

**Identities of research-active academics in new universities:
Towards a complete academic profession cross-cutting different worlds of practice**

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Abstract

This study explores how academics who expanded their teaching-only positions to include research, view their (re)constructed academic identity. Participants worked in a higher professional education institution of applied research and teaching, comparable with so called new universities. The aim is to increase our understanding of variations in academic identity and to be better able to support academics' 'role making' within and across different worlds of practice. Data from semi-structured interviews with 18 academics at a Dutch, new university were analysed using a grounded theory approach.

This revealed six well-rounded academic identities reflecting participants' personal scholarly objectives: the 'continuous learner', 'disciplinary expert', 'skilled researcher', 'evidence-based teacher', 'guardian of the research work process', and 'liaison officer'. The researcher role served to promote the overall development of participants' identities. The 'disciplinary expert' matured through participation in the academic world and research activities. Participants discovered what 'being' and 'becoming' a researcher in the new university might entail, and contributed to the professions' knowledge base. Participants learned to apply various research-based teaching approaches. As brokers, they linked research projects to practices in meaningful ways.

The six identities embodied an emergent power in creating and preserving a complete academic profession. Participants' accounts showed tensions inherent in an extended role portfolio and constraints in 'role making' given inconsistencies between the university's espoused research mission and the one in use. These imply challenges for university managers to align policies and practices, and to scaffold academics' attempts to integrate their academic roles in different worlds of practice.

Keywords: academic identity; research-teaching nexus; epistemic modes; boundary work; higher professional education; institutional change

Introduction

Since the beginning of this century institutions of higher professional education in several European countries have been expected to become institutions of applied research and teaching. They perform research aiming to improve, innovate and link professional practice and higher professional education, and to promote regional innovation (Kyvik and Lepori 2010). The institutions aim to provide an evidence base for the taught professions, develop collaborative research with employers, and need to establish relationships with the world of research. They simultaneously had to preserve their focus on teaching professional skills and students' employability in practice. Achieving synergy between the worlds of teaching, research and professional practice is challenging for those institutions. These worlds have their own, and prevailing, goals, values, and standards (cf. Ek, Ideland, Jönsson and Malmberg 2013; McNamara 2010).

Academics at these institutions need to carry out research-based teaching and fulfil researcher roles. We labelled this category of academics as '*later-career academics*' analogous to the category 'earlier-career academic' in higher education literature. In this study we focus on the identities of research-active later-career academics. In the continental European context, the institutions of higher professional education with a research mandate are typically referred to as 'universities of applied sciences' (Kyvik and Lepori 2010). In other countries those institutions, the former polytechnics, often are labelled 'new universities'.

The term 'academic' is not as clear-cut as common-sense usage may suggest. In research-intensive universities two distinctive responsibilities are associated with the academic role: research and teaching in the context of the university (Williams 2008). As a working understanding of 'academic' we refer to the four forms of scholarship of Boyer (1990): the scholarship of *discovery* (cf. research); *integration* (cf. multi-disciplinary research); *application* (cf. valorisation), and *teaching* (e.g., based on disciplinary developments). We define academics as those who are employed in higher education, related to one or more of those forms of scholarship. Many later-career academics at new universities originally have been hired for their professional expertise, and were employed as teachers only. Their challenge is to engage in and qualify for research-based professional education and research activities (Hazelkorn and Moynihan 2010).

Later-career academics are inherently involved in 'role making'. Role-making characterizes how a person lives a role and transforms the expectations into concrete behaviour (Herrmann and Jahnke 2012). However, descriptions of reconstructed identities as outcome of those academics' 'role making' from their authentic objectives are scarcely available in higher education literature.

To address this gap in the literature, our study focuses on the following research question: How do research-active later-career academics view their academic identity following the expansion of their work portfolios with researcher roles? The aim is to increase our understanding of variations in academic identity in higher professional education, to be better able to support later-career academics in their 'role making' and encourage institutions in providing effective guidance based on the institutional values and academics' contributions within different areas of work.

Academic roles and identities: practices and experiences

Academic roles can be examined as institutionalised positions, couched in values and norms, structured by the institutions, policy frameworks, and academic conventions (Ashforth 2001; Fanghanel 2012). Roles provide opportunities to express and develop identity. Roles organise functions, while identities organise meaning (Taylor 2008). We view academic identities as constituted in the interplay between agents (academics) and social structures. These structures condition identity, and identity, in turn, elaborates upon the structures which identity confronts (Archer 2000).

Here we will describe six interrelated adjustment processes among academics to synchronise their current identity positions with newer and emerging academic roles. We do not aim to provide an exhaustive overview, but to set the stage for our study into the identity reconstruction of research-active later-career academics related to university's research mandate. To broaden our understanding, studies on identities of academics in both new and research-intensive universities are included.

First, studies revealed that academics' identity development might be seen as a process of *continuous revision* of roles and identities (cf. Henkel 2005, 2010). A study in research-intensive Norwegian universities showed that academics have enhanced their performance in six researcher sub-roles: networking, collaborating, managing, doing research, getting it published and evaluating the research of others (Kyvik 2013). For example, faculty intensified their collaboration activities to make scientific progress and raise funds. Most academics undertook a mixture of both basic and applied research. However, role conflicts and work overload never seem far away.

Second, academics might develop *hybrid* identities, meaningful, alternative involvements in academe getting round the competitive atmosphere in research practices and the pressure to be an outstanding disciplinary expert. In a small-scale qualitative study in a British new university, information was collected about beliefs of faculty members about themselves (Clegg 2008). Despite institutional ambiguities, participants created space for the exercise of personal autonomy. This study revealed distinctive hybrid identities of individual faculty members, based around different disciplinary, epistemological, professional, and practice-based loyalties.

Third, studies identified the risk of *resistance* and *rejection* among faculty members to new roles promoted by their institutions (Billot 2010). For example, a study among academics in professional-oriented departments in British universities focused on their engagement with research activities (Boyd and Smith 2014). Many academics were overturning the primacy given to published research outputs. Teaching-focused staff felt that their institutions placed pressure on them to be actively involved in research, while teaching loads were high. Conducting research was generally not included in their contracts. Academics attempted to 'juggle' teaching, leadership, knowledge exchange, and research activity, and identified predominantly with the three former activities, although they also identified with intellectual development.

Fourth, academic staff might feel obliged to *pioneer on the margin*. Their enactment of new roles may be discouraged by inconsistencies between the espoused university's mission and this mission in use. For example, academics who faithfully and successfully enacted entrepreneurial roles in British research-intensive

universities felt marginalised by their peers and institutions (Bridgman 2007). The desired research output was formulated according to traditional academic standards. Yet, industry valued and facilitated the development of practice-oriented knowledge.

Fifth, *confusion* about one's academic identity might occur in processes of individual repositioning towards multiple academic orientations and merging collectivities. For example, in a professional-oriented department in an Australian university a research culture was pursued through research training programmes and the recruitment of research-qualified academics (Melles 2011). Academics' identities regarding research were informed by either practitioner or academic communities. This resulted in conflicting discourses around the valence of research work related to practice, profession, and discipline.

Sixth, scholars are concerned about *fragmentation* of academic identities. Studies indicate that focusing on one's identity as a teacher in isolation from one's broader academic identity may lead to a narrowing of awareness and a loss of synergy between roles (cf. Åkerlind 2011). Academics' accounts concerning academic work on the shop floor level resemble the former findings (Leisyte, Enders, and de Boer 2009). Academics in European research-intensive universities faced - to their disliking - increased separation of research and teaching as a result of research-based academic prestige, growing student numbers, and scarce resources. Given the importance of published research output many academics emphasized research work above teaching work, and indicated that quality of work decreased when the two were separated.

Academic identity conceptualised

In the present study we focus on social identity, which we define as that part of an individual's self-concept which is derived from identity descriptions (who are we?) and identity evaluations (how good are we?) within social groups, related to one's appreciation of these memberships (Ashforth, Harrison, and Corley 2008). We understand academic identity as a specific social identity. To study '*academic identity*', we include affect, cognition (values, goals, beliefs), abilities (knowledge and skills), and stereotypic behaviour. In the interactions between academics' personal affinities, and context-bound forces in higher education all these identity ingredients might undergo or need revision (cf. Ashforth et al. 2008; Fanghanel 2012). Contemporary literature recognizes that identity is not a fixed and stable entity but a fluid one that shifts with time and context, and emphasizes that academic identity in diversifying academy allows for a range of identity positions which provides continuity between traditional identity positions and newer ones (cf. Henkel 2005, 2010; Taylor 2008) and that academic identities are formed related to many '*areas in academics' working lives*', such as career, profession, discipline, and institution (cf. Ashforth et al. 2008; Henkel 2005; Välimaa 1998).

The demands of diversifying academe and the multiple collaborative settings may elicit forces for and against consistency and disruption of identity (cf. Beech and Huxman 2003). Scholars express the concern that the increased fluidity of identity positions can lead to fragmented identities (Akkerman and Meijer 2010; Archer 2000). A one-sided emphasis on the multiplicity, discontinuity and social nature of identity tends to conflict with a basic human need - a sense of self over time and context. Therefore, in this study we

purposefully view *opposing dimensions* of the *concept* of *identity* as viable - unitary and multiple, continuous and discontinuous, and personal and social. A view in terms of 'both/and' allows the possibility to study academics' self-definitions as the intermediate outcomes of 'an ongoing process of negotiating and interrelating multiple I-positions in such a way that a more or less coherent and consistent sense of self is maintained throughout various participations and self-investments in one's (working) life' (Akkerman and Meijer 2010, 315).

Method

Context

This descriptive study was conducted at a Dutch, new university (in continental Europe called 'university of applied sciences', Kyvik and Lepori 2010). This university provides education in hard and soft applied sciences, and conducts applied research (cf. Biglan 1973). At the time this study was conducted, in the respective Dutch new university the total of academic staff counted 2.032 persons (1.527 FTE). Two thirds (66%) of staff hold a master- or PhD-degree.

Research and teaching practices predominantly were accommodated in separate structures (Griffioen and de Jong 2013). Most institutions created research and development groups consisting of professors (*lectoren*) and research-active teachers. Nearly 11 % of all academic staff were research-active in the context of research groups, mostly on a part-time base (about 218 persons, including 51 professors; 126 FTE). While those academics performing both research and teaching tasks form a clear minority, most teaching staff were active in research-related teaching. In our study, we focus on the identity of research-active later-career academics.

Participants

Semi-structured interviews were conducted with 18 later-career research-active academics. University managers and research leaders mediated in the recruitment of these participants. The participants were at the time performing researcher roles on a temporary and voluntary base as part of their permanent appointment in teacher roles. Participants' deployment in research could vary from six months up to several years. Application-oriented researchers included in this study put emphasis on developing knowledge useful for professional practices. This research often was commissioned by industry or public agencies. These participants held a bachelor's or master's degree at maximum. Others were doctoral researchers and conducted basic research with an orientation towards future practical utility (cf. Bentley, Gulbrandsen, and Kyvik 2015). Those doctoral researchers were also affiliated with research-intensive universities

A purposeful sampling technique (Miles and Huberman 1994) was used to represent the variation in academics' conceptions, and included gender, age, highest qualification (cf. Hart 1998), research mode (cf. Griffioen 2013), disciplinary field and position (cf. Visser-Wijnveen, van Driel, van der Rijst, Verloop, and Visser 2009), and appointment (cf. Ashforth 2001). Guest, Bunce, and Johnson (2006) showed in their data that 92 % of all categories - conceptual labels representing particular and similar phenomena - were saturated within the first twelve interviews with a group of relatively homogeneous individuals. Thereafter, the majority

of subcategories identified were not new but instead fit into existing categories. The number of participants in our study exceeds that number necessary for data saturation in qualitative studies.

A brief survey was used to mark down and collect the background variables of the 18 participants in this study:

- Male: 9; female: 9
- Age range: 30s-60s
- Highest qualification: 4 bachelor's degrees, 14 master's degrees
- Research mode: 10 application-oriented research, 8 doctoral research
- Disciplinary field: 5 engineering, 2 education, 3 health studies, 4 social studies, and 4 business studies
- Position: 18 teachers (9 had an additional role as coordinator in study programmes, and 2 as coordinator in both study and research programmes)
- Appointment at the institution: 0.6-1.0 FTE (including 0.1-0.8 FTE in research)
- Membership of research communities: all 18; internal 17; external 7; both 6
- Academic research experience: 0-10 years
- Experience in the respective professional domain: 0-20 years
- Teaching in higher education: 2-23 years

Interview procedure

Semi-structured interviews were held in the first language of the interviewees. The open-ended interview questions allowed participants to raise matters they considered to be important. The interviewer (first author) posed follow-up questions at two levels, *what* and *why* questions, looking for descriptions of the interviewees' practices and their interpretations of these practices. The interviews typically lasted 90 minutes and were audio-taped and transcribed verbatim. This study reports on the following five questions about participants' understandings of their academic identity within an extended work portfolio:

1. *Can you describe the motives that prompted you to conduct research?*
2. *How did you experience your entry into your new research role?*
3. *How do you perceive doing research and being a researcher?*
4. *What do you think makes someone a 'good' applied sciences researcher?*
5. *How do you view the combination of your researcher and teacher roles?*

Analysis

The data were analysed using a grounded theory approach (Corbin and Strauss 2008). A grounded theory is faithful to the reality of the phenomenon under study. Through qualitative coding strategies, underlying categories in the interview data were uncovered which represent the variation in academics' identities related to areas in participants' working lives. A grounded theory approach includes the discovery of the conditions which apply to phenomena and therefore provides possibilities of control with regard to action. The analysis

comprised three phases: open, axial, and selective coding.

Firstly, the first author read and re-read the transcripts, selecting all fragments in which interviewees refer implicitly or explicitly to their academic identities and associated conditions. Using an open coding approach, all fragments were labelled according to their content with labels such as research process, dispositions, modus in work, and anticipated impact. Then, sensitizing concepts (Charmaz 2003) were used as a lens through which to re-read fragments within these main categories, and to identify, organise, and interpret participants' conceptions. These concepts were '*academic identity*' and '*areas in participants' working lives*', and are described in the introduction. A set of six categories was developed by iteratively regrouping the labelled fragments in meaningful ways, and afterwards judged as reflecting participants' identities as meaningful wholes.

Second, the six categories that were identified in the previous phase were interpreted, and related variations were identified through axial coding. The categories and related variations were verified against the data by constantly comparing individuals' understandings of identity with those of the group as a whole to identify similarities or differences. Definitions and demarcation rules were formulated for each category of identity.

Third, an additional interpretive within-category analysis was conducted (selective coding). The underlying aspects of the two sensitizing concepts were used for clustering and entering the data in conceptual matrices. These displays were used for drawing and verifying descriptive conclusions on the variations within the main categories (Miles and Huberman 1994).

The coding process that led to the final categories of identity was conducted by the first author. In addition, the second author independently coded a sample of interview transcripts in each phase. Differences and similarities between the raters were then discussed to improve the descriptions and demarcation rules of the categories. After agreement between raters was reached, fragments were re-coded if necessary. These dialogical reliability checks (Sandberg 1997) fostered the interpretative awareness needed to present a representative picture of the interviewees' conceptions. The checks took into account the procedures for establishing theoretical and methodological consistency, thus helping to ensure the trustworthiness of the analysis method (Lincoln and Guba 1985).

Findings

The data revealed six identities related to participants' working lives: 1) 'continuous learner', translating 'career' dispositions into a role portfolio extension 2) 'disciplinary expert', valuing the nurturing of the 'academic world' and 'disciplines', 3) 'skilled researcher', pioneering in university's new 'research practices', 4) 'evidence-based teacher', incorporating research-based learning into 'teaching practices', 5) 'guardian of the research work process', protecting the 'boundaries of the research work process', and 6) 'liaison officer', moving 'beyond the boundaries' to achieve synergy 'between domains of practice'. All participants showed in their accounts the core elements of all six identities. The developed six academic identities entailed thick descriptions of academics' affect, cognition, stereotypic behaviour, and abilities. Within each main category

of identity, variations were distinguished. Not all participants described elements of all variations. For example, some only identified with the 'gatherer of research building block's', a variation of the 'skilled researcher' (see Figure 1). Below, we explain the six identities in detail, and include sample interview fragments.

<INSERT FIGURE 1 ABOUT HERE>

Fig. 1 The variations of a 'complete' academic identity, linked to areas in academics' working lives

Participants predominately perceive their 'global self' as an emerging, complete and integrative academic identity:

I am a bridge builder between research knowledge and professional practice. Paying attention to... evidence towards students, teaching colleagues,... transmitting the newest knowledge into the educational and research programs... That means I am hoping to get synergy... I aim to offer innovative solutions to the challenges of industry professionals and equip students to be engaged in the application (Male, business studies, doctoral researcher)

Continuous learner

The 'continuous learner' identity reflects participants' career disposition. Participants are motivated to conduct research because this will help them improve valuable competences and up-date their knowledge in important disciplinary areas. They strive to enhance their academic knowledge in teacher and researcher roles, as is reflected in two variations.

Development in research-related teacher roles

Participants in this variation of the 'continuous learner' prefer research activities on a temporary base to enhance their teaching, as illustrated by this fragment:

The most important aspect of doing research for me is gaining experience... [and] being able to apply that experience in my teaching. After all, teaching is the main part of my job... (Female, engineering, application-oriented researcher)

Novel researcher roles as challenge

Participants in this variation express the desire to develop new identities. They are familiar with the curriculum content, have developed excellent teaching skills, and report that researcher roles suit them.

I seemed to have reached the limits of my development as a teacher... [so I] switched my focus towards being a researcher. I wanted to see what I could achieve. (Male, engineering, application-oriented researcher)

Disciplinary expert

In the interviews, participants indicate that the 'disciplinary expert' was brought to maturity through participation in the 'academic world', which nourished interviewees' intellectual growth in their respective 'disciplines', as reflected in two variations.

Depth of understanding of the disciplinary field

Participants in this variation indicate subject-related curiosity as their drive for engaging in research, for example, understanding technical operations or the dynamics behind phenomena. They dive deeply into a subject. This often contrasts with their daily teaching practice, which is perceived as cursory. For participants, conducting research implies entering the academic world which broadens and deepens their disciplinary perspectives, and entails reading literature and getting involved in new worlds of thought consisting of networks of academics and professional practitioners. In a teaching-only work portfolio these activities often were viewed as professional development separate from teaching. In contrast, in the extended role portfolio professional development was approached as inherent in preparing research output and this output was subsequently incorporated in teaching practices. For example:

Curiosity and conducting research lie very close together. Keeping up to date with your field, it just means,... you read research articles..., a very active way to be engaged in your profession. I study theoretical frameworks which fit [my research],... and which also link to education. (Female, business studies, application-oriented researcher)

Recognized and persuasive expert

Participants in this variation strive to be credible disciplinary experts. They establish this credibility through grounding their claims in empirical evidence. For some participants, in addition, publishing their research and becoming an author enhance their persuasiveness as experts. Participants desire to be critical partners in discussions with colleagues, as illustrated by this fragment:

Research findings give you clout, make you more of an authority on the subject matter... My motive is the opportunity to join the debate. (Male, health studies, application-oriented researcher)

Skilled researcher

Participants in this identity strive to enhance their research competences. The three variations of the 'skilled researcher' reflect what the participants perceive as the ingredients of 'being' and 'becoming' a researcher. Participants experience conducting research in the new 'research practices' as pioneering. They are among those who first specify, open up and claim necessary conditions, such as learning and exchange possibilities, infra structures, and research leadership. Participants perceive support as beneficial to their self-confidence and success. Those who experience insufficient support report a sense of insecurity and adversity in their research work.

Gatherer of research building blocks

Participants in this variation are focused on understanding the building blocks of research, such as study design and basic or advanced methods. They consider knowledge of the different phases of research and the links between these phases to be basic knowledge. Some see research projects as gap-filling exercises, suggesting a linear conception of research. Others have circular conceptions in which research questions determine the choice of methods and literature, and vice versa. Novices aim to become less dependent on the support of senior-researchers, and opt for training opportunities in basic research skills. The next quote reflects a moment of distress related to a lack of basic research knowledge:

That you don't have a grip on things... I feel like I'm working with a box full of jigsaw puzzle pieces, but there's no picture on the front... I would like to attend a course... I often miss the building blocks; for example, what is a good research question? (Male, business studies, doctoral researcher)

Quality through craftsmanship

In this variation, doing research involves being absorbed in reading and writing, grounded in a thorough overview of the field of study. Some participants perceive this as a journey into the unknown: a process of discovery similar to exploring the jungle. Others describe it as an artisanal journey: combining core variables and instruments through craftsmanship. Conducting research is seen as an iterative process in which quality evolves through continuous aligning of the research phases. For the participants, this means tinkering with their research projects to synchronise the aims, methods, analyses, and research focus, while staying open to the unexpected.

Having first explored their field of study, participants understand they have to find their own niche. They report 'wandering' during their research journeys. But when they make strong choices, expressed in terms such as 'killing my darlings', they experience a sense of progress. Participants in this variation lean on other researchers as critical friends. They report that 'quality through craftsmanship' can only be achieved with ample research experience and sufficient knowledge of the topic and relevant methods.

It's more than just doing a quick analysis. Which questions... do I analyse... or correct for bias? Research is more than just thinking of a topic and then diving in... It involves an entire process. Your original idea is rarely what you end up working on and rarely delivers the results you expect. (Female, health studies, application-oriented researcher)

Innovative researcher

Participants in this variation are oriented towards the development of new ideas and methods, such as participatory research methods. Some refer to new ideas as personal paradigm shifts. In their view, research from innovative perspectives often uncovers deeper causes of phenomena and opens up opportunities for fundamental improvements. These participants prefer unexplored topics, and view complexities as challenges. Although participants in this variation constantly question their position, they strongly believe in the value of their innovations. Participants in this variation consider competences in advanced research methods necessary

to conduct innovative research, and seek out networks with diverse participants. The following fragment illustrates a personal paradigm shift related to a study on information systems:

Then I discovered that a model is not logically designed at all. The things we look at from a single conceptual perspective should actually be approached at various levels... To base it on natural language is an ingenious step... It opens up new opportunities [to use operational data for purposes of strategic information]. (Female, engineering, application-oriented researcher)

Evidence-based teacher

The 'evidence-based teacher' reveals how research work affects teacher identity and participants' purposes in their 'teaching practices', which is reflected in four variations. The label 'evidence-based teacher' is used to explain participants' views that conducting research appears to enhance teacher's standing as a role model, fosters research-based teaching approaches, and improves teacher's ability to empathize with students' learning needs related to research activities. Participants strive for alignment of authentic research projects and teaching activities to achieve mutual benefit. They work on their students' competence level in research skills and a proper positioning of authentic research assignments in the study programs.

Role model

In this variation, participants report that conducting research contributes to personal change as a teacher. Being well informed of current disciplinary developments gives them credibility, enabling them to inspire and serve as role models for students.

You should show students that you're up to date... [Engineering] is constantly changing. Our students need to embrace those changes to gain a good foothold in the professional field. (Female, engineering, application-oriented research)

Research-based teaching

Participants in this variation initiate changes in their teaching practices as a result of their research activities. They aim to provide students with sources they can use to retrieve current disciplinary knowledge and to show them the practical applicability of this knowledge. In addition, participants feel more able to foster students' research competences; for example, through explaining methods, sharing their research experiences with students, and asking them challenging questions. They emphasize the development of positive attitudes towards knowledge among their students.

I bring research articles [and] I tell students:...this model gives us an entirely different view than if we examine a course design more intuitively. Let's look at the learning objectives and teaching methods and see if we can classify the learning objectives according to this model. What do you see? The teaching methods might not cover the learning objectives at all... (Male, education, doctoral researcher)

Co-research with students

As a special form of change in research-based teaching practices, some interviewees emphasize the value of involving students in staff research, since staff and students may benefit from each other's input.

[In our] learning community... students brought in their data and asked us to brainstorm with them. We were producing knowledge together. (Female, social studies, doctoral researcher)

Student-oriented research supervisor

Participants in this variation report that their participation in research projects enhanced their understanding of the challenges and pitfalls inherent in students' research projects and has gradually improved their supervising skills.

[My professor] patiently showed some inconsistencies in my research [proposal]... That was striking,... I just was not as far in my awareness. For me, this happened to be an eye opener. I should specify my feedback on students' research much more (Male, engineering, doctoral researcher)

Guardian of the research work process

Together with the 'liaison officer', the 'guardian of the research work process' is committed to boundary work. The present identity focuses on protecting the 'boundaries of the research work process', which are regarded as fragile. Two variations reflect how participants relate to this fragility.

Uninterrupted concentration on research work

In this variation, participants prefer to devote uninterrupted attention to research activities. They care about depth, effectiveness, and efficiency in their research work, and relate mental peace and focus to research output. However, many participants perceive their teaching duties as their primary responsibility, and as dominating their daily schedule (e.g. preparing lessons, providing students with timely feedback). They indicate that research-unfriendly and strict timetables in teaching often infringe on their research and lead to fragmentation of research time. Most participants describe regularly bending over backwards to avoid daily issues.

Last semester I had eight hours of teaching [weekly], as well as two days for my doctoral study and other tasks. When they divide that class schedule over three days, I don't have much time left for my research... I always have scheduling conflicts... When I schedule half-days spare time for research work, everything else gets in the way. (Male, business studies, doctoral researcher)

According to many participants, heavy teaching loads and limited research time mean that combining teaching and research activities is difficult. They report that serving multiple masters results in divided loyalties. The need to balance competing demands and allocate time strictly leads to compromised work quality.

Boundary work tactics: separation/integration/mixed tactics

Participants in this variation develop tactics to preserve the necessary time and mental space for research. Many academics separate their researcher and teacher roles, e.g. by setting limits on their availability in terms of time or place. Some participants suggest integrating research and teaching practices in order to reconcile conflicting loyalties. Many participants apply mixed tactics to create latitude in their work schedules. They recover lost research time later through their teaching hours, use their free time, arrange for colleagues to stand in for them, postpone research work, or opt for less demanding teacher roles as is illustrated below.

I want to be a good study programme coordinator, but I also want to be a good researcher. It's a bit like trench warfare. I want to dig myself in on both sides [to do both jobs well]. I've had some minor conflicts as a result... And that's the biggest pitfall - that you want to keep doing everything... My manager is now considering a different position for me in teaching. (Male, education, doctoral researcher)

Liaison officer

The 'liaison officer' is the second identity regarding boundary work. Participants move 'beyond the boundaries between domains of practice' in order to mutually enrich their different academic roles. In linking their research projects to practices, participants function as brokers and developers. Three practices constitute the variations of the liaison officer. For many participants the liaison officer is a cross-cutting identity regarding all practices, e.g., linking professional practitioners' knowledge needs, students' learning objectives, and educational innovations. In this enterprise, participants reported chances and limitations, and successes and frustrations. A challenge for the liaison officer identity is to establish the perceived positive valence of research knowledge in domains, which requires cultural sensitiveness, networking, visibility, and perseverance of the participants.

Educational institution

Participants in this variation strive to update study programmes to enhance students' professional competences and their attractiveness for the labour market. Other participants organise programmes for their teaching colleagues to enhance their research knowledge. Participants often take colleagues' critical sense and research-mindedness into account and strive to enhance their awareness of the surplus value of research findings at a personal level. Some participants face the challenge to get access to the decision-making on study programmes and the incorporation of research knowledge in these, while others have positions in this respect.

I'm a member of the curriculum committee... We establish knowledge areas... Have we missed anything? Where can new topics best be placed?... In this way new knowledge is integrated into the curriculum... And in my research area that happens to be [sustainability]. (Male, engineering, doctoral researcher)

Professional practice

Participants in this variation foster the adaptation of research knowledge in professional practice such as new approaches, perspectives, tools, and interventions. Participants inform practitioners about disciplinary insights by giving presentations and advice, and writing professional articles.

During field meetings [I] try to get [professional practitioners] excited about my topic... and explain the opportunities. When we publish in professional journals, why not write in Dutch [the local language] for a change? This will keep people more informed, which ultimately helps the researchers implement their results. (Male, social studies, doctoral researcher)

Scientific research

Participants in this variation of the liaison officer place value on contributing to the body of fundamental knowledge and having their publications accepted. Participants strive to be innovative and newsworthy. In addition, they seek to break down the dividing lines between fundamental and applied research and between disciplines.

The multidisciplinary aspect provides for extremely rich results. [However], one really big problem is publishing... I sent an article to an education journal... [but] it was too economic. [Yet] the economics journal said 'it's too educational'. In fact, there's not much support for using two [different disciplinary] paradigms. (Male, education, doctoral researcher)

Conclusions and discussion

This study explored how academics who expanded their teaching-only positions to include researcher roles viewed their (re)constructed academic identity. The present study revealed a set of six well-rounded categories of academic identity. All participants showed in their accounts the core elements of all six identities. The diverse areas of academics' working lives provided a wide range of possibilities for their identity development.

In the introduction, we explained to study academic identity purposefully following three opposing dimensions (Akkerman and Meijer 2010). We aimed to reveal academics' identity reconstruction in the context of diversifying academe in response to forces for and against consistency and disruption of identity (cf. Beech and Huxman 2003). First, in response to the *unity-multiplicity* dimension, we found that the participants demonstrated a notion of a global identity, an emerging complete and integrative academic identity. The researcher role served to promote the overall development of academics' identities. Participants' accounts revealed that the 'disciplinary expert' matured through participation in the academic world and research activities, resulting in depth of disciplinary knowledge and increased academic credibility. The three variations of the 'skilled researcher' displayed what needed to be considered and developed to feel at home with and proficient in this novel role. Participants contributed to the knowledge base of the taught professions. In linking their research projects to practices, participants functioned as brokers and developers (cf. the

'liaison officer'). Participants applied various research-based teaching approaches (cf. the 'evidence-based teacher').

Second, concerning the *continuity-discontinuity* dimension of the concept identity, the 'continuous learner' reflected the desire for further academic development. However, the ongoing shifts within and between identities also elicited discontinuities. Insecurities appeared to be inherent in development as a researcher. Participants juggled multiple identities. While the participating academics aimed to preserve work quality in each separate role and synergy between their multiple roles, they elaborated upon accompanying challenges. Shortcomings in support structures and the institutional ambiguities considerably exacerbated these tensions.

Third, regarding the *personal-social* dimension, participants' reconstructed identities reflected their personal scholarly objectives. Within each main category of academic identity, variations were distinguished. Not all participants described elements of all variations of the six identities. The developed framework of the six identities and related variations represented the possibility of a personalised academic profession. Regarding the social dimension, participants were geared towards others - students, university colleagues, and practitioners. Our data showed a hybrid situation - opposite *modi operandi* - at the boundaries between research and teaching practices. The boundaries between researcher and teacher roles are permeable and flexible at the shop floor level, but rather rigid and inflexible when it comes to incorporating research into teaching at the institutional level. This hybrid situation elicited different orientations among academics towards boundaries, reflected in the 'guardian of the research work process' and the 'liaison officer'.

Participants experienced conducting research at the new university as pioneering. They envisioned and realised alternatives in academic work in collaboration and negotiation with others. Participants' accounts reflected a need to convince others (the interviewer and by that a future audience) of the value of the researcher role in the new university. In contrast to other studies into the identity of later-career academics the present study revealed a set of six academic identities and related variations reflecting academics' personal objectives on an aggregated group level.

Identity development within and across academic roles and practices

Our focus on the interrelatedness of academic roles might have revealed a broadening of participants' awareness of the nature of the academic profession, reflected in the six categories of academic identity (cf. Åkerlind 2011). Related to academics' work environment various identity needs were fulfilled, such as mastery, meaning, and belonging. The need to control also was elicited (cf. Ashforth 2001; Henkel 2005; Välimaa 1998). The 'skilled researcher' followed by the 'disciplinary expert' appeared for academics to be central in their identity reconstruction. This is comparable to the academics in professional-oriented higher education in Boyd and Smith's study (2014) who identified with development work and intellectual development. In research-intensive universities the 'disciplinary expert' - formed in academic communities - traditionally was and nowadays remains a key anchor of academic identity in universities in turbulent times (Henkel 2005). Concerning academics' identity development, the present study showed what might be won when research activities are allocated as an inherent aspect of academic work. The reviewed studies, either

among practice-focused (e.g., Boyd and Smith 2014; Bridgman 2007) or research-focused academics (e.g., Kyvik 2013; Leisyte et al. 2009), showed that academics commonly valued three academic development possibilities - intellectual development, knowledge development, and knowledge exchange and consultancy. At least these academic development possibilities might be supported as *inherent* aspects of teaching-focused work portfolios in universities.

The reviewed studies also showed facets of boundary work among academics (i.e., Boyd and Smith 2014; Bridgman 2007; Clegg 2008; Kyvik 2013; Leisyte et al. 2009; Melles 2011) which fit into the two boundary work identities in the present study. For example, academics' boundary work concerned preserving work quality in separate roles, achieving synergy between multiple roles, and overcoming the cultural discontinuities between different sites and reference groups. These findings emphasize the importance of focusing not only on professional identities constructed within single academic roles and work practices, but also on identities prepared to master the challenges of boundary work (cf. Ashforth 2001; Akkerman and Bakker 2011; Henkel 2010).

The interplay between academic identity reconstruction and university structures

In the introduction, we explained to view academic identities as constituted in the interplay between agents (academics) and social structures (cf. Archer 2000). In comparing the findings of the present study with the reviewed studies we further develop notions on academics' *adjustment processes* to synchronise their current identity positions with newer and emerging academic roles.

The reviewed studies and the results of the present study show that academics might be receptive to processes of continuous revision of their identities. For example Kyvik (2013) and Bridgman (2007) found that academics at research-intensive universities enhanced their performance in newer roles such as applied research, networking, and consultancy. Similarly, Clegg (2008) showed that faculty members in a new university created space for the development of hybrid individual identity positions. However, the study of Boyd and Smith (2014) emphasized that in professional-oriented higher education many academics rejected new researcher roles. Academics were overturning the primacy given to published research output. In contrast, all the participating academics in our study valued their researcher roles.

Some of the reviewed studies (Clegg 2008; Bridgman 2007; Kyvik 2013), and likewise the present study, focussed on academics' personal objectives in their identity construction. In contrast, other studies took the perspective of (dis)connections between academics' understandings of their identities and the views of their institutions (e.g., Boyd and Smith 2014). The present study and the reviewed studies all revealed external factors which constrained academics' identity revision. However, these differences in foci and circumstances do not provide conclusive explanations for the discovery of different types of adjustment processes among academics. While Kyvik (2013) speculated that academics revised their identities because the external expectations corresponded with similar changes in academics' values, Bridgman (2007) indicated that the academics in his study were committed to newer entrepreneurial identities, although they were marginalised in their institutions. Clegg (2008) assumed that non-traditional university sites specifically provided space for

authentic identity reconstruction of staff. Likewise, our participants experienced space to identify with a variety of forms of research output (cf. the variations of the liaison officer). In contrast, Boyd and Smith (2014) emphasized the resistance of academics towards research activities, which might stem from narrowly defined managerial objectives.

We conclude that building on academics' existing and emerging identities foster productive adjustment processes among academics within and across their proliferating role portfolios. In order to develop sustainable interconnections between academics' roles and practices scholars have argued for the creation of communities of practice in which students, teaching-focussed, research-focussed academics, and practitioners learn in their field (cf. Brew 2003; cf. Hill and Haigh 2012). Those communities allow the teaching-focussed staff to develop academic identities such as the 'disciplinary expert', 'skilled researcher', and 'liaison officer' continuously *in teaching time*.

Implications and further research

Participants' identity narratives can help research-active later-career academics to make sense of their current conceptions and future aspirations regarding possible identity positions in different worlds of practice. The six academic identities and variations of these identities embodied an emergent power in creating and preserving a complete, integrative and personalised academic profession. Studies indicated that the emergent power and intellectual capital of research-active academics alone might be insufficient to challenge a prevailing professional-oriented culture in new universities (cf. Sharp, Hemmings, Kay, and Callinan 2015). The present study revealed considerable contextual constraints for academics' 'role making' within and crosscutting different worlds of practice, e.g., shortcomings in research facilities, and an absence of transition bridges to convey research knowledge into study programs. These imply challenges for university managers to strategically align university's practices with its research mission, and to scaffold academics' contributions to the development of emerging practices (cf. Fielden and Malcolm 2005).

A first step is to conceive research activities in higher professional education as beneficial to its teaching activities, while acknowledging that the meaning of 'knowing' has shifted in society at large (cf. National Research Council 2007). In the cognitive learning processes not only remembering and understanding, but also processes of applying, analysing, evaluating, and creating have become more central (cf. Krathwohl 2002). 'Authentic research opportunities [...] can and should provide students with a valuable transformative learning experience [...]: a lived epistemological experience of what it means to construct knowledge in their discipline' (van der Rijst, in press).

A second step is to integrate research, development, and innovation (RDI) into education. Students' transformative learning experiences may be situated within and beyond the current course content, and either inside or outside the classroom (cf. Waghid 2000). University managers therefore should flexibilise the boundaries of teaching in a temporal and physical sense, and foster familiarity between practices in a social and mental sense, e.g., through initiating dialogues on the possibilities of research practices related to multiple

stake holders' interests (cf. Brew 2013; Lopes, Boyd, Andrew, and Pereira 2014). Change processes in organisations are about moving boundaries (Hernes 2004).

Third, the integration of RDI into education can be attained when collectivities of teachers may develop guidelines for new ways of working and learning focused on this integration (cf. Kunnari and Iilomäki 2016). Likewise, educational institutes should take a leading role in formulating RDI-programs which render 'state of the art' educational programs in the taught professions. Both an effective demand and supply of knowledge are needed as drivers to achieve vital processes of knowledge circulation. Under the sign of those RDI-programs multiple stake holders can respond to the challenges in the profession, and develop sustainable partnerships crosscutting different worlds of practice (Gravani 2008; Häggman-Laitila and Rekola 2014). In the institution studied in this paper, partnerships in learning and innovating in forms such as mini-conferences, learning communities, and field labs emerged (cf. Cremers 2016), and the research centres will be explicitly linked to educational practices and regional development.

Longitudinal research could explore how academics succeeded in crafting their multiple roles sequentially over time and context related to their self-definitions and institutional values, standards and interventions. Role crafting (cf. job crafting) captures 'the actions employees take to shape, mold, and redefine their jobs' (Wrzesniewski and Dutton 2001, 180). Academics' ability to change the form of their roles to create meaningful and viable work identities (their understanding of their academic roles) may be a strategic advantage in large-scale institutional change.

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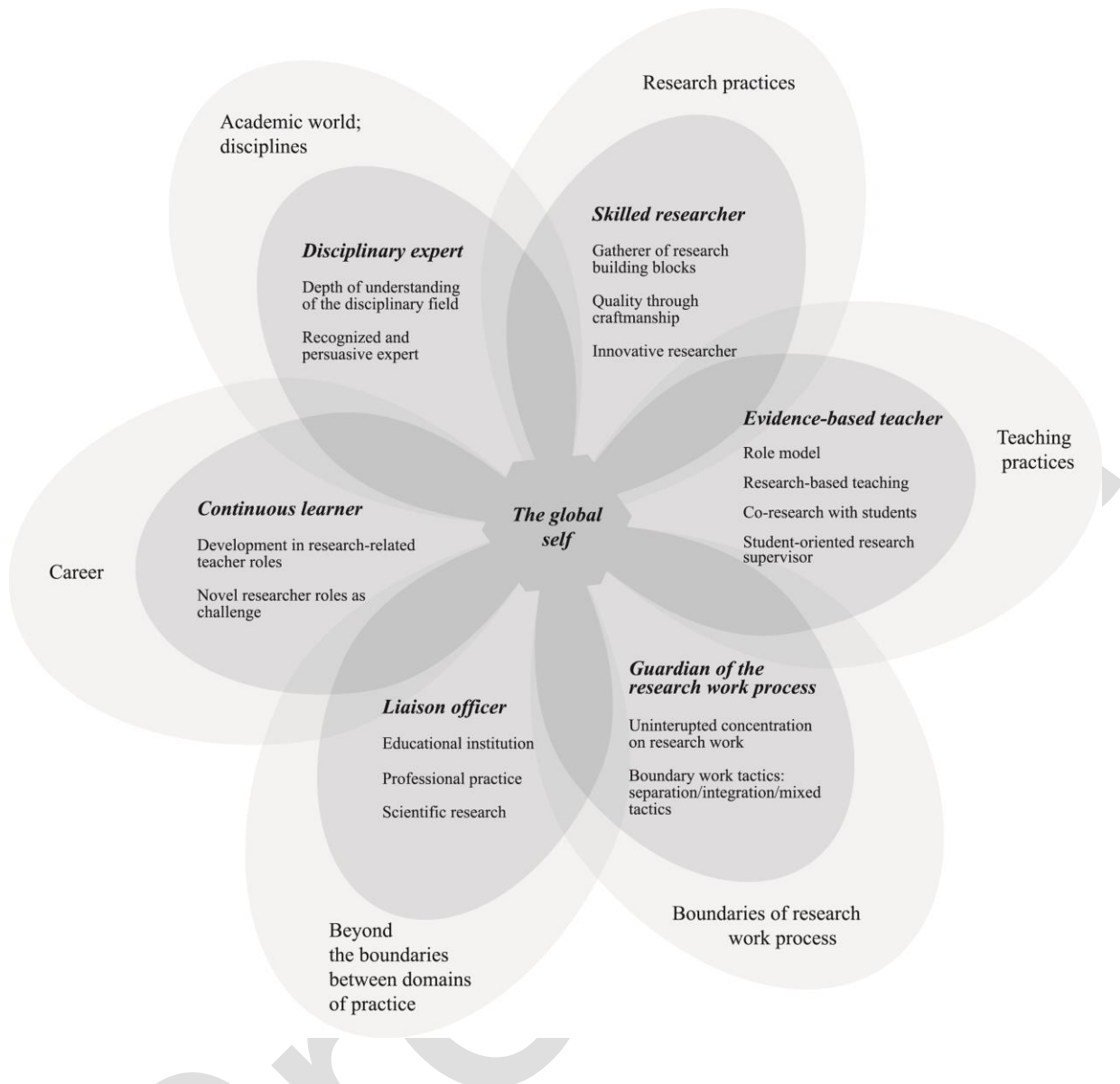


Fig. 1 The variations of a 'complete' academic identity, linked to areas in academics' working lives