Article

The Academic Identity Development of International Doctoral Students: An Exploration from a Sociocultural Perspective

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ABSTRACT

This qualitative study examines the factors that facilitate or inhibit the academic identity development of four Vietnamese doctoral students in Denmark. Using the combination of Genetic method and Activity theory, the paper provides insights into the participants' experiences of becoming and being an academic, which is context-dependent and personal. The findings suggest that the sense of being academics was strengthened when doctoral students were empowered by their supervisors, and other members of the academic community validated their membership. The students also enacted their agency to move beyond the student role and establish a confirmed academic identity, though there were situations when their agency did not lead to desirable outcomes. The study is one among a few that incorporated the personal life history of doctoral students to examine their academic identity development, arguing for its inclusion to have a comprehensive picture of students' learning and the process of becoming an academic.

Keywords: academic identity, international doctoral student, sociocultural theory, Vietnam, Denmark

Since a significant number of doctoral students will be engaged in academic work upon completion such as becoming faculty members or independent scholars (Hopwood, 2010), "defining academic identity is at the heart of doctoral pursuit" (Jazvac-Martek, 2009, p. 253). The outcome of doctoral education, therefore, is not only a dissertation but also the academic identity development of doctoral students. In other words, for a PhD student, academic identity formation is as important as producing knowledge (Green, 2005; Leshem, 2017; Frick & Brodin,

2019). Academic identity development can be understood as a process of becoming and being an academic, which "represents a dynamic configuration of elements that are simultaneously internal, or psychological and developmental, and external, involving the social and disciplinary" (Weiland, 1997, cited in Jazvac-Martek, 2008, p. 8).

In existing literature, day-to-day events, interactions and personal lives are rarely taken into account in researching doctoral students' academic identity (McAlpine et al., 2014). Even students themselves downplay personal issues, although "the personal cannot be separated from the academic" (Jarvac-Martek et al., 2011, p. 19; Strandler et al., 2014). This paper attempts to redress this research gap by looking into factors influencing the academic identity of four Vietnamese doctoral students in Denmark through the lens of sociocultural perspective with the combination of Genetic method (Vygotsky, 1981) and Activity theory (Engeström, 1987). It offers an insight into how and why the interactions and different academic tasks that the participants were engaged in during the candidacy contributed to their sense of being academics. Simultaneously, it unravels how the doctoral students' personal backgrounds affected their emerging academic identity, and how they negotiated their different identities (for example as Vietnamese students studying and working in the Danish academic context, as a graduate student striving to be an academic). The article answer the question: "What are the factors which contribute to or hinder the academic identity development of Vietnamese doctoral students in Denmark?". This study will suggest a feasible theoretical orientation to investigate PhD students' academic identity development. It will hopefully present a more holistic understanding of doctoral students' experience with the non-academic component of their lives being taken into account.

LITERATURE REVIEW

Definition of Identity and Academic Identity

Identity indicates our understanding of who we are and of how others think who we are, which is shaped by perceptions of self and the larger context in which the person shelters (Jenkins, 1996; Danielewicz, 2001). The postmodern and poststructural lens see identity as process-oriented, never static or fixed, and "individually constructed" (Exton, 2008, p. 9). From the sociocultural view, identity evolution occurs when individuals participate in social life and join as members of various groups in which they may experience different levels of affiliation and connection. The groups are nested in a broader specific social and cultural structures such as race, gender, or social status (Soong et al., 2015). This process implies dynamism because identity may be influenced once the settings and interactants change. Consequently, the identity of an individual is continuously shaped, fashioned and refashioned. It does not exist by itself but in relation to others. However, individuals still have the dominant control over their identity construction, depending on their social and academic goals (Hall & Burns, 2009).

The journey of becoming an academic is conceptualized as "a continuum beginning with doctoral studies, moving through the years spent as a non-tenured academic and on to becoming an established academic" (McAlpine & Amundsen, 2011, p. 16). Academic identity can be generally understood as the sense of being and becoming academic that one feels when participating in collective academic practices (McAlpine & Asghar, 2010; Pifer & Baker, 2016). Academic identity insinuates values, attitudes, beliefs, behaviours, and other responsibilities required of an academic who works in higher education and carries out duties including research, teaching, and community service (Mahlomaholo, 2009). The complex construction of academic identity develops through time and is "both social, reflecting the contexts in which academics live, and personal, reflecting their life histories" (Leibowitz et al., 2014, p. 1259). On one hand, academic identity is perceived as a social construct rooted in a social, context-dependent process and mediated by the interactions doctoral students have in academic communities (Higenell, 2009; Brew et al., 2011; Emmioglu et al., 2017). On the other hand, personal life including their motivation, personal background and emotional experiences throughout the candidature also shapes doctoral students' identity formation process. According to MacLure (1993), academic identity construction is "a self-reflexive endeavour" that involves "network of personal concerns, values and aspirations against which events are judged and decisions are made" (p. 314). This network is formed by an individual's unique history, by his or her chosen moral space and conceptual frameworks including "meaning, value, obligation and a range of notions concerned with dignity and self-esteem" (Henkel, 2002, p. 138), and by the various communities of which she or he is a member (Choi et al., 2021).

Understanding Academic Identity from a Socio-Cultural Perspective

Researchers have drawn upon a variety of theoretical and conceptual frameworks to study the complex notion of academic identity, including communities of practice and socialization framework (Amundsen & McAlpine, 2011; Fuller et al., 2005; Huang, 2009; Weidman & Stein, 2003), developmental networks and sociocultural perspectives on learning (Baker & Lattuca, 2010), or role identity theory (Jazvac-Martek, 2009). Although these frameworks have provided significant insight into the process of doctoral students' academic identity, they have certain drawbacks. First, they are "oriented to congruence and assimilation, with individuals inculcated into the normative knowledge and practices of the field" (McAlpine et al., 2014, p. 954). Second, in these frameworks, individual agency and self-motivation tend to be overlooked, specifically the idiosyncratic nature of individuals' histories and the learners' pre-existing conditions such as social codes, their own expectations in shaping engagement with academic work. In order to obtain a comprehensive picture of the continuous (re)formation of doctoral students' academic identity, this study chose to investigate academic identity of international doctoral students as a socially constructed part of human beings, thus, drawing on the combination of Genetic method (Vygotsky, 1981) and Activity theory (Engeström, 1987).

First, the genetic method (Vygotsky, 1981) encompasses four genetic domains of analysis: phylogenesis (humans undergoing natural evolution), socio-cultural history (the social settings of human activity), ontogenesis (the individual lifespan), and microgenesis (immediate events). These four domains are illustrated in Figure 1.
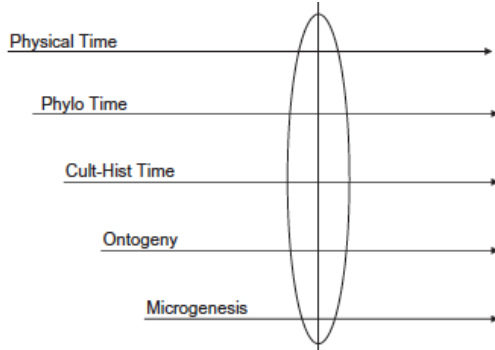

Figure 1. Sociocultural Theoretical Dimensions of Genetic Analysis (Cole & Engeström, 1993, p. 20)

In relation to academic identity, it is essential that individual demographic characteristics should be taken into account, including, though not limited to, students' gender, race and ethnicity, prior work and education backgrounds, motivations for a PhD pursuit, and imagined career prospects. As argued by Baker and Lattuca (2010), it is not "demographic characteristics" but how they are "interpreted within a particular socio-historical context" that is important (p. 822). The genetic method offers a framework to explain the continuous construction and reconstruction of identity while retaining the relation to its history and origin. In this sense, academic identity is seen as a composite of activity in context, time and space. The genetic method justifies how doctoral students perceive, believe and understand their own identity basing on their ontogenetic development (for instance their prior background, professional and educational experience, and life history) and the broader cultural-historic domain including policies, rules, community (including both the contexts in the institutions that the students work in and other social communities they are engaged with).

Second, Activity theory (Engeström, 1987) helps to shed light on the inherent complexities often found in doctoral students' experience by examining the tasks they take on, the network and people with whom they interact, the tensions and obstacles they encounter and how all those factors affect their developing sense of academic identity. The system (Figure 2) encompasses various analytical components, including a subject, an object, a community, tools/signs, rules, division of labour, and an outcome.
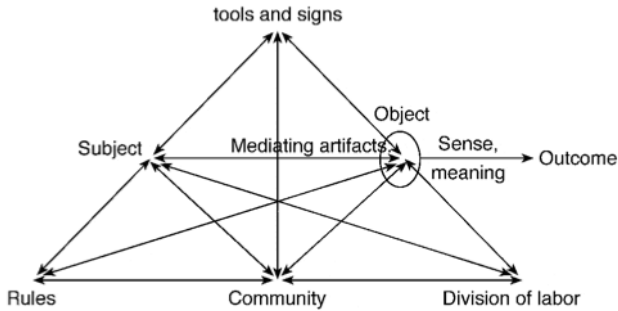
Figure 2. The Structure of a Human Activity System (Engeström, 1987, p. 78)

Each constituent node of the activity system has its own prior histories, meaning that a total understanding of any activity system in the present can only be achieved when the activity is analyzed in accordance with the wider social, political, cultural, and historical contexts. The system is a key to understanding what brings about the transformation of one's identity in a specific context, which will reveal:

> the relationships between (i) individuals, what they do and what motivates them, (ii) the communities and contexts in which they are embedded, including the rules and norms which regulate interactions, and the way different roles and tasks are assigned, and (iii) the tools people use to help achieve their objectives (Hopwood & McAlpine, 2007, p. 3).

I argue that the combination of Engeström's (1987) Activity system and Vygotsky's (1981) Genetic method will complement each other to study the process of academic identity development of Vietnamese doctoral students in Denmark. Specifically, the process of being and becoming academics is analyzed with reference to the students' past background, the complex relationships between them and the artefacts/tools they use, the social and academic groups they interact with, the cultural values or norms guiding social communication and behaviours, and the structure of those groups/communities (Hopwood & McAlpine, 2007). The genetic method will support components in the activity system such as rules, indicating not only the norms the Vietnamese doctoral students learn to acquire during their candidature in Denmark but also the values they hold as Vietnamese people, and communities, referring to the faculty or disciplines they work in and other social groups outside the institutions that they are members of.

METHOD

This study is a qualitative case study of Vietnamese doctoral students in Denmark. A qualitative approach was chosen to gain an in-depth understanding of the experiences of the participants without attempting to make generalizations of a wider population.

Participants

The sampling strategy employed in this project was purposive sampling, a nonprobability form of sampling. This sampling meant suitable participants were selected based on the relevance to the topic, research question, and analytical framework of the study. Purposive sampling allows the researcher to select participants who are acute observers and well-informed (Fraser, 2011) while still taking local conditions and values into account (Lincoln & Guba, 1985). Despite its restricted sampling variation, this method provided an economical and practical way to gather qualitative data from information-rich participants.

The participants were four Vietnamese current and recent doctoral students living in Denmark who were at different stages of their PhD study. They were referred to me from our mutual friends and my networks in Denmark. All of them were contacted via e-mail invitations to participate in the research. After their agreement was obtained, a research description letter and a consent form were sent to them. In this study, all the names of the participants and their institutions were anonymized. Although the number of participants were small, the data from in-depth interviews was still able to provide a comprehensive pictures of their candidature which were resonant with many other PhD students. Their demographic information is summarized in Table 1 with the names being pseudonyms.

Table 1: The demographic information of the participants

Name	Gender	PhD stage	PhD program	Scholarship	Background
Tam	Female	End of Year 1	Food Science	University funding	2.5 years research-based Masters program in Canada
					1 year of work experience in Vietnam
Hanh	Female	Middle of Year 2	Agronomy	University funding	2 years Masters program in Germany
					No work experience
Van	Female	Beginning of Year 3	Drug Design and Pharmacology	Vietnamese government scholarship	2 years Masters program in Vietnam
					10 years of working in a university in Vietnam
Nam	Male	completed, currently Post-doc	Computer Science	Danish government scholarship	2 years Masters program in Vietnam
					limited work experience

Data Collection

Data for this study was generated through in-depth semi-structured interviews with the four participants. Before the interviews were conducted face-to-face with the participants, a pre-interview form was sent to them to gather their background information which corresponded to the ontogenic and part of the socio-historical dimensions of the subjects (i.e., the participants) as in the theoretical framework. This form provided information about their prior background (e.g., their previous education, work and research experience, their aspirations to work in academia both before starting the PhD programs and during the PhD study, their current stage in the doctoral study, and their desired positions upon completion). The pre-interview form helped to acquaint me with the personal backgrounds of the participants and draw on the information provided to contextualize the interview questions and prompt for further details during the interview process.

After the participants sent the form back, interviews were arranged to accommodate their schedule. The interview protocol was grounded in the theoretical frameworks with questions covering all components of the Activity theory and dimensions of the Genetic method. A pilot interview was conducted and no revisions were made. At the beginning of each interview, I reminded the participants of their rights and assurance of anonymity, and that the interview would be audio-recorded. They were free to select either English or Vietnamese and they all chose Vietnamese to tell their stories. The audio files were later translated and transcribed for analysis by myself. I replaced all possible identifiers that may affect participants' anonymity with more neutral terms, for example the exchange institution is called "the exchange laboratory (lab)", the companies which funded the research project are entitled as "the companies/corporations".

Data Analysis

The data collected from the interviews were analyzed thematically. According to Braun and Clarke (2006), thematic analysis can be a contextualist method which reports meanings individuals give to their experience, events and realities, and examines the way that the broader society imposes on these meanings. The themes and patterns of the data were identified in an inductive and bottom-up way. Although the themes were well connected with the data without being attempted to fit into a pre-existing coding frame, I was aware that "data are not coded in an epistemological vacuum" and therefore I was not totally distant myself from "the theoretical and epistemological commitments" (Braun & Clarke, 2006, p. 84). The data collected from the interviews were analyzed according to the Activity theory framework before being grouped into themes: interpersonal and intrapersonal factors. Examples of the coding categories and themes are in Table 2.

Table 2: Example of the coding scheme

Code	Sub-code level 1	Sub-code level 2
Subject	Personal background	Hometown Family background Motivations for PhD pursuit
	Prior educational background	Place of undergraduate education Place and type of Masters education English proficiency Familiarity with team work, collaborative work Familiarity with laboratory facilities
	Prior research experience	Assistantship in undergraduate program Assistantship in Masters program
	Prior professional/employment experience	Working in university Working in corporation No work experience
Object	Completion of the program	Completion of required components of the program Accumulation of research and teaching experience
	Preparation for future career	Expanding network Publishing papers Establishing academic identity

RESULTS

The themes presented include (1) the interpersonal factors inherent in the supervisor's roles and the supervisory relationship, and the attention and recognition of the academic community, and (2) the intrapersonal factors, named as the students' agency and independence, academic literacy, and life history. It is worth noticing that these factors did not independently exist. They were interwoven, and some even have causal relationship. Henceforth, it is to be expected that there will be repetition and back-and-forth reference across the analysis of these factors.

Interpersonal Factors

The interpersonal factors refer to the students' interactions with their immediate academic setting (their supervisors and fellow colleagues), and the larger academic community (other faculty members and professionals with whom they had contact with), which corresponds with the community element in the Activity theory.

Supervisors' mentoring and trust

To the participants, their supervisors were credited as the most substantial on-campus source of support. They were portrayed to be "understanding", "supportive", "inspiring", and "facilitative". Nam and Van, who shared the same experience of language barriers, were indebted to their supervisors for the encouragement. Van recalled:

> I met a lot of difficulties. Sometimes I spoke to my professor and he didn't understand me, and I didn't understand him either. My supervisor, he is…magical. He always knows when I don't understand something...He is not pushy, he never puts pressure.

When the supervisors were alerted about communication constraints, they were willing to provide the students with academic resources and instant feedback. These responses from the supervisors reinforced the students' confidence and self-efficacy because they were signaled that slow integration did not mean incompetence. Unlike Nam and Van, Hanh's English proficiency sufficed for her PhD study. But only in the PhD study was she involved in a knowledge co-construction process with her professor who encouraged her to take charge of the work. Hanh said "When I first started the project, I often thought this project was his [Hanh's supervisor]. But he told me that this research is mine as well, that I am the owner, the manager of the project".

The supervisors also acted as mentors who linked them to relevant professional and academic networks, sponsoring them with necessary access to resources and opportunities for learning and research. Tam, for instance, considered networking as her weakness, which did not go unnoticed to her supervisor who often referred her to other faculty members within and outside her faculty and institution for relevant professional assistance. Tam acknowledged that these opportunities of frequent contacts with "people with expertise" not only enlarged her knowledge and network but also created a strong sense of inclusion in a scholarly community. "Compared with a normal PhD student, I think I have a lot of networking experience", Tam commented.

Furthermore, the participants' accounts highlighted the mentoring model, or peer-to-peer model of feedback giving (Kumar & Stracke, 2007), rather than the apprenticeship model which puts the students in a more passive position of importing their supervisors' suggestions into text with little criticality (Ryan & Viete, 2009; Odena & Burgess, 2017). The students all reported they were engaged in open critical conversations and intellectual dialogical exchanges of ideas. Hanh and Van, for example, emphasized that they did not "obey" but would pursue their own argument in case of disagreement with their supervisors. For the academic identity to be nurtured in a supervisory relationship, it is essential that PhD students acquire the feeling of being valued as a person with capacity and knowledge, and being free to argue and refute in a multi-voiced learning spaces.

The PhD students took pride in their supervisors' trust in their capabilities. Tam, for instance, received her supervisor's support to use an advanced expensive technology for experiments. "That's very costly, if I am not successful, it will be

a big waste, but she [Tam's supervisor] did not hesitate to give me her approval". Besides, the participants were honoured to be entrusted with academic tasks including tutoring, supervising, or teaching assistants. Hanh was given access to teacher-only resources to prepare learning materials for Bachelor and Masters students. Tam was assigned to do tutoring quite early, right in her first year. She was also selected by her supervisor to sit in the examiner board of Bachelor thesis defense. In front of the Bachelor students, Tam's professor treated her as a colleague:

> In the first meeting with the students, she [Tam's supervisor] frequently asked for my opinion on what she was discussing with them. She told them to come to me if they had any doubt. In the next meetings, the students worked with me only… I think that's how she trusts me. She wouldn't take the risk of trusting somebody who was not academically capable.

In general, the supervisors were portrayed to be intellectually present and supportive, empowering the students both as graduate students and as newcomers in the academe (Leshem, 2016, 2020). Although there was no account of emotional or social support from the supervisors, the students admitted that they did not expect the feelings of comfort but instead wanted to focus on developing a collegial relationship with their supervisors.

The recognition of the academic community

An interpersonal factor that could either accelerate or obstruct the doctoral students' academic identity was the recognition of their work and achievements, and the validation of their membership in academia by the scholarly community.

The recognition and attention could be as simple as the students' positive peer feedback on their performance. When Hanh first started her PhD study, she often thought "the project was just his [Hanh's supervisor]" because all the ideas came from him and she was "hired to do the experimentation". The feedback and attention of other PhD students to her work, however, showed Hanh that the values she was creating to the research project was recognized. In addition, academic activities like publishing and reviewing manuscripts were reported to evoke a strong sense of being academics. Nam, for his first manuscript, was not accepted and further revision was required for publication. Rather than disappointment, he saw it as a typical practice in academia that he should be prepared for. Another intellectual task which greatly contributed to the doctoral students' feeling like academics was being journal reviewers. Tam and Nam explained that the endorsement for this position entailed the recognition of their mastery in their research areas. This responsibility was not a requirement in the PhD program, but it signified their being on the right path to acquire a future academic position and they did the job with great enjoyment. Nam demonstrated his understanding of and sympathy for the work.

> Sometimes people might get very critical or very brief comments for their submissions, which can be annoying. But if you do the job, you know that it's a non-paid job, it takes the reviewers a lot of time and they are not paid...For my last year in the program, I felt like I received salary

and I worked to earn the living. It's like I lived by being an academic, I worked as an academic.

Compared to the other students, Van experienced a rougher, more tumultuous doctoral journey, particularly during her first year because of tensions with her colleagues. Her academic identity development therefore underwent a lot of fluctuations. Van recalled an event that seriously impeded her self-esteem and academic identity because she felt inferior to her fellows.

> I could tell that other people were thinking I asked a very stupid question. Their reaction implied that I was taking their time for nothing … I felt shocked, it seemed that people thought I came from an Asian country where I could not access advanced knowledge. This badly influences my academic identity.

Language barriers further hindered Van's integration into the community. She was not confident in her English, and she had no knowledge of Danish. The feeling of invisibility surged when her peers frequently spoke to each other in Danish regardless of her presence. This also happened when they all had to turn to the supervisor for dispute resolutions. In general, in the first year of her study, Van saw herself as "a guest" rather than a member of the immediate academic community. Nevertheless, her second year was a stark contrast. Her colleagues came to her for academic discussions, even those "who once looked down on" her.

> There were some facilities used in the experimentation process, and I spent a lot of time learning to operate them. I figured out some tactics that could ease the process and other people in the lab knew that. They came to learn from me.

The implicit acknowledgement of Van's fellow students of her capacity had incredible effects on her academic identity growth: "It was a process for others to realize that I have something to offer, which is significant in my study here. It's not just one event, or one point of time, it's the whole process". The transformation in the interactions Van had with her colleagues entailed the validation of her membership in the academic community, which propelled her out of her own "shadow" and greatly enhanced her sense of being an academic.

To Tam, it was the attention of the research group members which affirmed her academic identity. Members in her project research group included professors from two universities, experienced researchers from two corporations, one Postdoc, and Tam as the only PhD student. But Tam neither felt inferior to them nor found herself "of little value".

> Maybe it's just my personal feeling, but when I speak, everybody is quiet and listens to me attentively [...] In this project I conduct experiments every day and I figure out a number of problems. Perhaps that's why my opinion is highly valued in the meetings. If I propose any idea or research technique, 90% of possibility that it will be accepted.

The interactions in project meetings accelerated Tam's sense of being an academic. It was a manifest of respect and acknowledgement of her contributions to the work and also an affirmation of her membership in the group. She not only did the work because she was required to do, but she also took part in the conceptual level of generating ideas and shaping the direction of the project.

In alignment with Activity theory, the interpersonal factors discussed above emerge from the constituent nodes of the system including community (supervisors, faculty and peers) and division of labours (teaching and research-oriented activities). The academic identity evolves and transforms when the subject, doctoral students, interact with others in their network circles. These interpersonal factors may or may not give doctoral students a sense of belonging (Higenell, 2009). The sense of belonging was manifested in how the students developed mentorship with their supervisors, how they appreciated the supervisors' trust in their capacity to carry out important responsibilities and how their academic accomplishments were recognized by other academics within their scholarly communities. The recognition came in various forms, from the intricate interactions with other PhD fellows, the feedback on progress from peers and professors, the engagement with different academic responsibilities, to the attention that others paid to their work. The recognition also came in various degrees. It was detrimental to academic identity if the students lacked peer support, endured peer pressure and the feeling of otherness, meaning that their group membership was invalidated. When students do not find an academic environment "a space of belonging" where they are "accepted and welcomed" (Leibowitz et al., 2014, p. 1258), it leads to the production of negative energy such as the feeling of being overshadowed and a weak sense of being academics. Conversely, being involved in generating ideas and shaping the research directions, and being recognized for their contributions, capacity and values create a favourable condition for the students' academic identity to grow (Jarvac-Martek, 2008, Leibowitz et al., 2014; Filipovic & Jovanic, 2016; Phan, 2022).

Intrapersonal Factors

Managing dual roles

The PhD students' academic identity development was seen in events and moments that the students were able to move beyond their student role and to fit in the academic role. Typically, at the beginning of the PhD study, doctoral students are most aware of their role as students because they must go through a double socialization into the role of graduate students and into the profession of being an academic (Golde, 1998). In some cases, the student status was what the participants needed to feel comfortable to move forward. Van, for instance, at the start of her study, saw her student role to be more prominent because she was highly conscious of her weaknesses and slow integration into the academic environment. However, Van and the other participants made evident attempts to move beyond their student status by enacting their agency and establishing a more equal status to their professors.

> I don't think I have to obey him [Hanh's supervisor], I mean, follow every single thing he tells me to do. There are times when he says

something and I disagree with him. We discuss the work together. Of course most of the time I think he is reasonable, but when we don't see eye to eye on certain issues, I voice my opinion. (Hanh)

I don't wait for him to tell me what to do from A to Z. He has a lot of ideas, and I do too, we share and discuss with each other. I do the experimentation without waiting to be told what to do. (Van)

There were situations when the students exercised their agency as an academic but the response confirmed their student role rather than their academic role. Hanh recounted on such experience when supervising a Bachelor student in her laboratory.

She [the Bachelor student] was not open to me at first. My professor assigned me to supervise her experimentation. Although he told her that she would primarily work with me, she always came to him, instead of me, if she had questions. Maybe because I was just a student.

The participants oscillated between the two roles: as a doctoral student and as an academic, with the latter growing stronger as they progressed along the candidature. This was noticeable in Nam's narrative, a PhD graduate. When he had reached milestones such as having publications and attending top-ranked conferences, he felt less of being a student and saw his supervisor as "a colleague, sometimes a friend", though the student role awareness was never totally swept away.

Towards the end of my PhD, I did not think I was a student. I only had that feeling when I heard my supervisor talking to another professor about something I had no knowledge about, and I thought I still needed to learn more. But it did not happen frequently.

Nam even emphasized his "right to contribute". He saw it not only as a responsibility of a PhD student to be intellectually engaged in academic discussions, but also a right to be part of the academic community. "I had the right to voice my opinion during meetings, propose solutions, refine the solutions. PhD students have the right to do so".

The academic role, however, might not always feel weak to first year PhD students. The example is Tam and her collegial relationship with senior researchers. She engaged in intellectual discussions with less in the role of a student and more of a researcher.

I discuss with them, offer my opinion. They may know about technology, but they don't personally do all the experimentations, therefore I give my opinion, I disagree, I refute. I think it is academic discussions, academic exchange, we interact and learn from each other. They may have the general knowledge, but haven't applied it specifically on anything, and now I offer them the specific example of what I do.

Tam saw herself in an equal position, having an equal say with other academics. "To me it is similar to a discussion between scientists", Tam further commented. Because of the confidentiality of her research project and the involvement of industrial corporations, Tam was allowed to purchase new facilities for experimentation and almost had a laboratory of her own. This working space put her in a position of expertise when talking to other student fellows if they asked her for assistance with the new facilities. Tam enjoyed this great amount of independence, which she stressed as an essence in her academic identity.

In general, the participants found themselves in two roles: as PhD students and as novice academics. In order to establish their desirable academic identity, the participants attempted to construct the identity the way they wanted themselves to be positioned in the scholarly community and tried to act accordingly. The switch from a student role to an academic role requires a high level of agency and cognitive complexity. This extrapolated why the participants enjoyed their increasing independence from their supervisors because they were agentic to make progress in the learning process, explore their doctoral experiences and opportunities, and achieve a more equal level with other academics. However, they also made a clear distinction between independence and solitude. They all wanted to be autonomous, but simultaneously emphasized that an academic belonged to and developed within a certain community. Therefore, they were agentic to be well-connected with their supervisors, colleagues and other faculty. Furthermore, it should be that academic identity may feel strong to PhD students regardless of their stage of candidacy. Although it is more common that doctoral students see themselves more as academics when they approach the end of the program, first year doctoral students might enact their agency to construct the desired academic identity. Therefore, they might find themselves farther from the student role spectrum and closer to the academic role spectrum despite being at the beginning stage of their doctoral program.

Academic literacy

Another factor that influenced the academic identity (re)construction of the PhD students was their academic literacy, meaning reading and writing practices within the discipline and the ability to think and act critically. This factor represented the mediating tool in the Activity system.

All the participants in this study had certain research experience before they started their PhD undertakings in Denmark, but it did not mean they had no difficulty in academic reading and writing. The first reason was their low English proficiency. The second reason was their unfamiliarity with academic writing genres. It is common for doctoral students to encounter such issues, especially international students who have to learn the discourse of the discipline not in their mother tongue. Van's progress from reading with difficulty to reading with satisfaction and efficiency marked a big leap in her doctorate learning. Van read journal articles to familiarize herself with "the language of the discipline". Being equipped with knowledge and language, she was more confident to be engaged in intellectual exchange with her supervisor and peers. Her experience is an example of a student's deploying the repertoire of linguistics practices appropriate to the

academic setting to be a part of a specific scholarly group. Meanwhile, Nam reported his experience, "I had a strong sense of being an academic when I read journal articles, because I could understand what they were writing, I could tell where I was in the school of thoughts". Nam's case was quite unusual since it is more common that students find reading an "isolating" rather than an engaging "intertextual experience" (McAlpine, 2012b, p. 355). His progress in writing was evidenced in his publications, and the gradual mastery of academic writing was significant to his academic identity development (Inouye & McAlpine, 2018). As Parker (2009) asserts, scholarly writing is "something more than a skill" and "intimately connected to the identities of doctoral students and academics" (p. 52).

Unlike the other three students, Tam were confident of her academic literacy thanks to the Masters program in Canada. But in her PhD study, being a reviewer offered her a chance to interact with the textual productions of the field, the manuscripts, and integrated this intertextual networking with the familiar networking (McAlpine, 2012a) through intellectual exchange with other professors and experts about thought-provoking points in the manuscripts. In this study, academic literacy was a constitutional element of the students' academic identity and was manifested in how they learned from and interacted with the disciplinary textual products (Chang & Schleppegrell, 2016; Inouye & McAlpine, 2017, 2018). The findings suggest that reading was necessary to accommodate the students' ability to communicate, either in written or spoken forms. Their improving academic literacy not only encompasses reading and writing practices, it also "comprises both thinking critically and taking action" (McAlpine, 2012b, p. 359) such as Tam's decision of acceptance or rejection of journal submissions or Nam's and Van's attempts to read more efficiently and write more academically. My argument is that academic literacy should be seen as an issue at the level of identity construction. It gets better along with time when the doctoral students learn to acquire the discourse and the intertextual network of the discipline from reading and writing practices. It furthermore enables the academic socialization process and academic identity development of PhD students, especially international students who are supposed to be less familiar with the mainstream academic discourses and research culture in the host countries (McAlpine, 2012b).

Life trajectory

Understanding life trajectories helps to unravel the linkage between the past, present and future, which underpins the examination of the identity trajectory of the doctoral students (McAlpine et al., 2014). In the study, what is significant to the academic identity (re)formation includes the students' prior professional and educational history, their cultural norms, and their future imagined possibilities. The academic identity can be acutely recognized by the participants themselves even before they started their PhD study due to their prior professional and educational background such as working in a university in Vietnam (Van's case) or doing a research-based Masters in Canada (Tam's case). Van said:

I am passionate about researching, not teaching... I became a lecturer because the environment that most nurtured the research capacity was a university… I did not want to identify myself as a teacher, I preferred a researcher. I saw myself as an academic.

However, it does not mean that her academic identity blossomed during her doctoral study. Despite an existing sense of belonging to academia, Van portrayed herself as "a guest" in her laboratory. Cases like Van support the view of Colley and James (2005, in Leibowitz et al., 2014, p. 1265) on academic identities as "disrupted processes" that involve not only "becoming" but also "unbecoming". Before seeing herself as, in her own words, "a cog in a fast spinning wheel", it took Van time and consistent efforts to engage with and get accepted by the immediate academic community in order to move from the periphery of the community inwards. I would argue that this disrupted process also involves a phase of "re-becoming" when a PhD student exercises his or her agency to regain the sense of belonging and reconstruct the academic identity which is subjected to alterations in order to fit with the new community.

Similar to Van, Tam assumed her academic identity before her PhD study. She entered the doctoral program with an existing sense of being an academic from her Masters. But in contrast to Van, Tam experienced much less identity fluctuation, and her academic identity development could be viewed as an undisrupted process. In accordance with her description, the research environment in Canada was as advanced and professional as in Denmark, and she was no stranger to most of the state-of-the-art facilities, experiment techniques and an intense work pace. The prior educational background was acknowledged by Tam as a contributing factor to her academic identity. It can be argued that academic identity can be formed even before the start of the PhD program since doctoral students bring with them the "professional capital of the field" (Jawitz, 2009, p. 246) to their study. The previous professional and educational background can be a leverage for them to quickly adapt to the new scholarly community and can further strengthen the academic identity (re)construction process. Conversely, it may put the students in a situation when their existing academic identity is challenged in a new community.

In contrast to Van or Tam, the establishment of Nam's academic identity was from the view that being an academic is a cultural asset. He came to Denmark with familial support from his parents who, like most parents in Vietnam as Nam said, encourage their children to get a PhD because it is a symbol of social status and guarantees a faculty position in a university, a job highly valued in the country. In that sense, the meaning of the PhD degree and the identity as an academic to Nam and his family was associated with the sociological imagination of a higher social status and respect. This study therefore suggests that the students' personal life history, or their ontogenic development, specifically their life trajectory and social engagement, influenced their academic identity development.

The Vietnamese student community

Being international students, the participants developed a close-knit relationship with other Vietnamese students in Denmark including Vietnamese

doctoral and Masters students. This co-national community played a role in the academic identity (re)configuration of the participants. Nam, Hanh and Van often came to their Vietnamese friends for social support and advice. According to their explanation, sharing the same Vietnamese values and traditions might allow them to be "honest, sincere when talking about sensitive issues" as in Van's words. The Vietnamese students formed themselves into a group, having their particular practices in order for its members to learn from each other's failure and success. Nam took an example of his Vietnamese PhD friends' tactics on networking at conferences such as how to introduce himself to other academics, how to approach senior professionals with appropriate questions, how to "market" himself, which was "very helpful" in Nam's PhD progress. Van, who struggled to handle the tensions with her other PhD fellows, described her Vietnamese friends as the source of reference. She sought for their advice and learned from their journey. This community also helped to lessen her feeling of loneliness when she first embarked on her study. Similarly, Hanh came to her friends for their view on how to respond to her supervisor's disapproval of her lab exchange.

In line with previous studies (Gomes, 2015, 2017), this study suggests that having common cultural and traditional values, the students found it easier to be "open to the shaping of new meanings and new practices" (Leibowitz et al., 2014, p. 1259) once they learned those from other Vietnamese students who might have similar experience of going through not only geographical relocation, but also linguistic relocation and cultural relocation (McAlpine, 2012a). This study also concurs with MacLure's (1993) argument that academic identity construction entails not only the intellectual growth of the students but also a "network of personal concerns, values and aspirations" on which the students base on to judge the events they encounter and to make informed choices (p. 314). When they were alerted about the potential conflicts with personal values, they sought advice and suggestions from their Vietnamese friends to give meaning to the experiences. In that sense, the academic identity of PhD students is susceptible to changes and so is their personal identity. The findings of the study can be summarized according to the activity system as in Figure 3.
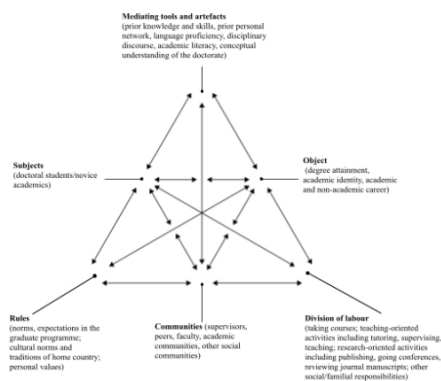

Figure 3. The activity system of doctoral students' academic identity development

CONCLUSION

This study, using the combination of Activity theory and Genetic method, sheds light on the factors shaping the academic identity development of four Vietnamese doctoral students in Denmark, including interpersonal and intrapersonal factors.

In this paper, I argue for the inclusion of personal life history of doctoral students as a factor in their academic identity development process during their doctoral study. For future studies pursuing the same line of research, it should be noted that the current project focuses only on the experience of the students through their narratives, no specific observations of their study and work environment was made, and no interviews or talks with professors or faculty staff occurred either. Henceforth, factors which are presumed to have an impact on doctoral students' academic identity such as the culture of the faculty and institution, or the curriculum of studies may not emerge from the data of this study, but might be in longitudinal projects or other research of bigger scale. In addition, the current work involves only four participants, and there existed no distinct disparity in the academic identity (re)construction among them which might be influenced by gender or discipline, therefore, these two factors may come up in other studies. Lastly, as this study has figured out academic identity can be assumably constructed before the PhD study, such as during doctoral students' previous Masters study or professional work experience, future research may take this point into account for a more thorough examination of doctoral students' identity trajectory and development process.

REFERENCES

Amundsen, C., & McAlpine, L. (2011). New academics as supervisors: A steep learning curve with challenges, tensions and pleasures. In L. McAlpine & C. Amundsen. (Eds.), *Doctoral Education: Research-Based Strategies for Doctoral Students, Supervisors, and Administrators*. Springer Dordrecht Heidelberg London New York.

Baker, V., & Lattuca, L. (2010). Developmental networks and learning: toward an interdisciplinary perspective on identity development during doctoral study. *Studies in Higher Education, 35*(7), 807-827.

Beauchamp, C., Jazvac-Martek, M., & McAlpine, L. (2009). Studying doctoral education: using Activity Theory to shape methodological tools. *Innovations in Education and Teaching International, 46*(3), 265-277.

Brew, A., Boud, D., & Namgung, S. U. (2011). Influences on the formation of academics: The role of the doctorate and structured development opportunities. *Studies in Continuing Education, 33*(1), 51-66.

Chang, P., & Schleppegrell, M. (2016). Explicit learning of authorial stance-taking by L2 doctoral students. *Journal of Writing Research, 8*(1), 49-79. http://doi/org/10.17239/jowr-2016.08.01.02

Choi, Y. H., Bouwma-Gearhart, J., & Ermis, G. (2021). Doctoral students' identity development as scholars in the education sciences: Literature review and implications. *International Journal of Doctoral Studies, 16*, 89- 125. https://doi.org/10.28945/4687

Cole, M., & Engeström, Y. (1993). A cultural-historical approach to distributed cognition. In G. Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations* (pp. 1-46). Cambridge: Cambridge University Press.

Emmioglu, E., McAlpine, L., & Amundsen, C. (2017). Doctoral students' experiences of feeling (or not) like an academic. *International Journal of Doctoral Studies, 12*, 73–90. https://doi.org/10.28945/3727

Engeström, Y. (1987), *Learning by expanding: An activity-theoretical approach to developmental research.* Retrieved October, 2015, from http://lchc.ucsd.edu/mca/Paper/Engestrom/Learning-by-Expanding.pdf

Filipovic, J., & Jovanovic, A. (2016). Academic maturation and metacognitive strategies in academic research and production. *Universal Journal of Educational Research, 4*(6), 1442–1451. http://doi.org/10.13189/ujer.2016.040623.

Fuller, A., Hodkinson, H., Hodkinson, P., & Unwin, L. (2005). Learning as peripheral participation in communities of practice: a reassessment of key concepts in workplace learning *British Educational Research Journal, 31*(1), 49-68.

Golde, C. M. (1998). *Beginning graduate school: Explaining first-year doctoral attrition New Directions for Higher Education, 101*. New York: Jossey-Bass Publishers.

Green, B. (2005). Unfinished business: subjectivity and supervision. *Higher Education Research & Development, 24*(2), 151–163.

Gomes, C. (2015). Negotiating everyday life in Australia: Unpacking the parallel society inhabited by Asian international students through their social networks and entertainment media use. *Journal of Youth Studies, 18*(4), 515–536.

Gomes, C. (2017). *Transient mobility and middle class identity: Media and migration in Australia and Singapore*. Palgrave Macmillan

Henkel, M. (2002). Academic identity in transformation?: The case of the United Kingdom. *Higher Education Management and Policy, 14*(3), 137-147.

Higenell, G. J. (2009). *An exploration into doctoral students' sense of community and its influence on the formation of informal mentoring relationship*. Master thesis, Brock University, Canada.

Hopwood, N. (2010). Doctoral experience and learning from a sociocultural perspective. *Studies in Higher Education, (35)*7, 829-843.

Huang, S. L. (2009). *Professional socialization of international doctoral students in differing disciplinary contexts in the U.S.: A mixed-methods study.* Doctoral Dissertation, University of Washington, The United States.

Inouye, K. S., & McAlpine, L. (2017). Developing scholarly identity: variation in agentive responses to supervisor feedback. *Journal of University*

Teaching and Learning Practice, 14(2), Article 3, 1-23. Retrieved from http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1741&context=jutlp

Inouye, K. S., & McAlpine, L. (2018). Developing academic identity: A review of the literature on doctoral writing and feedback. *International Journal of Doctoral Studies, 14,* 1-31. https://doi.org/10.28945/4168

Jawitz, J. (2009). Academic identities and communities of practice in a professional discipline. *Teaching in Higher Education, 14*(3), 241-251.

Jazvac-Martek, M. (2008). *Emerging academic identities: How Education PhD students experience the Doctorate.* Doctoral Dissertation, McGill University, Montréal, Canada.

Jazvac-Martek, M. (2009). Oscillating role identities: the academic experiences of education doctoral students. *Innovations in Education and Teaching International, 46*(3), 253-264.

Jazvac-Martek, M., Chen, S., & McAlpine, L. (2011). Tracking doctoral student experience over time: cultivating agency in diverse spaces. In L. McAlpine and C. Amundsen (Eds), *Doctoral Education: Research-based Strategies for Doctoral Students, Supervisors and Administrators* (pp. 17-36). Springer Science+Business Media B.V.

Kumar, V., & Stracke, E. (2007). An analysis of written feedback on a PhD thesis. *Teaching in Higher Education, 12*(4), 461–470.

Leibowitz, B., Ndebele, C., & Winberg, C. (2014). "It's an amazing learning curve to be part of the project": Exploring academic identity in collaborative research. *Studies in Higher Education, 39*(7), 1256-1269.

Lepp, L., Remmik, M,. Leijen, A., & Leijen, D. A. J. (2016). Doctoral students' research tall: Supervisors' perceptions and intervention strategies. *SAGE Open*, *6*(3), 1-12. https://doi.org/10.1177/2158244016659116

Leshem, S. (2016). Doctoral students identity: Does it matter?. In L. Frick, V. Trafford and M. Fourie-Malherbe (Eds.), *Being scholarly: Festschrift in honour of the work of Eli M Bitzer* (pp.135-143)*.* Stellenbosch: SUN MeDIA.

Leshem, S. (2017). *Dancing identities on the route to becoming 'doctor'.* Presentation at European Conference on Educational Research (ECER), Copenhagen, Denmark.

MacLure, M. (1993). Arguing for your self: Identity as an organising principle in teachers' jobs and lives. *British Educational Research Journal*, *19*(4), 311–322.

Leshem, S. (2020). Identity formations of doctoral students on the route to achieving their doctorate. *Issues in Educational Research, 30*(1), 169-186. http://www.iier.org.au/iier30/leshem.pdf

Mahlomaholo, S. (2009). Critical emancipatory research and academic identity. *Africa Education Review, 6*(2), 224-237.

McAlpine, L., & Asghar, A. (2010). Enhancing academic climate: doctoral students as their own developers. *International Journal for Academic Development, 15*(2), 167-178.

McAlpine, L. (2012a). Identity-trajectories: Doctoral journeys from past to present to future. *Australian Universities' Review, 54*(1), 38-48.

McAlpine, L. (2012b). Shining a light on doctoral reading: implications for doctoral identities and pedagogies. *Innovations in Education and Teaching International, 49*(4), 351-361.

McAlpine, L., Amundsen, C., & Turner, G. (2014). Identity-trajectory: Reframing early career academic experience. *International Journal for Researcher Development*, *1*(1), 97-109.

Odena, O., & Burgess, H. (2017). How doctoral students and graduates describe facilitating experiences and strategies for their thesis writing learning process: a qualitative approach. *Studies in Higher Education, 42*(3), 572-590, doi: 10.1080/03075079.2015.1063598

Parker, R. (2009). A learning community approach to doctoral education in the social sciences. *Teaching in Higher Education, 14*(1), 43-54.

Phan, A. N. Q. (2022). On space, on place: A poetic self-study of the emerging academic identity of an international doctoral student. *Art/Research International: A Transdisciplinary Journal, 7*(1), 186-209. DOI: https://doi.org/10.18432/ari29638

Pifer, M. J., & L. Baker, V. (2016). Stage-based challenges and strategies for support in doctoral education: A practical guide for students, faculty members, and program administrators. *International Journal of Doctoral Studies, 11*, 15–34. https://doi.org/10.28945/2347

Ryan, J., & Viete, R. (2009). Respectful interactions: Learning with international students in the English-speaking academy. *Teaching in Higher Education, 14*(3), 303-314.

Strandler, O., Johansson, T., Wisker, G., & Claesson, S. (2014). Supervisor or counsellor? - Emotional boundary work in supervision. *International Journal for Researcher Development, 5*(2), 70-82. https://doi.org/10.1108/IJRD-03-2014-0002

Vygotsky, L. S. (1981). The genesis of higher mental functions. J. Wertsch (Ed.)., *The concept of activity in Soviet psychology* (pp. 144–188). Armonk, N.Y.: M.E. Sharpe.

Weidman, J. C., & Stein, E. L. (2003). Socialization of doctoral students to academic norms. *Research in Higher Education, 44*(6), 641-656.

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