

# JAMILA'S STORY: ANALYSING AFFECTIVE BEHAVIORS THROUGH A PRAGMATIST PERSPECTIVE OF IDENTITY

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*This paper presents the story of a novice mathematics teacher, through which we aim to explore the social nature of affective behaviours drawing on a pragmatist perspective of identity formation. Data was produced by interview and treated as narrative, allowing the teacher-participant to freely trace and trace back contextually relevant aspects of her/his life experience. Our analysis indicates that teachers' affective positionings towards others emerge from shared social scenarios, manifested in response/reaction to such scenarios, and reflect their attempts to redescribe themselves in the eyes of others.*

## INTRODUCTION

Over the last ten years, the interest in studies about identity in the context of mathematics teachers' professional development has increased significantly. Walshaw (2004), for example, investigated the power of subjectivity over pre-service students' engagement when they were involved in pedagogical tasks in the first years of primary school mathematics classrooms. Brown & McNamara (2011) approached the development of mathematics teachers' formation and the construction of their professional identities, considering the implications of these processes in their teaching. Taking a sociological perspective, Lerman (2012) showed that individuals who have taken up mathematics as their careers were able to exhibit agency and change the direction of their lives in spite of what might be described as disadvantaged social backgrounds. The collection of articles edited by Frade, Roesken & Hannula (2010) proposed that both affect and identity may be seen as emerging individually through personal experiences, or as emerging socially through shared scenarios, and that this tension became salient when relationships between affect and identity were explored regarding the mathematics teachers' professional development. A common point in all these studies is the idea of bridging between the individual and the social.

Our study is situated within perspectives on the social nature of affective behaviors and the constitution of teachers' identities. Using a pragmatist perspective on identity formation, we suggest that the search for "bridges" between the individual and the social for approaching affect and the constitution of identity is not fruitful. The way in which we interpreted the theoretical perspectives we adopt led us to reject any "divorce" between the so called 'individual realm' and 'social context', since the

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individual and the social are relational entities articulated as a unity in semiotic interactions. Next we detail our ideas aiming at presenting our research questions more clearly.

## **A PRAGMATIST PERSPECTIVE ON IDENTITY FORMATION**

Like many other researchers (e.g., Damasio, 2003), we believe that human beings are born with biological mechanisms dedicated to learning. However, the developing person requires radical changes from biological determination to semiotic interaction with others-in-the-world. We suggest that what we call affect, or affective positionings toward others, emerges at the forefront of our identity formation. This depends on learning processes that begin as actions towards social scenarios and later in development become responses to individual/private demands. This is akin to Vygotsky's (Vygotsky & Rieber, 1998) second law of development, according to which all forms of knowing move from social settings to individual persons, and then from the individual to the social, in a constant semiotic interaction among individuals and, more generally, between individuals and their historical socio-cultural contexts. As such interactions emerge in life, all forms of knowing/learning (including our affective positioning towards others) are internalized and contribute to individuals' identity formation. We observe that such internalization is not passive. It instead involves a complex combination of contingency, circumstance, choice and judgment. In this sense, one's identity is only temporally stable; it is continually changing and dependent on the historical socio-cultural contexts to which individuals respond.

For pragmatist scholars (e.g., Dewey, 1916; Rorty, 1989), there is no core human essence or an innate self previous to semiotic interactions between individuals and their action-contexts. Hytten (1995) noted that

[Dewey] argues that individual minds are developed through social intercourse, that humans are characterized by their plasticity, which ensures the possibility of continual growth and that autonomy results from individual redirection, reconstruction and revision of societal understandings and beliefs. (p. 2)

The quotation above strongly suggests that identity formation is a process of self creation in response to social scenarios (some of which may well be private) and continual growth. Along the same lines, Rorty (1989) introduced a notion of identity that shifts the emphasis from an internal self/mind to language, suggesting that "no core essence or identity exists which lies behind the language individuals use to describe themselves and their world" (Hytten, 1995, p. 2). This notion of identity is developed by Rorty on the basis of two key ideas: blind impresses and final vocabulary. By 'final vocabulary' Rorty meant the set of words used by any one individual to justify her/his actions, beliefs/convictions and life; words with which we narrate the story of our (past and prospective) lives. For Rorty, the vocabulary is "final" in the sense that its words make up the boundaries of the stories we can tell about ourselves at a certain stage in life. On the other hand, 'blind impresses' are those

particular contingencies that make each of us unique and not a copy or replica of some other person; they guide our conduct and more generally our discourse.

In terms of culture, we interpret Rorty's ideas as follows: while we live in a cultural context, which we grow up and structures our world view, we are unaware or “blind” to some differences (gender, religion, race,...), as a fish is unaware that it lives in water. When we step out of this context, and begin to recognise other cultural contexts or differences, our blind impresses are no longer blind because this recognition implies in a redescription (a process of confronting our own contingencies and to trace our idiosyncrasies backwards and forwards, as Rorty puts it) of ourselves by developing a new language. Thus, by tracing our blind impresses in our own discursive moves, we continuously reinvent ourselves. Having said this, we argue that people develop, share and negotiate their identities in semiotic spaces by communicating selected aspects of what they think to be their blind impresses through some kind of final vocabulary. We believe this to be precisely what Gee (2000, p. 99) meant by "all people have multiple identities connected not to their 'internal states', but to their performances in society".

Based on the premises above, we wanted to investigate how to make sense of the manifestations of teachers' affective positionings towards others, from the point of view of the pragmatist perspective of the constitution of identity. How do such positionings emerge, and how are they produced, communicated and negotiated towards the formation of one's identity as a mathematics teacher? Our proposal is then to explore affective conducts through the notion of identity.

To offer a response to our research questions, we carried out an empirical investigation with two categories of secondary mathematics teachers (twelve teachers in total): one represented by teachers in their first four years of professional experience, and the other, with more than seven years of career. This choice was due to a conjecture that teachers of the first category were still positioned very close to the boundary crossing between their professional projections—socially constructed through their experiences of life (including the university formation) – and the effective practice of being a teacher. Therefore they are in an affective positioning potentially fruitful for capturing possible redirections or redescrptions of their blind impresses to survive in the profession. For the second category, our conjecture was that these redirections or redescrptions stabilize somehow during the practice. In this case, we would observe how this stability occurs.

## **METHODOLOGY**

Our research demanded a qualitative/interpretative approach, in order to promote an immersive analysis in the stories, life experiences and feelings that make up one's identity. Further, the theoretical frameworks we adopted—the social nature of affective behaviors, according to Vygotsky's second law of development, and a pragmatist perspective for the constitution of identity—imply, as noted by Meira (2006), in “a conception of development and learning as emergent semiotic processes in daily contexts of human experience” (p. 11). In this respect, we tried to follow Halliday's

(1993) suggestion that data should be ‘natural’ (not experimental): based on language, not self-monitored, in the context of its production, and not dissociated from the circumstances. We understand that interviews-in depth, semi-structured in a flexible way, matched (at least in part) the above point of view. The intention was to welcome both retrospective and prospective speeches, allowing the interviewee to trace and trace back in time the various phases of the projection they made in relation to a certain situation, showing that the discourses are not dissociated from the context of their production and enunciation. In this sort of interview, the interviewees are asked to talk about some few key aspects of the theme of research, giving them the maximum of freedom to treat the subject flexibly. We cannot but be aware that the interview situation is itself a productive context, in that the interviewee presents her/his as she/he wants to be seen and heard to that person at that moment.

We interviewed four teachers (3 females and 1 male) in Belo Horizonte, Brazil, and eight teachers (5 females and 3 males) in London, UK. Regarding the Brazilian teachers, two had recently finished their doctoral course in mathematics education, and one was in the middle of his doctoral research. The eight teachers from London were also students-teachers of a mathematics education undergraduate course. Among them, six were immigrants or originated from immigrant families from different countries. The interviews varied from 20 to 75 minutes each, and were audio-recorded. We also made use of personal notes. The first author started from the initial orientation “Please, talk about why did you want to be a mathematics teacher”. Next, she asked them to talk about their expectations in being a teacher and their real experiences as teachers. Then she asked them to talk about the flexibility of their schools regarding modes of teaching, and if they had experienced any special (conflicting or pleasant) moment in teaching they would like to report. We looked at the teachers’ reports as narratives and analysed them as such. By narrative we are referring to a discursive instrument of construction of the past, present and prospective reality of an individual. For Bruner (1987), thanks to the cultural systems of interpretation, coded in the form of narrative, the conversations about the past and the future make one’s own life more comprehensible.

Next we discuss some data to illustrate our ideas. In order to present in detail our ways into the analysis, we present the story of only one teacher-participant: Jamila, fictitious name of a representative of the first category of novice teachers. We chose to report on Jamila’s story because her professional choice for teaching mathematics was the only one that proved to be influenced by political circumstances. This story was constructed from Jamila’s narrative. Her words are in italics and have not been corrected for the English. Our comments are in brackets.

## JAMILA’S STORY

At the time of the interview, Jamila was 49 years old. She was born and gained her graduation in mathematics in Hungary. In 1997, she moved to London because she married a British citizen. Jamila indicated that her professional mathematical identity

has emerged in the context of Hungarian communism, from a combination of three main affective positionings towards: a familial affinity; a political belief about mathematics as culture and value-free; and a sentiment of “defence” against the regime. She said:

I came from a long line of teachers in my family, and some of them are from humanities, like as linguistics, history, and some of them are from physics and mathematics (...) I chose mathematics because mathematics couldn't be distorted by the regime. Mathematics was clear and straightforward. We're not telling in a sense our opinion; you are solving problem, and you had an answer to it (...) No matter which field you came from, when you solve the mathematical problems that is a very international thing and then politics and ideology couldn't be involved in that (...) and nobody could say 'No, that is not right because today in this country we don't think like that'. So, I chose because of that, so it's a political reason.

The passage above shows two special things: the decisive role played by Jarmila's affective positionings in the forefront of her professional identity formation; and how this identity formation was constituted by the social circumstances she was subjected to in a certain period of her life. Regarding the familial positioning, Jamila gave strong indications that it was produced by affinity since almost everybody in her family was a teacher. She stated that “*it was almost obvious to [her] to become a teacher as well [because she] didn't know anything [than being a teacher]*”. It is possible that her stance towards mathematics as supposedly an apolitical discipline had been produced by the influence of her mathematician relatives, and then reinforced in the university graduation course, including her experience in the teaching practice in a selective school with high achieving students. She did not mention any personal or special appreciation for mathematics in itself nor if she experienced, at that time, any type of conflict between her expectation in being a mathematics teacher and her experience in the teaching practice. It is also possible that, up to that time, Jamila's professional mathematical identity had a certain stability. However, she suggested that this possible stability was disturbed when she had to step out of the culture in which she grew up and structured her world view, and became aware that the selected environment of her teaching practice in Hungary was not representative of every place—her blind impressions regarding her teaching experience in Hungary were no longer blind when she was faced with differences. We can see this in the following:

Before I came to this university [in London] I taught for two years in a small independent school (...) with the kind of approach that children have to experience what they do (...) What the funny thing is that in Hungary you do your teaching practice in selected schools (...) you don't meet behaviour problems, you don't meet children who will find difficulty to understand a concept because they all came from a background that was established (...) you put together your lesson plan and then you're going to the class and you carry it out. And then when you go out and meet the real children, well that's completely different experience (...) When you're going to the real life then we will find that (...) children (...) may not have the concept established, they would come from all different backgrounds (...) and then, your lesson is not going to happen according to your lesson plan at all.



This new social scenario touched Jamila, and provoked the emergence of new affective positionings towards her students and modes of teaching, including the enlargement of her final vocabulary as teacher. In an attempt to adapt to this new scenario, she decided to convert her diploma, gained in Hungary, doing a PGCE course [Postgraduate Certificate of Education] in a public university in London. Feelings of sensibility and cooperation were produced due to her desire to attend to her students' needs, differences, backgrounds, and past experiences. And these demanded a redescription of Jamila as she explained in the passage:

This [new scenario] becomes me more flexible, and sometimes I decide just put the lesson plan completely aside, and let us do something, just sit down to discuss and see what we have got together as a class (...) What I learn through this is that you must be flexible with your lessons (...) it made me listen much more, a little bit of the past of the class, working together, trying together to achieve something.

Further, she said her participation in the PGCE course, notably interacting with her young colleagues helped her to carry out this redescription to make things less difficult for her. She developed an affective positioning towards her colleagues saying that she *"learn[ed] a lot from them (...) value[d] their company"*. For her, they were *"a group"*, and *"very often [she] just listen[ed] and tr[ied] to make sense where to put [her]self"*. Jamila clarified in what sense she has been benefiting from her colleagues:

The world has changed, the children are more open and in a sense they expect less authority, which can be a good thing because that means that it has become more democratic. They expect you to listen and value their opinion, but I have to learn that new approach because when I finished studying in maths becoming a teacher was completely different.

At the time she was doing the PGCE course, Jamila started teaching in another secondary school, and this experience led her to give continuity to the development of other types of affective positionings towards her students, the school and modes of teaching. She reported that this school was *"an extraordinary, selective, independent Muslim school just for girls (...) odd than the ordinary"*, and that [she kept] *it approach, that is, that the class have to work together, and then [she and the students] ha[d] to achieve something together (...)* She stated she was very encouraged to be in an environment like that, and suggested that her affective positioning towards the students has changed because now she was in an environment that *"girls [were] very kind and helpful, they enjoy[ed] helping each other"*. Here, again, we have evidence that such affective positionings emerged from a social scenario and were produced in response to it, as reinforced by Jamila:

When I go to the school with these girls, it's great to go into the classroom and then have luck in all work, and by the end of lessons they says they discovered something (...) I can become very touched, children can touch me. In one of the classes there is this girl who, her sight is very bad so we have to prepare for her, and seeing her how happy she is when she keeps up with the class and achieve the same things the class can do.

When she said “*to prepare for her*”, can this be a clue that, among other actions, Jamila’s impressions regarding her prototype of ‘student’ has changed and because of this she had to enlarge aspects of her final vocabulary as teacher to communicate with this girl?

Jamila also showed she has developed a healthy relationship with her mentor, but found it hard to redescribe herself as aiming at reaching a “*fine balance*” between the school and parents’ expectations and her identity as mathematics a teacher. She explained this conflicting negotiation in this way:

My mentor, she is an experienced teacher (...) she says she is open [to] new ideas (...) and she says the way she could do use me: this school is a high achieving school, so, for that reason, you have to make sure whatever you teach, in the end, the girls are going to be able to complete GCSE [General Certificate of Secondary Education] on a very high level and that comes first. It’s very hard because the schools have their expectations, so it’s not that you come with bright ideas and would like to carry them out, but the school is going to say ‘No, listen, this is the way we do things here, and we don’t mind if you experience a little bit harder, we would like to carry on a method because it is a tried method that works with us’.

Despite all these, Jamila seemed very aware of the need to redescribe her actions in response to social institutional demands saying that:

It doesn’t only depend on me what sort of teacher I am going to be, what sort of the teacher’s personality I am going to be, that is more or less on me, but sort of a teacher convey the subject is not only than to me (...) We have to adapt.

## FINAL COMMENTS

In a previous work (Frade, Roesken, & Hannula, 2010), we suggested how conflicting the processes of identity formation in novice mathematics teachers may become, especially those dominated by conflicts involving strong projections of what a “good teacher” is expected to be and to do. Jamila’s discourse showed how difficult it is being Jamila in everyday school practice; how it is conflicting to combine a redescription of herself in the eyes of others (students, mentor, institution) with her own demands towards herself. In spite of this, she seemed to have developed a way to deal with all these, perhaps an emotional maturity in recognizing that she needs to find a balance between the institutional demands and her own demands to adapt to and to survive in the profession. And this possible emotional maturity seems to be what can be said that stabilizes along the professional practice of being a teacher. The continuing redescrptions that characterize the constitution of one’s identity as teacher, as discussed in our previous work and demonstrated in Jamila’s story, led us to say that affective positionings towards others are strongly ‘situated’ in that they emerge from temporal-specific social scenarios, and are learned, produced, communicated and negotiated as responses/reactions to it. In this sense, the pragmatist perspective we used is very helpful, for it directs our analysis to “outward rather than inward, toward the social context of justification rather than to the relations between inner representations”. (Rorty 1979, p. 424) Jamila’s story aimed at showing that for each

scenario she was subjected to—the familial context, the political circumstances of the two countries involved, the different schools she taught at, and the PGCE course, for instance—were sources of the origin of both affective positionings towards others and ruptures of some of her blind impresses regarding the career of mathematics teacher. On the other hand, such affective positionings reflected Jamila's attempts to redescribe herself towards a new Jamila in the eyes of these others by developing a new language to better 'live' in such scenarios.

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