Higher Education
https://doi.org/10.1007/s10734-022-00837-5

Nested identities and identification in higher education institutions—the role of organizational and academic identities

Siri Brorstad Borlaug[1] · Silje Maria Tellmann[2] · Agnete Vabø[1,3]

Accepted: 2 March 2022

Abstract
Academic staff hold multiple identities by relating to the organization and to their profession. Merging higher education institutions involves organizational changes which may impact identities of academic staff. This paper studies potential impacts on staff perceptions of their organizational and academic identities through a 2-year in-depth study of a merger between a large university and three university colleges in Norway. We find that academics have multiple nested identities and engage in identification at different levels. While they may identify with the new organization, they may simultaneously experience tensions and pressures on their academic identity, or they may have strong academic identity and low identification with the new organization. Moreover, space to develop local accommodations in the new organization and access to symbolic resources plays significant roles in the identification processes.

Keywords Organizational identities · Academic identities · Identification · Higher education institutions · Merger

Introduction

Organizational and academic identities come into play when higher education institutions (HEIs) are merged. Mergers represent a form of organizational change which may challenge established identities. Organizations with different practices, norms, and cultures are brought together, and academic and administrative staff are required to adjust. While policymakers often argue that mergers offer opportunities to develop new organizational cultures and identities, they may also accentuate differences among more or

✉ Siri Brorstad Borlaug
siri.borlaug@nifu.no

1 Nordic Institute for Studies in Innovation, Research and Education (NIFU), Tøyen, P.O. Box 2815, 0608 Oslo, Norway

2 TIK Centre for Technology, Innovation and Culture, University of Oslo, Blindern, P.O. Box 1108, 0317 Oslo, Norway

3 Oslo Business School, Oslo Metropolitan University, St. Olavs plass, P.O. Box 4, 0130 Oslo, Norway

less compatible organizational and academic cultures and identities (Greenwood et al., 2011; Ravasi & Schultz, 2006).

This paper investigates relations between nested identities and processes of identification in the post-merger integration phase of four HEIs. Our point of departure is that academics have multiple nested identities, and under a merger process, these are (re-)constructed and negotiated. One of the aims behind mergers in higher education is to achieve higher quality in research and teaching through increased critical mass of qualified academic staff. Hence, the idea of academic integration is based on an expectation that academic staff in a discipline or field hold similar identities, values, and norms, as well as epistemic standards. These identities are linked to professional tasks, mainly teaching and research. But academics also identify with the organizational units—the HEI where they are employed and the local environment of the basic units and institution (Degn, 2018; Gioia et al., 2013; Henkel, 2005; Macdonald, 2013; Välimaa, 1998). Against this background, we argue that there are several identities at play in a merger process. These may have an enabling potential in integration processes, but they may also lead to tensions and conflicts. It is therefore important to gain knowledge on the role of different nested identities involved in such a process for understanding and catering for integration.

Our study has been guided by the following research questions: How are different identities put into play in merger processes, and what are the tensions and complementarities between different identities? To answer these questions, we studied the nested identities of academics through an in-depth 2-year study of the merger between the Norwegian University of Science and Technology (NTNU) and three university colleges: a merger of four very different HEIs. The former NTNU was considerably larger than the three other institutions, and academic staff had other research conditions and academic profiles than their colleagues at the university colleges. We applied a mixed-methods approach using data from document studies, a survey of academic staff, and case studies of two different fields of education and science. The study took place during the first 2 years after the merger in 2016.

Our findings suggest that academics have multiple nested identities and engage in processes of identification and dis-identification after a merger. They might identify with the new organizational identity while simultaneously experiencing frictions and pressures on identities related to differences in modes of teaching and research, or vice versa—depending on their perceived position in the new organization. Furthermore, findings show the importance of taking into account access to symbolic resources as well as the space to develop local accommodations in the new organization when studying processes of identification—both academic and organizational.

Our framework and findings are relevant for a broader audience. We contribute to the literature on organizational and academic identity in higher education and provide insights for policymakers and HEI leaders on features and aspects of nested identities that should be taken into consideration in merger processes.

The paper is structured as follows: First, we propose our analytical framework on nested identities and identification. Then, we introduce the background for our cases and the methodological and empirical approach. Next is a presentation of key findings related to the managerial decisions and restructuring process, and the reactions from academic staff in the aftermath of formal implementation of the merger. Finally, we discuss key findings and main contributions.

Analytical framework: nested identities and identification

In the organizational literature, universities are typically understood as old and institutionalized organizations with a set of values and norms that are difficult to change. Simultaneously, universities, like other public sector bodies, are regarded as complete organizations (Brunsson & Sahlin-Andersson, 2000) and seen as strategic actors which can change their formal principles of organization in order to achieve strategic goals (Fumasoli et al., 2020). Mergers may represent a jolt to these relatively institutionalized organizations (Meyer, 1982), and as such an opportunity to study identity and processes of identification at different levels of the organization.

Different research traditions inform work at different levels of analysis and emphasize different aspects of the concept identity. Acknowledging the large literature on identity and given our interest in nested identities within merged organizations, we will build upon research from studies of science, higher education institutions, and organizational theory in an effort to link organizational and individual identities (Degn, 2019).

Academic identities

Scholars studying research, teaching, and third mission activities have underlined that academic identities are embedded in the disciplinary/teaching community and the HEI (Becher & Trowler, 2001; Henkel, 2005; Välimaa, 1998; Borlaug & Gulbrandsen, 2018). These studies use multiple and different definitions of identity, rooted in anthropology, philosophy, and organizational studies. While they acknowledge the importance of the HEIs, they primarily relate academic identity to the norms, values, and practices enshrined in discipline-based work structures that govern the content and process of academic work. Some broaden the scope and specify values/ideological rewards that academic identity is premised on, such as the value of discipline scholarship, intellectual curiosity, a community of practice, accountability to peers, and professional autonomy (Ramsden, 2003). Others, like Välimaa (1998), claim that academic identity is composed of several interactive and layered identities with different reference groups as "significant others." Välimaa's model emphasizes foremost the disciplinary-based communities (national and international colleagues), then professional communities (colleagues and/or professional organizations in one's own organization and/or the national level), organizational-level communities (professional colleagues from other departments), and national culture (as a reference group; friends, relatives) (Välimaa, 1998: 133). Although Välimaa underlines that the disciplinary dimension involves the organization of teaching and research, he does not really show how. The organizational dimension is embedded in how the different fields are organized intellectually through the disciplines (Becher & Trowler, 2001; Hammarfelt, 2020); however, the HEI as an organization has a minor role in these studies.

Organizational identity

The literature on organizational identity and identification is vast. In terms of HEIs, Stensaker (2015) points to how scholars either hold an essentialist perspective of organizational identity emphasizing enduring, central and distinctive aspects of identity, while others take a strategic approach, seeing organizational identity as an organizational resource to be applied as part of strategic positioning and orientation. Like Stensaker (2015) and Degn (2019), we will bridge these two approaches and take on a processual view of organizations

(Reay et al., 2019) and study how academic staff engage in processes of identification (Ashforth et al., 2011; Gioia et al., 2013). This implies that an individual may have several identities within an organization, emerging from central, distinctive, and more or less enduring aspects of the role and collective in which the person is a member (Ashforth et al., 2008). These memberships may include team, workgroup, department, profession, and career.

However, an organization has a distinctive identity with features seen by its members as central to the organization's character, separating it from similar organizations (Gioia et al., 2013: 125). Central features may be key values, labels, services, or practices and are essential aspects of organizational self-definition of "who we are." As such, organizational identity provides a guide for what an organization's members should do (ibid.). The more identity perceptions are shared and articulated by staff, the stronger the identity and, therefore, the stronger the potential for identification—and dis-identification—with the unit (Ashforth et al., 2008).

Nested identification

Identity comes into play when organizations merge. Our case entails merging four organizational identities, constructing a new one and merging different academic identities. Organizational identity functions as a filter for members in interpreting and responding to strategic issues and environmental changes (Dutton & Dukerich, 1991; Fiol, 1991; Gioia & Thomas, 1996; Gioia et al., 2013). Research on mergers particularly suggests that identification with the post-merger organization will be positive if the merger respects and incorporates the identity of the pre-merger organization (van Leeuwen et al., 2003). However, the constructed formal identity at the organizational level may not necessarily comply with identities at lower levels. For instance, Humphreys and Brown (2002) showed that leadership proclaiming university status and emphasizing research may threaten faculties' existing identities as teachers. Moreover, while different hierarchical levels can generally agree on the content of organizational identity, they may differ in their detailed perceptions and discussions of identity (Corley, 2004). Divergence between different levels of identity in an organization and individuals' different roles and membership in different subunits therefore may imply that an individual have multiple identities nested across levels and that identities at one level of analysis may enable and constrain identities and identification at other levels (Ashforth et al., 2011). Hence, the process of constructing a new identity of the merged organization from the top may entail a process of sensebreaking and divestiture—to deliberately strip away (unwanted) identities—and sensegiving, the process of guiding the meaning construction of others toward a preferred redefinition of organizational reality (Ashforth et al., 2008). From below, the process may involve sensemaking—how members pick out cues to give meaning to their organized life and how these processes are affected by perceptions of identity, and the enactment of identity, that is, identification and dis-identification with the new unit (Ashforth et al., 2008; Degn, 2019). Enactment of identity may be observed through different identity markers, emphasizing different performance outcomes and members' behavior (Ashforth et al., 2008). So, although academic staff in one unit may hold similar organizational identity, they may have different academic identities and points of identification within their research and teaching work communities and structures, and as such we may observe different processes of enactment.

The maintaining of an identity and the processes of identification and dis-identification may, however, also rely on access to resources and potential differences in access between units in the organization (Haslam & Ellemers, 2011). This is particularly salient in merger processes which may entail different and sometimes conflicting symbolic hierarchies of valuation across the merged organizations and disciplines/professions and perceptions of having and not having resources to perform certain tasks. Thus, under certain conditions, bias can be formed against outgroup members as a way of sustaining an identity, and within an organization, this may contribute to internal conflicts (Ashforth et al., 2008). Mergers may therefore involve tensions and conflicts over resources—both material and symbolic, and between different identities. Such tensions may be particularly salient if the academic staff strongly identify with the pre-merger organization as they then may feel more threatened by the merger (van Knippenberg & van Leeuwen, 2001).

In Table 1, we summarize the main aspects of the two dimensions of identity identified in this section—organizational identity and academic identity. We further delineate points of identification and indicators of enactment which are empirical entrances where we may observe processes of identification and how staff related to the nested identities.

Having these different dimensions of identity—academic and organizational—and the nested levels of identification in mind, the role of competing expectations regarding how organizational and academic identities play out in the post-merger integration phase can be proposed. An emphasis on academic identities would underline the complementarities of academics from similar disciplines, expecting that integration of units with similar disciplinary profiles would run smoothly, as academic staff are expected to hold similar academic values and epistemic standards. Emphasis on organizational identity would, on the other hand, underline the role of the local environment and the diverse memberships of the staff in different fora—not the discipline. In this paper, we seek to align these conceptions of identity and to investigate how identity related to teaching and research interacts with organizational identity.

Mergers in higher education as a case of nested identities

Mergers are commonly justified in political statements by their contribution to more rationalized organizations. They tend, however, to reproduce the organizational structures and patterns of the former organizations (Barrier & Musselin, 2016), particularly in vertical mergers between unequal organizations (Harman, 2002). Academic staff from the merged HEIs may hold different interests, loyalties, and teaching and research cultures, and Barrier and Musselin (2016) have noted that the construction of a new organization resembles processes of "muddling through," where leaders maneuver under pressure from conflicting interests and short time to design a new organization. However, studies also show

Table 1 Dimensions of identity

Key identities	Points of identification	Indicators of enactment
Organization	Central, distinctive aspects and features of the organization	Identity markers like symbols, conformity to identify norms, behavior
Academic	Discipline-based work structures and communities	Norms, values and practices relating to teaching and research respectively. Whom are your peers?

that mergers which preserve the academic autonomy of the merged institutions experience fewer challenges in the implementation phase (Ripoll-Soler & de-Miguel-Molina, 2019). Still, a remaining question is whether this strategy will contribute to academic integration within the new organization.

A common trait of the existing body of literature on merger and HEIs is its main emphasis on the strategic level of mergers and on organizational and structural issues such as merger management and leadership. Less attention is on how academic staff react and maneuver in merger processes, despite their key role in carrying out mergers. Exceptions are the studies by Ylijoki (2014) and Ylijoki and Ursin (2013), which apply a socio-cultural perspective exploring how structural reforms in Finland shaped work practices and identities of academics. They find that mergers resulted in responses among academics ranging from conformism to resistance, depending on their role in the organization and their status in the changing academic hierarchy, and that narratives of loss and regression follow from nostalgia over "lost" institutional belonging.

While those studies show that academic identities indeed matter for how mergers are interpreted and negotiated by academics, they do not link such responses to the organizational characteristics of the reorganization taking place, and the new practices that these bring to academics in the merged institutions. Hence, the "jury is still out" on the question of how different identities are nested and play out in the post-merger phase when different HEIs commence integration.

Case description

The merger between Norwegian University of Science and Technology (NTNU) and the university colleges of Ålesund, Gjøvik, and Sør-Trøndelag in 2016 was one of several mergers in the Norwegian higher education system following governmental ambitions to reorganize the higher education landscape. The goals were economies of scale, improved quality in research and education, and increased cooperation with working life and other external stakeholders.

The merger was a classic take-over by a large research-intensive university of three smaller teaching-oriented colleges, with the rules, routines, practices, norms, and values of the old university charting the template for the new organization. It further represented a typical case of a so-called vertical merger (Harman, 2002): the former NTNU was regarded as Norway's preeminent technological university, with a national responsibility for research and education in a number of technologically oriented fields (Vabø & Langfeldt, 2020; Vabø et al., 2016). The university colleges offered large study programs in professional fields such as nursing and social work, not taught at the former NTNU, as well as in engineering with an applied profile. Two of the colleges (in Gjøvik and Ålesund) had developed outstanding research environments in ICT and in relation to practical maritime technology.

There were, moreover, considerable differences in number and competence of academic staff and students among the merging institutions (see Table 2). About 46% of academic staff at the former NTNU were professors, compared with 10–18% at the former university colleges. The university colleges, on their side, had a considerably larger share of academic staff in university lecturer positions dedicated to teaching, consistent with their teaching-intensive profile (Borlaug et al., 2019; Vabø et al., 2016).

Table 2 Size and profile of the institutions in 2015, the year before the implementation effectuation of the merger

	NTNU (Trondheim)	Gjøvik University College (Gjøvik/HiG)	Sør-Trøndelag University College (Trondheim/HiST)	Ålesund University College (Ålesund/HiÅ)
Total number of person years	5 314	325	854	239
Students/academic person years ratio	7,5	15,9	17,6	16,8
Characteristics	Multidisciplinary; profile on technology and life science	Mainly professions; engineering and health. Profile in ICT	Mainly professions; engineering and health. Profile on maritime technologies	Professions; engineering, health, economics and teaching

Source: DBH (database for statistics on higher education)

Finally, one university college, HiST (Sør-Trøndelag), was located—like NTNU—in Trondheim, whereas the distance to the two others is about 300 km.

Taken together, these aspects suggest a particularly complex merger involving multiple academic, organizational, and spatial conditions, all of which are essential to understand how the merger process unfolded. Rather than drawing conclusions based on these structural factors, we will focus on data at the micro-level of the organization—the academic staff of the new university—to expand on the role of organizational and academic identities in the post-merger process, and on how nested identities and identification processes play out in the post-merger integration phase.

Methods and data

Data were collected in the spring of 2016 and 2018—allowing us to study the merger process and the identification processes as they happened.[1] We used three methods:

1) *Analysis of relevant documents* and decisions was used to map the restructuring following from the merger and the strategic considerations of the central management of the NTNU as laid out in sections "*Strategic response: creating a common organizational identity*" *and* "*Implementing one organizational identity through alignment and standardization.*" This included documents prepared for the university board and their subsequent decisions, as well as reports from the working groups on the restructuring of study programs, the new departmental structure, and the administrative reorganization—all published openly on a dedicated website of the merger.[2]

[1] The study was commissioned by NTNU to provide a research-based follow-up evaluation of the merger process. The authors worked independently of the commissioners, and all analytical and methodological decisions are the authors' only.

[2] For access and more information, see: (www.ntnu.no/fusjon).

2) A *survey* in 2018 of all academic staff holding permanent positions. The survey was distributed to 2515 people, with a response rate of 55%. The sample was highly representative in terms of gender, prior institution, and faculty affiliation. The survey covered issues like differences in attitudes and perceptions of the merger processes, academic status, and research and education activities. For the purpose of this paper, we have used descriptive statistics. The data were analyzed using SPSS.

3) In 2016, we *interviewed* the management of the four HEIs and academic staff representing the different HEIs in the fields of engineering and health and social work, all together 12 group interviews each with 3–6 participants. These interviews concerned expectations of the merger and perceptions of the initial process.

In 2018, we did interview-based case studies of two academic environments—nursing and information and communication technology (ICT). We interviewed all relevant department heads (6) and conducted 11 group interviews with academic staff involved in both research and teaching activities at all former institutions. The groups included 3–6 people and were composed to include academic staff with different profiles, both temporary and permanently employed staff, as well as staff involved mainly in research or teaching. The cases of nursing and ICT are not only interesting because of their different positions in the field of education and knowledge; both were strongly affected by the merger, which we expected could act as a catalyst on perceptions of them and us, hence a better empirical intake to study the characteristics of nested academic and organizational identities. Nursing education had to develop a joint study program across the previous three colleges. ICT engineering at colleges had to be part of a much closer collaboration with engineering education at the old NTNU.

The group interviews allowed for more extensive data and opened for discussions throughout the interviews which exposed different interpretations of the merger that we otherwise would not have accessed. In all, 104 people were interviewed. The interviews were based on a semi-structured interview guide with open-ended questions, allowing informants to respond more freely. At least two researchers were present at all group interviews, and detailed notes were taken. The interviews were firstly analyzed independently by the researchers, constructing thematic codes related to identification during the process of analysis. We then compared codes and interpretations and linked these to the analyses of the survey and the mapping of organizational processes as found in the documents.

By combining different methods and data sources gathered at different times, we were able to explore in depth how different expectations and interpretations of the merger unfolded among different academics, as well as to analyze how the merger was perceived on an aggregated level across groups. We furthermore linked key managerial decisions regarding the merger. This enabled an analysis of how multiple identities were set in motion in the merger process and how their interplay influences academics' interpretation and support of the merger. Based on this, we developed the notion of nested identifications in merger processes.

Main findings

In line with the general literature on mergers and organizational identity, the post-merger phase can be studied as a strategic process where leaders take action to integrate former separate units into a united organization, as well as a process of cultural integration of communities with varying practices, beliefs, and values (Corley, 2004; Graebner et al., 2017; Ravasi & Schultz, 2006). In the following, we outline the aims and decisions taken at the strategic level to re-organize the merged organizations and to cater for a joint organizational identity. We then analyze how academic staff responded to the merger and the integrative measures and how different processes of identification were set in motion.

Strategic response: creating a common organizational identity

The official arguments presented by top management were largely in line with the government's objectives for the restructuring: the goal of the merger was to strengthen the quality of research and build more "robust" research environments and educational programs equipped for the future. For the management at the university colleges, the merger represented increased academic status and size together with new collaboration opportunities. For the top management at the former NTNU, on the other hand, the merger represented a window of opportunity to strengthen its position as a technical university by providing access to outstanding research environments in ICT and maritime technology at the university colleges in Gjøvik and Ålesund (Vabø & Langfeldt, 2020). Yet in this process, they also adopted large university college departments within professional fields including nursing, social work, and teaching which either had been at the margins of the former university portfolio or totally absent. Hence, the merger did not only strengthen the technical profile of the university, it also introduced a broader and more heterogeneous professional basis of the new university which included academic fields that had developed in close connection with the field of practice, and where a smaller proportion of academic staff had doctoral training. This meant that the former NTNU also had to revise its organizational identity as the *technical university,* as it now encompassed a broader academic profile.

In a strategic move to counter potential tensions brought about by the merger, the leadership set in motion a process aimed at integrating the four merged institutions into one unified organization—aspiring to a shared organizational identity, by an integrated organizational structure and capacity for strategic action. To guide the process, the leadership of the four institutions negotiated a founding document for the merger (NTNU, 2015b), stating the new profile and ambitions of the new organization. The slogan "One university – three cities" (ibid., p.7) was launched, and this was later repeated and retold as "One NTNU" or "one university" in various contexts in the proceeding months and years. With this slogan, the rectorate recognized that the new organization was multi-campus, with activities in three different cities; more importantly, it determined that the new organization was a *university*. This resonates with the first step of identity formation processes outlined by Gioia et al. (2013), indicating the importance of the articulation of a shared vision, a common image of the goal, and the uniqueness of the organization. In declaring *one university*, the rectorate distanced itself from the characteristics of the former university colleges. All practices, norms, and routines of the former NTNU became the standard for the new university. As such, the rectorate adopted the identity of the former NTNU—with all its associated cultural and social markers. Hence, the former NTNU came to serve as a basis for creating the new university's identity (Vabø & Langfeldt, 2020).

Implementing one organizational identity through alignment and standardization

To realize the synergies of the merger and in an effort to implement the vision of *one university*, the rectorate introduced means and measures targeted at structural integration, alignment, and standardization (Graebner et al., 2017) across the former institutions, targeting key aspects of both organizational and academic identities. First, through the reorganization of faculties and departments; second, through the introduction of new incentive structures for strengthening research; and third, through the introduction of a coherent structure for study programs. The changes challenged existing identities and set in motion new identification processes among the staff.

New organizational structure

For the rectorate, the vision of *one university* was implemented through new managerial and organizational structures to promote a more united organization with a shared identity. Administrative lines, responsibilities, and leadership were centralized in Trondheim, the center of both the old and the new NTNU (NTNU, 2016a). Moreover, considerable restructuring of faculties and departments aimed at integrating units with shared academic profiles across the different campuses was introduced, setting aside geographical cleavages and creating new subunits across former organizational boundaries. A main belief guiding the reorganization was that staff with similar disciplinary foundations would share a similar academic identity and would therefore easily create synergies, joining forces around joint study programs (NTNU, 2015a).

Nevertheless, accommodations and exceptions were made for Ålesund and Gjøvik to cater for their geographical distance from the managerial center of the new university. Several departmental units continued as before despite having academic parallels at other campuses, and the two campuses were also given their own vice-rectors and “campus councils” to ensure on-site coordination internally and externally, thus allowing them some internal autonomy. The former HiST, located in the same city as NTNU, was, however, not mentioned at all in the decision documents concerning the new rectorate and the restructuring (NTNU, 2015a). Rather, it was largely absorbed into the former NTNU structures—structurally and spatially. Many former NTNU departments, having no academic parallels, were not reorganized at all; they continued mainly as before (ibid.).

In summary, the reorganization affected staff unequally, depending on organizational, geographical, and disciplinary affiliation. In terms of organizational autonomy and internal boundaries, former HiST was largely erased, whereas former NTNU kept central control. Some organizational autonomy was protected for staff in Gjøvik and Ålesund, thus allowing the continued existence of their old organizational identities alongside the construction of a new NTNU identity. As elaborated below, these structural decisions had implications for academic staffs’ attitudes towards the merger and processes of identification.

Strengthening research

Few measures were introduced to strengthen the research performance after the merger. Academic staff kept their original employment contracts, which implied that staff from the former university colleges mainly had less time devoted to research compared with their colleagues from the former university (NTNU, 2015b). Strengthening the research component in the internal performance-based funding model (implying a scaling down of incentives for teaching) was the only measure introduced explicitly for this purpose by the rectorate (NTNU, 2016b). The message sent to the organization was that research performance would improve as a result of access to new collaborative partnerships, not by redistributing resources for research. Research accordingly continued as an activity managed by the single researcher and research groups, with few direct changes resulting from the merger.

Coherent study programs

Several measures were introduced to ensure the vision of "one university" on the part of teaching and education. Graduating from NTNU should imply having the same skills and being exposed to the same syllabus independent of campus, and students should be able to move easily across the campuses. In practice, this implied new leadership structures to coordinate both the content and the pedagogic quality of programs. All bachelor's level courses should have the same number of credits, and all programs became obliged to include an introductory course in philosophy and scientific history and methods. At master's level, programs had to include an interdisciplinary mandatory course (NTNU, 2016c).

In the process of standardization across the campuses, the standards and administrative routines of the former NTNU became the template that the others had to comply with. Although democratic processes with representatives from all organizations were launched to negotiate the new structures, the former NTNU set the standard for the new NTNU, demonstrating the dominance and power of the old university. Standardization and alignment are typical measures for strengthening the organizational identity and pushing processes of identification (Graebner et al., 2017).

The view from below: nested identification processes at work

The introduction of new organizational structures and measures in support of the integration processes elicited tensions among academics originating from different institutions but also across academic and locational boundaries. Furthermore, tensions were amplified by the removal of various events and markers, often small in themselves, but of great symbolic significance to those affected.

General attitudes towards the merger

In the survey of academic staff 2 years into the merger, we asked about their attitudes towards the merger (Table 3). The resistance towards the merger was strongest among staff from the former NTNU followed by staff from HiST, whereas staff from the previous university colleges in Gjøvik and Ålesund were more positive.

The results suggest that geographical or managerial structures and direct affectedness are inadequate to understand how mergers are interpreted by academic staff. Despite being subject to vast organizational changes, staff from Gjøvik and Ålesund identified more with the merger than their colleagues in the geographic and managerial center of the new university. Staff from the former NTNU had kept their rector in charge of the new university, and it was their standards and practices that were applied as a template for the new university. Accordingly, staff from former NTNU were less affected by the reorganizations following from the merger compared with colleagues from the university colleges, and fewer were affected by departmental reorganization. Nevertheless, staff from former NTNU expressed most negative attitudes towards the merger and hence also dis-identified with the new NTNU. Staff from HiST, marked by both

Table 3 Academic staff attitudes towards the merger

On a scale from 1 to 100, how positive/negative are you towards the merger (100 = positive)					
Organization	NTNU	HiST	HiG	HiÅ	All (mean)
Average	36	45	69	60	42

Source: Survey of academic staff 2018

academic and geographical proximity to the former NTNU, also displayed considerably more negative attitudes than their colleagues from Gjøvik and Ålesund. We did not find any differences in terms of the staff's age or type of position on this question. We will accordingly analyze how the identities of academics—embedded in the intersection between organizational, disciplinary, and locally embedded practice-based communities—were challenged by the merger process.

Moving academic hierarchies

As the preeminent technical university in Norway, the former NTNU enjoyed widespread acknowledgment as a distinguished elite institution in the organizational field (DiMaggio, 1991; Vabø & Langfeldt, 2020). With the merger, this superior status was set in motion as new disciplines and professional programs were to be integrated in the new university—a move that could possibly threaten the status of the university in the intellectual hierarchy within the field—and as such the organizational identity.

When asked about how the merger would affect the academic status of NTNU, respondents attached different interpretations of how status is shaped and maintained in the organizational field. A majority of staff from the former NTNU agreed to the claim that the merger would weaken the academic status (Fig. 1). They understood the academic status of NTNU in light of its research and innovation mission with a research-intensive academic culture and strong linkages to knowledge-intensive industries, and they feared that this status would suffer from the merger with the less research-intensive university colleges. Staff from the former university colleges tended to disagree with this view, and in accordance with the political signals that initiated the merger, they interpreted the breadth and the increased size of the university after the merger as a strength of the new organization. Yet again, we see that staff from former HiST are more divided about this.

In the interviews 2 years into the merger, staff, especially from Gjøvik and Ålesund, moreover expressed high expectations that the new university would award them new opportunities and increased status. By becoming part of the "NTNU brand," they expected access to larger and superior academic environments as well as new international partners. In contrast, staff from the former NTNU struggled to see how the merger brought about new opportunities: "While they [*former HiST*] have had to change, we have had little to change. (…) I do not think we had much to gain from the merger, we are not doing something we would not otherwise do" (engineer, former NTNU). In fact, prospective contributions of the university colleges seemed to be of secondary importance to staff from the former NTNU, who in line with previous studies of academic identity rather referred to the global academic discipline as their primary source of identification (cf. Henkel, 2005): "My contacts are all over the world. It does not matter where you are. You are part of

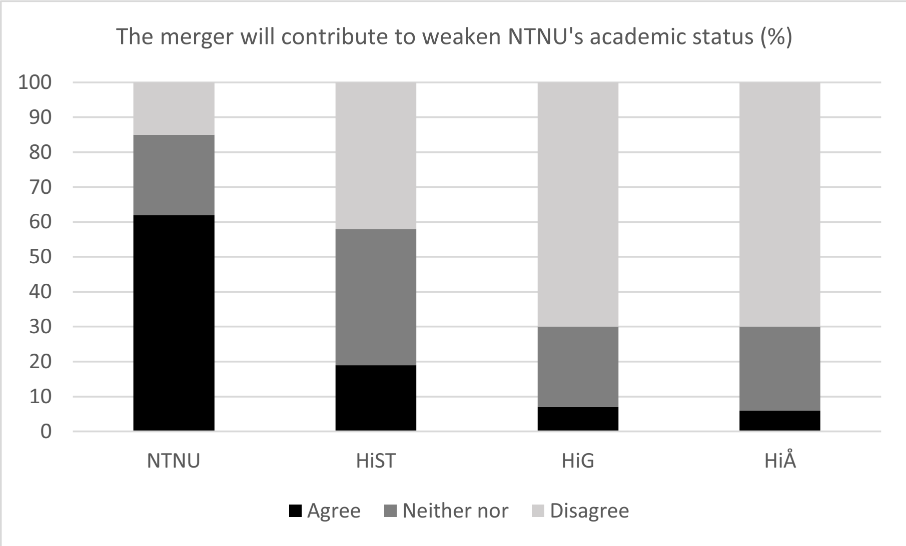

Fig. 1 Academic staff attitudes towards the academic status of NTNU after the merger. Source: Survey of academic staff 2018

national and international networks, and they do not change even if NTNU changes" (health sociologist, former NTNU).

Despite expectations of new academic opportunities among staff from the former university colleges, a growing recognition of internal academic hierarchies were correspondingly surfacing within the new university. Staff from the former university colleges were now evaluated on the same terms as academic staff from the old university, despite coming from academic traditions with other ways of performing research and services to the profession. This was interpreted as a reinforcement of the former hierarchies between university colleges and universities *within* the new university. "There is an A and a B-team. The former NTNU researchers are the A-team, and we are the B-team," an engineer with background from former HiST explained. At the same time, proud traditions at former HiST, such as graduation ceremonies with flowers and fruit baskets at the lunchroom, were considered less important by the new management and removed from the budget lines. Hence, while most of the staff from former university colleges disagreed with the claim that the merger would weaken the academic status of NTNU, they learned that their own academic and social status within the new organization was weakened.

Study programs as junctures for nested organizational identities

The merger brought together organizations with divergent research traditions and practices, yet there was also considerable overlap in study programs. In line with assumptions about study programs being embedded in universal epistemological beliefs, overlapping programs were therefore merged to realize professional synergies as well as efficiency in the supply of study programs. It was however in these seemingly academic parallels that some of the major tensions following from the merger arose. The cases of nursing and ICT both represented such communities, but with different constellations of mergers across the former organizations. To recollect, nursing was present at all the former university colleges but not at former NTNU, whereas engineering, including ICT, was a "flagship" study program of the former NTNU, and was also present at all the university colleges, but with competing and more practice-oriented profiles. In the merger process, study programs in both nursing and ICT were reorganized to conform to the standards of the technical university. Also, the leadership of study programs was centralized to deal with the integration of parallel study programs across the former organizations.

The merger and reorganization of the study programs to comply with the standards and values set by the former NTNU imposed significant additional work on staff from the former university colleges. While this would suggest that resistance to this part of the merger was stronger among this staff, the survey on the contrary found most negative attitudes among staff from former NTNU and HiST (Fig. 2), proposing a gap in how staff interpret the changes in study programs along lines other than previous affiliation with a university college versus former NTNU. Rather, we analyze this in light of the historical competition between HiST and former NTNU about what a "proper" education in ICT should offer.

Regarding the nursing programs, each of the three former programs was historically embedded in its local environment and had developed distinct profiles that reflected its local partnerships and institutional history. These diversities were largely acknowledged in the merger processes, and the joint study program was developed in negotiations between equal partners which regarded the merger as a window of opportunity to redesign programs that were long-standing and difficult to change. Yet, while the programs merged, each campus kept its local profile, and they continued as three separate organizational units with the autonomy that followed.

In contrast, the merger of the study programs in ICT brought to light deep-held contradictions between engineers at HiST and former NTNU as well as hierarchies. "Flagship" study programs in applied engineering and ICT at HiST, in many ways developed in opposition to the more theoretically oriented programs at former NTNU, were now committed to align with the standards of their former counterpart. This clearly represented a threat to the identity of the

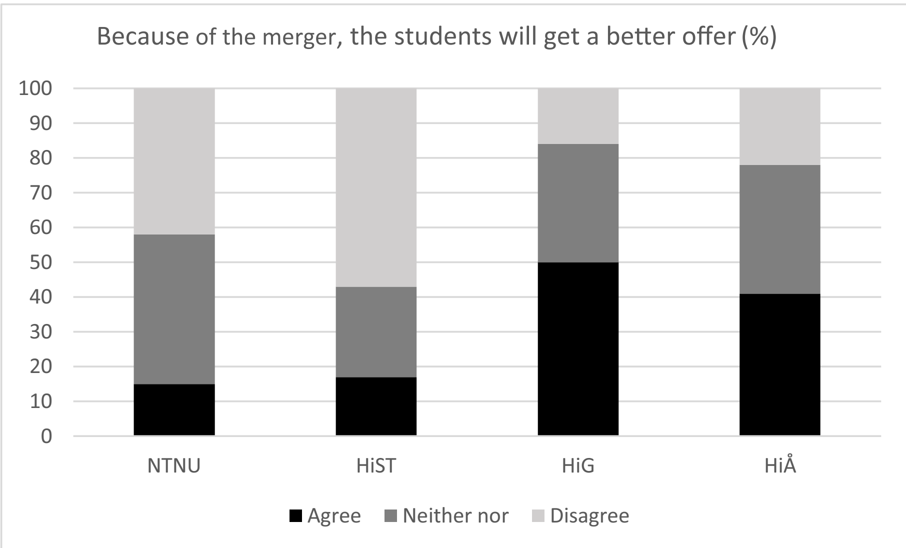

Fig. 2 Academic staff attitudes towards teaching quality. Source: Survey of academic staff 2018

HiST staff who had taken pride in offering classroom teaching with few students per teacher and close supervision of students. This was a stark contrast to the large lectures common at the former university, where students were expected to study independently with little interaction with staff. Staff from former NTNU linked this to their research commitments and the challenge of balancing research and teaching. In contrast, teaching and attending to practice-oriented study programs had been the main activity for the majority of academic staff from the former university colleges, and the study programs and the student base formed a key point of identification:

> Unlike NTNU, which recruits students straight from high school with top marks (grades five and six in math, etc.), we recruit students with professional experience and offer them pre-courses. When NTNU says they are going to help raise our quality of study, it is almost insulting. It is important that we have academic staff who are interested in pursuing undergraduate education, which is not primarily research-driven. We see the benefits of being part of the big "research machine" NTNU, but here it is difficult to get credit for teaching experience. (engineer, former HiST)

The experiences from the merger of study programs in ICT suggest that while disciplinary affiliation is important, practices of teaching, relations with students, and the field of practice are also key points of identification which were put into play in the merger. Academic staff with different positions in the nexus of teaching and research displayed different views on what the study programs and "good teaching" should offer, and teaching-oriented staff from the former colleges openly disagreed with the academic hierarchy and emphasis on research scripted in the aims of the merger. "They say that they will increase the share of research and the competence of our staff, but to me, that means less time to do teaching. The so-called 'lift of competence' is only about research" (engineer, former HiST). Hence, while the nurses largely negotiated the demands of the university on equal terms, engineers in the ICT departments entered the merger holding largely disparate symbolic values as well as resources in the traditional academic hierarchy, contributing to tensions that arose out of academics' nested identities and affiliations.

Discussion and conclusion

The merger in question was complex, with multiple processes of identification (Ashforth et al., 2011). It was characterized by ambitious goals, aiming at developing synergies between established research and teaching environments across geographically dispersed institutions and diverse disciplines, and creating a common organizational identity.

The aim of this paper is to develop a framework for studying nested identities and processes of identification and dis-identification in HEIs with emphasis on organizational and academic identities. In the theoretical framework, we proposed a model for how one may study the nested identities, emphasizing points of identification and indicators of enactment. Our case study of a merger of four higher education organizations has, however, added important nuances to our model. In the discussion, we will highlight the role of local spaces and symbolic resources and how these are interlinked with organizational and academic identities. Figure 3 provides an illustration.

Our empirical results show that in terms of organizational identity, staff at the former university colleges at Gjøvik and Ålesund had a positive identification with the new NTNU organization, while this was not the case for many of the staff from the former university

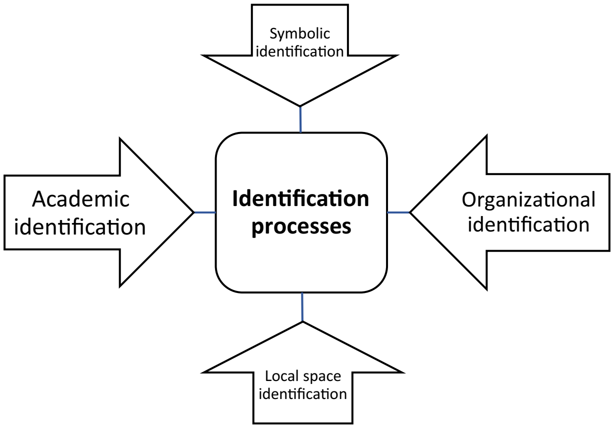

Fig. 3 Points of identification

college HiST and the former NTNU. We may explain the positive identification with the new organization by the role of geographical location from the former university and the space to develop local accommodations in the new organization and thus the identity. Academic staff at these four HEIs did see their former organization as having a distinctive identity separating it from other HEIs (Gioia et al., 2013). Since Gjøvik and Ålesund are located 300 km from Trondheim, the main center, the academic staff had prior to the merger mainly engaged in demarcating their HEIs from other HEIs in the same region. The university college HiST, located in the same city as NTNU, had over time primarily constructed an organizational identity based on being something different from NTNU, and vice versa. Thus, two competing organizations with identities constructed around demarcation from the other were pushed into being *one* university. This partly explains why both HiST and NTNU staff were rather lukewarm towards the merger.

Furthermore, HiST staff experienced a process of sensebreaking or divestiture, where central, distinct aspects and features of the organization were erased (Ashforth et al., 2008). The organizational and leadership structures were wiped out or partly integrated into the university. Resources for events and arrangements were reduced, and features and aspects that once had symbolized a good organizational culture and served as strong identity markers were no longer possible to maintain (Ravasi & Schultz, 2006). The two other former colleges did not experience a divestiture; they kept their main organizational structures and even new ones were developed to cater for the campus. Staff in Ålesund and Gjøvik kept part of their organizational identity in the merger process and a sense of doing things their own way—i.e., a sense of autonomy. This alludes to the findings of van Leuween et al. (2003) and the need for incorporating the identity of the merging organizations or creating a bridging organizational identity in the merger process (Gioia & Thomas, 1996).

In terms of academic identity, we observe the same pattern: academic staff in Gjøvik and Ålesund were positive, whereas staff at HiST and NTNU were less enthusiastic. For academic staff in Gjøvik and Ålesund, the merger represented an opportunity for improvement in academic status—an identity they embraced—and many submitted to the official arguments of expected synergies and new collaborative prospects. For the former HiST staff, the merger represented a potential threat to their academic identity. One of the main ambitions of the merger was anticipated synergies in terms of both quality enhancement in research and education, but also rationalization in teaching-intensive units merged with academic parallels from the former university. Our findings underline the nested identities—both organizational and academic—and how these are layered and developed over time, and in case of HiST and NTNU as part of differentiation towards the other.

However, the differences in educational traditions and teaching identities, with a stronger practice orientation at bachelor's degree level in the former university colleges, and more emphasis on research among staff from the former university, put considerable pressure on the academic identities of the staff from all the former university colleges. The negotiations of content of the curriculum in the study programs and modes of teaching practices were especially challenging. Staff from the former university colleges perceived an asymmetrical relationship, as staff from the former university could exercise more symbolic power—not only in terms of coming from the largest organization, but also because they were experienced researchers, a practice highly valued in the new university. The negotiations and directives from the top expressed a valuation of research over teaching practices and contributed to a perception of university college staff as underdogs, further posing threats to their academic identity and self-esteem—from being proud to becoming unsecure and perceiving themselves as the B-team. These types of identity pressures were, however, not found in nursing, where the study program merger was between relatively equal partners. Thus, processes of identification may also relate to symbolic resources, which interacts with both organizational and academic identities.

Our paper contributes to the field. We have developed a theoretical framework for studying processes of organizational and academic identification in higher education. Through our case study, we show the importance of studying processes of identification at different organizational levels—both the top and the shopfloor-level. These processes are not always aligned and are constantly refined. Studies of strategic processes of creating one organizational identity black boxes other processes within the organization which are important and may include other layers of identification. The study further shows the importance of including academic (or professional) identities and analyzing how these interact with organizational identity in processes of identification and dis-identification. This has, to our knowledge, not yet been properly addressed in the higher education literature as the general tendency has been either to study organizational identities or academic identities. A final contribution is the potential role of symbolic resources and local spaces for processes of both academic and organizational identification. These incorporate issues of symbolic hierarchies, potentials for comparisons and conflicts, and tensions between those who have and those that do not.

Finally, we will underline the relevance of our study for policymakers, especially in the field of higher education. Mergers of HEIs are on many governments' agenda together with goals of higher quality in research and education alongside rationalization and efficiency. The development of an organizational identity is a constant, dynamic, and complex process characterized by negotiations at different levels. It is important to acknowledge that mergers take time. However, given the complexity of nested identities at play, it is reasonable to argue, in line with Pjeturssons (2014), that the window of time should be considered fairly short in terms of acting upon the core ambitions of the mergers, as one may risk that the nested identities of the academic staff may remain as archaeological layers in the new organization, and processes of integration may be hampered by territorial struggles and ingrained notions of "them and us." Yet, mergers are also about giving value to different culture and practices, and although it is convenient to develop the new organization based on the largest organization's practices, values and norms, our case reveals the importance of being sensitive to valuable elements of the other organizations.

Acknowledgements We highly appreciate good and constructive comments from the editor and two anonymous reviewers. We also appreciate comments and feedbacks from participants at EGOS 2019, and from Bjørn Stensaker and Mari Elken.

Funding The research was funded with support from the Research Council of Norway (R-QUEST grant 256223 and Re-Structure grant 298969).

Declarations

Conflict of interest The authors declare no competing interests.

References

Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of Management, 34*(3), 325–374.

Ashforth, B. E., Rogers, K. M., & Corley, K. G. (2011). Identity in organizations: exploring cross-level dynamics. *Organization science (Providence, R.I.), 22*(5), 1144–1156.

Barrier, J. & Musselin, C. (2016) Draw me a university: organizational design processes in university mergers. *The University Under Pressure*. Emerald Group Publishing Limited, pp.361–394.

Becher, T., & Trowler, P. R. (2001). *Academic tribes and territories : Intellectual enquiry and the culture of disciplines*. Society for Research into Higher Education/Open University Press.

Borlaug, S. B., & Gulbrandsen, M. (2018). Researcher identities and practices inside centres of excellence. *Triple Helix, 5*(1), 1–19.

Borlaug, S.B., Tellmann, S.M., Melin, G., Hovdehaugen, E. & Vabø, A. (2019) Er NTNU på rett vei? Følgeevaluering av fusjonen. Delrapport 2. Nordisk institutt for studier av innovasjon, forskning og utdanning NIFU.

Brunsson, N., & Sahlin-Andersson, K. (2000). Constructing organizations: The example of public sector reform. *Organization Studies, 21*(4), 721–746.

Corley, K. G. (2004). Defined by our strategy or our culture? Hierarchical differences in perceptions of organizational identity and change. *Human Relations, 57*(9), 1145–1177.

Degn, L. (2018). Academic sensemaking and behavioural responses - exploring how academics perceive and respond to identity threats in times of turmoil. *Studies in Higher Education, 43*(2), 305–321.

Degn, L. (2019). Investigating organisational identity in HEIs. In Pritchard et al. (Eds.), *The three Cs of higher education: Competition, collaboration and complementarity*. Budapest: CEU Press.

Dutton, J. E., & Dukerich, J. M. (1991). Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal, 34*(3), 517–554.

Fiol, C.M. (1991) Managing culture as a competitive resource: an identity-based view of sustainable competitive advantage. [New York, NY] :, 191–211.

Fumasoli, T., Barbato, G., & Turri, M. (2020). The determinants of university strategic positioning: A reappraisal of the organisation. *Higher Education, 80*(2), 305–334.

Gioia, D. A., Patvardhan, S. D., Hamilton, A. L., & Corley, K. G. (2013). Organizational identity formation and change. *Academy of Management Annals, 7*(1), 123–193.

Gioia, D. A., & Thomas, J. B. (1996). Identity, Image, and Issue Interpretation: Sensemaking during strategic change in academia. *Administrative Science Quarterly, 41*(3), 370–403.

Graebner, M. E., Heimeriks, K. H., Huy, Q. N., & Vaara, E. (2017). The process of postmerger integration: A review and agenda for future research. *Academy of Management Annals, 11*(1), 1–32.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *Academy of Management Annals, 5*(1), 317–371.

Hammarfelt, B. (2020). Discipline. *Knowledge Organization, 47*(3), 244–256.

Harman, K. (2002). Merging divergent campus cultures into coherent educational communities: Challenges for higher education leaders. *Higher Education, 44*(1), 91–114.
Haslam, S. A., & Ellemers, N. (2011). Identity processes in organizations. In *Handbook of identity theory and research* (pp. 715–744). Springer, New York, NY.
Henkel, M. (2005). Academic identity and autonomy in a changing policy environment. *Higher Education, 49*(1–2), 155–176.
Humphreys, M., & Brown, A. D. (2002). Narratives of organizational identity and identification: A case study of hegemony and resistance. *Organization Studies, 23*(3), 421–447.
Macdonald, G. P. (2013). Theorizing university identity development: Multiple perspectives and common goals. *Higher Education, 65*(2), 153–166.
Meyer, A. D. (1982). Adapting to environmental jolts. *Administrative Science Quarterly, 27*(4), 515–537.
NTNU (2015a) Faglig organisering. Utredning om ny fakultetsstruktur ved NTNU. Trondheim: NTNU. Retrieved 14 April 2018. https://www.ntnu.no/fusjon
NTNU (2015b) Fusjonsplattform. Trondheim: NTNU. Retrieved 28 Mai 2017. https://www.ntnu.no/fusjon
NTNU (2016a) Administrativ organisering. Sluttrapport med alternative forslag fra Børresen-utvalget. Trondheim: NTNU. Retrieved 28 Mai 2017. https://www.ntnu.no/fusjon
NTNU (2016b) Forslag til framtidig rammefordelingsmodell (RFM). Trondheim: NTNU. Retrieved 24 October 2018. https://www.ntnu.no/fusjon
NTNU (2016c) Minutes from the Board of governors. S-sak 88/16 and 87/16. NTNU. Retrieved 24 October 2018. https://www.ntnu.no/adm/styret/saker
Pjetursson, L. (2014) Når ledelse er kommunikation – en medreflekterende bog om lederens kommunikative kompetence. Latvia: Egmont/L&R Business.
Ravasi, D., & Schultz, M. (2006). Responding to organizational identity threats: Exploring the role of organizational culture. *Academy of Management Journal, 49*(3), 433–458.
Ramsden, P. (2003). *Learning to teach in higher education*. RoutledgeFalmer.
Reay, T., Zilber, T. B., Langley, A., & Tsoukas, H. (2019). *Institutions and organizations: a process view*. City: Oxford University Press: Oxford
Ripoll-Soler, C., & de-Miguel-Molina, M. (2019). Higher education mergers in Europe: A comparative study of the post-merger phase. *Tertiary Education and Management, 25*(3), 255–271.
Stensaker, B. (2015). Organizational identity as a concept for understanding university dynamics. *Higher Education, 69*(1), 103–115.
Vabø, A., Melin, G., Aanstad, S., Borlaug, S.B. & Dalseng, C.F. (2016) Utviklingen av det nye NTNU: Rom for alle og rom for fornying? En underveisevaluering av fusjonen. NIFU.
Vabø, A. & Langfeldt, L. (2020) The Position of technical universities within changing frameworks of institutional organisation and steering: the case of the norwegian university of science and technology. . In: Maasen P and Muller J (eds) *echnical Universities. Past, present and future*. Springer, pp.45–59.
van Knippenberg, D., & van Leeuwen, E. (2001). Organizational identity after a merger: Sense of continuity as a key to post-merger identification. In M. A. Hogg & D. J. Terry (Eds.), *Social identity processes in organizational contexts* (pp. 249–264). Psychology Press.
van Leeuwen, E., van Knippenberg, D., & Ellemers, N. (2003). Continuing and changing group identities: The effects of merging on social identification and ingroup bias. *Personality and Social Psychology Bulletin, 29*(6), 679–690.
Välimaa, J. (1998). Culture and identity in higher education research. *Higher Education, 36*(2), 119–138.
Ylijoki, O. H., & Ursin, J. (2013). The construction of academic identity in the changes of Finnish higher education. *Studies in Higher Education, 38*(8), 1135–1149.
Ylijoki, O.-H. (2014). University under structural reform: A micro-level perspective. *Minerva (london), 52*(1), 55–75.