



HAL
open science

Chapter 3 Epistemic Gender Positioning: an Analytical Concept to (Re)Consider Classroom Practices within the French Didactique Research Tradition

Chantal Amade-Escot

► **To cite this version:**

Chantal Amade-Escot. Chapter 3 Epistemic Gender Positioning: an Analytical Concept to (Re)Consider Classroom Practices within the French Didactique Research Tradition. In Taylor, C. A., Amade-Escot C., & Abbas A. (Eds.) (2019). *Gender in Learning and Teaching: Feminist Dialogues across International Boundaries*. London: Routledge, Francis and Taylor., 2019. hal-02994410

HAL Id: hal-02994410

<https://hal.science/hal-02994410>

Submitted on 7 Nov 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Amade-Escot, C. (2019). Epistemic Gender Positioning: an Analytical Concept to (Re)Consider Classroom Practices within the French Didactique Research Tradition. In Carol A. Taylor, Chantal Amade-Escot, Andrea Abbas. *Gender and Feminism in Learning and Teaching: Debates across International Traditions* (pp. 24-38). London: Routledge. Taylor and Francis Group.

Chapter 3

Epistemic Gender Positioning: an Analytical Concept to (Re)Consider Classroom Practices within the French *Didactique* Research Tradition

Chantal Amade-Escot

ORCID: orcid.org/0000-0001-7611-220X

Abstract

The chapter presents a theoretical discussion of the concept of ‘epistemic gender positioning’ as used in French *didactique* research. It begins with an overview on the late emergence of a gender focus in the francophone didactic research. Then, drawing on the theoretical idea that knowledge construction and meaning making are a by-product of teacher and students’ joint action, it provides examples of the use of the concept of ‘epistemic gender positioning’ in different school subjects, which sees gender as a fluid, multiple and relational category. Through a vignette and two examples of research data the chapter outlines the need for detailed and in-depth analyses of classroom practices and participants’ interactions. The discussion brings to the fore the idea that gender positioning is always linked with each participant’s practical epistemology, in the sense that teacher and students, who are embedded and act within an implicit and differential didactic contract, value or privilege different facets of knowledge depending on context, meanings and interactions. The conclusion summarises

the distinctive contribution of the French *didactique* research tradition to the understanding of how gender order is done/undone in the class and advocates the need not only deconstruct but challenge gender norms in teaching and learning.

Introduction

This chapter discusses the theoretical concept of ‘epistemic gender positioning’ as used in French *didactique* research and its relevance for providing new perspectives on gender in the teaching and learning of specific subjects in preschool, primary and secondary schools. It argues that the strength of a gender-positioning lens lies in its ability to produce in-depth analysis that takes the teacher, the students and the situatedness of knowledge into account simultaneously as interrelated instances. The chapter begins by providing some insights into the French context that leads feminist researchers to precisely characterize, in the everyday life of the class, how boys and girls construct their knowledge differently through actions and discourse. Theoretically, the chapter draws on the idea that the knowledge taught and learned is a by-product of the teacher’s and students’ didactical joint action. This is illustrated by a vignette which introduces the core concepts used and posits gender as a relational category beyond the reductionist masculinity/femininity binary. The next section outlines the conceptual framework and methodology. The discussion continues through two additional research excerpts, concerning physical education and science education, which further illustrate the potential of gender positioning in accounting for the differential dynamics of the didactic contract. The discussion here indicates that gender differences and inequalities among students go through tiny, almost imperceptible processes in relation to the gendered facets of each particular piece of content. The conclusion summarises the distinctive contribution of the French *didactique* research tradition to the understanding of how gender

order is done/undone in the class and advocates the need not only deconstruct but challenge gender norms in teaching and learning.

The emergence of a gender focus in French *didactique* research

Research on gender in teaching and learning first appeared in the late 1980s in France, with the development of the new sociology of education. Most of this research was conducted in the areas of sociology and psychology (see Duru-Bellat [1995] for a useful review). Drawing on second-wave feminism, this initial body of work highlighted how schooling reproduces and maintains masculine domination and the gendered aspects of the cultural heritage of French society, notably the contribution of schools to the reproduction of stereotypes related to social sex roles. Based on the notion of '*la construction scolaire des différences entre les sexes*' [sex differences as a school construction], three prominent factors were identified: i) the generally male-oriented curriculum and the sexist contents of textbooks; ii) the number and types of interactions between teacher and students; iii) the underestimation of gender essentialism unconsciously attributed by teachers to girls and boys (Duru-Bellat, 1995). As in other western countries, feminist researchers in France documented in depth the fact that female and male students are not given equal opportunities to participate at school and are treated differently in relation to gender-based expectations. It has already been pointed out that if the social and cultural ideologies are not challenged and if explicit antisexist pedagogy is not introduced, equity in schools will remain no more than an aspiration. Notwithstanding this, in the French context to date little research has focused on classroom practices in relation to the knowledge taught and little attention has been paid to the issue of how the contents of lessons impact on student gendered learning. This is where the distinctive contribution of a

didactical approach when studying gender in teaching and learning comes into play.

Subject didactics research in France emerged in the early 1970s in a period of important shifts in curriculum reforms subsequent to the massive spread of secondary education. Calling attention to the building of French didactics, Caillot (2007: 127) argues that the greatest specificity of ‘any *didactique* is that a specific subject is always involved’. In the French-speaking world of educational research didactics is strongly related to: i) the study of the subject-content and its function in the teaching and learning; ii) the way it is embedded in learning environments and brought into play within teacher-student interactions; and iii) the extent to which a student’s relationship to knowledge impacts on her/his learning and developmental process. However, until the 2000s, didactic research in France did not pay much attention to gender and could be seen as gender-blind research. Recent years have been marked by an effort at gendering research through various perspectives: curriculum and textbook analysis (see Lebeaume in this book), teacher practices (see Collet in this book), students’ relations to knowledge, and teacher education. Yet, despite this, a focus on gender still remains marginal in French didactics.

In this context, studying classroom practices with the purpose of critically describing gendered knowledge construction is an innovative trend. For nearly two decades, a broad research programme called ‘*Genre & Didactique*’ has been in progress at the University of Toulouse, aiming to identify, in the everyday life of the class, how boys and girls construct their knowledge differently through actions and discourses. Studies were first conducted in physical education (Amade-Escot, 2017) and indicated that this school subject was not innocent but was, rather, ‘one of the most sex-differentiated subjects on the school curriculum that contributes to the social construction of homogeneous gendered categories’ (Flintoff and

Scraton, 2006: 768). Important for this chapter is that the specific forms of embodiments, the values of strength, power and spatial movement, and cultural experiences (Taylor, 2013) at the core of student learning in physical education generate empirical conditions for delving further into the issue of how a didactical approach (that is, the specificity of the knowledge intended to be taught) can deepen understanding of how gender order is enacted in the classroom. Nowadays, the '*Genre & Didactique*' research programme has been extended to other school subjects and has produced a series of observational case studies of a variety of subjects and settings within the French educational system. These case studies include theoretical and empirical works, doctoral studies and participatory action researches, all of which develop in-depth analysis of didactical interactions. Like the research underpinning this chapter, these studies share the same starting point: that boys and girls are physically and discursively produced to be differently literate according to the various school subjects. This process takes place through: i) gendered differences in interactions between teachers and students; ii) social relations between peers; and, iii) differential academic expectations. The interactions explored in this chapter are aligned with the aims of the research programme which relies on the claim articulated by Mosconi, a feminist educational philosopher who wrote:

To understand how teachers act with girls and boys in the classroom, fine-grained analysis of everyday classroom life and didactical interactions is needed. The differences and even the inequalities of treatment between students according to gender (but also according to their social origin, as well as their standing of excellence in the class) involve tiny, very subtle elements that cannot be seen without a very detailed analysis, including the didactical viewpoint (Mosconi, 2003: 38, our translation).

The French *didactique* approach and the study of gender order in the classroom

This section begins with a vignette as an empirical example which frames the subsequent discussion of ‘epistemic gender positioning’ and its importance in looking at didactical practices.

Louise’s Story

Louise (not her real name – all names are pseudonyms) was a four and a half year old girl, and this episode occurred during her early preschool learning. Louise belongs to a class called ‘*moyenne section*’ (age 4-5 years) in the French preschool system. The learning context is related to individual work monitored by the teacher. After having read a carnival tale and set up an informal conversation about disguises with the whole class, the teacher hands out a worksheet to each child. This worksheet presents nine different characters with animal and human faces (see Figure 1). The teacher then asks pupils ‘to circle each animal in green, each feminine character in pink, and each masculine character in blue’.

INSERT CHAPTER 3 FIGURE 1 HERE

Beyond the binary sex-stereotyping assignment provided by the teacher (pink for girls, blue for boys) it is worth noting that the knowledge content embedded in this learning exercise is complex and has various interwoven aspects: i) cognitive, in categorizing and grouping items; ii) observational, in making distinctions between human and non-human life forms; iii) social, related to the traditional coloured representation of the gender binary; iv) cultural, in relation

with the carnival tale read earlier. Moreover, to some extent, two characters of the worksheet look ‘enigmatic’ (Figure 1, characters 4 and 6).

During the first minutes Louise, strongly engaged in the task, circles characters 3, 5, and 7 in green, characters 1 and 8 in pink, and characters 2, 4, 6, and 9 in blue. She stops for a few seconds looking at the worksheet, then grabs another coloured pencil and circles character 6 again, in purple. How might we interpret Louise’s actions? Answering a teacher’s question about ‘*why purple?*’ later, Louise says: ‘*Umm ... It is ... it is a boy ... disguised as a girl!*’ Matching her words with action, Louise takes the purple pencil again and re-circles character 6: ‘*... it should be circled in purple*’.

Three ideas emerge from this vignette of Louise’s actions that help to introduce the core concepts used to conduct a didactical inquiry on how gendered contents are enacted through classroom practices. The first idea concerns the feminine/masculine dichotomy embedded in the learning environment set up by this preschool teacher: a taken-for-granted feature of Western societies pervading the display of school contents. This is not new. Research has consistently shown that curriculum and classroom practices convey gendered bias, even at preschool (Davies, 1989). The second idea is that Louise has a kind of independence with respect to the didactic contract (a core concept presented below). She feels free to use the purple crayon, thus introducing a breach with the teacher’s assignment. It worth noting that Louise, a high achieving pupil, understands pretty well what the teacher’s expectations are but plays with them. The last idea is that Louise activates remarkable gender positioning. In some way she jeopardizes the binary dichotomy of feminine and masculine characters introduced by her teacher, thus producing resistance and repositioning. Altogether, these three ideas encourage us to go further into the theoretical tenets underlying the approach.

Using the concept of epistemic gender positioning to account for individual agency within didactical practices

The term ‘gender positioning’ is used to account for the different ways individuals act in their everyday lives according (or not) to traditional sex-roles. In educational research, it has often been used in this sense, and is at odds with the research related to post-structuralist discourse analysis of power and resistance. Research on positioning emerged in the 1980s in the area of feminist studies (Davies 1989, Harré and van Langenhove, 1999). Based on social constructionist psychology, these authors assume that human behaviour is goal-directed by group norms, and that human agency is a product of the history of each individual’s interactions with other people. Drawing on the social, symbolic and interactional dimensions of human action, and the importance of context and language, positioning theory considers that positions are not fixed but fluid and can change from one moment to the next, depending on the context, participants, meanings and interactions. Harré and van Langenhove (1999) criticise the concept of ‘social role’ in American social psychology, and contend that the theory of ‘positioning’ goes further and offers a dynamic alternative to it. Broadening the scope of positioning we have argued elsewhere that ‘gender positioning’ is a fruitful concept in attempts to account for the transactional dynamics of knowledge construction in day-to-day classroom life (Amade-Escot, Elandoulsi and Verscheure, 2012, 2015). Furthermore, the epistemological stance of positioning theory, in paying attention to the fluidity and the shifting forms of gendered actions, resonates with Butler’s (1990) idea of gender performativity. However, to be clear, gender positioning in the didactic approach is understood as a knowledge-specific concept (as illustrated by Louise’s vignette), which challenges the sex-role theory still strong in educational research.

How gender is understood in the French didactique approach to classroom practices

When investigating gender in classroom practices the *didactique* approach examines the ways girls and boys construct their knowledge differently through academic expectations and within interactions with the teacher and/or among peers. This approach sees gender as a relational social construct that is fluid, multiple and shifting, and so goes beyond the traditional male and female binary (Butler, 1990; Chabaud-Rychter et al., 2010; Francis, 2006). In questioning the validity of traditional binary categories and the implicit and underlying vestiges of essentialism underpinning many school practices, our research tries to find a path between ‘modernist reductionism and post-structuralist relativism’ as discussed by Francis (1999). It does this by drawing on feminist research which accounts for the structural and institutional role of schooling practices in cultural reproduction and, at the same time, it acknowledges that gender must be conceptualized and investigated in terms of the subject’s fluid, shifting, and sometimes fragmented experiences that regulate, rather than determine, the enactment of unequal learning trajectories. I next turn to the didactics framework in relation to which the empirical studies are conducted.

Studying gender order in classroom practices through the joint action in didactics framework

The didactical approach to classroom practices sheds light on how gendered learning is co-constructed through a fine-grained analysis of transactions related to the several facets of each

particular piece of knowledge taught. It focuses on the differences and even the inequalities of treatment between students according to gender, their social origin, as well as their standing in the hierarchy of achievement in the class (see Verscheure and Debars, in this book). To capture the details of the curriculum in motion in classroom settings, the approach draws on the idea that student learning occurs within the unavoidable tension between student and teacher agencies and a learning environment, called the ‘didactic *milieu*’, which is always cultural, institutional, material and social. It aims to account for the complexity of the functioning of the didactical system conceptualized as an interwoven threefold relationship between the teacher, the students and the particular situatedness of knowledge content. Assuming that the knowledge taught and learned and all the associated meaning-makings are a by-product of teacher and student practices in culturally bounded environments, these practices are, in theoretical terms, envisaged as ‘didactical joint actions’. This does not mean that the participants have the same agendas and share the same goals; in fact, much research indicates the uniqueness of participants’ actions and their consequences in terms of gendered learning.

The joint action in didactics (JAD) conceptual framework is a descriptive framework within a pragmatist view of classroom practices. It enables teachers’ and students’ discourses, actions and interactions in a given situation to be studied in order to depict student learning experiences and the meanings constructed through these experiences (Ligozat, 2011; Sensevy, 2007). Its purpose is to access the logic of didactical practices, and draws on Bourdieu’s (1980) sense of practice as to how the practical concerns of everyday life (here in the classroom) condition the transmission and functioning of social or cultural habits. In the analysis which follows, I focus only on the interrelated aspects of the JAD framework which are relevant for a gendered analysis of didactical transactions: i) ‘epistemic gender

positioning’, which helps our understanding of how individuals (students and teacher) engage themselves in the practice of learning and teaching, ii) ‘differential didactical contract’, which accounts for students’ various learning trajectories, and iii) ‘practical epistemology’, which allows us to capture the gendered facets of knowledge privileged by participants. I have already delineated the former concept above, and I briefly sketch out the last two immediately below.

Differential didactic contract as a result of teacher and student epistemic gender positioning

In the French *didactique* tradition, the ‘didactic contract’ broadly refers to the teacher’s and students’ implicit system of mutual expectations, joint habits and attribution of intentions. Focusing on teacher and student joint action related to the knowledge at stake during classroom transactions, this concept links the *Didactique* perspective with pragmatist and social-interactionist approaches of classroom practices (Ligozat, 2011). Nevertheless, unavoidable breaches in the didactic contract appear, particularly in relation to transactions that express discrepancies between the lines of actions of teacher and students. As noted by Schubauer-Leoni (1996), the didactic contract is inherently differential because it is not implicitly established with all the students of the classroom but with groups of students (and individuals), who have diverse standings of excellence in the class and diverse social backgrounds. The concept of differential didactic contract is often used to conduct relational analyses at the micro-level of didactical transactions. Relevant to the purposes of this chapter, Verscheure shows how various forms of gender positioning and repositioning that teacher and students enact during didactical transactions play a major role in the differential evolution of the didactic contract (Verscheure and Amade-Escot, 2007). These dynamics are constrained

by participants' agency in terms of what each of them brings to the transactional situation.

This leads us to envision the third key concept.

Participants' practical epistemologies and their intricate interplay with gender positioning

The notion of practical epistemology in the JAD framework was first elaborated to account for the teacher's action. It underlined that teachers' views on the subject knowledge they teach are part of their actions (Sensevy, 2007). Within this pragmatist definition, the concept was extended to students' action. In the JAD framework, it should be understood less as a knowledge base than as a pragmatist propensity to act in certain direction. In this sense, the teacher's actions and discourse reveal what counts as valid knowledge and appropriate ways of performing in a specific social practice. Conversely, students' actions following their own agenda (which, as I have already mentioned, may or may not be aligned with the teacher's one) reveal the sense they give to the knowledge they encounter. Teaching and learning are discursive acts, where participants' attention is directed towards certain events, questions, and relationships, while others are undervalued or ignored. The research posits that participants' practical epistemologies can be fruitfully described through a gendered lens, namely through positioning. To sum up, the concept of practical epistemology helps to understand what facets of knowledge are privileged by teachers and students and the extent to which the knowledge taught and learned is marked by gendered patterns of expectation and perception of the subject.

Analysing epistemic gender positioning: two empirical illustrations

In order to obtain a fine-grained description of the teacher's and students' actions and discourses, a qualitative research design which gathered data from video and audio recordings of lessons and interviews with participants is used. For ethical purposes, information on the study is shared with school teachers and authorities. In addition, parents' consent and assent forms are collected and the use of video data is restricted to research purposes. The data analysis is inspired by Héritier's (2002) anthropological idea that any social practice (and thus any school practice) encompasses gendered interpretation and is marked by what she coined as the '*valence différentielle des sexes*' [differential valence of the sexes]. This term acknowledges that gender dichotomy and masculine domination are a taken-for-granted (in various forms) in all societies; yet, at the same time, the term dialectically attests to 'the existence, not of a radical division between the sexes, but of a relatively complex and unstable continuum, on the organic, psychological, emotional, and social planes' (Héritier, 2010: 31, our translation).

The analysis consists in identifying in each subject-content transaction the several facets of each particular piece of knowledge taught and the gendered forms, practices and discourses that underpin them. This enables us to see how subject knowledge is informed by traditional gender binary norms (or not), and at the same time how the teacher and students might challenge these norms during classroom events. Through close analysis we can, then on one hand, identify sex-stereotyped reductionist social constructions, which, most often, reproduce gender binary norms and behaviours and marginalise students who are not clearly identified as acting according to these traditional demands and, on the other, we can begin to see the multiple modes of gender performativity that open up opportunities for resistance through the positioning and repositioning that each participant initiates in relation to knowledge during

on-going transactions (as for example, does Louise when she breaches the ‘pink and blue didactic contract’ using a purple pen!). Assuming that gender positioning evolves during didactical transactions with regard to the knowledge at stake, the crucial point when conducting data analysis is to record all forms of positioning. Following H eritier’s assertion about the ‘relative complex and unstable continuum’ of gender performativity and seeking equity and genuineness, we try to report on all participants’ contrasted ways of performing a task and to pinpoint in their actions and discourses which forms of individual gender positioning are activated: those reinforcing traditional gender order and also those undoing gender. The differential learning trajectories are described in the two empirical analyses below – one from physical education the other from science education.

How a teacher’s practical epistemology impacts on gendered learning

This video excerpt concerns a physical education unit in a Tunisian high school class (15-16 years) and focuses on the handstand forward roll in gymnastics (Amade-Escot, Elandoulsi and Verscheure, 2015). This subject content encompasses various combinations of aesthetic and acrobatic movements. Reductionist forms of practices associated with dominant gender norms envision aesthetic movements as feminine whereas a masculine stereotype values the acrobatic dimension. This is a gender stereotypical vision because: i) aesthetics and acrobatics are not dichotomous categories and should be combined in a proper handstand; ii) female students may choose to perform acrobatically, and conversely male students may pay attention to the correctness of their body movement; and, iii) learning to perform a handstand forward roll implies controlling both dimensions together in action. These considerations drive the analysis.

In action and the associated discourse, a teacher may value the aesthetic or the acrobatic dimension, or a combination of both when teaching. Students may (or may not) elicit one of these dimensions or both, thus indicating the meanings they are construing. In the selected excerpt, Mohamed, the teacher, gives students instructions related to the acrobatic facet of the handstand forward roll movement: *'you should throw the leg and then roll'*. To Salim, a male student who never reaches the handstand position, he says: *'go, go, push hard on your leg'*; to the class: *'hey guys, make an explosive push'*. Mohamed asks Ouissal, a highly skilled female student, to demonstrate how to reach the handstand position. He comments on her performance to the class: *'you should be as strong as she is'*. From his discourse, always related to strength or force, which, according to Whitson (1994), illustrates how masculinity is publicly celebrated, a pre-eminent masculine gender positioning stands out. Ouissal's actions repeatedly favour the aesthetic dimension of the gymnastic skills, with body alignment, and feet and toes pointed, thus performing perfect, tight handstands. However, she never engages herself in the roll, thus introducing a breach of the didactic contract (i.e. she does not choose to follow the teacher's instructions). Interestingly, Mohamed never interacts with her on this theme. Ouissal does not find any support or opportunity to experience the acrobatic dimension of a gymnastic movement. An implicit and gendered differential didactic contract emerges through transactions as if the handstand forward roll is not an objective for a female student. Mohamed's actions indicate what is valuable gymnastic knowledge for her in comparison with that implicitly negotiated with male students, who are called upon to perform more acrobatic gymnastics. Mohamed's positioning illustrates a teacher's practical epistemology paying tribute to masculinity, and at the same time being benevolent toward female students – reinforcing gendered dichotomies of body movement as pointed out by Larson, Fagrell and Redelius (2009).

Gender positioning and students' practical epistemologies during group work

This video excerpt comes from research by Pautal and Vinson (2017), whose work I have permission to re-analyse for the purpose of this chapter. This data concerns the teaching of biology in a French primary school (age 9-10 years), particularly the study of how the human blood circulation functions, within an enquiry-based pedagogy. During the two previous lessons, students identified the different blood vessels and the function of the blood, they saw a short video on heart anatomy and participated in scientific workshops related to these contents. In the following excerpt, the knowledge to be transmitted concerns a scientific debate in groups on human blood flow and its related scientific model. The teacher distributes a paper representing a blank human body to each group. She asks the students to exchange ideas with the purpose of collectively deciding '*how many blood circuits are needed to make the blood function efficient*' and to '*draw how it works on the poster*'.

The excerpt involves two girls (Lucie and Asmae) and two boys (Marius and John). Marius and Lucie are high achieving students. Asmae is seated between Lucie and Marius. John is on the opposite side of the table. Lucie and Marius place the poster facing them. They take the floor; the other students do not talk much.

1. Lucie: 'There is one [circuit] in the head ... and then there's a circuit that comes back ... I think' (*Lucie draws two circuits from the heart on the poster*)
2. Marius: 'NO ... the circuit goes all over the body ... I believe there's only one tube'
3. Lucie: 'but the dirty blood ... it goes, it goes ...' (*She sketches the lungs*)

4. Marius: (*raising one arm*) ‘NO ... what I am trying to say is... at the beginning all blood is clean, and it goes around the body. It is cleaned up in the heart, and then ... it leaves again’
5. Asmae: ‘but it’s not possible ... the clean blood and the dirty blood will mix as a slop’
6. Marius to John: ‘and you, you should talk, you should explain ...’
7. John (*silent*)
8. Marius: (*to the group*) ‘who agrees with me?’
9. John: (*raising a hand*) ‘me’
10. Asmae, following: ‘me’
11. Lucie, after a second: ‘me too’ (*She erases her previous drawing with two circuits*)

Lucie provides the first statement and draws two circuits on the poster. Interrupting her, Marius resists Lucie’s statement. Lucie objects to Marius’s proposal with a rational argument related to ‘*the dirty blood*’ and sketches the lungs (3). It can be said that, at this stage, Lucie’s blood flow model is compatible with the knowledge that is intended to be established. Marius interrupts her again, adding his own rational claim for a single circuit (4). At the end of these four turns of talk, two models related to the blood flow have been put forward: Lucie believes that there are two circuits, while Marius believes that only one is needed. Nevertheless, their different practical epistemologies are appropriate to the didactic contract of a scientific debate as both rationally argue their own vision. Such differences are entirely appropriate in such a social-constructivist didactic milieu. However, Marius does not draw anything, leaving the girl to do the written work. An additional understanding of this dialogue (at 2 & 4) is that Marius’s epistemic gender positioning falls into ‘*maninterrupting*’ (he interrupts Lucie with two sturdy ‘*NO*’s). This analysis is sustained by the next turns: when Asmae intervenes with a rational counter-argument to the mixing of the clean and dirty blood (5), Marius stops contributing any argument to the scientific debate. Unsuccessful in finding support from John (6), he asks for a vote (8). John and Asmae agree with him. Discouraged, Lucie follows the vote, erasing her drawing (11).

In asking for a vote, Marius stepped out of the didactic contract of a scientific debate. By this power act, he blocked the discussion and thus the collective knowledge construction. Marius shifted toward a (traditional) masculine gender positioning while Asmae and Lucie gave up, abandoning their relevant model of two blood circuits and adopting behaviour that may be interpreted as silenced traditional feminine gender repositioning. Consequently, the intended knowledge faded away. This excerpt confirms the interplays of practical epistemology, knowledge and power as in science and technology classrooms (see Danielsson, Berge and Lidar, 2017).

Conclusion and implications for teaching and learning

This chapter explains the distinctive contribution the French *didactique* tradition makes to feminist dialogues on teaching and learning. In doing so, it adds an important dimension to the debates on gender explored in this book. It outlines the concept of epistemic gender positioning and demonstrates its analytical potential in investigating gender in different school subjects, in relation to a vignette and two examples of research data. The theoretical discussion brings to the fore the idea that gender positioning is always linked with each participant's practical epistemology, in the sense that teacher and students, who are embedded and act within an implicit and differential didactic contract, value or privilege different facets of knowledge depending on context, meanings and interactions. The findings in this chapter illuminate how gender differences in knowledge construction vary depending on the very specific subject content and how they are brought into play during classroom events. At the same time they exhibit similar patterns of interactions in different subjects that align this research with the scope of comparative didactics and 'the relationships between content-

specific and generic features of teaching and learning practices' (Ligozat, Amade-Escot and Östman, 2015: 314). Moreover, such studies indicate that gendered learning trajectories among students go through tiny and almost imperceptible processes that need to be analysed. In mobilising the interrelated concepts of epistemic gender positioning, differential didactic contract and practical epistemology, the French *didactique* tradition sheds new light upon how gender inequalities are perpetuated in classroom settings. Because teaching and learning specific subjects are situated actions, they also demonstrate the incredible diversity and uncertainty of student learning and how classroom practices offer resources and opportunities but also constraints that limit gender educational benefits.

The events analysed demonstrate the subtle processes entailed in the production of the gender order in the classroom and how this, more often than not, privileges masculinity.

Underscoring the relational process involved in the production of gendered content and the risk of marginalisation of girls and boys who are not clearly identified as acting according to their assigned sex, the approach suggests that greater attention should be paid to teacher and students' joint action related to knowledge during classroom events. A better understanding of the didactical phenomena that are at the core of doing/undoing gender in the class may open the way to new emancipatory and feminist educational projects in which gender norms are not only deconstructed but challenged (Francis, 1999).

Paired Dialogue

Subjects of learning and pedagogical encounters

Susanne Gannon

The *Didactique* research tradition draws attention to bodies, relations and knowledge as co-constructed amongst students and teachers in the live space of the classroom. The micropolitical intricacies of classroom life are observed through video and audio recordings and interviews. The examples presented in this chapter provide fine-grained analysis of what children and teachers do in tiny moments in classrooms, and how these are infused by gendered positionings. Bodies feature in the secondary gymnastics lesson, where strength and grace (or acrobatic and aesthetic dimensions) are differentially valued by the teacher for male and female students. Artefacts feature in the early childhood literacy lesson where the worksheet requiring classification as ‘male’, ‘female’ or ‘animal,’ confuses the child – not because of the degendering of animals but because of the gender ambiguity of a human clown. Young people resist and modify the demands that are made of them in both lessons, demonstrating that the ‘didactic contract’ requires negotiation and adjustment, within particular subject specific conventions.

My own work, in the Anglophone tradition, has drawn on the concept of ‘pedagogical encounters’ to explore how many orders of things – human and nonhuman, animate and inanimate – come together unpredictably in spaces of learning (Davies & Gannon, 2009). The example below is from narrative fieldnotes from an elective Year 12 English Extension class, during which students develop an externally evaluated creative writing project. The class comprises three 17 year old male students and an experienced female teacher. Bodies are carefully and casually arranged: ‘Although the classroom is big, the three students sit at the front of the classroom in a rather cramped row.’ Ms M. ‘rests against a desk slightly to the side of the students’ row, creating an intimate and casual space.’ She has brought in ‘outrageous openings’ from ‘philosophical novels’ ranging from Adam’s *Hitchhiker’s Guide*

to the *Galaxy* to Dostoevsky's *Notes from the Underground*. The synergies between the two traditions becomes clear: gymnastics focuses on correct formation of bodies; English focuses on correct formation of minds and literary tastes.

In my fieldnotes, discussion is highlighted as the mode of engagement with knowledge: we see the teacher's questions lead towards the close study of language that characterises literary study. This excerpt, for example, is from discussion of the first sentences of *Notes from the Underground*: 'I am a sick man. I am a spiteful man. I am an unattractive man.'

Ms M asks about the character of the narrator. Billy (all names are pseudonyms) says that the opening 'gently gives some idea of character'. Charles suggests that 'the first person gives an idea of character.' Ms M asks 'how does the way it is written add to that?' She asks about the effects of 'short, blunt sentences' and highlights the ways in which the speech patterns give the text a self-critical tone, so the reader can access ideas about the character of the narrator.

Miss M returns to her initial question about enticing the reader, asking, 'Do you want to read more about this man?'

Where are the hints of gender in this lesson? In bodies 'cramped' into small plastic chairs? In 'philosophical' texts selected by the teacher? In the invitation extended to young men to feel, express choices and preferences, and become analytical and sensitive readers? Gender intersects with age, experience and power differentials. In this lesson as well artefacts (extracts of first lines from novels), bodies (students and teachers) and the interactions between them form what Amade-Escot terms the 'didactic contract' and what I see as the conditions for 'pedagogical encounters.'

References

- Amade-Escot, C. (2017) How gender order is enacted in Physical Education: the *didactique* approach. In G. Doll-Tepper, R. Bailey and K. Koenen (eds.). *Sport, Education and Social Policy. The state of the social sciences of sport*. London: Routledge, 62-79.
- Amade-Escot, C., Elandoulsi, S. and Verscheure, I. (2012) Gender positioning as an analytical tool for the studying of learning in physical education didactics. *European Conference on Educational Research*, 18-21 September, Cádiz. <http://www.eera-ecer.de/ecer-programmes/conference/6/contribution/16572/>
- Amade-Escot, C., Elandoulsi, S. and Verscheure, I. (2015) Physical Education in Tunisia: Teachers' Practical Epistemology, Students' Positioning and Gender Issues. *Sport, Education and Society*. 20(5), 656-675.
- Bourdieu, P. (1980) *Le sens pratique*. Paris: Les Éditions de Minuit.
- Butler, J. (1990) *Gender trouble. Feminism and the politics of subversion*. New-York: Routledge.
- Chabaud-Rychter, D. Descoutures, V. Devreux, A-M. and Varikas, E. (2010) *Sous les sciences sociales, le genre. Relectures critiques de Max Weber à Bruno Latour*. Paris: La Découverte.
- Danielsson, A.T., Berge, M. and Lidar, M. (2017). Knowledge and power in the technology classroom: a framework for studying teachers and students in action. *Cultural Studies of Science Education*. <https://doi.org/10.1007/s11422-016-9782-0>
- Davies, B. (1989) *Frogs and snails and feminists tales. Preschool children and gender*. Sydney: Allen and Unwin.

- Davies, B. & Gannon, S. (Eds.) (2009). *Pedagogical Encounters*. New York: Peter Lang.
- Duru-Bellat, M. (1995). Filles et garçons à l'école, approches sociologiques et psychosociales: La construction scolaire des différences entre les sexes. *Revue Française de Pédagogie*. 110, 75-109.
- Flintoff, A. and Scraton, S. (2006). Girls and physical education. In D. Kirk, M. O'Sullivan and D. Macdonald (eds.). *Handbook of research in physical education*. London: SAGE, 767-783
- Francis, B. (1999) Modernist Reductionism or Post-structuralist Relativism: Can we move on? An Evaluation of the Arguments in Relation to Feminist Educational Research. *Gender and Education*. 11(4), 381-393.
- Francis, B. (2006). The 'nature of Gender'. In C. Skelton, B. Francis and L. Smulyan (eds.) *The SAGE Handbook of Gender and Education*. London: SAGE, 7-17.
- Harré, R. and van Langenhove L. (1999) *Positioning theory: moral contexts of intentional action*. Oxford: Blackwell Ltd
- Héritier, F. (2002). *Masculin - Féminin. Dissoudre la hiérarchie*. Paris: Odile Jacob.
- Héritier, F. (2010) (Dir.) *Hommes, femmes: la construction de la différence*. Paris: Le Pommier.
- Larson, H., Fagrell, B. and Redelius, K. (2009) Queering physical education. Between benevolence towards girls and a tribute to masculinity. *Physical Education and Sport Pedagogy*. 14(1), 1-17.
- Ligozat, F. (2011). The Development of Comparative Didactics & Joint Action Theory in the Context of the French-speaking subject *didactiques*. *European Conference on Educational Research*, 1-16 September, Berlin. <http://archive-ouverte.unige.ch/unige:75023>

- Ligozat, F., Amade-Escot, C. and Östman, L. (2015). Beyond Subject Specific Approaches of Teaching and Learning: Comparative Didactics. *Interchange: A Quarterly Review of Education*. 46(4), 313-321.
- Mosconi, N. (2003) Rapport au savoir et division socio-sexuée des savoirs à l'école. *La lettre de l'enfance et de l'adolescence*. 51, 31-38.
- Pautal, E. et Vinson, M. (2017). Interaction verbales et non-verbales : outils de compréhension de la co-construction des savoirs et du genre entre élèves. *Recherches en Didactiques*, 23, 27-46.
- Schubauer-Leoni, M.L. (1996) Etude du contrat didactique pour des élèves en difficulté en mathématiques. Problématique didactique et/ou psychosociale. In C. Raïsky and M. Caillot (eds.) *Au-delà des didactiques le didactique: débats autour de concepts fédérateurs*. Brussels: De Boeck, 159-189.
- Sensevy, G. (2007) Des catégories pour décrire et comprendre l'action didactique. In G. Sensevy and A. Mercier (eds.). *Agir ensemble. L'action didactique conjointe du professeur et des élèves*. Rennes: Presses Universitaires, 13-49.
- Taylor, C. (2013) Objects, bodies and space: gender and embodied practices of mattering in the classroom. *Gender and Education*. 25(6), 688-703.
- Verscheure, I. and Amade-Escot, C. (2007) The gendered construction of physical education content as the result of the differentiated didactic contract. *Physical Education and Sport Pedagogy*. 12(3), 245-272.
- Whitson, D. (1994). The embodiment of gender: discipline, domination and empowerment. In S. Birrell and S. Cole (eds.). *Women, Sport and Culture*. Champaign: Human Kinetics, 353-371.
-