

# Between striated and smooth space: Exploring the topology of transnational student mobility

## *Abstract*

In this paper, we raise a question regarding how transnational students develop their spaces as mobile, temporary, and at times stable and territorially fixed. We argue that approaching transnational student migration and its relations to place as a Deleuzian assemblage is a fruitful way of highlighting this issue, and we propose the axes of the expressive/material and territorialisation/de-territorialisation as analytical tools for understanding aspects of the temporal and spatial dimensions of transnational student mobility. Our theoretical discussion is informed by the migration experiences of transnational students studying at a Norwegian university. Our core argument is that transnational student mobility should be approached as a complex process in which links to places in the student's past, present and future dissolve the linear notion of causality and in which new notions of the relations between proximity and distance challenge ideas regarding the power relations embedded in a geometrical space.

*Keywords:* international student migration, transnational student mobility, relational space, topological space, assemblage

## **Introduction: Researching transnational student mobility**

Transnational student migration has increased significantly in recent decades and has become a major form of contemporary transnational mobility (Bhandari and Blumenthal, 2009; Organisation for Economic Co-operation and Development [OECD], 2014). Likewise, the interest in studying the geography of transnational student mobility has also increased. Consequently, among others, geographers have contributed significantly to conceptualising and theoretically approaching these phenomena (Beech, 2014; Carlson, 2013; Findlay, 2011; Findlay et al., 2011; King and Raghuram, 2013). Within the literature, scholars seemingly agree on the need to develop approaches that go beyond static and linear perspectives on student migration when discussing questions about the spatiality and temporality of transnational student mobility. In terms of *spatiality*, place is often understood as a given location to and from which students move, while space is seen as the distance between such places.

In terms of *temporality*, several researchers have called attention to the currently inadequate conception of how individual transnational student mobility develops over time; they call for more complex and procedural perspectives on migration practices (Carlson, 2013; Findlay, 2011). King et al. (2006: 259) argue that "*migration must not be thought of as a single relocation decision by an individual at a moment in time*". Instead, Carlson (2013) suggests that the ways in which transnational students become mobile should be studied, for instance, by applying a biographical and processual perspective that connects student mobility with the trajectories of students' lives, including their previous migration experiences and those of their friends (Carlson, 2013; Frändberg, 2013; Ploner, 2015; Tran, 2015). An often neglected issue is how transnational student mobility can also result from an imagined possible future, which is formed by the individual's life-course aspirations and plans for mobility over the long term

(Findlay, 2011, Findlay et al., 2011). According to Mosneaga and Winther (2013), one aspect of this motivation is the study-to-work transition, which they claim is an individual and context-dependent process (see Pásztor, 2014). An essential element of the critique directed towards conventional approaches to student mobility concerns the inability to isolate transnational student flows from wider mobility trajectories that occur before and after the student's formal educational experience (Findlay, 2011).

Another aspect of the literature on transnational student mobility relates to new ways of considering the importance of *space and place* within transnational higher education. Place is argued to be more than merely the location of a university or a national context (Beech, 2014). In prospective studies, places are not fixed units but rather the result of individuals' previous and present constructions and imaginings of their possible futures in such places (Beech, 2014; Raghuram, 2013). The prospect of studying at a "world-class university" (Findlay et al. 2011), which is a social construction based on international rankings and reputations (Pásztor, 2014), may be attractive to students. Similarly, imaginings of place created and depicted through various media also have a major influence on transnational student migration practices and experiences (Beech, 2014).

Space and place are relevant to new understandings of immobile but transnational students. Geographers have challenged conventional understandings of proximity and distance in higher education research, showing how students aim to acquire internationally recognised knowledge by enrolling in international institutions while remaining at home (Geddie, 2012; Rye, 2014; Rye and Støkken, 2012; Waters and Leung, 2013). The student's place of residence becomes a transnational space through its connection to transnational educational networks via satellite campuses and/or communication technology. Similarly, researchers demonstrate the influence

of social networks on the ways in which migration practices develop, as these networks participate in and negotiate among different forms of social relations, stretching out across space and over time (Beech, 2015; Brooks and Waters, 2010, 2011; Ploner, 2015).

These recent contributions to a new understanding of the geographical dimensions of transnational student mobility are important and promising. Still, research on transnational student mobility could benefit more from the sound theoretical and conceptual discussions emerging from relational perspectives on space, place and scale (Beech, 2014). We suggest that research would benefit from approaching transnational student mobility as a complex process wherein links to places in the student's past, present and future dissolve the linear notion of causality and the power relations embedded in a geometrical space. Thus, the geography of transnational student mobility must be viewed from the perspective of mobile students constantly reproducing space (Raghuram, 2013). Accordingly, this article aims to further develop insights into the spatial relations of transnational students and the ways in which these relations work as a force that constitutes individual students' migration strategies and accordingly their personal and professional life courses.

We pursue these insights into the relationality of transnational students by drawing on recent topological approaches to the spaces and places associated with social phenomena (Brenner, 2001; Leitner and Miller, 2007; Marston et al., 2005; Marston and Smith, 2001; Woodward et al., 2012). We address how transnational students develop their spaces as mobile, temporal and sometimes stabilised and fixed. In the next two sections, we develop a conceptual frame in which transnational student mobility is seen as assemblages that produce both seamlessly smooth and striated spaces through processes that can be described as expressive, material, territorial and de-territorial (DeLanda 2006). Thereafter, we further present an empirical

analysis of transnational student mobility and conceptually discuss the forces involved in these students' decisions to move to a foreign country to study and then to stay (longer) in a host society, to move on, or perhaps to return to their home country/place.

### **Relational space and assemblages of transnational student mobility**

To understand the spaces and places of transnational students, we lean on recent advances in theories of relational space, which implies understanding space as a product of interrelations and interactions that emerge from multiple series of connections between people, places, processes and objects (Massey, 2005). What are often perceived as discrete places are, in this view, simply temporary stabilisations of spatial assemblages constructed through relations across space (Harvey, 1996); as geographers, we should seek to understand how these relational spaces emerge and how spatial configurations are generated (Murdock, 2006). Different relations create different types of spaces and places (Larner, 2015; Pedro and Franco, 2015), and we address how such relations construct the mobile everyday lives of transnational students. We follow Findlay et al. (2006: 314), who note the *“need to explore relational mobilities rather than dwelling on simplistic and potentially false dichotomies such as mobility/immobility or drivers and barriers at the level of the individual student”*. Although transnational students (as with all students) are always situated within specific sites and situations, they are also influenced by a mixture of relations that span far more than what is physically present at each time/space on the migration path. The migration then becomes much more than a simple movement between places; it is about the links between places that are constantly produced and reproduced over time (King et al., 2006). Some of these relations may span vast geographical distances across the globe, while others may be more locally orientated.

However, students' links to distant places in the past (e.g., the home country) or in a potential future (e.g., the workplace) may feel more important than many current links to the place in which they presently study (Frändberg, 2013; Ploner, 2015; Tran, 2015). The differential importance attributed to such links illustrates the need for a spatial concept that allows for the conceptualisation of the relationality of student mobility, i.e., a way of theorising proximity and distance, present and past, and flow and fixation in a single process (Lysgård, 2016).

One way of grasping relationality may involve going beyond a simple geometry of physical location and searching instead for a topological space in which *“relationships are mediated through events, technologies and practices that enable them to be stretched, folded or twisted in such a way as to transcend a landscape of fixed distances and well defined proximities”* (Allen, 2016: 39). This concept implies a topological non-metric space in which both space and time are folded into one another and the dimensions of ‘here and there’ and ‘now and then’ are relational. Students may experience the labour market in a future place where they can potentially start their careers as much more present and relevant than the city in which they are presently studying. The meaning of the past (e.g., the place where they grew up) may also change as their perceptions of the future change. This folding of past, present and future in various places probably facilitates the development of a geographical career and life path.

According to this conception, topological space will disrupt common understandings of what is near and far in terms of the social proximities established over physical distances and the social distances created through physical proximity (Allen, 2003, 2011). Notably, a topological concept of time where the past and the future are folded into the present applies here. Therefore, a topological approach to transnational student mobility will grasp not only the relationality of this phenomenon but also the ways in which this relationality is constituted by properties of

people and places, irrespective of the distances that students travel. An important aspect relates to how power, in a topological sense, appears to be more about presence and absence than about proximity and distance. We need to understand how this presence and absence occurs (Allen, 2016).

To further discuss the topological relationality of transnational student spaces, examining Deleuze and Guattari's (1987) concept of 'assemblage' may be interesting. Our interest is how Deleuze and Guattari's concept of 'assemblage' provides us with a topological concept of space that extends beyond more simplistic analytical dichotomies, such as fixation vs. mobility and global vs. local. Assemblages are considered to be not only temporary and territorial but also open and fluid. By examining transnational student mobility from this perspective, students and their actions can be approached in terms of how they are linked to significant entities across space and over time and how these links constitute the dynamics of being a transnational student.

By applying this concept of assemblage, we can grasp how the topological relationality of transnational students have territorial properties without simply reducing the links across space to the distance between places. We aim to elaborate an analytical approach to the relational spaces of student mobility in the tension between stability and instability in the site and situation of the emergent and constantly changing transnational student assemblage within a city. We thus follow Brenner et al. (2011) and use assemblage as an analytical and methodological approach, not as a real empirical object or an alternative ontology. Similarly, Anderson et al. (2012) see assemblage as a way of handling spatial challenges by using an extended relational understanding of social spatiality. They claim that assemblages are configured to manage the

complexity of the construction of social spaces in the tension between the relational and the territorial.

For the study of transnational student mobility, we find the main potential of assemblage theory in this intersection between the relationality and territoriality. In a meaningful way, assemblages include the spatial and temporal dimensions of transnational student mobility discussed above. However, as the initial aim of this paper is to address questions about how spaces of transnational student mobility work as a force that constitutes individual students' migration and career strategies, the question about the agency of transnational students and the power relations involved in the process of defining and developing their life courses must be addressed. We can only understand why some students choose to move on, move home, or stay (for a while) in this way.

Although 'power' has been an explicit concept in the literature on transnational student mobility to a limited degree, the effect of power is discussed in relation to issues such as how international higher education influences the reproduction of class (Brooks and Waters, 2011; Holloway et al., 2012) and produces new and old forms of geographical unevenness (Perkins and Neumayer, 2014). This reproduction of unevenness, social and geographical, is typically explained through structural factors, such as visa regulations, national immigration or education policies, existing academic networks (Barnett et al., 2015). In Massey's (2005, 2007, 2011) work, this uneven development is found in the 'power geometry' in how people, social groups, institutions and places are interrelated and in how this 'power geometry' creates possibilities for some to take advantages of the new interconnected global world while others have fewer possibilities to do so. The ways in which places, people and institutions are interrelated define people's abilities to make a difference in their own lives (Massey, 2005). This production of



certain positions in global connectivity that produce particular types of inequalities is certainly relevant and important to understanding the mobility of transnational student. Still, we will follow Allen (2016) and suggest that approaching such mobility as a kind of topologically founded assemblage can provide additional insights into the processes that shape transnational students' geographical, personal and professional life courses. The process of becoming a transnational student depends on the configurations of assemblages, as they influence the student's opportunities to move to a new place for his or her studies, which may be seen as a process of becoming something else related to his or her aspirations for a future life trajectory (Tran, 2015). In this process of "becoming of becoming", one assemblage actually constitutes another.

For Deleuze and Guattari (1987), the process of becoming involves the unique combination of assembled elements that release the potential emergence of new relations. Power can be identified in these relations. They divide power into 'power over', which concerns the potential and the possibilities for domination and enforcement of will, and "power to", which is more about the possibility of acting and making things happen (Allen, 2016). In the latter notion of power, we have found the essence of understanding the process of becoming a transnational student, which not only involves historical conditions and contemporary practices but also the consideration of students' expectations and plans. Our concern here relates to how 'power to' makes things happen through assemblages may explain the process of becoming a transnational student (Carlson, 2013; Tran, 2015; Zhang and Guo, 2015), but the possibility of becoming 'something more' than a student since student life is only a temporary situation linked to a larger life course.

In line with a topological approach and assemblage theory, it is important to note how the relations that create the ability to make things happen, i.e., creating a particular (geographical) life course, are not simply a kind of linear causality. Existing features of the current place and situation (such as existing social structures and access to recourses) and intentions related to the future (professional aspiration and desired place of residence) may be important. Nevertheless, a simple chain of cause and effect cannot be assumed because all the relations that create and re-create an assemblage cause things to happen (DeLanda, 2006). A student may decide to move to or from a place for multiple reasons that relate to how relations across space are configured. The properties of these relations are products of how intentions potentially change as the student moves. As Allen (2016) argues, how power relations are mediated should be addressed in a way that transcends a simple geometry of power by considering how events, technologies and practices enable these relations to be stretched, folded or twisted through space.

In sum, the topological space embedded in notions of assemblages implies a conception of the relationality of transnational student mobility that considers how relations are folded through space and time. As expressed by McFarlane (2011: 221), "*Assemblage emphasises thick description of the relations between history and potential, that is, the different processes that historically produce urban inequality and the possibilities for those connections to be contested, imagined differently and altered*". Thus, the construction of a space for transnational students must be analysed in this relational non-metric and non-linear space, where other places at other times may be more relevant than what is happening in the here and now. The question is not how students connect to a single place but how transnational students construct their assemblages as a mixture of relations to places that they have been, that they are in now, and that want or plan to be in sometime in the future (Zhang and Guo, 2015). Altogether, these

assemblages determine the opportunities that transnational students have to develop their geographical life courses. How we analytically approach empirical studies of transnational student relations to space will be discussed in the next section.

### **Conceptualising the topology of transnational student mobility**

Anderson et al. (2012: 172) claim that the assemblage approach “*demands an empirical focus on how [...] spatial forms and processes are themselves assembled, are held in place, and work in different ways to open up or close down possibilities*”. In the following section, we will consider the empirical processes of the constant union and dissolution of student assemblages and an analytical approach to the production of student spaces as assemblages. A major frame for understanding these assemblages will be Deleuze and Guattari’s (1987) analytical distinction between *striated and smooth space*. *Smooth space* is associated with movement and instability, through which stable territories are erased and new identities and spatial practices become possible. The *striated space* represents a bounded territory in which everything is ordered and stringent or readily territorialised/stabilised: “*Striated space is where identities and spatial practices have become stabilized and strictly bounded territories with choreographed spatial practices and socially controlled identities*” (Dovey, 2010: 21-22).

To analyse how such assemblages are constantly in the process of becoming and producing new kinds of spaces for transnational student assemblages, we suggest focusing analytically on two axes: the material/expressive and territorialisation/de-territorialisation. These axes are taken from assemblage theory, which shows the types of roles that different components of assemblages have in relation to one another (DeLanda, 2006; Deleuze and Guattari, 1987; Dovey, 2010; Hillier, 2011).

The first axis addresses the complexity of intermixing the expressive and the material (DeLanda, 2006). This axis includes *the material* dimension – understood as bodies, physical components, technology, interpersonal networks, organisations and institutions, and face-to-face meetings and conversations. As described in the transnational student migration literature, social networks are an example of the material (Beech, 2015; Brooks and Waters, 2010; Pedro and Franco, 2015). The other dimension of this axis is *the expressive* – understood as different kinds of linguistic and symbolic forms that relate to how memories, imaginings and experiences of particular elements (e.g., the reputation of the university, the experience of quality, hospitality, and future expectations) shape how transnational students relate to present and future places. In the literature, this aspect is discussed in contexts relating to, for instance, how intercultural interactions constitute symbolic (Pham and Tran, 2015; Tran and Pham, 2015) and social capital (Waters, 2009) and how the notion of an elite university is important for many students when they consider where they want to study (Findlay et al., 2012; Pásztor, 2014).

Regarding the material and expressive aspects of transnational student assemblages, we find the research literature on transnationalism, cosmopolitanism and diaspora particularly interesting, as they concern how cultural transnationalism refers to the transference and reconfiguration of cultural symbols, practices and artefacts across different national cultures and nation-states (Hannerz, 1996; Joseph, 1999; Pries, 2001; Stevenson, 2003; Voigt-Graf, 2004). Werbner (1999: 19-20) makes a useful distinction between (i) transnational migrants, “*who move and build encapsulated cultural worlds around them*”, and (ii) cosmopolitans, who “*familiarise themselves with other cultures*”. The former relates to how migrants bring their cultural signs and practices with them and create ‘diasporas’ as more or less bounded cultures, spaces or communities in new places. This concept highlights how migrants, including transnational students, transfer their cultures, how they connect them to their new places, and

how they ultimately maintain and sustain their connections to the places and cultures from which they have moved. The latter distinction relates to the conceptualisation of cultural cosmopolitanism (Held, 2010; Stevenson, 2003) – how and in what sense migrants connect to a more global cultural space that is disembedded from nation-states (Harvey, 2009; Nowicka, 2005; Ong, 2005). Transnational students may be understood as cosmopolitans (Beech, 2015; Singh et al., 2007) or individuals in search of cosmopolitan identities (Findlay et al., 2012)

The second axis of the becoming of an assemblage addresses varying relations from stability to instability and from fixation to flow, tendencies towards territorialising or connecting to place, and tendencies towards de-territorialisation, leading to an unstable flow of change and uncertainty. Territoriality is a type of materiality that can take the form of fixed spatial boundaries (e.g., places, buildings, and physical structures) or non-spatial demarcations, which affect how places, events and situations become homogenised and internalised by excluding and segregating certain groups and individuals (DeLanda, 2006). In terms of transnational student mobility, territoriality may concern aspects such as how students relate to, obtain access to, and become included in networks, communities and/or situations before they migrate (Beech, 2014; Pedro and Franco, 2015), at their host universities, and in their host cities (Andersson et al., 2012; Robertson, 2013); it concerns how these relations affect their understanding of stability in relation to the places and campuses where they are studying (Hazen and Alberts, 2006). De-territorialisation occurs when certain processes or influences lead to an unclear and uncertain understanding of territoriality and again put students' relations to place in a state of flux. These influences might be expressive elements (e.g., students' planned careers) (Mosneaga and Winther, 2013) or material elements (e.g., the rise of social networking media). The latter have allowed prospective transnational students to engage more easily with

those who have already chosen to study overseas and who can thus share their experiences with those who have remained at home (Beech, 2015). In this way, communication technology is making relations to other places just as easy as relations to the place in which a student currently lives.

In summary, the expressive and material practices of transnational students will constitute an *“assemblage that stabilizes dwelling but also encompasses lines of movement and processes of becoming”* (Dovey, 2010: 23) through processes of territorialisation and de-territorialisation. The process is about not only “becoming” a transnational student (Carlson, 2013; Tran, 2015) but also becoming what lies beyond the student’s temporary position. Accordingly, in this study regarding how transnational students relate to space and create student assemblages, the analytical approach that we propose concerns, first, the roles of both material and expressive practices in constructing the temporality of becoming a student. These roles must be seen from a time-space topological perspective, not only asking what and how material and expressive elements are involved but also when and where. In the intermixing of the *what, where, when, and how*, we are able to understand how the roles of the material and the expressive form what it means to be a student. Second, it is crucial to understand the forces involved that lead either to the territorialisation or stabilisation of how students relate to place and space or to the destabilisation of their relations to a specific community, thus instigating flow. In this tension between the dimensions of the material and the expressive and between the territorialised and de-territorialised, we will have to look for and find the mechanisms that foster the emergence of transnational students’ social spaces as spaces that are simultaneously striated and smooth.

## **Empirical sources**

The empirical data comprise interviews with twenty-four master's students at the Norwegian University of Science and Technology (NTNU), which is Norway's largest university with 39,000 students. Approximately 3000 of them are foreign students. The main campus is located in Trondheim, the main urban centre of central Norway and the third largest city in Norway (approximately 200,000 inhabitants). Although the university conducts top internationally renowned research in selected fields, such as engineering and medicine, it does not appear among the top universities worldwide in various rankings of higher education institutions (i.e., The Times Higher Education, 2014).

The interviewed students were studying engineering or science during their second year of a two-year master's programme. Geographically, these students had diverse backgrounds: thirteen were from Asia; two were from Africa; three were from North America; one was from South America; and five were from Europe (EU). Most of the students from Asia were from emerging economies (China, India and Indonesia). Nineteen students were self-funded; four had scholarships through the Erasmus programme; and two had scholarships through the Norwegian International Aid Agency (NORAD). Two of them combined self-funding with the Erasmus programme to get a full master's degree at NTNU. Notably, in terms of funding, Norway has no mandatory tuition fees for foreign or domestic students, which probably makes Norway attractive to international students.

The general potential of a relatively small selection of foreign master's students at a university in Norway, which is not a major destination for international students, is clearly limited. In most destinations around the world, transnational students are likely to be very different from the people who we interviewed. In addition, interviewing transnational students at a particular

time in a particular place may provide a limited understanding of the temporality and spatiality of these students. While the phenomenon that we are studying is rather fluid, the methodological approach is rather static, although a life course perspective is used. Nevertheless, these NTNU students represent a purposeful case of transnational student mobility, as NTNU occupies a somewhat intermediate position that allows research on a variety of aspects of transnational students' temporality and elusive place attachment. Although it is not in the same league as the world's top-rated universities, NTNU occupies a strong international position. The selected students already experienced migration from one university to another, and their attachment to their host city was relatively weak, as they had only been living there for a short time, and their relations to the present place, based on their position as students, was supposed to rather quickly. The host city is of a modest size and is not as attractive as large metropolises; its attractiveness is based on its urban qualities to a limited degree.

Nevertheless, these empirical cases were not selected to validate empirical claims for transnational students as a whole, and they were not meant to represent the total population of transnational students. Accordingly, the paper is conceptual, and the interviewed students are not supposed to represent or reflect transnational students in general. Hence, the methodological approach aims to reveal some general (spatial) aspects related to what it means to be a transnational student, not a general claim regarding who the transnational student is or what causes him or her to migrate. Hence, whether or to what extent the theoretical insights gained in this paper apply to other transnational students, other places and other times (or even other segments of society) is a question that requires further theoretical and empirical elaboration.



Despite obvious differences among transnational students, on a more abstract level, investigating how all transnational students developed their attachment to place and their prospective ideas on where to move and what to do in the future is interesting. They were in the process of “becoming” “*the kind of person, professional or citizen that they aspire[d] to be*” (Tran, 2015: 2). This idea implies, for example, that students’ notions of future places to live were not fixed but rather processes that developed as students were on the move. Their place of origin acquired new meaning as they gained new experiences in the new places. Previous events in other places were important to students’ present experiences of place (Carlson, 2013), but notions of a possible future notably gave meaning to the present. Altogether, a web of connections between the past, present and future was established, as were connections across space that changed the relations between proximity and distance, a web similar to the assemblage in Deleuzian terminology (Deleuze and Guattari, 1987). To further elucidate how these topological connections and folding have an impact on transnational student mobility, we will now discuss these experiences from the perspective of two axes – the material/expressive and territorialisation/de-territorialisation – as outlined previously in this article. We conclude our discussion by outlining some categories that exemplify how material and expressive articulation may work in favour of territorialisation or de-territorialisation.

In line with Dovey (2010), we will argue that the topological time-space dimension is crucial to understand how the roles of the material and the expressive fold into one another and create the assemblage of transnational students at NTNU in Trondheim. As seen in the empirical discussion, the assemblage of becoming and being a transnational student is first influenced by the materiality of former places that act as some sort of reference – in either a positive or

negative way – for how the present and future places are experienced. Positive influences may include family relations, culture, social networks and physical preferences concerning climate and nature. Negative influences may be a lack of job opportunities, political and social instability and the general security situation. For example, some interviewed students had attempted to escape from the materiality of political and social problems in their home countries, and they were searching for a safer political and social environment in Norway.

For example, a student from Iran explained how studying abroad was about a permanent escape from the place that she lived. More explicitly, she mentioned escaping from restricted professional opportunities:

*“[...] I don't know if you know, but it is an Islamic republic, and it is not so good for women, so one of the reasons is that I could not get a job that is related to my interest in Iran. And there are few opportunities, and most of them are for men, and in the culture, females can do limited work”. (Female, Iran, 24 years old)*

Another student from Iran explained how she escaped from what she considered limited personal freedom in her home county and searched for a place where political and social problems were, in her mind, not affecting peoples' lives. Both Iranian students appreciated being in a safe environment, which they claimed that they could not find back home. Nonetheless, the possibilities for such an escape are a question of migration policies.

However, students also migrated because they were from places where they felt restricted in terms of future career development. One female student from Indonesia discussed the limited possibilities for professional development in her country. However, interestingly, she was planning to return home after graduating. Her escape was temporary. By pursuing education in

Trondheim, she sought to acquire sufficient qualifications to boost her professional prospects back home.

*“Actually, I don’t have any intentions to settle in Norway. I mean, I want to stay somewhere else, anywhere, abroad before I start to work in my country. Because I should have some experience of working. If after studying here and then I’m just working in my country, it can be [...]. I mean, I can’t have a good job opportunity as well. Because as a fresh graduate without any experience, it’s not good for me”.*  
*(Female, Indonesia, 24 years old)*

However, none of these categories was fixed. As suggested by Tran (2015: 2), “[i]nternational students imagine their spatial movement as producing new conditions and possibilities for the transformation of themselves and identity re-construction in divergent manners”, which can be considered a process that is inherent in the notion of mobility as becoming (Cresswell, 2006).

Material experiences elsewhere and at other times then become memories and imaginaries that influence how the materialities of the new place are experienced and become assembled as the present place for the transnational student. This new place may be viewed as an expression of an “imaginative geography” that is formed through transnational communities and their connections to the surrounding world (Beech, 2014). Students’ future expectations and plans for their life trajectories formed these material experiences (Pásztor, 2014). In Trondheim, the transnational students were influenced by the materiality of campus facilities and the formation of a foreign student ‘bubble’. This bubble can be interpreted as a separate space or network for foreign students that requires little to no involvement in everyday life of the city. They socialised within groups of foreign students, and they related to Norwegian students and other parts of the ordinary social life of the city to a lesser degree.

*“It’s kind of different because I’m living with international students [...] So, this circle is much more powerful than the Norwegian circle [...] I think the international circle is quite easy; it doesn’t take so much effort. But, [getting to know] Norwegians is kind of difficult. It takes time. You have to drink a lot and party the way that they do [...] So, that’s the reason international students have...they have their own circle”. (Male, Pakistan, 27 years old)*

The language spoken in this ‘bubble’ was mainly English, and the lack of Norwegian language skills was regarded as a problem and obstacle for becoming integrated into the everyday social life of the city.

Andersson et al. (2012) observed this type of self-segregation, and the reasons for this self-imposed exclusion can, as previously discussed, relate to either a desire and plan to return home or a desire to start a career in other places that can offer other types of materialities than Trondheim in terms of job opportunities, cultural amenities, service provisions, and the climatic environment. Therefore, future plans and expectations regarding what to do, where to live and how to live may influence the will to actually invest in creating relations with the place in which they currently reside. As Hazen and Alberts (2006) note, based on data from the US, few students migrate with the intention of immigrating permanently. Instead, these authors claim that a wide variety of professional, societal and personal factors influence students in an ongoing decision-making process.

Decision-making flexibility appears to be very much connected to the role of the expressive elements of the transnational migration experience, which can be summarised with two concepts: *place reputation* and *future expectations of place*. As also stated by Findlay et al. (2012), the reason for coming to a university city such as Trondheim in the first place, as several

of the interviewed students expressed, is based on the reputation of the university and its academic programmes in terms of quality as well as the reputation of Norway as a stable (Western) democracy and a safe and wealthy country. To a large extent, the university's reputation is shaped and mediated through friends and family, university websites and other information channels that play an important role in the assemblage of the student's relations to place (Beech 2014).

Interestingly, the city of Trondheim did not appear to be particularly important when the students chose to study abroad. Instead, as seen in the stories of the female students from Iran and Indonesia, the university – not its location – was typically considered to be the main destination, and expectations about what the university could provide motivated their choice to move to Trondheim.

The students expressed a rather loose attachment to the city of Trondheim but a strong connection to the university's campus, which may explain why few of the interviewed students regarded Trondheim as a place to live in the future. However, some students did think about living in Norway in the future, but their career plans were more focused on other Norwegian cities as Stavanger, Bergen and Oslo.

*“I really have no preferences for a place yet [...] so I never thought of...no vision or barrier or anything. Never comes as a criterion, it's just Norway [...] for my industry I know it's more Stavanger...I think that's where most of the oil and gas companies are [...] It probably has more opportunities for me than Trondheim”. (Male, Nigeria, 29 years old)*

Other cities in Norway (e.g., Stavanger) were considered options because of students' perceptions of Norway as a safe and prosperous nation with good career opportunities.

For some, the decision was also based on the reputation of studying abroad as an interesting and, in some sense, exotic once-in-a-lifetime opportunity – part of an adventure or as a lifestyle experience. A male student from the United States said that choosing Trondheim was motivated neither by his home nor his future career plans. Instead, he was inspired by a complex relationship between his professional life path and geographical life path, ranging from purely professional thinking to more general identity formation during adolescence. He was neither escaping from a place nor rushing towards a new one; instead, he was searching for new experiences and places that would support his adventures and lifestyle preferences.

*“So, Norway has always been a very attractive place to come and spend time. Because, based on my interests outside of school, like hiking, and I just do a lot of cross country skiing, so obviously, it seems like a pretty cool place [...]and NTNU definitely stands out as a pretty good university [...]But, Trondheim is a...I think a nice city. I was definitely very happy about the decision to come here because there is enough going on downtown, so it does not feel like you are living in the middle of nowhere, but at the same time you can quickly get out to the rural areas and mountains”. (Male, United States, 26 years old)*

However, for the interviewed students and most transnational students, being a foreign student in Trondheim was primarily part of an imagined professional career plan that involved an anticipated future occupation (Brooks and Waters, 2011; Holloway et al., 2012). As Trondheim is a rather small city, the students did not have strong associations with it prior to their migration. Interestingly, the interviews suggest that students only developed weak attachments

to the city during their stays. Several students explained that they experienced the city in positive ways, noting that it appeared to be an easy-going place with a friendly social environment. However, these characteristics did not appear to be rooted in any type of deeper attachment to or involvement with the place (Hazen and Alberts, 2006); instead, the students seemed to view the city from a somewhat superficial vantage point. The decision to study abroad seemed to relate to either the quality of the university or Norway's reputation as a wealthy, advanced and prosperous nation, both of which could act as potential stepping stones on the way to a professional career in the future.

None of the students who we interviewed had particular conceptions about Trondheim as a city prior to their migration decisions, but some had clear expectations about Norwegian society, which they thought would be reflected in the particular place where the university was located. This imaginary was essentially constructed with information gained by searching the Internet and consuming global media.

*“First, I started searching for master’s programmes abroad. Sweden and Norway first got my attention because there is no tuition fee [...]. I saw them as countries to live in after my studies. I looked at them as a good place to live [...] the image that I had before was that they were really open for foreigners and there were lots of opportunities for foreigners, and they’re countries with good economic situations”. (Male, Portugal, age unknown)*

However, factors such as peace, tranquillity and social security were also emphasised as features of Norway and the Norwegian way of life. A final expectation of Norway related to the quality of its natural environment, which was particularly notable in the aforementioned

American student who thought that Norway would be an ideal place to combine his studies with his love of the outdoors.

For the students who had a very distinct plan to return to their cities or countries of origin, the city of Trondheim was only a place of transition in their educational journey back home. In their minds, they had never left home and regarded Trondheim – and Norway – as a temporary place with a specific role: the place where they would earn their qualifications. An Indian student explained how, when he returned home, he could create something new for his home community by connecting knowledge about hydropower in Norway with demands for hydropower in India. His reason for studying in Trondheim had more to do with a desire to contribute to the development of his home community or society (on a national scale) than with more personal aspirations.

*“The purpose of the quota scheme [the funding arrangement] is to educate people from developing countries so that they will go back and they will use their skills in their own country [...] our department [back home in India] is working in the field of hydropower, and, in Norway, most of the power is hydro. So, in that way, Norway was the best choice, and I got the opportunity through the quota scheme [...]”.* (Male, India, 34 years old)

Other students saw Trondheim as a stepping stone into the cosmopolitan world of career options. Some students envisaged future careers in global companies, and NTNU was regarded as more or less the gateway to this global labour market. Still, the campus was important for both groups, as they could acquire the necessary skills there before returning home or moving abroad again. The campus was a place to fulfil their social needs, including maintaining their connections to their home cultures by socialising with students from the same place; in addition,



on campus, students could meet others who shared the same cosmopolitan dream of a prosperous career in a global engineering company.

In line with Werbner (1999: 19-20), the students who planned to return home participated in the foreign student bubble because it gave them an opportunity to “*build encapsulated cultural worlds around them*” and to create a type of diaspora that offered a space in which they were free to maintain their cultural signs and practices. The students who did not plan to return home were more ambitious cosmopolitans that “*familiarise[d] themselves with other cultures*” by using the network of transnational students on campus to connect themselves to the more global cultural space of a cosmopolitan work environment. The foreign student ‘bubble’ then became a learning environment and stepping stone for future expectations related to a cosmopolitan labour market (Singh et al., 2007). Transnational students appeared to relate to either their homes as positive or negative reference points or to the more cosmopolitan student culture.

Nevertheless, some foreign students at NTNU became more involved than others with local practices and developed more intense relations with the social life of the host city. We can identify at least two types of entry points for this process of connection. First, a student’s romantic involvement with a local Norwegian citizen may serve as an entry point into everyday Norwegian life through family and friends. Second, a significant entry point is an introduction to a normal work situation; for some students, this introduction comes in the form of a part-time job during the semester, while others take summer jobs between semesters. In both of these situations, relations outside the foreign student ‘bubble’ are established, and social relations with local networks are developed. These relations create a more intense and reflexive connection to the local place than the more distant disconnectedness that is typical of those in the foreign student ‘bubble’.

*“So, I had a plan to have work-social life balance, and get integrated. And it worked very well. I came, and I worked in festivals. And now I know a lot of people in Norway [...] Because I was out of my comfort zone. So, it was a good experience. And Trondheim has a lot of opportunities to build networks”. (Male, Pakistan, 27 years old)*

The interviews show that the main breaking point at which students start to consider the potential and qualities of the place is linked to either their decisions concerning settling down and starting a family or their introduction into work life. This change in the role of the expressive involves a re-evaluation of, on the one hand, expectations about career plans, family situations and general expectations regarding quality of life and, on the other hand, local amenities of various kinds and their general mentality/values in terms of work life and family relations. Regardless of their initial plans, several students reported wanting to stay in Norway because they were attracted to the low-stress Norwegian work mentality and appreciated the safe environment. Hence, regardless of their initial intentions, many transnational students inevitably change their minds over time; in addition, for many students, the development of career plans and family decisions lead to permanent immigration in the long run (Hazen and Alberts, 2006).

In the remainder of this section, we will sum up the discussion of the empirical case above by outlining some categories that indicate some of the forces that enable transnational students to shape their professional and private life courses across space (Tran 2015) by creating individual mobility in the long term (Findlay, 2011 Findlay et al., 2011). We will discuss the forces that produce the ‘power to’ make things in students’ lives. We then continue to follow a topological approach to assemblages (DeLanda, 2006; Deleuze and Guattari, 1987), which suggests that expressive and material forces can stabilise both students’ connections to places and the forces

that that set student assemblages into motion and create a new phase in students' geographical mobility. Notably, the categories suggested here should be considered preliminary, as the empirical basis is limited; however, they are nevertheless a step in the right direction towards identifying forces that may configure the spaces of transnational student mobility.

Based on previous empirical discussions, three types of *material practices enforce the de-territorialisation* of transnational student mobility by destabilising transnational students' relation to space and place. First, the forces of *institutional and structural* arrangements and situations are either the reasons why students become mobile in the first place (such as the relative quality of higher education, universities and academic programmes) or the sources of uncertainty and risk due to the lack of economic, political and social stability in the student's home country. Second, the *presence and bodily experience*, which results from being part of the transnational student network on campus, is in a state of constant change and instability – from dissatisfaction with amenities and social arrangements in the host city (which thus creates a desire for something else) or from a lack of social and cultural knowledge due to a lack of cultural and/or language skills. Third, access to *technology and available infrastructure* provides students with very good connections and communication with other places and social relations that influence the possibility of or potential for change and destabilisation.

Based on an analysis of the empirical material, three forms of possible *expressive practices that trigger de-territorialisation* and enhance the mobility of transnational students have been identified. First, the experience of anxiety and fear due to a lack of social and political security produces *feelings of uncertainty and instability* and a *desire for change*. Second, the university's *reputation* as a high-quality institution and/or the host country's reputation in terms of welfare and prosperity, cultural and social amenities, and career opportunities are also important

expressive elements that influence movement and instability. Third, students have *future expectations and imaginings* of career possibilities and preferences for the place of settlement. In particular, students' expectations for returning to their homeland or their expectations and imaginings about becoming a part of a highly skilled cosmopolitan community are important as destabilising elements.

In contrast to these forces, we also find *material practices that cause territorialisation*. Interestingly, however, these practices are not primarily about the territorialisation of the foreign student bubble because this network is constantly and inevitably changing due to the persistent flow of transnational students who are starting and completing their programmes. Instead, the territorialisation seems to be more about how the transnational students develop spatial connections to the host city and become citizens with stakes in the city's materiality of the city. This type of territorialisation may occur in three forms. First, students may be involved in different types of *networks*: either professional networks by securing a local job and joining a local work community or social and emotional networks by becoming romantically involved with a local resident and being introduced to a network of locally embedded friends and family. Second, students may grow accustomed to and satisfied with *physical amenities and infrastructure*, such as culture and service provisions, social security, and leisure amenities (e.g., nature and outdoor activities). Third, students may forge *institutional connections* by becoming involved and satisfied with different types of cultural and social activities and institutions.

As previously discussed, the process of territorialisation is highly connected to the role of *expressive practices that trigger territorialisation*. Two main types of practices are detected based on our empirical discussion. The first practice is a *change in and re-evaluation of*

*expectations and imaginings of career plans and future prospects for family life*. Becoming materially involved with the host city in some way spurs a change in future expectations and a change in values, wherein cosmopolitan values and career expectations are slowly replaced as the main qualities of life. The second practice is a *change in and re-evaluation of the value of local culture and amenities* and locally embedded values concerning work and family relations.

Altogether, these categories illustrate some of the likely mechanisms behind the emergence of transnational students' social spaces, which appear in the tension between the dimensions of the material/expressive and the territorialised/de-territorialised (see figure 1).

[Figure 1 to be placed about here]

Figure 1 Forces of transnational student assemblages

Notably, in line with our previous discussion, the different components illustrated in figure 1 should not be misinterpreted as generalised and stabile categories that are independent of a fixed time and space in some form that creates a kind of linear causality. Instead, they will typically undergo continual negotiations, changes and reconsiderations; thus, the components only represent possible material and expressive articulations of forces in terms of territorialisation and de-territorialisation (Delanda, 2006). They thus represent a form of non-linear causality, whereby the ways in which articulations of expressive and material components play a stabilising or destabilising role will depend on the situation, time and space in which transnational students are situated. In this situation of *temporary stabilisation/territorialisation*, the students temporarily define their situations and place

relations as stable for the time being and for the immediate future. One of the interviewed students explained this theoretical point as follows:

*“I think that, anywhere, the root of the problem is that you know that these people are just going to leave, so why would you invest in a friendship with someone who is leaving in four months? And I think it has nothing to do with the fact that you’re not interested in their culture”. (Female, United States, 25 years old)*

As the student suggested, the temporary stable assemblage and its material and expressive components may turn into a process of destabilisation when the time is right to make a change based on a reconsideration of career opportunities, family obligations or changed lifestyle preferences.

### **Concluding remarks: In between striated and smooth space**

Instead of viewing transnational student mobility from the perspective of the places that they visit – fixed places that host and provide services to foreign students – we have followed recent scholars of transnational student mobility (such as Beech 2014; Findlay 2011; King et al. 2006; Tran, 2015) and argued for a fruitful investigation of the type of space that students produce for themselves through their mobile, temporal and spatial practices in the process of becoming a student. By using the conceptual frame outlined in this paper, we have shown how assemblages of transnational students’ relations to places can be understood as continuous struggles, negotiations and tensions between the dimensions of the material and expressive, the territorialised and de-territorialised and the interconnections between those two dimensions. Based on our topological approach developed from scholars such as Deleuze and Guattari (1987), DeLanda (2006), and Allen (2016), we argue that this struggle to belong to a place appears to be less about being connected to a single place than about being connected to a

myriad of places that students have left and are leaving, places that they visit, places of everyday practice and presence, places of co-presence linked to and virtually visited with the help of communication technology, and future places that they imagine will be part of their future. If this is the case, transnational students mainly relate to a *smooth space* of flow, where the sense of belonging is floating and constantly changing, as the experiences in that place fold into one another and dissolve by destabilising the forces of material and expressive components. As times change, the students may enter situations in which they temporarily or more permanently relate to more organised and identifiable parts of the local community, become part of local social networks and develop aspects of common identity and belonging – i.e., a *striated space*. The striated space represents the organised and choreographed practices of a local place, which create the potential to develop some kind of common identification with a place. If students become involved in organised local activities, social and emotional relations, work relations or even special local leisure amenities, they are possibly exposed to the striated space. In the tension between the production of smooth and striated spaces, we will find the mechanisms behind the emergence of an elusive way of belonging that characterises the mobility of becoming a transnational student and the becoming of their future life course.

On a more abstract level, an important aspect of the main argument proposed in this article relates to how forces of mobility (exemplified above with the case of transnational student mobility) are deeply rooted in aspects of territoriality. Although we may experience a new and possibly increased mobility today, denying how territoriality in terms of spatial embeddedness is important for understanding people's abilities and power to develop their life courses would be misleading. Nevertheless, territoriality should be about more than borders around spatial configurations, such as a country or a region. It is also about relations between spatial configurations across space and the material and expressive articulations of forces that create

the grounds for (im)mobility. Migrants not only move between territories (countries) at particular times; through their movement, they also develop, change and resolve connections between places and between the past, the present and the future embedded in various places.

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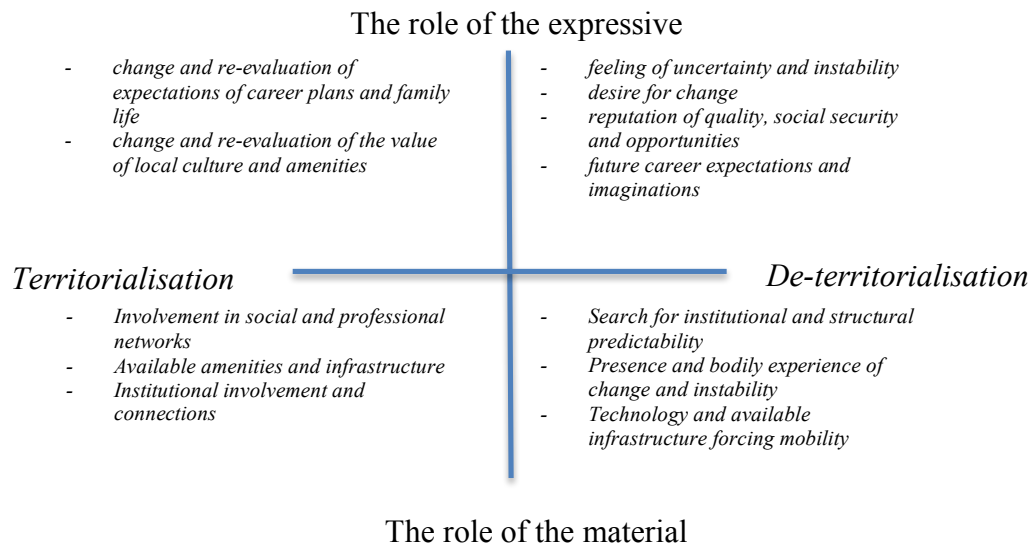


Figure 2 Forces of international student assemblages