem to hear and see the things that I think as a journalist I hear
and see. When I have a conversation with someone over the years I have realized - it
is really tough on my friends and my circle of acquaintances – but everything you say is
potential fodder for a story idea.

What else goes into Bonnie’s acute ability to develop good news stories?

When working actively as a journalist . . . I stay abreast of what other people are doing
in terms of news content, and in the way that I engage with that content

in terms of story ideas is that I am constantly looking for what do they cover? What are
the gaps? What is it that follows? . . . What did they miss? Who did they not talk to? ’

Often what they miss is a face of the story, or people who are marginalized or
disenfranchised, and that is often a big missing piece for me. . . .

How does Bonnie know to ask those kinds of questions?

I am not sure, like how is it that I just know? I just know . . . and I think
maybe being well read and being on the planet for a little while certainly contributes
to helping identify this stuff. . . from a cultural studies side of things, or critical
studies really, I am aware that there are haves and have-nots, I am aware there are
power differentials . . .

Further exploration with Bonnie of the significant difference between her own instinct for
good news stories, clearly a key element of her professional disciplinary identity as a journalist,
and her students’ profound difficulty in developing a similar instinct ran into the affective
dimension of failed professional disciplinary identity formation, an emotional bottleneck.

Those unexplored angles . . . when you pull them up to the surface they are
typically tension-laden. . . And this is the part that the students . . . are afraid of
the tension and they are . . . ‘Oh, you just want a lot of negative stories,’ and it is
no, I want tension-filled stories! . . . They seem afraid of the tension, they seem
afraid of the negativity and afraid of the conflict . . .

A professional journalist’s so-called “nose for news,” her ability to spot (or construct) a story
that needs to be told, is an example of an attribute central to her disciplinary professional identity
but profoundly difficult for her students to acquire.

The journalist’s nose for news and nurse’s intuition are key elements of the specific
perspectives on reality with which these professional disciplines operate. They are key elements,
too, of the lived disciplinary professional identities of journalists and nurses. Students in journalism and nursing programs are being directed into those lived disciplinary professional identities in spite of the cognitive and emotional learning bottlenecks encountered along the way.

The process as it stands, however, is seriously inefficient. Time is wasted and emotional prices are paid trying to get through the bottlenecks. Some students don’t get through and so do not realize their dreams of becoming journalists or nurses. So long as key elements like the nose for news and nurse’s intuition are acquired more or less unconsciously, by repetition, by emulation in the workplace, by the gradual acquisition of disciplinary languages, the resulting disciplinary professional identities are likely to be largely the same as last year’s, and the year’s before, and the year’s before that (Stibbe 2011).

The acquisition of professional disciplinary identities might usefully become a fully conscious process, a process reflected upon critically by its subjects, a process deconstructed and open to change by its subjects. Introducing insights from identity theory into the decoding interviews could help open doors to such understandings as where the nose for news or nurse’s intuition come from, of what roles they play in journalists’ or nurses’ professional identities, or of how they contribute or fail to contribute to the futures of the disciplines.

**Identity Theory**

Contemporary identity theory offers potential help for interviewers and interviewees exploring disciplinary professional identities as part of a Decoding the Disciplines process. Ordinary-life reflections on identity may be said to focus most often on relatively coherent, steady-state conceptualizations with limited or even singular aspects and originating paths. But the late cultural theorist Stuart Hall has noted that this kind of everyday conceptualization of identity prevails “only because we construct a comforting story or ‘narrative of the self’ about
ourselves” (Hall 1996, 598). (Not all such stories, of course, are necessarily comforting.) In contrast, identity theory in all of its various flavours conceptualizes identity as always evolving, many-sided, multivoiced, situational, with both self-reflected and un-reflected elements, and arising from a multitrack set or system of origins.

Instead of asking what are people’s roots, we ought to think about what are their routes, the different points by which they have come to be now; they are, in a sense, the sum of those differences. . . . These routes hold us in places, but what they don’t do is hold us in the same place. We need to try to make sense of the connections with where we think we were then as compared to where we are now. That is what . . . the stories we tell ourselves or the autobiographies we write are meant to do, to convince ourselves that these are not a series of leaps in the dark that we took, but they did have some logic . . . a logic of connected meaning (Hall 1999, 2).

**Narrative Identity Theory.** Narrative identity theory is particularly concerned with those routes Hall suggests we consider. Narrative identity theory is about how and why humans establish meaning in their own and others’ lives through story-telling and, in the process, become agents in building their own and others’ identities, always within specific social-cultural contexts (Brockmeier and Carbaugh 2001). Narrative identity theory in its strongest expressions posits that identity cannot be thought, indeed may not even be possible, without narrative construction.

Discovering the narrative routes by which people construct identities is not a simple matter. People follow more than one narrative route in constructing their identities, and they construct multiple identities and construct those identities repeatedly. Individuals’ narratives of self include both real and fictive elements (Brockmeier and Harre 2001). The constituents and elements of narrative structures in individuals’ self-stories: plots, storylines, points of view,
characters, voices and genres; and the structures themselves are flexible and unstable (Brockmeier and Harre 2001, Freeman and Brockmeier 2001).

... it is an essential characteristic of narrative to be a highly sensitive guide to the variable and fleeting nature of human reality because it is, in part, constitutive of it. ... The study of narrative invites us to rethink the whole issue of the Heraclitean nature of human experience because it works as an open and malleable frame that enables us to come to terms with an ever-changing, ever reconstructed reality. (Brockmeier and Harr 2001, 53).

Precisely as an open and malleable frame, the narrative frame offers means of understanding the ever-changing, ever reconstructed reality that is anyone’s disciplinary professional identity or "set" of always-provisional disciplinary professional identities.

Not all of an identity is narrated consciously by its bearer. The stories of any individual’s disciplinary professional identities are shaped by the individual’s own struggles to make sense of her life, and, without the individual necessarily being at all or wholly conscious of the fact, by taken-for-granted models, by social-organizational constraints, by listeners’ reactions, and by those who tell stories to and about the storyteller (Gregg 2006, Holstein and Gubrium 2000, Pasupathi 2006, Shoemaker and Reese 2014, Laing 1993). In what today is for most people an extremely complex lived world, an identity is an on-going enterprise constantly in revision and requiring constant maintenance (Holstein and Gubrium 2000).

**Sociological Components of Identity.** A thoroughly developed and empirically founded theory of how identities actually operate is offered by Burke and Stets (2009) through the lens of sociological social psychology. Relying on the results of more than a decade of research, they characterize an identity as being made up of a system of “four basic components: an *input*, an
identity standard, a comparator, and an output” (Burke and Stets 2009, 62, italics in original). A person’s identities are maintained or altered by the operation of these components in a "constant loop": perceptions (inputs) from the environment of, say, how feminine a person’s behaviours are, are compared (comparator) with the person’s understanding of what feminine behaviours should be (identity standard) and new behaviours are executed (outputs) to maintain the feminine identity or to improve it or alter it. The system is in default conservative, working to maintain or verify the identity in relatively close alignment with the identity standard.

The operation of this system for maintaining or altering an identity can be studied empirically, determining the bases, influences and evolutions of the meanings by which the identity-bearer orders her world, the meanings conveyed to or imposed upon her by the social structures she lives and by her interactions with others, the resources she draws upon to maintain or strengthen her identity, the agency she exerts in deciding to strengthen or weaken an identity by, say, increasing or reducing her commitment to a particular role, and the processes by which she maintains her multiple identities (teacher, biologist, life partner, feminist, manager) in a sustainable totality. The Burke-Stets system opens the door, too, to studying the affective as well as the cognitive elements and processes of identity verification and identity change.

**Dialogical Self Theory.** Important help in grasping the complexities of the processes by which people maintain or alter, or suffer the maintenance or alteration, of their multiple identities, especially as these processes are further complicated by the globalization of relevant factors, is offered by dialogical self theory (Hermans and Hermans-Konopka 2010). Dialogical self theory is interested in how people position their selves in global as well as local contexts. It is dialogical theory because it conceives the person

... in terms of a dynamic multiplicity of I-positions or voices in the landscape of the
mind, intertwined as this mind is with the minds of other people... Dialogues may take place among internal positions in the self (e.g., or voices in the landscape or between my position as a father and my position as a hardworking scientist I found a workable solution as a father and my position as a hardworking scientist I found a
t son of my father I’m used to talking with him about my successes and

disappointments...”) and between external positions of the self (e.g., “Two colleagues . . . solved their serious conflict and I learned a lot from that”) (32).

Dialogical self theory reads emotions and the self as mutually constitutive. It suggests there is a dialogical relationship worth studying in depth between the emotional “I” and the reasonable “I”. It regards the emotional processes constitutive of the self as complex, staged processes open to analysis.

**Decoding Identity**

In the tapestry of identity theories available to contemporary researchers, the fundamental stake is the tension between the social construction of identity and the self-construction of identity. In Decoding the Disciplines interviews, and the follow-on elements of the Decoding process, the ultimate stake is the ability of students to acquire, by way of conceptual change among other things, the ways of thinking, practicing and being, specific to the discipline in question. The available identity theories (and the descriptions above are only a limited, partial account of just some aspects of some theories) in their current states of development offer conceptual tools for detailed analysis of identity, including analysis of how students acquire disciplinary professional identity.

From narrative identity theory, Decoding interviewers could have invoked lines of discussion aimed at elaborating the interviewees’ stories of how, when and why their
perspectives on reality changed as their professional identities developed; of what meanings they had ascribed to their lives and how and why these had changed in light of the development of their professional identities; of when and how they believed they had been agents in constructing their own or others’ professional identities; and of when and how they had felt themselves to have had little choice in constructing their professional identities.

Narrative identity theory could inspire discussions of how interviewees’ professional development had followed particular plot lines, involved certain characters in certain roles, lent itself to being understood via certain tropes, encountered specific challenges en route, and been sidetracked or followed different routes at different times (such as professional versus teacher identities).

Narrative identity theory could open the door to exploring how the discourse of journalism practice or of nursing practice shapes professional identity and of how that discourse might be changed to offer different models of professional practice and professional identity. Decoding interviewers might begin exploring narrative identity by asking, “if you were asked to tell the story of how you became a true professional as a journalist, where would you begin?” Developing the interviewee’s story, interviewers might ask, “what metaphors would you use to describe the most difficult parts of becoming a professional as a nurse?”

Identity theory founded in sociological social psychology could direct interviewers to exploring Burke’s and Stets’ four basic components of identity. Interviewers and interviewees thus could try to identify the inputs to professional journalism or nursing identity, the identity standards against which these disciplinary identities are measured, the machinery for maintaining the identities in question, and the outputs of those disciplinary professional identities. Each of these elements could be addressed critically: what changes might be warranted, what aspects
might be found missing, what agency is permitted to the identity’s bearer, what are the affective dimensions of the identities seen through a Burke-Stets lens? A Decoding interviewer working with Burke’s and Stets’ schema could ask, “What are the key resources you call upon to maintain your professional identity as a journalist in the face of challenges to that identity?” Exploration of the dimensions of professional identity more felt than reflected might start with, “What are the most important elements of a nurse’s professional identity that are discussed by nurses only informally, if at all?”

Dialogical self theory could inspire exploration of the interior and exterior conversations constitutive of journalists’ and nurses’ professional identities. When and where had these conversations occurred in interviewees’ experiences? Which of these conversations were useful and which were not? What conflicts or synergies had been noticed between professional identity and other identities and how had these been confronted or exploited? Interesting questions might be asked in light of a dialogical theory of professional identity. “Do you have more than one kind of journalist inhabiting your journalist’s professional being?” “What conversations does your private, personal self have with your professional nurse’s self around how you want others to see you?”

Through all of these discussions, interviewers and interviewees would be looking constantly for the constitutive elements of the disciplinary professional identities at issue, and for the interplay between the emotional “I” and the reasonable “I” on each stage of the journeys to those identities, all in order to enable discussion and instruction with students. For Decoders, the proposals made here can constitute a rich program of learning, research and development, and ultimately a boon for students.
References


Dall’Alba, Gloria. 2009b. Learning to be Professionals. New York: Springer.


Middendorf, Joan, Jolanta Mickute, Tara Saunders, José Najar, Andrew E. Clark-Huckstep, and David Pace, with Keith Eberly and Nicole McGrath. 2015. “What’s feeling got to do with it? Decoding emotional bottlenecks in the history classroom.” Arts and Humanities in Higher Education 14 (2): 166-180.


RON MACDONALD has been a college and university teacher of political science, political philosophy and journalism for 35 years. He was a working journalist for 30 years.