

3 Can we de-pedagogicise society?

Between “native” learning and pedagogy in complex societies

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Introduction: “native learning”

In this chapter I will address and analyse claims that argue that we need to turn to what has been lost through pedagogicisation, and that we need to de-pedagogicise society. I will discuss the limitations and the potential of *going native* in an apparently over-pedagogicised society, through reflecting on the questions: How do we understand pedagogicisation in relationship to learning? Is pedagogy, or teaching as a separate register unique? How do we understand a teaching register, and (why) do we need it? Can we speak at all of a “natural” way of learning removed from communities of practice?

My interest in these questions stems from when I travelled in the 1990s to the Mazahua region in Mexico to study how children learn in a Native American community, a community that was drastically different from my own. At that time, my motives were not limited to understanding learning and teaching in that community but my ultimate aim was to understand learning across communities. I wanted to understand why certain forms of learning and teaching were happening in some places and not in others, and if it would make sense to learn from how other communities undertake the job of teaching the young. Given the literature on Native American learning that claimed that in these communities children learn remarkably well from observation, independently from adult instruction, a large part of my attention was drawn to the question: Is there something that can be called a “pedagogy” in this community, and what does it look like? (de Haan 1999, p. 224). And how can I describe this pedagogy, and how does it relate to what pedagogy is in my own culture and in the scientific record?

I found that in the community I studied, a teaching *register*, as a way of thinking and talking about teaching as I knew it, did not exist. This was apparent from one of the first interviews I conducted with a Mazahua mother who lived somewhat away from the central village. She was kind, and curious enough to endure the flood of explorative questions that I had prepared to help ensure that I would come to understand their way of doing pedagogy. It was only after a while that I discovered my interviewee and I did not share the same language and underlying concepts, as illustrated in Box 3.1.

BOX 3.1 Research interview

The interview takes place in the yard of the mother's home, where her children are playing. We both sit on the ground, and she is holding an approximately 1-year-old baby. I have carefully formulated my questions, so as to make sure that my question do not reflect a certain interpretation of teaching or learning. I asked questions such as: 'How do you as a parent make sure a child learns?'; 'How do you show a child something (*Cómo usted enseña un niño*)?' The mother seemed surprised by my questions, but also confused. In the following, M = mother and I = Interviewer:

M: *Pero ... , nadie ... , le enseñamos, para que aprende si.* M: *But ... , nobody, we showed him, so that he learns, yes.*

As I felt we were getting there, I continued to ask her for a certain rationale, a methodology.

I: *¿C ómo se enseña una cosa que un niño no sabe? Cómo se enseña?* I: *But how do you show something a child does not know? How do you show (something)?*

This kind of questioning and probing did not help her, and although she was very willing to help me out, she felt obviously awkward and embarrassed with this line of inquiry. After trying out a number of variations, and asking how she would go about situations in which she wanted her son to know something that he did not yet know, the mother concluded, laughingly:

M: *es que yo no sé, la verdad es que no sé.* M: *I don't know, really, I don't know.*

I insisted that I was not asking her about something that she did not know, as this was something related to her daily practice with her son. The mother looked puzzled and suggested:

M: *para hacer de qué, de trabajar o de...* M: *To do what, to work, or...?*

I: (encouraging her) *Sí, vamos a hablar de un ejemplo, no?* I: *Yes, let's talk about an example,*

I: *Qué cosas él aprendió de usted, que cosas usted enseñó, usted a él de hacer...* I: *What he learnt from you, what things you show him, - you to him, to do...*

M: *Yó a el...* M: *Me to him...*

(Continued)

(long silence)

(long silence)

I: Son muchas, me imagino. A ver, él sabe cocer el agua?

I: There are many things, I suppose. Let's see. He knows how to boil wáter?

M: Él sí.

M: He, yes.

I: Quién le enseñó a él?

I: Who showed him this?

At that point, the mother starts laughing, very relieved.

M: Ahhh, ya lo entendí.

M: Ahh, I already understand.

I: Ahh, ¿a ver? (both laugh) Entonces cómo?

I: Ahh, you see. (both laugh) So, how?

M: Pues, yo dice que va a cocer el agua, así, así, se coza (laughs), así.

M: Well, I tell him that he is going to boil water, like that, you boil (laughs), like that.

Source: de Haan (1999, p. 90)

Interestingly, it was only when we talked about the life sphere of work that the mother started to finally feel comfortable. All of my attempts to get her to tell me a story using educational language seemed futile. Only when she understood that I wanted to know how she gets her son to work, did she feel that I was tapping into something familiar. This finally resulted in her sharing some kind of script that described how this was accomplished, although the *how* was more related to the world of work, and certainly not to any educationalist discourse of pedagogy.

In addition, I found that, although teaching was not signalled by her as a separate speech register, there was certainly much guidance by the mother in evidence, guidance that was mostly smoothly integrated into productive activities. Sometimes, however, this kind of guidance was marked as such, for instance, when skilled workers needed to slow down activities such as when sowing maize, or building a market stall, or when a child could not keep up with the rhythm of labour or when making mistakes. My conclusion was that in this community, clear motives to “learn” as well as “teaching” efforts could be distinguished; for instance, when elders would encourage a child to observe carefully or scold a child when s/he did not pay attention. However, these teaching and learning opportunities were created without taking away children’s responsibilities as full participants and community members (de Haan 1999, 2002; Paradise & de Haan 2009). For instance, feedback given by parents was not directed towards the learning process of children (e.g. ‘you are already doing better’), but only related to the successful pursuit of activities (e.g. ‘you were supposed to do it like this’).

Although at the time this work provided me with an answer to the question of whether there is a “pedagogy”, and what it looks like in this Native American context, it did not help me to understand learning and teaching across societies. How this so-called “unpedagogicised” guidance, or perhaps alternative kind of pedagogicisation, related to formal and informal learning in my own society was a question to which I kept returning.

According to Depaepe and Smeyers (2008) the idea of Pädagogisierung (a German “umbrella” word that does not translate easily into English) was put forward by Michael-Sebastian Honig at the end of the twentieth century as meaning: “the institutionalization of childhood as a social subsystem, thus identifying an independent range of functions that prepared the new generation for participation in culture, politics, and the economy” (Depaepe & Smeyers 2008, p. 379). It stood for the tendency to colonialise informal life spheres, such as leisure time or family life, using the register of schooling to capture these spheres in order to make them work for an educational agenda. Similarly, Sefton-Green (2015) has noted that ‘we are living through an era where the “creep” of pedagogicisation will inevitably penetrate all aspects of the individual life world’ (p. 57).

For instance, one can speak of the pedagogicisation of family life when parents feel the pressure to regulate the growing up of their children in such a way that family activities are spent in educationally smart ways to maximise developmental outcomes for their children. Indeed, scholars have recently drawn attention to the phenomenon of hyper parenting, pointing to the fact that in particular in middle-class milieus, parents feel an increasing pressure and responsibility to control and monitor their children’s lives (Furedi 2008). These ever-more rationalised, controlled and designed childhoods are justified by claiming to reduce potential risks or damage to children, and to ensure social and educational success. According to this literature, *parenting* becomes another separate identity for adults, as a pedagogicised life sphere that takes over from other informal social spheres.

In response to this *over-pedagogicisation* some have argued that we need to return to earlier, forgotten, so-called “natural” practices of teaching and learning. The argument for returning to our “natural” habitus of learning is often based on the idea that we are overestimating our capacities to teach while we are underestimating the more “natural”, in-built, inherently human capacity to learn to become members of expert communities without rationalising or institutionalising this process. Indeed, opposing pedagogicisation is easy to imagine. Depaepe and Smeyers (2008) state that pedagogicisation ‘could easily be read in oppositional terms, over against autonomy, liberation, and independence – due to increased dependence, tutelage, patronization, mothering, infantilization, [and] pampering’ (p. 382).

It is precisely this resistance to pedagogicisation that is addressed in calls to return to “natural learning”, questioning whether we haven’t gone too far in our attempts to implement pedagogical regimes. Often the argument for this opposition to pedagogicisation is that it has detrimental effects on children, or on

learning, such as withholding children's rights to adult responsibilities and identities, or creating too much dependency by children on teachers (e.g. Depaepe & Smeyers 2008).

At the same time, I want to relate these claims to those who argue for the further sophistication of pedagogy given that we are living in an increasingly socially and technologically complex society. Our current educational system is designed for the industrial age (Robinson 2011) whereas new forms of knowledge production ask for a new paradigm for learning and teaching (Lankshear, Peters & Knobel 2000; Ito et al. 2010). Here I will ask: (How) do evolutionary and sociocultural perspectives on learning claim we are, or should be, developing more complex pedagogies? Can we – without serious consequences – “return” (if it is a return at all) to so-called earlier and presumably more basic forms of learning and teaching without acknowledging the socio-historical development of a society or community? Are we caught up in a sociocultural–evolutionary development that urges us to take the next step and come up with new paradigms of teaching and learning as some are claiming? Linking the issue of de-pedagogicisation to a socio-developmental approach complicates the answers to these questions but provides a necessary lens to understanding issues of pedagogicisation in complex societies.

Are we over-pedagogicised? A return to the “natural” way to learn?

Although this question could be discussed in a number of different ways, here I want to examine the study of learning in so-called non-pedagogicised communities. The work of David Lancy (2015) makes a key contribution to this field, although it is possible to see the work of many others in this same line of reasoning (Adams & Coulibaly 1985; Paradise & Rogoff 2009; Rogoff 2014). Drawing upon a large record of studies on learning in non-Western communities, Lancy (2015) claims that Western schooling is antithetical to the usual way children learn in most countries across the world. Lancy raises the challenge that resistance to academic learning derives from the fact that children are cut off from their more natural habitus of learning claiming that teaching is historically and cross-culturally rare, and appears to be unnecessary in order to transmit culture or to socialise children. Based on extensive reviews of the anthropological literature, Lancy (2016) concludes that: ‘teaching was extremely rare and did not seem to map onto any inventory of critical survival skills. In parental ethno-theories of “proper” child-rearing, teaching was specifically proscribed – even deemed harmful’ (p. 35).

While according to contemporary Western standards learning is organised top-down, and supposed to happen through the transfer of knowledge from experts/teachers to novices/pupils, the ethnographic record shows a pattern that is bottom-up, and happens through eager, self-initiated and self-directed learning, based on observation of, and gradual participation in, community practice.

Moreover, Lancy (2016) argues that more generally teaching is not a natural way to make learning happen. He claims that:

despite spending billions on developing curricula, methods, and teacher training, the schooling process, at least across much of the US, seems, by many measures, seriously deficient. There seems to be very little that is “natural” about effective pedagogy. On the contrary, promoting successful pedagogy seems like an engineering challenge comparable to sending humans to the moon.

(Lancy 2016, p. 56)

Even if it is the case that in Western societies teaching might be more necessary due the academic and complex nature of the tasks people need to master, there is evidence that in Western societies, educators do try to teach things children would learn by themselves. Lancy shows that there is a growing body of research that reveals that parents in Western middle-class families are unnecessarily using the teacher register for tasks that children can and have always learned by themselves, such as when teaching children to speak, to play with their peers or to play with toys (Lancy 2016, p. 38).

Lancy thus raises the fundamental question about the uniqueness of the teaching register to accomplish learning, suggesting that there is little evidence that “lessons” or learning plans about how to pursue a particular skill or behaviour can do anything else that is not already routinely present in human interaction such as speech or shared intentionality (Lancy 2016, p. 48). In fact, his argument can be read as a plea to reconsider our focus on the pedagogicisation of learning, as it makes adolescents too dependent on others, and ‘tames the autonomous learner’ (Lancy 2015, p. 326).

A similar argument has been developed by Peter Gray (2013) who argues that our current schooling model un-learns children to learn. Based on comparative anthropological and historical work he argues against the pedagogicisation of both schooling and everyday life. He states that there is evidence that humans have what he calls “educative instincts” which are minimally invasive or intrusive to others. Humans have a natural curiosity and a natural playfulness which motivates them to engage in culturally relevant activities, to explore and practise, and finally they have a natural sociability which allows learning to spread ‘like a wild fire’ to others (Gray 2013, p. 112). From the study of learning in hunter-gatherer societies, the history of education and play, the biological and psychological functions of play and alternative forms of schooling amongst others, he comes to the conclusion that children are biologically predisposed to take charge of their own education and there is no need for them to draw upon the forced lessons of standard education. Even worse, these only interfere with children’s natural ways of learning (Gray 2013, p. 6). This line of argument would define pedagogicisation, then, as taking children out of their own learning activities, and bringing them into the regimes of others to make them learn.

However compelling these arguments are, they leave us with a couple of questions, especially given the fact that key activities to be learned are not equal across societies. Indeed, how might Gray’s claims hold for societies that depend on, for instance, the teaching of complex literacy skills, theoretical physics or specialised surgery – skills that are both inaccessible and too complex for the eager learner’s

observation? Does the complexity and *inaccessibility* of some knowledge ask for a different and more formal pedagogical regime in which masters need to show the way, and skills need to be built step by step leading towards increasing complexity according to well-designed curricula? And how do these claims hold in a *global* information society with its new ways of producing, organising and accessing knowledge?

Learning versus pedagogy: (how) can the two be disentangled?

In a piece on pre-assumptions in the concept of tutoring,¹ Maier and Valsiner (1996) claim that while there is no doubt that human development is immersed in cultural transmission, it is less clear what the status of “tutoring” is for the discipline of developmental psychology (p. 27). In line with what others (Koops 2000; Depaepe & Smeyers 2008) claim about the nature of pedagogy, Maier and Valsiner define tutoring as intentional acts of a tutor towards a tutee that have a planned character, in which specific techniques of instruction are used that guide the learner and that attempt to impact learning outcomes, according to some culturally desirable outcome. Tutoring has a rational organisation, justified with/based on scientific notions of development or guidance that are characterised by means–end relationships. In this sense, tutoring is defined differently from any other goal-directed social interaction or from any “accidental” explorative learning of an individual child.

However, so they argue, this planned and intentional directing by the tutor happens irrespective of whether the learner accepts this direction. When considering the co-constructive nature of development in these tutor settings, that is, when considering that the learner is also an active agent in this kind of instructive interaction, and that his/her development is just as well defined by his/her own actions as those of the teacher, it becomes clear that the distinction between tutoring/teaching and other social interactions is relatively inexact. This is illustrated, for instance, in a study by Elbers et al. (1992) showing how a learner can resist or sabotage tutoring while setting her/his own goals relatively independent of the goals of the tutor. In other words, tutors might have an intention to steer the development of learners, but learners have intentions too, and in the process new goals can be constructed (p.28). Thus, tutoring is, according to Maier and Valsiner (1996), ‘dynamically goal oriented’, highly variable and unpredictable. In other terms, *actual* human development or learning is far more complex than can be conceived or captured in the planned and stepwise procedures of tutoring. Another reason for the relatively inexact distinction between this definition of tutoring and other social interactions is, as the authors state, that all types of interactions between a child and social others – where some kind of normative expectations are involved or problems need to be solved – could be seen as learning and exploration opportunities. Tutoring/teaching interactions are then, in terms of learning opportunities, and potential developmental outcomes, not very different from individual (playful, explorative, socially guided) learning, except

for one distinctive characteristic: the intention of the teacher and the rational, planned character of the interaction.

Do we need (more complex) pedagogies in more complex societies?

In order to argue whether teaching is basically a superfluous cultural register, and in particular whether this claim could also hold for complex societies, here I will present arguments from three different disciplinary fields: evolutionary psychology, sociocultural theories of learning and social-organisational aspects of teaching and learning.

- 1 In the field of evolutionary psychology the claim is made that a distinction can be made between those things for which learners are naturally equipped with the skills to learn without instruction, and those things that need instruction and which are typically associated with modern, specialised, complex societies.
- 2 Sociocultural theories of learning have made claims about the relation between learning and teaching and the increasingly complex nature of mediation.
- 3 Social-organisational accounts of the nature of teaching, in particular related to the institutionalisation of learning, give rise to reflections on the normative nature of pedagogicisation.

From the perspective of evolutionary psychology, it would not be possible to “go back” to the natural capacity of learners to learn in complex societies. The argument against going back to “natural” learning would be that learners can learn technologically simple activities that are easy to observe, access and understand, but this is not possible in technologically complex activities, symbolic systems or complicated semiotic codes such as those involved in learning literacy, medicine or information science.

The overall implication from evolutionary biology is that with more complex forms of life, more complex forms of learning and transmission are needed. This view is based on the idea that not only have cultures developed through human evolution, but so has the capacity to acquire cultures (e.g. Csibra, & Gergely 2009; Tomasello, Kruger & Ratner 1993). Human beings, in contrast to other primates, have the capacity to learn from each other in ways that allow them to preserve accumulated cultural practice across generations. These “ways to preserve” are fundamentally different for basic and more complex cultural forms, as argued by evolutionary psychologist Geary (2007). He suggests that it is useful to distinguish between primary forms of knowledge and abilities for which the human brain is biologically primed, and secondary culturally specific ones that need to be taught. Examples of primary abilities are language skills or spatial skills, while typical examples of secondary abilities are literacy and maths. Primary abilities are typically learned early in life, while the secondary abilities develop on the basis of the first. According to Geary (2007), teaching is necessary to learn

competencies that would otherwise not develop spontaneously; and modern societies would not survive without teaching. This distinction is not relative, but absolute as, according to Geary, evolution has afforded children with acquisition skills to master key domains necessary for survival but not with the acquisition skills to master these secondary abilities for which they depend on teaching by experts. Thus, from this point of view, the idea of going back to more “basic” forms of teaching and learning would be catastrophic for complex societies.

Sociocultural theory does not distinguish between natural (innate) forms of behaviour and cultural ones in human development (Wertsch 1985; Wertsch & Tulviste 1992). As a theory about the social origin of the nature of uniquely human individual mental functions, a distinction between the natural and the cultural phase in the development of individuals does not hold. The social origin of mental–individual functioning can be illustrated from the example of language learning: a child uses a social sign system, which is used and developed to influence and direct others, and adopts it to influence his/her own thinking and actions. Children of about 3 years old use speech (Vygotsky calls this egocentric speech) to plan and regulate their actions, and in doing so, they use social signs, derived from previous participation in social interactions with others (Wertsch & Tulviste 1992, p. 549). Thus, from a sociocultural point of view, a distinction between “natural” learning (biologically given), and cultural learning (needing teaching), does not hold. Although it is evident that a biological base exists, almost from after birth children’s learning starts to be socially and culturally “mediated”. Children start to be impacted and transformed by social interaction, endowed with meanings, with ways of seeing and acting upon the world that can be seen as “products” of the history of earlier social interactions. As learners explore their environment, even if they do so without much explicit and intentional help of social others, they cannot help but do so in already inhabited spaces that “speak” somehow of the social and cultural history of how others have dealt with those spaces before.

However, sociocultural theory, in particular given its premise that human mediation becomes more complex through history, provides us with reasons to believe that as mediation becomes more complex, learning and social interaction become more complex too. As accumulated histories of signifying, meaning making, literacies, technologies and the intelligent ways of acting upon the world need to be passed on through social interactions, these social interactions also carry the traces of these accumulated complex histories (Wertsch 1985; Bakhtin 1981).

Illustrative of this growing complexity in mediation is work on how the development of external memory systems (images, letters, digits) have “unloaded” the biological brain’s task in remembering, as Säljö (2012) has described. In contrast to the human brain, such systems have huge storage capacities and are publically available for further processing. Memorising, but also seeking, selecting and using information in such cases takes place while coordinating with these technologies. These processes become located at the intersection of the human mind and these technologies, and their current form is dependent on a very long history of production and human–machine interaction (Cole & Derry, 2005, cited in Säljö, 2012).

Learning in societies that have developed such technologies is fundamentally different from those that have not. In contrast to oral societies, in literate societies learning is not only defined by the collective accessibility and preservation of information outside of the human brain itself, it becomes geared towards the organisation and productive use of such systems (Donald 1991, in Säljö 2012). In other words, it needs an inauguration in what Säljö calls the epistemic practices of how these technologies function, and often also some background on the history of their use and production. These technologies form part of meaningful practices, conventions and insights about their use that are not ‘given by nature’ (p. 9) but ‘acquired through experience and enculturation’ (p. 9).

With automation, more and more cognitive functions (through modelling algorithms and rules) are externalised, stored and automatically produced. In addition, due to the digitalisation of technology, the distributedness of socio-cognitive processes is undergoing major transformations. As learning to work with these technologies does not entail the learning of these algorithms and rules themselves anymore, and a large part of such complexity is taken over by machines such as calculators, statistical programs, spelling checking software or global positioning systems (GPS) systems, many of the technological complexities are no longer part of the learning of individual learners, but instead are “blackboxed” for them (2012, p. 61), simply because the use of these technologies would otherwise not be possible or too time consuming. Säljö states that from a learning point of view:

such tools imply that users’ knowledge and skills, as it were, are parasitic on the collective insights that have emerged over a long time and which have been entered into the instrument in a crystallized form: algorithms, grammatical rules and concepts.

(Säljö 2012, p. 14)

The fact that learners feel as ‘digital natives’ (Prensky 2001) in such environments, is thus, one could argue, not solely due to their capacities to deal with these technologies, but also due to efficient blackboxing and the smart design of developers that hide complexities from users.

Following this sociocultural line of reasoning, the accumulated histories of human action and technologies makes it unlikely that denying the guidance of experts and their instructive efforts will enable the next generation to become as skilled as the former to be able to continue to understand and manage our knowledge systems and technologies. It is safe to assume, given the above, as well as from the socio-historical nature of learning, that in order to have access to the history of the development and use of these technologies, some kind of guidance and introduction of experts is indispensable. However, societies with complex technologies do not need per se complex pedagogies, given that the complexity of technologies is also regulated in other ways (e.g. through black-boxing) so that not all of the burden of passing on this complexity is on the shoulders of pedagogues.

The difference between learning as a by-product of being engaged in authentic practices, and learning as something that is set apart from authentic activities, is well explained by Wertsch, Minick and Arns (1984). Borrowing from Leontiev's notion of activity, which stands for an actual, identifiable, unit of life – a system with its own structure, motive and goal – they explain that in institutionalised learning, learning is the dominant “motive”, while in other activity systems a learning motive might be present, and can be an important goal, but it does not form an independent activity-motive system. In these last cases, learning is inextricably linked with the activity itself and follows the organisation of that activity, while in institutionalised learning the organisation is defined by didactic principles and rules. An example of the last case (thus a case of non-institutionalised learning) is described in a study by Greenfield and Lave (1982) of tailor shops in Liberia. Apprentices learn to tailor starting with smaller garments and sewing buttons, instead of the more risky cutting the design. Although the shopkeepers are aware of the critical importance of the apprentice's learning, their learning does not change the structure of the activity, but instead, the logical order and nature of the production process defines their learning.

Apart from the issue of setting learning apart from other life spheres, the need for pedagogicisation also depends on the political organisation of knowledge in a society as Maier and Valsiner (1996) argue. Societies that are socially differentiated, and which stratify access to forms of knowledge and the formation of an intellectual elite, introduce pedagogicisation for the young of that elite, so that the unequal distribution of knowledge will be preserved. In contrast, societies with no central authority, where knowledge is accessible to all, and in which there is a clear and shared view on what valid knowledge is, there are no, in-principle reasons for specific pedagogies, as almost any adult could act as an adequate teacher and there would be no need to distinguish between pedagogic interactions and other forms of interaction.

A second explanation for pedagogicisation is where possibilities for observation and participation are limited or non-existent. An example from the ethnographic record that Lancy (2016) mentions in this respect is the explicit, lesson-based instruction described by Gladwin (1970), which is considered necessary to train long-distance navigators in the Puluwat Islands. Their navigation system is considered too complex and inaccessible to observe naturally and so must be explicitly taught by an expert.

Concluding thoughts on de-pedagogicising in complex societies

Here I would like to resolve the questions that I posed at the beginning of this chapter, namely: Can we (re)turn to what is lost through pedagogicisation, and do we need to de-pedagogicise society? And, in particular, can we do so while we are living in an increasingly socially and technologically complex society?

In this chapter I have examined different perspectives (evolutionary psychology, sociocultural learning theories, and social-organisational aspects of learning)

in order to investigate whether we could throw away our (over)pedagogicised practices, returning to a mode of learning from earlier times where teaching is reserved for exceptional circumstances, and is, generally, considered more of a burden than an effective resource? Overall, my conclusion is that there is not much basis to conclude that as societies grow more complex, pedagogicisation grows equally complex (in the sense that we have developed increasingly complex forms of pedagogy for the passing on of increasingly complex forms of human life, technology or knowledge).

First, as we have seen from the analyses of presumptions in the concept of tutoring, an important conclusion is that pedagogy, as a separate teaching register, is not unique when compared to other forms of social participation that allow learners to understand and appropriate socially and culturally desirable knowledge, skills, norms and values. However, it is unique as a culturally defined (speech) *register*.

Second, as is clear from sociocultural accounts about the increasing complexity of mediation, even if social interactions pass on the accumulated histories of signifying, and the intelligent ways acting upon the world somehow also carry traces of their accumulated complex histories, it does not follow that pedagogicisation grows more complex. It does mean that pedagogicisation becomes geared towards the organisation and productive use of such systems, or the induction into, what Säljö (2012) calls, epistemic practices.

Third, as was clear from socio-organisational accounts, pedagogy as a teaching register is not per se associated with the learning of more complex skills or systems, but rather with the lack of or impossibility of access to and participation in expert practices, or the decision to rationalise and organise the steering of the development of the inexperienced and/or the young relatively removed from the practices any such learning was meant to prepare them for. This happens both in more complex societies as well as in the relatively unspecialised, traditional communities where the ethnographic record states that teaching is rare.

The twofold complexity thesis – increasingly complex technologies require increasingly sophisticated means of transmission – seems further hampered by the fact that, as we have seen, automation, digitalisation and the distribution of intelligent activities in information societies seem to “regulate” the amount of guidance to some extent by “hiding” part of the complexities of technologies from their users. At the same time these three points speak against the fundamental distinction between learnable and teachable skills defended by evolutionary psychologists.

Instead, we might speculate that instead of pedagogy becoming more complex, it seems rather that the opposite is the case: namely, that through the institutionalisation and professionalisation of pedagogicisation (understood here as “separating out” and rationalising the guidance of the young), pedagogical principles have become similar across contexts and, as historical research on schooling and child raising has shown (e.g. Rockwell 1999; Sterns 2006, chapters 1 and 2), have proven surprisingly stable over time. We could perhaps say that the generalisation and abstraction from everyday practices that necessarily is part of its

institutionalisation, has caused a certain “mummification” (in the sense of a fixation, resistance to change) of pedagogy that makes it relatively immune to changes outside of educational institutes. I believe it is precisely this tendency for relative stability that makes it necessary both to de-pedagogicise, but also re-pedagogicise societies.

The need to de-pedagogicise in complex societies

I would plead for de-pedagogicisation in complex societies, not in the sense that we should go back to more “natural” habits of learning, but in the sense of finding more flexible, diversified forms of pedagogicisation that are more in tune with creating the means for observation and participation in authentic expert practices, and depend less on rather restricted scripts that follow only the rules of the discipline. It seems that the reason we are using the teaching register as our main and most important script to pedagogicise our practices is not because we have ample proof that it is the most efficient, but because it has become the dominant paradigm of how to prepare new generations in modern society (Depaepe & Smeyers 2008).

In their analyses of the history of pedagogicisation in modern society, Depaepe and Smeyers (2008, p. 382) point out that, as is the case with the process of medicalisation, where a greater supply on the medical market does not necessarily lead to a healthier society, the increasing dependency on professional pedagogy likewise does not necessarily lead to a new generation that is better prepared. They point out that the success of the project of schooling depended on the professionalisation of education, the legitimisation of the asymmetric educational relation, and the authority of the teacher ‘moulding students in the direction of socially desirable behaviour’ (p. 379). The increased academicisation and professionalisation of pedagogy legitimised and stimulated the development of general scripts and principles associated with the project of schooling.

This is precisely the reason that the teaching register is often presented as superior to “just” participating and observing, while there is evidence that participation and observation are often superior to pedagogic exposition. The effectiveness of observation and imitation, as opposed to or in contrast with “teaching”, has been argued for from the perspective of the learning sciences (van Gog & Rummel 2010), sociocultural theory (Rogoff 2014) and anthropology (Paradise & Rogoff 2009). In a piece that describes community learning, Paradise & Rogoff (2009) signal that this un-pedagogicised learning is often defined as a residual category – in opposition to something else (formal, schooled learning) – rather than as a thing in itself. Descriptions of how children learn through observing and participating directly in their shared social and cultural world are labelled by Rogoff (2014) as ‘learning by observation and pitching in’ to emphasise the integration of learners into a range of activities in the community. Similar concepts that describe informal community learning are ‘legitimate peripheral participation’ (Lave and Wenger 1991), or learning in communities of practice (Wenger 1998). Characteristics of this form of learning are access to,

and keen observation by children in, community activities; collaboration and contribution in shared collective efforts; and a sense of belonging and identification. Paradise and Rogoff (2009) see this form of learning as panhuman, inherently cultural, and they argue that it is a mistake to see this form of learning as a “natural” form of learning, given its social nature, and its inherent connection to community participation.

Despite these efforts, these unpedagogicised learning practices continue to be under-conceptualised and go relatively unnoticed both in science and daily practice, even though they represent the basic and omnipresent practice of guided learning in communities, both in non-Western and Western societies. As I pointed out in the introduction to this chapter, in modernised societies, in which the project of schooling has impacted the cultural metaphor of learning, this kind of community learning is often undervalued and replaced by a school-like register, even when this is redundant.

However, any possibility of de-pedagogicising societies has to face up to the social organisation of learning, and the social dynamics of how the advancement and distribution of knowledge is connected with authority and privilege. This then makes the debate political. Giroux (2004), for instance, draws on the notion that the pedagogical is a political practice, and argues against a notion of the pedagogical as something to do with a technique or method, making the case that in current society, pedagogicisation is a necessary means to counter global economical–political hegemonic forces. Pedagogy always implies a particular version and vision of (civic) life, the future, and how we might represent ourselves, others, and our physical and social environment. It is always an introduction to and a legitimisation of particular forms of social life and represents always someone’s vision of the future (Giroux, 2004, p. 33). However, according to Giroux, educators need a new pedagogical and political language to address the changing societal contexts of our post-modern societies that face ‘a world in which capital draws upon an unprecedented convergence of resources – cultural, political, economic, scientific, military, and technological – to exercise powerful and diverse forms of hegemony’ (p. 32). Arguments for de-pedagogicisation are thus dangerous, and especially so in complex societies. Where there are new technological complexities that are not easy to manipulate or oversee, more emphasis is needed for guidance, interpretation and the moral underpinnings of certain ways of behaving (Säljö 2016). This is the case despite the fact that new technologies make learners feel they have more autonomy because of the self-explanatory nature of some applications and platforms (cf. the discourse on native learners and digital natives, e.g. Prensky 2001).

The need to re-pedagogicise in complex societies

Pedagogicisation as a form of rationalising and organising what needs to be learned cannot be dismissed, especially in complex, differentiated, globalised societies that are characterised by huge knowledge bases that are difficult to oversee, have long histories of growing into increasingly complex technologies, and

that through digital technology provide access to multiple different communities and life worlds. Re-pedagogicisation is necessary in those cases where there are pedagogical voids, forgotten or new domains not addressed by traditional institutes of education, that, if not attended to by more experienced members of the society, will lead to undesirable (unsafe, unjust, inefficient, improper) outcomes for inexperienced members. In other words, it is important to be more conscious about what exactly needs to be pedagogicised, and what needs to be released, unleashed or left to community learning or self-exploration.

There are therefore specific challenges for re-pedagogicisation in relation to globalised, information societies highly defined by digital infrastructures. It is for instance easy to imagine that observation and participation become more complicated in a world characterised by open knowledge production models, in which knowledge production and sharing happens not in one clearly identified community but through decentralised and distributed networks, in which a wider variety of resources over greater distance is available for learners, and where learners need to deal with the contradictory frameworks and meaning systems related to being in touch not just with one community, but many (de Haan et al. 2014).

Although some have argued that new technologies make pedagogues redundant, it is also clear that new terrains for pedagogical intervention open up because of new technological complexities. For instance, the many pathways a learner can choose in the hyper textual structure of the Internet (Cousin 2005), and the fact that learners can only control or manipulate a very small part of the intelligent system of which they are a part, directs our understanding of learning towards interpretative acts. In turn, this might mean that more emphasis is needed on guidance in meaning giving, social interpretation and moral codes of conduct (Säljö 2016). Further, the potential for socio-technical changes to amplify social and economic inequalities urges us to ask new questions about fairness and inequality in our new educational ecologies (Facer 2011).

Finally, although my conclusion is that the practices of learning and pedagogicisation in traditional societies certainly cannot be translated in any direct way to counter the over-pedagogicisation of the schooled society for many different reasons – only some of which have been addressed in this chapter – the comparison between different traditions of learning and pedagogicisation is insightful especially helping us to overcome any cultural blindness when imagining alternatives to traditional schooling.

Note

- 1 Maier and Valsiner use the term tutoring referring to guided problem solving between a tutor and a tutee which was a site of study in sociocultural research in the 1980s and 1990s in line with the concept of the Zone of Proximal Development, but their argumentation applies to teaching more generally.

References

- Adams, MN & Coulibaly, M 1985, 'African traditional pedagogy in a modern perspective', *Prospects*, vol. 15, no. 2, pp. 275–280.
- Bakhtin, MM 1981, *The dialogic imagination*, University of Texas Press, Austin.
- Cousin, G 2005, 'Learning in cyberspace' in RL Land & S Bayne (eds.) *Education in cyberspace*, RoutledgeFalmer, London.
- Csibra, G & Gergely, G 2009, 'Natural pedagogy', *Trends in Cognitive Sciences*, vol. 13, no. 4, pp. 148–153.
- Depaepe, M & Smeyers, P 2008, 'Educationalization as an ongoing modernization process', *Educational Theory*, vol. 59, no. 4, pp. 379–389.
- Elbers, E, Maier, R, Hoekstra, T & Hoogsteder, M 1992, 'Internalization and adult-child interaction', *Learning and Instruction*, vol. 2, pp. 101–118.
- Facer, K 2011, *Learning futures: education, technology and social change*, Routledge, London.
- Furedi, F 2008, *Paranoid parenting: why ignoring the experts may be best for your child*, Continuum, London.
- Geary, DC 2007, 'Educating the evolved mind', in JS Carlson & JR Levin (eds.) *Educating the evolved mind*, Information Age, Charlotte, NC.
- Giroux, HA 2004, 'Critical pedagogy and the postmodern/modern divide: towards a pedagogy of democratization', *Teacher Education Quarterly*, vol. 31, no. 1, pp. 31–47.
- Gladwin, T 1970, *East is a big bird: navigation and logic on Puluwat atoll*, Harvard University Press, Cambridge, MA.
- Gray, P 2013, *Free to learn: why unleashing the instinct to play will make our children happier, more self-reliant, and better students for life*, Basic Books, New York.
- Greenfield, P & Lave, J 1982, 'Cognitive aspects of informal education', in DA Wagner & HW Stevenson (eds.) *Cultural perspectives on child development*, Freeman, San Francisco, CA.
- Haan, M, de 1999, *Learning as cultural practice. How children learn in a Mexican Mazahua community. A study on culture and learning*, Thela Thesis, Amsterdam.
- Haan, M, de 2002, 'Distributed cognition and the shared knowledge model of the Mazahua: a cultural approach', *Journal of Interactive Learning Research*, vol. 13, no. 1, pp. 31–50.
- Haan, M, de, Leander, K, Ünlüsoy, A & Prinsen, F 2014, 'Challenging ideals of connected learning – the networked configurations for learning of migrant youth in the Netherlands', *Learning, Media and Technology*, vol. 39, no. 4, pp. 507–535.
- Ito, M, Baumer, S, Bittanti, M, boyd, d, Cody, R, Herr, B, et al. 2010, *Hanging out, messing around, geeking out: living and learning with new media*, MIT Press, Cambridge, MA.
- Koops, W 2000, *Gemankeerde volwassenheid. over de eindpunten van de ontwikkeling en de doelen van de pedagogiek* (English translation: *Wronged adulthood. About the endpoints of development and the goals of pedagogy*), Bohn Stafleu Van Loghum, Houten.
- Lancy, D 2015, *The anthropology of childhood: cherubs, chattel, changelings*, Cambridge University Press, Cambridge.
- Lancy, D 2016, 'Teaching: natural or cultural?', in DC Geary & DB Berch (eds.) *Evolutionary perspectives on child development and education*, Springer International, Basel, Switzerland.

- Lankshear, C, Peters, M & Knobel, M 2000, 'Information, knowledge and learning: some issues facing epistemology and education in a digital age', *Journal of Philosophy of Education*, vol. 34, no. 1, pp. 17–40.
- Lave, J & Wenger, E 1991, *Situated learning. legitimate peripheral participation*, Cambridge University Press, Cambridge.
- Maier, R & Valsiner, J 1996, 'Presuppositions in tutoring: rhetorics in the concept', *Archives de Psychologie*, vol. 64, pp. 27–39.
- Paradise, R & Haan, M, de 2009, 'Responsibility and reciprocity: social organization of Mazahua learning practices', *Anthropology and Education Quarterly*, vol. 40, no. 2, pp. 187–204.
- Paradise, R & Rogoff, B 2009, 'Side by side: learning by observing and pitching in', *Ethos*, vol. 37, no. 1, pp. 102–138.
- Prensky, M 2001, 'Digital natives, digital immigrants, part II: do they really think differently?', *On the Horizon*, vol. 9, no. 6, pp. 1–6.
- Robinson, K 2011, *Out of our minds: learning to be creative*, Capstone Publishing, Chichester, UK.
- Rockwell, E 1999, 'Recovering history in the study of schooling: from the *Longue durée* to everyday co-construction', *Human Development*, vol. 42, no. 3, pp. 113–128.
- Rogoff, B 2014, 'Learning by observing and pitching in to family and community endeavors: an orientation', *Human Development*, vol. 57, pp. 69–81.
- Säljö, R 2012, 'Literacy, digital literacy and epistemic practices: the co-evolution of hybrid minds and external memory systems', *Nordic Journal of Digital Literacy*, vol. 01, pp. 5–19.
- Säljö, R 2016, 'Symbolic technologies, hybrid minds and communities as sources of learning', Keynote address, *EARLI SIG 10, 21 and 25 Joint Conference*, 28–29 August, Tartu, Estonia.
- Sefton-Green, J 2015, 'Negotiating the Pedagogicisation of everyday life: the art of learning', in M Watkins, G Noble & C Driscoll (eds.) *Cultural pedagogies and human conduct*, Routledge, New York.
- Stearns, PN 2006, *Childhood in world history*, Routledge, New York.
- Tomasello, M, Kruger, AC & Ratner, HH 1993, 'Cultural learning', *Behavioral and brain sciences*, vol. 16, no. 3, pp. 495–511.
- van Gog, T & Rummel, N 2010, *Educational Psychology Review*, vol. 22, no. 155. <https://doi.org/10.1007/s10648-010-9134-7>
- Wenger, E 1998, *Communities of practice: learning, meaning, and identity*, Cambridge University Press, Cambridge.
- Wertsch, JV 1985, *Vygotsky and the social formation of the mind*, Harvard University Press, Cambridge, MA.
- Wertsch, JV, Minick, N & Arns, F 1984, 'The creation of context in problem solving', in B Rogoff & J Lave (eds.) *Everyday cognition; its development in social contexts*, Cambridge University Press, Cambridge.
- Wertsch, JV & Tulviste, P 1992, 'L. S. Vygotsky and contemporary developmental psychology', *Developmental Psychology*, vol. 28, pp. 548–557 doi:10.1037/0012-1649.28.4.548