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Micro-transitions and work identity: The case of academic entrepreneurs

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Abstract

Research Summary: This paper examines how academic entrepreneurs—scientists who found research-based startups while remaining in academia—construct and sustain their professional identities amid frequent transitions between academic and entrepreneurial roles. Drawing on 27 interviews with Swedish academic entrepreneurs, we show that hybrid identities are not simply the result of reconciling abstract role categories but are shaped through the material and practical organization of everyday work. We introduce the concept of professional micro-transitions as a key site of identity formation and argue that material artifacts and routines play a central role in this process. This study contributes to the literatures on identity work, role transitions, and academic entrepreneurship by offering a granular, materially grounded account of how hybrid identities are enacted and sustained in practice.

Managerial Summary: This article investigates how academic entrepreneurs—university scientists who create startups to commercialize research results while remaining in academia—manage to build a hybrid professional identity when frequently switching back and forth between their

jobs as academics and for-profit entrepreneurs. The findings reveal how they creatively find cross-fertilizing effects between their academic and entrepreneurial work tasks. This in turn allows them to reevaluate and extend their professional identity. For universities, incubators, and policymakers, this study suggests that supporting academic entrepreneurship is not just about funding or IP policies. It also requires recognizing the practical identity work involved and creating flexible environments that allow scientists to integrate both roles in meaningful ways.

KEYWORDS
academic entrepreneurship, hybrid identities, identity work, materiality, micro-role transitions, work practices

1 | INTRODUCTION

We study how scientists who take an operational role in research-based startups while also remaining in academia develop a coherent sense of professional identity amid frequent transitions between these roles. Academics who start private companies to commercialize their research are said to face conflicting and potentially incommensurable demands on their professional identities, since these roles entail very different norms and practices (Jain et al., 2009). As academics, expectations are of a clear dissociation between the personal and the scientific, of transparent sharing of results with a community of peers, of work undertaken in pursuit of truth rather than financial or otherwise personal gains, and of active solicitation of peer and public scrutiny (Merton, 1968). While not always adhered to in practice, these ideals are nevertheless normatively significant for academia as a whole and exert a strong influence on individual academics' professional identities (Lam, 2010). In contrast, entrepreneurs are expected to be passionate and often economically motivated individuals with "the dream and the will to found a private kingdom" (Schumpeter, 1934, p. 93) by means of protecting valuable insights through secrecy, patents, copyrights, etc. While this account of entrepreneurship is also an oversimplification, it arguably reflects general perceptions and entrepreneurial identities in much the same way as the Mertonian norms do academic identities. It appears that individuals who combine science and entrepreneurship face a professional situation marked by conflicting ideals—ideals that, as we will see, are closely intertwined with the content, character, and materiality of the work itself, and whose reconciliation may similarly hinge on these very characteristics.

While academic entrepreneurship has been widely studied, much of this literature defines entrepreneurial activity broadly to include patenting, licensing, consulting, and other forms of technology transfer (Bercovitz & Feldman, 2008; Galán-Muros et al., 2017; Muscio et al., 2014, 2016; Pattnaik et al., 2023; Stuart & Ding, 2006). Scholars have only recently turned their attention to the identity challenges faced by academic entrepreneurs—the individuals who most directly live the tensions between science and commercialization (Giunti & Duberley, 2023; Hayter et al., 2022; Jain et al., 2009; Karhunen et al., 2017; Mäkinen & Esko, 2023; Pattnaik et al., 2023; Wang et al., 2021). This is a welcome development, given the potential value of knowing more about how these tensions are practically managed. However, also in these studies the term 'academic entrepreneur' is typically defined broadly to include academics who are only passively involved in commercialization activities. Partly as a consequence of this, the literature tends to use rather abstract role categories as opposed to focusing on concrete practices. In an influential study, Jain et al. (2009) thus found that hybrid identities are constructed through mechanisms such as delegation

and buffering, which serve to protect the pure and central academic identity from corrosive commercial influence. Building on this, the literature tends to describe the identities of academic entrepreneurs in terms of either clean separation of roles, on rare occasions their unproblematic integration, but otherwise occupying a problematic liminal state in between (Giunti & Duberley, 2023; Karhunen et al., 2017). Little attention has been paid to how such identity related tensions are concretely and continuously managed in the context of day-to-day work.

This reflects a broader theoretical gap in the professional identity literature. While identity work during macro-transitions—major, often sequential changes in professional roles—is well theorized, we know little about how individuals navigate identity in frequent, everyday transitions between professional roles. These micro-transitions are often assumed to be unproblematic—especially within the same organizational context—obscuring the identity challenges that arise when professionals repeatedly move between multiple work-related roles that belong to professional domains characterized by different norms and values.

The purpose of this paper is therefore to explore how academic entrepreneurs—defined as individuals actively engaged in both academic and entrepreneurial work—construct and sustain their professional identities amid frequent transitions between these roles. We do this by interviewing 27 Swedish academic entrepreneurs, focusing specifically on how they practically manage and make sense of these dual and ostensibly very different professional roles.

To foreshadow our results, we find, *pace* Jain et al. (2009), that academic entrepreneurs did not buffer their academic identities by delegating entrepreneurial work to avoid commercial contamination. While more pedestrian tasks in both domains—such as grading or lab work, and managing payroll or building product—were gladly handed over to others, company tasks for which they were uniquely qualified—such as setting technology roadmaps, doing key sales and partnerships, and securing funding—were seen as natural and appropriate parts of their overall professional identities. More broadly, our findings suggest that coherent professional identities emerge not from maintaining strict boundaries between academia and entrepreneurship, but from the specific content, character, and materiality of the work involved. This is reflected in three interrelated high-level categories in our empirical results—role demarcating, role cross-fertilizing, and role normalizing. Taken together, these dynamics also offer insight into the broader phenomenon of micro-transitions between professional roles.

The paper is organized as follows. First, we review the literature on identity work and role transitions, highlighting how materiality is underexplored in ongoing shifts between multiple professional roles, including in academic entrepreneurship. We then describe our method, including sampling strategy and data analysis. After reporting our findings in some detail, we conclude by discussing their implications for both our understanding of academic entrepreneurship and identity development for plural careerists navigating competing role demands in practice.

2 | THEORETICAL BACKGROUND

This section integrates three key streams of literature: identity work during macro- and micro-role transitions, the role of materiality in shaping professional identity, and identity work within the context of academic entrepreneurship. While existing research has primarily emphasized cognitive and narrative strategies for navigating professional transitions, we draw attention to the underexplored role of material artifacts, everyday work practices, and micro-transitions in constructing and sustaining hybrid professional identities.

2.1 | Identity work and professional role transitions

Identity is central to understanding how individuals view themselves, regard others, interpret experiences, and make decisions. Unsurprisingly, identity work, as the ongoing process through which individuals come to define who they are (Alvesson et al., 2008; Brown, 2015), has received a lot of attention from scholars interested in professions and

careers (Caza et al., 2018). While an ongoing process across all walks of life, identity work becomes especially pronounced during transitions between structured settings and roles such as families, community organizations, educational institutions, and, not least, professions and workplaces. Such transitions are commonly classified into two broad types. Macro-transitions involve individuals entering new roles (e.g., Ibarra, 1999) or facing great confusion and self-doubt triggered by substantial changes to their existing role (e.g., Lifshitz-Assaf, 2018), such that one identity is ultimately replaced by another. In contrast, micro-transitions refer to the often less dramatic and more frequent shifts between simultaneously held roles (Ashforth et al., 2000). Importantly, the way individuals experience these transitions—particularly whether specific tasks feel purposeful or resonant—also shapes how identity is maintained or redefined across roles. Bailey and Madden (2016) emphasize that meaningfulness in work emerges not from role titles or broad transitions alone, but from engagement in specific tasks that are experienced as morally significant or emotionally engaging. This perspective adds an important experiential layer to our understanding of identity work during transitions.

While macro-transitions can occur between professional and non-professional roles, such as when individuals retire or leave the workforce to become full-time parents (Ashforth et al., 2000; Ebaugh, 1988), most scholars have studied sequential transitions between different professional roles. Examples include junior consultants and investment bankers transitioning from technical and managerial work to client advisory roles (Ibarra, 1999) or wage earners becoming full time entrepreneurs (Hoang & Gimeno, 2010). Focusing on radical shocks rather than formal role changes, other examples include how early-career doctors revised their professional identities post-medical school when confronted by new work responsibilities (Pratt et al., 2006), how librarians initially resisted but eventually embraced the Internet as compatible with, and an extension of, their traditional "masters of search" identities (Nelson & Irwin, 2014), and how senior scientists at NASA found a way to recast themselves as facilitators and solution seekers, rather than experts and problem solvers, as their organization embraced open innovation (Lifshitz-Assaf, 2018). Key to developing these new identities were mental reframing, the construction of expanded narratives of work, and more generally the construction of mental categories.

Interestingly, studies of professional micro-transitions exhibit the opposite pattern. Here, the overwhelming majority of studies focus on how to handle ongoing shifts between professional and non-professional identities and roles (e.g., Aljabr et al., 2022; Ashforth et al., 2000; Chamakiotis et al., 2024; Kreiner et al., 2006, 2009; Nippert-Eng, 2008; Ramarajan & Reid, 2013). Focusing especially on demanding or "greedy" occupations (cf. Coser, 1974), this literature describes how attitudes, moods, and behaviors from the work domain often intrude or spill over into the private sphere. For priests, activists, clergy, and scientists, the job can easily consume their time, energy, and personal identity, blurring the boundaries between professional and private life in ways that are not always for the best. For instance, the role-appropriate aggressiveness that comes with police work, the obedience to authority inherent in the military, and the impulse of scientists and lawyers to engage in intellectual debate may be triggered in non-professional settings with potentially harmful consequences (Ashforth et al., 2000; Delanoeije et al., 2019; Draga & DeCelles, 2024).

Tactics for dealing with undesired tensions and spillovers during micro-transitions typically center on embracing integration or seeking separation (Kreiner et al., 2006). Integration is often achieved cognitively, for example by incorporating the professional role into one's personal identity, or by framing personal values as aligned with professional commitments. It can also be facilitated materially, as digital technologies enable individuals to engage in hybrid spaces or to occupy liminal states that are neither entirely work nor entirely non-work (Chamakiotis et al., 2024). Conversely, separation is achieved by creating psychological, physical, and digital spaces between the two. This can include setting temporal and other limits or articulating a clear identity hierarchy where one is always prioritized over the other. Much emphasis is, however, placed on more concrete and tangible means of achieving separation and differentiation. This can include active rituals such as exercising before leaving work or listening to music while commuting home (Ashforth, 2001), as well as the more indirect ways in which work-related uniforms, workspaces, phones, computers, and other technological artifacts reinforce the sense of separation (Aljabr et al., 2022; Draga &

DeCelles, 2024; Kreiner et al., 2009; Scheibe et al., 2024). This emphasis on technology and materiality is also found in the general literature on how professional identities are developed and enacted.

2.2 | Identity work and materiality

Across organizational studies, the sociology of professions, and ethnographic studies of work, scholars have long found materiality to be key for understanding how identities are defined, solidified, and expressed (e.g., Nicolini, 2012; Orr, 1996; Van Maanen & Barley, 1984). Specifically, material artifacts, such as technologies, tools, routines, and workspace arrangements, not only support and shape how work is carried out but also help anchor and make visible identity (Barley, 1986; Hatch et al., 2015; Kaplan, 2011; Pratt & Rafaeli, 1997). Things made often carry identity-expressive qualities and can serve as symbolic extensions of authentic professional values (Watkiss & Glynn, 2016). Toy car designers thus expressed themselves and their creative independence through highly personal signature styles (Elsbach, 2009), while craftsmen used meticulously crafted prototypes to distinguish their work from mass production, thereby reinforcing their sense of authenticity and professional pride (Anteby, 2008). Similarly, librarians were found to curate collections, showcase books marked "good reads," etc. (Boudreau et al., 2014).

While earlier studies have shown how physical artifacts can serve as expressive anchors of professional identity, more recent research has drawn attention to how digital technologies—understood as a form of material artifact—reshape traditional boundaries at work. In academic contexts, Aljabr et al. (2022) show that such technologies can function as boundary objects, helping professionals manage after-hours connectivity and maintain separation between work and non-work domains. In contrast, Chamakiotis et al. (2024) show how digital technologies facilitate hybridity and liminality by enabling individuals to fluidly inhabit the in-between space of work and non-work domains. Focusing solely on the professional realm, Waizenegger et al. (2023) show how individuals use digitally mediated communication tactics—such as response delays, softened language, and selective availability disclosures—to shape how they are perceived across roles and to manage their accessibility and professional image.

Clearly, materiality is relevant if one wishes to understand the formation of professional identities. However, when materiality is related to professional role transitions, we again notice an interesting pattern. Studies of transitions between professional and private roles focus almost exclusively on ongoing micro-transitions. And while cognitive sensemaking strategies are discussed, much greater emphasis is placed on how material artifacts are used to manage boundaries by either reinforcing separation or enabling integration across roles (Ashforth et al., 2000; Kreiner et al., 2009). In contrast, studies of transitions between two professional roles largely focus on sequential macro-transitions, which are explained primarily through narratives, storytelling, symbolic markers, and other intangible terms, with comparatively little attention paid to things concrete and material (e.g., Ibarra & Barbulescu, 2010; Hennekam, 2017; Fenters et al., 2025).

Despite its growing relevance, the role of material artifacts in micro-transitions between professional roles remains underexplored. As modern work environments grow more complex, professionals are frequently required to navigate fluid shifts between tasks, roles, and responsibilities. This is especially salient for plural careerists (Campion et al., 2020) and multiple job holders (Caza et al., 2017), whose sense of professional normality (Van Maanen, 2010) is frequently interrupted as they transition between distinct practice domains—each often involving unique material artifacts, routines, and norms. Still, professional micro-transitions are often assumed to be relatively unproblematic—especially when they occur within the same larger organizational context, such as shifting between managerial and subordinate roles or moving between departments (Ashforth et al., 2000).

However, this assumption overlooks the challenges that arise when professional roles span quite radically different organizational contexts, each involving distinct actors with divergent—and potentially conflicting—goals. In such cases, micro-transitions may require individuals to navigate competing expectations, manage fragmented routines, and reconcile differing professional norms. In such contexts, complementing the focus on cognitive sensemaking and

reframing with attention to materiality and practice may help us better understand how people manage the often fragmented and dynamic nature of contemporary work. These issues come into sharp focus in the context of academic entrepreneurship.

2.3 | Identity work and academic entrepreneurship

The academic entrepreneurship literature generally highlights the complementarities and tensions that exist between the identities of researcher and entrepreneur (Giunti & Duberley, 2023; Jain et al., 2009; Karhunen et al., 2017). These tensions are rooted in the contrasting ideals said to characterize academic and entrepreneurial work—science being associated with the disinterested and transparent pursuit of public good (Merton, 1968), and entrepreneurship with the passionate, often secretive, pursuit of private gain (Schumpeter, 1934).

Given the perceived differences between academic and entrepreneurial work, it is commonly assumed that the "cherished, more stable, and dramatically different" (Jain et al., 2009, p. 924) academic identity is threatened by the alien practices, values, and norms associated with entrepreneurship. To cope, individuals often develop a hybrid identity in which the academic role remains primary but is expanded to accommodate entrepreneurial engagement. In an influential study, Jain et al. (2009) identified two key coping mechanisms: *delegation*, which is externally oriented and involves reconfiguring relationships and practices so that commercialization activities are handled by external actors such as technology transfer offices; and *buffering*, which is internally focused and involves mentally reframing and practically reorganizing entrepreneurial work "in a manner that retain[s] the essence of their academic role identity" (Jain et al., 2009, p. 930). Others find variations between countries. Karhunen et al. (2017), for instance, found that Russian academic entrepreneurs saw the two identities as essentially in tension, whereas their Finnish counterparts had no problems reconciling the two. Giunti and Duberley (2023) also studied academic entrepreneurs across countries. While finding differences in degree between Australia, Italy and the United Kingdom, they also identify three categories that apply across the board: *disciplinary loyalists*, who only reluctantly engage in entrepreneurship and seek to protect their academic core; *entrepreneurial embracers*, who engage enthusiastically but maintain a clear hierarchy with the academic identity on top; and *liminal bridgers*, who sustain a more fragile and emotionally taxing middle ground marked by ambiguity and uncertainty. Hayter et al. (2022) also speak of liminality, but more from a processual and temporal perspective. They describe academics as having to navigate a liminal phase where they play and experiment with the new entrepreneurial identity, something that, given the differences between the two, can be quite emotional and challenging. However, with time and sufficient social and institutional support, individuals can emerge from this phase having achieved identity reincorporation—an "end-state that provides a coherent sense of self that influences work performance positively" (Hayter et al., 2022, p. 1473). Echoing Jain et al. (2009), this end-state is characterized by individuals who "reconcile their scientific and commercial identities through hybridization, though they maintain the scientific as central through a process of delegating and buffering" (p. 1479). Some also exit the process and retreat to their academic identities without having achieved this goal. Finally, for those who remain suspended between the two, "liminality may endure maladaptively with significant personal costs" (p. 1474).

Much of the academic entrepreneurship literature has focused on how individuals reflexivly reconcile what are viewed as fundamentally different identities through discursive sensemaking strategies. Methodologically, this often involves attending to how individuals draw on prevailing institutional logics, social support, role models, and success narratives to construct a coherent account of how their two roles cohere. Giunti and Duberley (2023) thus find that many academics navigate this space by "re-framing academic entrepreneurship through the lens of social entrepreneurship" (p. 547), thereby bridging social and commercial logics and aligning entrepreneurial activity with values more familiar to the academic domain. Karhunen et al. (2017) explicitly focuses on the role of autobiographical narratives, while also acknowledging that such reflexive stories "are not a record of what actually happened, but should be regarded as a continuing interpretation and reinterpretation of our experience" (p. 7).

These approaches yield valuable insights into the cognitive and narrative processes that underpin identity work. While not explicitly using the terminology of macro-transitions, these studies tend to frame identity development as a macro-transition of sorts, culminating in a stable, hybrid identity. By emphasizing abstract role categories and sense-making narratives, they also largely overlook the concrete material practices through which academics navigate, relate, and reconcile their dual roles. Even in studies that explicitly focus on process and temporality, such as Hayter et al. (2022), the aim is a stable identity reincorporation with "ongoing liminality" described as maladaptive and problematic. Yet analyzing such states through the lens of ongoing micro-transitions—with greater attention to the content and character of work, as well as the material circumstances within which these dual roles are managed and related—may reveal alternative, more neutral understandings of how academic and entrepreneurial identities can be held in productive tension over time, as well as forms of meaningful reincorporation that go beyond the dominant, separation-oriented models of reincorporation "exemplified in the literature by Jain and colleagues" (Hayter et al., 2022, p. 1473).

3 | RESEARCH APPROACH

To explore how academic entrepreneurs construct and sustain their professional identities amid frequent transitions between academic and entrepreneurial roles, we adopted an inductive and interpretive approach inspired by grounded theory (Glaser & Strauss, 1967). Focusing primarily on concrete practices, we examine how individuals made sense of and practically managed work across academic and entrepreneurial contexts. Our analysis draws on two complementary forms of data: (1) semi-structured interviews with academic entrepreneurs, and (2) secondary materials that provided contextual depth and informed our interview preparation. In the sections that follow, we detail the study setting, sampling logic, data collection procedures, and analytic strategy.

3.1 | Study setting

The study was conducted at a large Swedish technical university with an explicit institutional commitment to supporting research utilization. The university maintains a technology transfer office, several incubators, a venture creation-based entrepreneurship education, and is situated within a national context where the academic researchers retain full ownership of intellectual property generated in their academic roles (cf. Goldfarb & Henrekson, 2003). These features made it more likely that we would encounter academics actively involved in venture creation. However, our analytical focus was not on the institutional context as such, but on identity work among academic entrepreneurs.

3.2 | Sampling and data collection

We adopted a purposive sampling strategy to identify academic entrepreneurs for whom identity work was likely to be most salient. Specifically, we focused on individuals who were operationally engaged in venture creation while remaining in academia and maintaining their other academic duties. We define academic entrepreneurs as individuals who have founded or co-founded a research-based venture—that is, a company built to commercialize knowledge, technologies, or methods developed through academic research. To qualify as research-based, ventures needed to be based on university-generated outputs, such as patented inventions, applied technologies, or scholarly methods with commercial potential. These ventures varied in maturity and structure, from university spinouts to independently launched startups. Our focus was on academics with direct, hands-on involvement in venture development, rather than those who only contributed intellectual property.

Academic entrepreneurship, as defined in this article, is a particularly relevant empirical context for exploring micro-transitions and identity work more generally. It involves recurrent shifts between two distinct professional spheres—academia and commercial enterprise—that differ in values, practices, and expectations. Unlike macro transitions, where one identity is over time replaced, our respondents are forced to manage ongoing micro-transitions between roles. Because academic and entrepreneurial activities frequently coexist rather than occur sequentially, individuals are required to continually move between activities such as writing grant proposals, mentoring students, meeting with investors, or managing IP. Such shifts demand situated forms of identity work that are embedded in the flow of everyday tasks and practices, making academic entrepreneurship an ideal context to examine the concrete realities of professional identity work.

To capture both individual experiences and contextual detail, we collected two types of data: (1) semi-structured interviews with academic entrepreneurs, and (2) secondary data from publicly available sources, including university press releases, company websites, media articles, and institutional bios. These secondary materials helped us verify entrepreneurial involvement, prepare tailored interview questions, and enrich our understanding of the organizational and professional context in which each participant operated. Table 1 provides an overview of the datasets used in the study, including secondary materials, pilot interviews, and the primary interviews.

We conducted interviews with 27 academic entrepreneurs across several STEM fields, including biotechnology, computer science, mechanical engineering, and materials science (see Table 2 for participant details). The sample was composed of 26 men and one woman, which, while very skewed, is not entirely surprising given the gender distribution in STEM research as well as STEM entrepreneurship. This imbalance was not a design choice but an empirical reality that warrants further exploration in future research. We included participants ranging from postdoctoral researchers to full professors. This allowed us to explore a diversity of career stages and academic responsibilities without assuming predefined differences in identity dynamics. We also included both first-time founders and academics who had started multiple ventures. Interviews lasted between 40 and 90 min, were audio-recorded with consent, and transcribed for analysis. The interview guide (see Appendix 1) covered participants' experiences with venture creation, role transitions, and perceptions of peer and institutional reactions.

Notably, early in the data collection process, whenever asked about their professional identities, our respondents tended to focus heavily on what they do—their concrete work practices and use of material artifacts when shifting between academic and entrepreneurial work. They were keen on comparing and reflecting on work practices from both domains and how they related to each other. As these themes emerged inductively, we decided to direct

TABLE 1 Summary of datasets used in the study.

Data type	Description	Purpose	Data format	Time frame
Secondary data	Publicly available sources (e.g., university press releases, company websites, media articles, institutional bios) used to verify entrepreneurial involvement and enrich interview preparation.	Contextual understanding and interview tailoring.	Textual documents	Collected throughout data collection phase
Pilot interviews	2 initial exploratory conversations used to refine the interview guide and identify emerging themes. Not included in final dataset but informed methodological design.	Refinement of interview guide and analytic focus.	Audio-recorded conversations (not transcribed or analyzed)	Conducted early in research process
Main interviews	27 semi-structured interviews with male academic entrepreneurs across STEM fields, spanning a range of disciplines, career stages, and entrepreneurial experiences. Focused on dual-role navigation.	Primary empirical material for grounded theory development.	Audio-recorded and transcribed interviews	Main phase of data collection

TABLE 2 List of informants and their background details.

	Position	Gender	Academic discipline (research)	Business area (startup)	Startup founding year	Number of previously created startups
Informant 1	Professor	Man	Computer science	Software testing	2006	1 (Based on research results)
Informant 2	Professor	Man	Computer science	Translation services	2013	0
Informant 3	Professor	Man	Computer science	Memory and cache compression	2015	1 (Based on research results) + Board member of many other companies
Informant 4	Assistant professor	Man	Physics	High speed data transmission	2013	1 (consultancy firm)
Informant 5	Postdoc	Man	Computer science	Memory and cache compression	2013	0
Informant 6	Postdoc	Woman	Biology and biological engineering	Yeast biotechnology	2013	0
Informant 7	Postdoc	Man	Biology and biological engineering	Yeast biotechnology	2015	0
Informant 8	PhD, lecturer	Man	Energy and environment	Carbon footprint calculator	2010	0
Informant 9	Associate professor	Man	Product and production development	Production development	2012	1 (Not based on research)
Informant 10	Associate professor	Man	Mechanical engineering	Vehicle dynamics	2012	1 (consultancy firm)
Informant 11	Professor	Man	Electrical engineering	Medical devices		More than 2
Informant 12	Professor	Man	Electrical engineering	Medical devices		1
Informant 13	Associate professor	Man	Electrical engineering	Medical devices		0
Informant 14	Professor emeritus	Man	Physics	Surface science instruments	2010	More than 2
Informant 15	Professor	Man	Computer science	Machine learning	2017	0
Informant 16	Research engineer	Man	Computer science	Machine learning	2017	0
Informant 17	Postdoc	Man	Biology and biological engineering	Biotechnology	2017	0
Informant 18	Professor	Man	Computer science	3D Visualization	2013	More than 2

(Continues)

TABLE 2 (Continued)

	Position	Gender	Academic discipline (research)	Business area (startup)	Startup founding year	Number of previously created startups
Informant 19	Assistant professor	Man	Computer science	Cloud computing		1
Informant 20	Professor	Man	Electronics and communications engineering	Motion detection	2014	1
Informant 21	Associate professor	Man	Computer science and engineering	Virtual/ augmented reality and simulation	2017	0 (board member in another startup since 2006)
Informant 22	Professor	Man	Microtechnology and nanoscience	Microwave electronics	2008	0
Informant 23	Professor	Man	Microtechnology and nanoscience	Microwave electronics	2006	0
Informant 24	Associate professor	Man	Biomedical engineering	Acoustic cell separation	2010 (works as advisor)	0
Informant 25	Professor emeritus	Man	Medical microbiology	Adsorption clothing	2013	0
Informant 26	Associate professor	Man	Mathematics	Traffic flow and congestion management	2014	0
Informant 27	Professor	Man	Mathematics	Medical devices	2013	0

our investigation more explicitly toward understanding the role these practices and artifacts played during micro-transitions between roles, and how they shape identity work more broadly. This shift allowed us to explore how professional identities were actively constructed through materially grounded and situated forms of engagement.

3.3 | Data coding and analysis

We employed a grounded theory approach (Glaser & Strauss, 1967), which guided our inductive analysis of how academic entrepreneurs practically engage in identity work. A grounded theory approach was particularly well-suited to our research aims, which centered on inductively exploring the situated, practice-based, and materially mediated nature of micro-transitions. It allowed us to iteratively move between data and concept, surface meaning-making processes from the participants' own perspectives, and build theoretical insights grounded in empirical practice. Our results were then organized and presented using a Gioia-style data structure (Gioia et al., 2013).

Data analysis began with open, line-by-line coding of interview transcripts to identify meaning units—discrete segments of text that captured a particular idea or experience. These units were assigned first-order codes using the participants' own language whenever possible to preserve the integrity of their perspectives.

For example, one participant described how the startup generated data that later "became a paper," which was coded as *data from startup as input for future research*. Another explained, "Publishing scientific results is a good way to communicate information regarding the system. It is appreciated by potential customers. It has actually strengthened our business," which we coded as *scientific publications as communication tool*. As we moved through iterative

rounds of comparison and clustering, these codes were synthesized under the second-order concept "Artifacts facilitating role accumulation." This concept captures how academic entrepreneurs used tangible outputs—such as prototypes, publications, and user data—both to advance academic agendas and to legitimize or strengthen their entrepreneurial work.

Throughout the process, we wrote analytic memos to explore the implications of emerging patterns and revised our interview guide to probe new insights as they surfaced. This iterative, theory-building approach allowed us to move from granular practices to broader theoretical categories, culminating in the data structure (see Figure 1) that

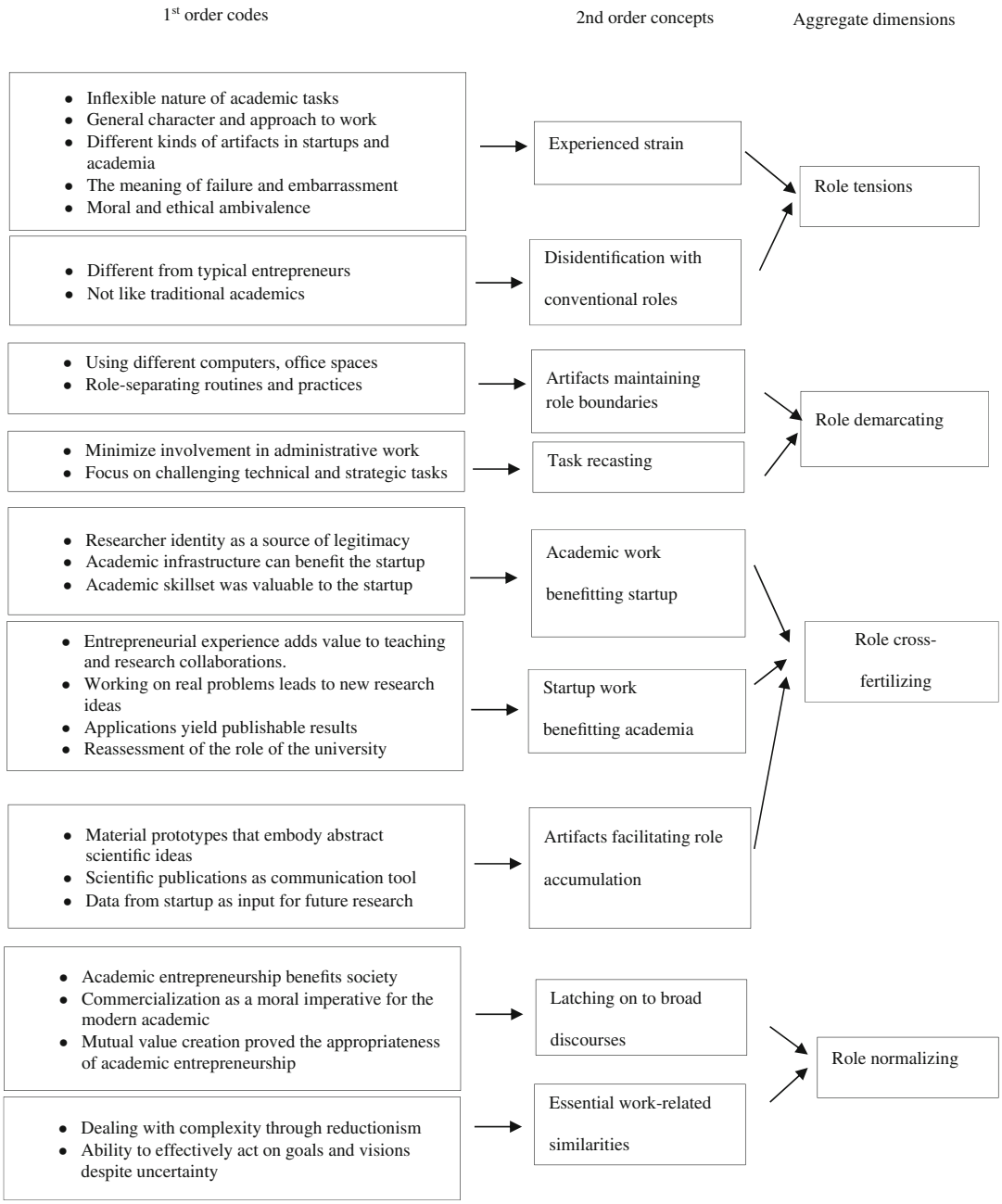

FIGURE 1 Data structure.

illustrates the link between first-order codes, second-order concepts, and our theoretical categories (Gioia et al., 2013). We frequently returned to the audio recordings to recover nuances in tone, emphasis, and emotional content that might not be fully captured in the transcript. This helped preserve the interview atmosphere and enhanced the accuracy of our interpretations. Informal team debriefings after early interviews also served to surface emergent ideas, refine the focus of subsequent interviews, and maintain consistency in analytic orientation.

4 | NAVIGATING MICRO-TRANSITIONS BETWEEN ACADEMIA AND ENTREPRENEURSHIP

When discussing their practical experiences as academic entrepreneurs, our informants consistently told us that the frequent transitions between academia and entrepreneurship generated a certain measure of tension and sometimes led to feelings of moral and ethical ambivalence. Interestingly, these frequent transitions also prompted and provided a concrete basis for sensemaking processes whereby practices, artifacts, and identities co-evolved and took on new meanings. In addition to role tensions, our findings thus highlight three broad themes—under the rubrics of role demarcating, role cross-fertilizing, and role normalizing—that capture how academic entrepreneurs concretely navigated and related their dual roles.

4.1 | Role tensions

As expected, our respondents pointed to the many ways in which academic and startup life differ. They also spoke of the more or less practical problems they experienced when seeking to live up to expectations in both domains. Pointing to the intimate relation between work and identity, they also described themselves in ways that set them apart from "typical entrepreneurs" as well as "traditional academics."

4.1.1 | Experienced strain

When reflecting on their experiences, almost all informants spoke of competing and sometimes incompatible pressures. Many described how the inflexible nature of academic tasks, such as research, teaching, and administrative duties, caused problems since they could not be easily delegated, postponed, or disengaged from. Stepping down from teaching a course or from chairing a committee could, for instance, take more than a year. Teaching was especially mentioned in this regard since the immovability of lectures and labs limited their flexibility as founders to act quickly on unexpected opportunities. Citing these constraints, many reported feeling stressed as they tried their best to honor their many responsibilities as founders and academics. Said one respondent:

> *The problem that you have as professor is that you have very stringent things that you cannot move. When I have teaching, I cannot tell the students; sorry I have a meeting with a CTO go way. I need to be there for the teaching. I cannot say I am not going to conferences anymore. There are a lot of these hard constraints and I think if you are trying to build a startup you cannot have them.*
>
> *(Informant 19)*

Some respondents also reflected that the addition of urgent entrepreneurial tasks to the existing academic workload often came at the expense of their private life:

Everything takes time, I have a family with small kids and when you go home sometimes you have not closed all issues at work. You may open the computer after dinner to finish up things and nowadays I have to deal with the company as well. It's a conflict. I have to prioritize. I have to ask myself what's in it for me and why am I doing it.

(Informant 21)

Others noted that the general character and approach to work differ in the two settings. Academic research in particular was associated with work on interesting problems in depth for an extended period of time. Doing a certain amount of explorative and curiosity-driven work was deemed appropriate even if it might not lead to new discoveries. In contrast, work in the startup was conducted under more immediate pressure to deliver working solutions.

In research, you are more explorative, you think about why something is happening the way it is. You want to find out the idea behind it. In an entrepreneurial environment, you are just happy that you found a strain (of yeast), and then you move on to produce your product.

(Informant 6)

Intimately related to this, several interviewees saw the need to interact with outsiders as a major difference. While academic life contains seminars, conferences, and the like, most of the actual work to develop a new technology takes place during relatively long and isolated periods inside the university lab. In comparison, the pragmatic and customer-oriented nature of startup work relies on frequent inputs from outside stakeholders to make viable progress.

In research, you are still in your bubble. You make assumptions about the problem, you read previous research to see what the state of the art is and what are the basic problems etc. But in the industry [when you commercialize], you have a lot of talks with real customers and there you get in touch with real problems.

(Informant 5)

Such interactions would sometimes lead to a lot of discomfort. Nowhere was this more clear than in some interviewees' descriptions of their discomfort with selling products and negotiating with customers. In the words of one first-time entrepreneur:

One thing that I thought I could do but really can't is selling… I am getting more and more aware of it, and that is painful. I must say, I feel a bit frustrated when I go somewhere and talk to people for two hours and they are very kind and everything, but nothing happens afterwards. I hear that you need to be very patient in order to eventually catch a fish. But I just don't have the guts for it. Maybe not the skills either.

(Informant 2)

Closely related to the above, our respondents emphasized that they typically work with very different kinds of artifacts in startups and academia. In academia, technologies are developed to fulfill standards required for publication, whereas in startups they should ultimately satisfy customers. An academic publication can thus be based on a rough prototype or a proof of concept as long as results are valid. In contrast, customers seek an error-free and polished product that solves a particular problem. Research results that are publication-ready therefore require significant development work that is scientifically derivative and application-focused:

In research, if you know how to do a thing to a certain level that proves that everything is working, then that's it. You don't need to make sure that the setup is waterproof or that it will work for ever. However, in

the startup, you actually spend much more time on refining it. In research, when I know that something works, I publish. Refining what I published is company work.

(Informant 4)

Or even more succinctly stated:

A research prototype software is useable only by the person who wrote it. You make it work well enough to get the results that you need for publication, but if you are going to put something in the hands of customers it needs to work much better than that.

(Informant 1)

Switching between, on the one hand, academic work that uses ad hoc technologies in a careful manner to achieve the scientific rigor needed for publication and, on the other, quickly and iteratively developing a product—knowing full well that the initial releases are incomplete and have limited functionality—sometimes led to tension. Specifically, several respondents described how their scientific attitudes interfered with the entrepreneurial need for speed and agility:

For an entrepreneur, once an idea has been tested, it should be quickly released and then one can learn what works and what does not. I, however, come from the background that for something to be released it needs to be very good. When an article is ready, it should not contain a single error if it were to be published. This is clearly a problem, at least for me… It's extremely difficult to liberate oneself from it.

(Informant 8)

The approach toward work and the different artifacts employed in the two settings also produced ambivalent feelings about the meaning of failure and embarrassment. One respondent described it thus:

Publishing something and being wrong is the worst thing that could happen to you. In the start-up world, it's the other way around. Failing five times is a badge of honour. Trying several times tells people that you have experience and that you are willing to take risk.

(Informant 19)

While acknowledging this difference in principle, the same respondent then explained the deep sense of embarrassment he felt when he had to demonstrate an incomplete prototype with a customer:

I think there was always a deep, maybe unfounded fear of going to the CTO of a company that you know and talking about something that you yourself consider to be sketchy and incomplete. There was this deep fear that you cannot have only 10% of the product and go to a CTO, you needed to have 95% of the product.

(Informant 19)

This broad sentiment was echoed by a junior faculty member who did not hesitate to promote his own expertise, but grudgingly acknowledged that he often ended up selling his product short:

I feel that I am not overselling at all, I am underselling, yeah… we've done… it works… and it's fairly cool but I am not pushing. I am like toning it down. I feel that it is a quite common researcher take. I am not selling the product that I have developed, I am selling myself as an authority in this area. I can sell myself but not the stuff that I am trying to sell.

(Informant 8)

For many respondents, such feelings and attitudes also produced a sense of moral and ethical ambivalence. Going beyond the form and content of work, such ambivalence was sometimes experienced in relation to the very fact that one is starting a company while employed by the university. One associate professor described feelings of doubt, despite the very vocal encouragement from his professor and the head of department:

> *That's the thing that makes it so challenging, it's not that black and white, which makes it really difficult. But then I talk to my professor and he says that this is really good, it's good for us, do it! Yet, I still feel that it is primarily for myself, it is for my company. So I ask my myself is this right? Is it wrong? … The funny thing is that my boss is one of my greatest supporters but I still feel: Is this right? Is this wrong?*
>
> *(Informant 10)*

A full professor heading a group of PhD students and junior faculty described similar concerns but from the opposite perspective of maintaining the integrity of the university and protecting the scientific careers of untenured individuals.

> *I constantly hold back. Now when we try to commercialize something, the main thing I think about is protecting my PhD students, to make sure that they finish their studies, and that commercialization does not interfere with research too much. We are in the process of possibly starting a company and a lot of people want to give us money. I constantly have to say no, not yet, not yet. There is this big company that wants to give us money and start a company just like that (waves hand). But I said no, I have to wait for the right moment. It would be so easy to take this whole research group and start a company and but then this whole research area will be gone.*
>
> *(Respondent 18)*

While all respondents experienced tensions when combining academic and entrepreneurial work, they also managed this tension, often in surprisingly constructive ways, by means of three broader mechanisms that gradually moved from managing necessary separation, leveraging synergies, and finding common ground.

4.1.2 | Disidentification with conventional roles

Our respondents often distanced themselves from what they considered to be typical entrepreneurs or academics. In doing so, they avoided association with qualities and expectations tied to these roles. One researcher thus explained that he was very different from typical entrepreneurs who would make bold claims about technologies and products without the scientific knowledge necessary to back it up:

> *[When] I hear other companies pitch, sometimes it's laughable. Because from a science point of view, they have nothing. The difference with us is that we can go in the world market and hold our ground, whereas these other companies can't. We have proof. I go to international meetings and say "This is what we do," there is not one single person that can say "no you can't," because I've proven it … It makes you much more powerful to have the science background. It's a huge force.*
>
> *(Informant 26)*

This sentiment was echoed by another respondent who referred to his product's origin in solid research as separating him from entrepreneurs in general.

> *I don't see myself as the standard meaning of an entrepreneur. Let's say that my goal within the company is to make things work, basically. To have a research product, which is usually not suitable for commercialization yet, and to figure out what's needed to make it usable for a particular kind of customer.*
>
> *(Informant 24)*

One respondent described the contrast between himself and "entrepreneurial posers" more bluntly:

> *It's quite trendy these days to be entrepreneur. Many people look and act the part in the sense that they have a MacBook with some stickers on it, they are doing some IT related business. They are all the same age, they look the same and talk the same. I think serious researchers are still the missing link.*
>
> *(Informant 16)*

Interestingly, our respondents also stressed that they were not like traditional academics, whom they described as being exclusively focused on publishing research papers with little or no thought of industry applications. Several respondents described their approach to academic work in ways that explicitly contrasted with what they saw as the majority attitude.

> *I am interested in doing problem-based research instead of tool-based research. I think something like 90 percent is tool-based where you use the tool that you got as a PhD student and keep working with that. It's like going around with a screwdriver looking for suitable screws to turn. That's the usual way people work. It's a cynical viewpoint, but it's unfortunately true. And that's also how things are rewarded academically.*
>
> *(Informant 27)*

Echoing this attitude, one respondent explicitly saw successfully marketed applications as a natural end point to science:

> *A lot of people are happy to find a solution and get a publication, but I find it more interesting when I do something that will eventually turn into money. That is the closed cycle. For me getting a publication is not that difficult, it is much more difficult to get someone else to buy your idea. If you do that in the right way, you will be creating value and solving problems better than other people do… I feel like I have an alarm on my back telling me always that I need to do something practical not just flying around up there.*
>
> *(Informant 4)*

Having distanced themselves from the established roles of entrepreneur and academic researcher, our respondents often fell back on more inclusive terms such as "problem solver" and "innovator" when speaking of themselves. Such categories helped reinforce a positive sense of self that transcended their distinct roles, while simultaneously suggesting a proud refusal to be bounded by traditional terms. When prompted to describe in more concrete terms what life is like as an innovator, problem solver, or academic entrepreneur, their answers could be broadly grouped into three closely related and increasingly reconciling themes: role demarcating, role cross-fertilizing, and role normalizing.

4.2 | Role demarcating

Our informants described how role tensions were managed by means of a clear and formal separation between work done for the university and for the company. Central here was the setting of clear boundaries in terms of physical work environments and work-related routines. However, when discussing work content, it became apparent that the

line was also drawn between qualified or more pedestrian tasks. Notably, this demarcation did not discriminate between work performed at the university and in the company but focused squarely on whether it was considered appropriate given their sense of professional identity.

4.2.1 | Artifacts maintaining role boundaries

The academic entrepreneurs we interviewed used several material artifacts to clearly draw a line between their roles as university scientists and academic entrepreneurs. A key behind this behavior is to preempt criticism and reduce confusion about their dual work engagement. Said one professor:

> *Since I started, I have done all business in my home office. I have a separate phone line which I have been paying for 30 years. I did not even use envelopes from the university. I have never been accused of over-using university resources even though I have been heavily engaged in many companies. I think that is important to make it work.*
>
> *(Informant 14)*

While not always formally required, such material boundaries were established because, in the words of one informant, they "want to do things right." Perhaps as important, they also want to signal that their conduct is beyond reproach thus forestalling any potential accusations of misusing university resources.

> *When I do something for the company, I do it on my own time and it is paid for by the customers. And it's done in my home office and on computers that are owned by the company. I have separate machines for that. I just want to keep it clear, so I have this clear distinction. It is also to make sure that no one will come afterwards and say that I have done something wrong.*
>
> *(Informant 2)*

Boundaries could be temporal as well as physical. This was illustrated by one professor who sought to divide work on university and company tasks into longer chunks of time for ethical as well as practical reasons.

> *I try to spend a day at a time on each and not to think too much about the other. I don't work well when I have a lot of distractions, so when I work on one, I focus on that.*
>
> *(Informant 1)*

Just as with material artifacts, our respondents employed several role-separating routines and practices that minimized any risk of blurring the two roles. Such routines also helped minimize ambiguity regarding their roles, both reflexively for themselves and for others with whom they interacted. This was, for instance, accomplished by very transparently reporting dual affiliation whenever publishing or reviewing scientific work.

> *When I publish, I disclose both my affiliations. I always disclose my relationship with the company. Publishers are very careful to avoid having a company say what is science. These biases can exist in any field, but when there is a company that can profit from a high impact article then they are a lot more careful.*
>
> *(Informant 13)*

Again, going beyond what is required, one informant described coming up with his own rules for reporting sideline activities. This allowed him to customize the standardized reporting guidelines to fit his specific working circumstances, thereby avoiding any ambiguities and allowing for both roles to coexist.

> *I made up my own rule for reporting sideline activities. If I have time, I will always take it on university time and take the project to the university. But if I have full duties, then I take it to my own company as a sideline activity. I had a discussion here with my boss who wondered, who decided this …? I decided this!*
>
> *(Informant 10)*

4.2.2 | Task recasting

Many of our informants categorized the kinds of work they were doing—both in the company and at the university—so that the fault line was no longer between these two settings. Specifically, they clearly distinguished between work that was considered creative and challenging, and therefore worthy of their attention, and work that was pedestrian and routine, and hence suitable for delegation to others. In general, many of our respondents tried to minimize involvement in administrative work, whether in the company or at the university.

> *I am an entrepreneur whether in private life or professionally. To come up with, cultivate, and dismiss ideas is very much a part of my life. I am a really poor administrator. It's something that I have had to recruit personnel to do for me. When I was running EU research projects, I had to employ people who could keep things in order.*
>
> *(Informant 14)*

Correspondingly, they saw it as natural to focus on challenging technical and strategic tasks both in their roles as entrepreneurs and professors. Also, here derivative and boring technology development was gladly delegated, regardless of context, whereas leading technological research and setting technology roadmaps were always seen as enjoyable and quite appropriate to their roles.

> *There is a lot of bulky work in the company. I mean I can do it if it's necessary but it's not my cup of tea in the long run. It's very boring and not so creative. I know how to do it but what I like is the research part. I realized that quite early. I want to work with real challenges that can seem impossible to do. That's the fun thing!*
>
> *(Informant 11)*

Comparing his strategic role in the company to life at his university, one senior professor admitted that:

> *I don't remember the last time I touched something myself, did lab work, or coded… I don't know, maybe 15 years or so…*
>
> *(Informant 20)*

Combined with efforts to establish clear boundaries between university work and what is done for the company, the abovementioned grounding of professional identity in skills and expertise—rather than the setting in which such skills are put to use—appears to have helped our academic entrepreneurs maintain a cohesive work identity. Next, we describe how such cohesion can be further achieved by acknowledging differences while seeking to leverage potential synergies.

4.3 | Role cross-fertilizing

The academic entrepreneurs we spoke to often described how work practices associated with one role led to desirable outcomes in the other (see Tables 3 and 4). This suggests that demarcating academic and entrepreneurial work

TABLE 3 Academic practices and their interpretations.

Academic practices	Interpretation in entrepreneurial domain
Doing research at university	Enhances my legitimacy as an inventor
Transparently discussing research limitations	Increases my trustworthiness when engaging with potential customers
Attending and presenting research at conferences	Creates opportunities to initiate conversations with potential partners or clients
Publishing research articles	Serves as a way to communicate and build credibility around the invention
Writing grant applications	Strengthens my ability to pitch ideas to investors and stakeholders
Supervising PhD students	Develops my skills in managing and leading startup team members

TABLE 4 Entrepreneurial practices and their interpretations.

Entrepreneurial practices	Interpretation in academic domain
Founding a research-based startup	My students view me with greater respect and admiration.
Turning an invention into a marketable innovation	My colleagues seek my expertise as co-applicant for future research grants
Solving real word problems in the startup	My perspective on what constitutes valuable research topics has evolved
Immersive engagement with industry	I have developed a more nuanced understanding of the university's mission and role

did not only serve to keep the two apart; our informants also appeared to enjoy substantial benefits from their cross-fertilization, with positive outcomes further increasing a sense of legitimacy. We start first by analyzing how material and narrative artifacts helped in bridging the gap between their roles as startup founders and university scientists.

4.3.1 | Artifacts facilitating role accumulation

Material artifacts played an important role in helping academic entrepreneurs visualize the value of their work in the startup. One informant, who had a successful research career within the field of mathematics, vividly described how proud he was when seeing others present and talk about a medical stent that was developed using his mathematical models.

> *The president of the university has one of the stents in his pocket showing it to people. At the Swedish ambassadors gathering, he showed the removable stent in his presentation. I felt pretty proud about that. Satisfied. Absolutely. And, also here at the math department they say but we do some really applied stuff as well and we have some inventions with medical doctors.*
>
> *(Informant 27)*

He further explained that working on something as concrete as a stent that could help doctors save lives gave him a sense of purpose. It allowed him to reconcile the roles of academic researcher working on highly complex scientific problems and that of startup founder translating that same knowledge into useful and concrete solutions. This inspired him to further his commitment to the role of company founder by creating another MedTech startup.

Other artifacts that are narrative in nature, such as research articles and science presentations, were brought up when reflecting on the cross-fertilizing effects between their academic and entrepreneurial commitments. Scientific publications were viewed by most informants as highly valuable for both academic and startup purposes. In addition to their main role in advancing one's academic career, publications proved to be a good source of information for their potential startup customers. Said one informant:

> *We found that publishing scientific results is a good way to communicate information regarding the system. It is appreciated by potential customers. It has strengthened our business. We have patented the underlying technology. The research that we do now is how to apply this technology and that is something we can publish, there is no problem because we have the patent for the basics.*
>
> *(Informant 10)*

Spending time on writing and publishing research results, as well as presenting them in different venues, was not antithetical to startup work. It was facilitating it by increasing the legitimacy of the university scientist in the eyes of future customers.

4.3.2 | Academic work benefitting the startup

Many of our respondents, but especially the more experienced ones, spoke of their researcher identity as a source of legitimacy and as an important asset when acting as an entrepreneur. In general, academic researchers tend to be perceived as trustworthy and well-intentioned. This can be valuable, as illustrated by one respondent.

> *It's about this trust that is usually associated with researchers. I would have never been contacted by [a partner firm] and asked to collaborate if I were not a researcher… they thought this guy is a researcher making this service based on his research, so he is a "good guy." I think this credibility is something you bring with you from academia to the startup. It is an advantage that makes it easier to get easier access to certain contexts.*
>
> *(Informant 8)*

Beyond the general trust enjoyed by researchers as a profession, several informants described how specific scientific traits and attitudes also proved surprisingly valuable. One respondent thus described how listing all conceivable shortcomings of the system he was trying to sell—a natural part of scientific communication—made him stand out as honest and trustworthy.

> *When you are a researcher, you are so eager to tell customers about the technical aspects that are not working, the remaining issues to be solved…. The sales guys on our board, just shake their heads and say you will go nowhere, it's not going to work [laughter]. What is so funny is that it builds trust with customers. They have never seen anyone trying to sell the system by saying that all these things are not working!*
>
> *(Informant 10)*

Also, the established academic infrastructure can benefit the startup. One informant thus described how academic events became natural arenas for customer prospecting and conversations:

> *So, when industrial people hear the research that I am presenting at academic conferences and they see the practical part of it, they come and want to talk to me […] We have this specific problem, can you solve*

that? I say, of course I can solve that, my solution was made to solve those problems … and it becomes an opportunity for me to grab a new customer.

(Informant 4)

Several informants described how their academic skillset was valuable to the startup. Indeed, the qualities that made them successful as academics were often intentionally, but more often unintentionally, leveraged in the startup. During one interview, in a moment of clarity, an experienced professor suddenly realized that his many years of writing grant applications and research proposals had in fact honed his "pitching skills."

A successful research leader is one who is very good at getting funding, and how do you get funding? You need a pitch. If you are not good at pitching, you know … how do you expect to get funded? … [laughs] … It's the same for startups, you need to be able to pitch your ideas to customers and investors, and I love that, I really love it, I could really imagine how I would love being a salesman [laughs].

(Informant 3)

Similarly, a senior professor who had started several companies made the following observation about his "people" skills.

What I am darn good at is coaching young PhD students, I am very good at coaching—This is, of course, very useful in a startup. Giving energy to people is a success factor for an entrepreneur!

(Informant 1)

4.3.3 | Startup work benefiting academia

The status and practical experience gained from being a startup founder also conferred a number of benefits in academia. We thus heard several examples of how entrepreneurial experience adds value to teaching and research collaborations. One interviewee described how his relationship with students had transformed after having started his company.

This industrial experience […] earns me a different kind of respect from students. When I lecture to students, I tell them pretty much the same stuff that I always did, but I used to do it as an academic with very little industry experience. Now I do it as an entrepreneur who is using this stuff in practice. This affects the students in the sense that you speak with more authority thanks to a broader range of experiences, including industrial.

(Informant 1)

It appears that the ability to turn research findings into commercially successful solutions also constitutes a valuable academic competence in its own right. This was not only evident in the relationship with students, but also in the interactions with funding agencies. Since many funding agencies emphasize utilization and societal impact, several respondents described how they had become more attractive as collaborators on applications and projects.

My research colleagues know of the new experiences I have and ask questions about it or ask me to take part in grant applications where that kind of experience is important. So, we have had quite a lot of feedback between the company and the research group here.

(Informant 24)

Commercialization can also trigger a virtuous cycle whereby working on real problems leads to new research ideas, which in turn yields new applications. One professor of mathematics thus explained how the meaning and value he found in academic work got revitalized as a consequence of his entrepreneurial work.

> *It's extremely interesting… it opens your eyes to your own research. Looking at your own work from a different and new perspective. And actually, I see value in my own research. I mean, I'm so much more aware of what I should be doing in my research now because of what I learned.*
>
> *(Informant 26)*

Even more concretely, it was not uncommon to see applications yield publishable results by generating new data. In the words of one respondent:

> *We get a lot of 'research data' out of the work we do at the startup, we have full access to this data, we can run statistics on it. We can do a lot of things research wise. So, the startup is really enabling us to do a lot of new research. Since the creation of the startup, it's been a lot easier to get data. So far, we have one publication that is based on our data from the company.*
>
> *(Informant 9)*

One experienced academic entrepreneur was even more clear when describing how work in the startup had translated into academic value and currency:

> *When you look at my compilation of papers, three of the most cited papers are related to this method and six of the most cited papers are related to the product. This says something about the impact as a research instrument.*
>
> *(Informant 14)*

Going beyond specific benefits, several respondents described how their commercialization experiences led to a reassessment of the role of the university and a deeper appreciation of their own roles as academics. One respondent described how this was personally satisfying.

> *I think that for me the most satisfying aspect is a much more comprehensive understanding of the university's role in society. It's a much broader comprehension of that role. On one extreme, you have those who think that a university should do only mission one and two. The rest is a distraction and is compromising one and two. I have the opposite view. I believe you can combine them in a fruitful way that benefits both. My understanding of this interplay is much deeper than it would have been if I had stayed in basic science.*
>
> *(Informant 14)*

There clearly appears to be a mutually reinforcing dialectic between the academic and entrepreneurial roles. However, in addition to demarcating the two roles and appreciating the value of their cross-fertilization, we also noticed how our respondents sought to normalize their hybrid identities as academic entrepreneurs. This we turn to next.

4.4 | Role normalizing

As we have seen, life as an academic entrepreneur entails tensions and differences that are both problematic and possible to leverage for mutual gain. However, when discussing such tensions and differences, our respondents

would frequently switch gears, sometimes mid-sentence, and start describing research and commercialization as essentially the same and their combination as entirely appropriate. Such normalization was primarily traced to discourses surrounding the modern university but also to essential similarities in the nature of academic and entrepreneurial work.

4.4.1 | Latching on to broad discourses

To reinforce a sense of appropriateness, our respondents would often stress that academic entrepreneurship benefits society, not only in terms of improved technology and increased productivity, but also in terms of tax revenues and employment opportunities. In the words of one respondent:

> *Much of my work is done with taxpayer money, and with the company it would be possible to pay back through company taxes, to give them back what I have got. Now the company is around 10 people, all of them paying taxes, and taxes are very high for companies you know.*
>
> *(Informant 23)*

When asked about those who might object to scientists who engage in commercial activities, one respondent became slightly agitated:

> *These are old people, that would be my guess… because I know that 20 years ago, it was said that research should not be done in the interest of commercialization, it should be for the best of mankind. I think it's a rubbish argument, I mean in some areas, maybe in the social sciences […] but computer science is so practical, why should we do anything in science if not for impact on society. The university exists not only to educate people, but also for the economy of Sweden and it must justify that it benefits the economy.*
>
> *(Informant 18)*

In addition to specific benefits to society, some scholars suggested that the presence of mutual value creation proved the appropriateness of academic entrepreneurship. In doing so, one respondent invoked the fact that no one lost out from his activities, which, on the contrary, benefitted his academic career, society, the university, as well as his company:

> *My academic output is quite high. I publish a lot. That benefits both the university and the company… The company gets PR from my research, and I go to conferences and talk about it, so they get also exposure to those opinion leaders so to speak. As a company, they want such scientific work because they can use it to sell a product so it's a win-win situation.*
>
> *(Informant 13)*

Transcending material benefits, several people spoke of commercialization as a moral imperative for the modern academic; as something researchers ought to do. This was illustrated by a junior faculty member who described how conversations with an experienced academic entrepreneur had convinced him to press forward with his startup regardless of what others might think.

> *Talking with this mentor for research, I changed my views a bit. We discussed a lot the modern university and how it's supposed to develop society… That's something we need to do. I need to do it even if I get some bad looks from colleagues. (Informant 10)*

This attitude was echoed by a scholar who suggested that it was instead science for its own sake that bordered on the immoral.

> *Before this stage, when I was a pure academic, I could do a project just because it's fun. I was working on chaos theory and things like that and it was lots of fun. After a while I realized I can't really just go to work and have fun. For some people that was enough, but for me it was not enough… when you go to the hospital and you see the patient and you talk to the medical doctors and they describe the problems they are having… we are talking about real people's lives in those situations. This is motivating for me as a scientist, and as a businessman.*
>
> *(Informant 11)*

4.4.2 | Essential work-related similarities

As described above, all respondents acknowledged that the character and approach to work in many ways differed between research and entrepreneurship. Still, many respondents pointed to inherent similarities when it came to essential methodological principles governing work. For instance, both roles involve dealing with complexity through reductionism. This was clearly stated by one respondent.

> *The basic research that has dominated the first ten years of my academic life was a training on how to not be afraid of complex situations, complex problems. Knowing that and by using the reductionist approach, you can sort out what the key questions are and not be distracted by secondary questions. I was reasoning in exactly the same way in the startup. Can I make this work as a company, as a commercial venture?*
>
> *(Informant 14)*

Complementing and guiding such process-related qualities, several scholars mentioned the ability to act on goals and visions despite uncertainty as defining of high performers in both roles.

> *If you take the good researchers that are internationally recognized and then the other big mass of researchers that are doing good work that will never have huge impact. There is a divide between these two groups… I mean those who are really good seem to have a vision of where they are going but the other ones are very good analytically and at problem solving but they cannot really formulate a vision… My view of an entrepreneur is someone who also has a vision and is open minded to quickly change his mind about where he is going. That I think is critical and also for entrepreneurs!*
>
> *(Informant 3)*

The combination between big picture thinking and attention to detail was further illustrated by another experienced academic entrepreneur.

> *A business coach in a previous startup told me this. You are really good at moving quickly, in a fraction of a second, from details to abstract thinking. Now, I have never thought about that, but you certainly train yourself this way as a researcher. In fact, to survive as a researcher you need to have that. I think this is critical also for entrepreneurs.*
>
> *(Informant 27)*

In sum, our respondents secured a sense of normalcy by latching on to broad discourses about the modern academic, as well as by seeking similarities in the scientific and entrepreneurial methods of attacking big ideas by analytically breaking them down and systematically working to develop them.

5 | DISCUSSION

The purpose of this paper is to use deep interviews to explore how academic entrepreneurs construct and sustain professional identities amid frequent transitions between academic and entrepreneurial work. At the most aggregate level of analysis—role demarcation, role cross-fertilization, and role normalization—our findings are consistent with earlier research. However, where our findings differ quite dramatically is in the underlying mechanisms and explanations whereby, for instance, role normalization is achieved. We now turn to the theoretical implications, focusing on the role of practice in hybrid identity construction, the importance of artifacts and practices to professional micro-transitions, and what this tells us about the liminality of academic entrepreneurship.

5.1 | Practices and the constitution of hybrid identities

While we agree with prior research that academic entrepreneurs develop hybrid identities (Jain et al., 2009; Karhunen et al., 2017), our findings reveal a different structural relationship and a more granular account of how these identities interconnect. Existing literature typically characterizes the identities of academic entrepreneurs as hierarchically structured, with the entrepreneurial identity clearly positioned as "secondary" (Giunti & Duberley, 2023, p. 540) and the academic identity as the more "cherished" or central one (Jain et al., 2009, p. 931). Our results challenge this picture. While respondents identified as academics in abstract terms, their identity-in-practice was constructed not around institutional roles but around the content and character of qualified work across domains. Rather than identifying wholly or even primarily with one role, they would distinguish between tasks they saw as qualified and professionally meaningful and those they considered mundane. And this regardless of whether it occurred in academia or the startup. Routine activities—such as lab work, grading, administrative duties, or product development—were gladly delegated to others, whereas strategic, creative, and technically demanding work was embraced. Echoing contemporary accounts of entrepreneurs-as-scientists (Zellweger & Zenger, 2023), our respondents also saw similarities in how such qualified work was undertaken—such as managing complexity through reductionism and the need to combine abstract ideas and concrete details. This suggests that their professional identity was not primarily understood in terms of broad categories, related to either free pursuit of knowledge for the public good or secretive venture development undertaken for private profit. Instead, the content and character of work played a central role, giving rise to an identity hierarchy structured around perceived distinctions between qualified and pedestrian work. This supports Bailey and Madden's (2016) argument that meaningful work is rooted in tasks aligned with purpose or requiring creativity, rather than formal roles.

By highlighting the nature of work, our results also suggest a possible reinterpretation of studies that have found academic entrepreneurs in different national and professional contexts to perceive their identities very differently, ranging from naturally integrated to fundamentally incompatible (e.g., Giunti & Duberley, 2023; Karhunen et al., 2017). If investigated primarily through the lens of abstract categories, one may suspect such variation to reflect prevailing and socially desirable discourses and attitudes toward commercialization. If instead identity is conceptualized and investigated as related to the content and character of work across the two roles, we may find that academic entrepreneurs with ostensibly very different views on how the two roles may be reconciled—such as the Finnish and Russian entrepreneurs interviewed by Karhunen et al. (2017)—may have more in common than surface-level distinctions suggest. While identity should not be conflated with practice, we posit that a closer connection

between identities and concrete and materially mediated practices is warranted (cf. Barley, 1986), and especially so in contexts characterized by micro-transitions between multiple professional roles.

5.2 | Artifacts, practices, and professional micro-transitions

It is well known that professionals derive meaning from their work and that their identity work often seeks an authentic alignment between professional activities and broader self-conceptions (Caza & Creary, 2016; Lifshitz-Assaf, 2018; Pratt et al., 2006). Extending this, we show how professionals who frequently transition between multiple domains, in our case academia and entrepreneurship, similarly seek alignment between the two roles. Prior studies have also focused on artifacts as a way to express one's professional identity (e.g., Elsbach, 2009; Anteby, 2008; Courpasson & Monties, 2017). Our findings suggest that they also play a more concrete role by helping professionals practically navigate such micro-transitions.

Echoing the way digital technologies help manage micro-transitions between professional and private life (Aljabr et al., 2022), our respondents relied on using a combination of material artifacts and concrete practices to maintain clear and appropriate boundaries between their professional roles. While Aljabr and colleagues focus on after-hours connectivity in academic contexts, we show that similar practices are employed to manage transitions between professional domains—namely, academia and entrepreneurship.

Such demarcation in turn enabled fruitful cross-fertilization. While seemingly paradoxical, establishing temporal, material, and procedural separation between academic and entrepreneurial work led to ethical as well as practical clarity, which in turn made exploiting synergies between them easier. This was done in several ways. Concretely, our respondents described how scientific publications bolstered credibility with customers, how entrepreneurial experiences improved their teaching, how academic grant-writing was similar to startup fundraising, and how their ability to recruit and mentor talent and build strong research groups transferred well to the company setting. More broadly, some respondents described designing their ventures to align with and affirm their academic ideals—for instance, by choosing to make company software open-source. Such examples of cross-fertilization and mutual adaptation were not incidental side effects of their dual roles but constituted the practical core of how our respondents made sense of what they did and thereby established their new hybrid identities. Stated differently, identity work in the context of professional micro-transitions is intimately related to practical work.

Generalizing these observations, our findings inform the broader literature on role transitions and identity work by illustrating mechanisms at play during the increasingly common experience of plural careerists navigating competing role demands in practice (e.g., artist entrepreneurs, clinician researchers, etc.) (Campion et al., 2020; Caza et al., 2017). Prior studies of professional identity work have predominantly addressed macro-transitions, or "movements between sequentially held roles" (Ashforth, 2001; Ibarra & Barbulescu, 2010). Whereas professional macro-transitions involve intensive, unidirectional adaptation and socialization into the new role, we describe the kinds of mutual adaptation that is ongoing as professionals manage the demands, practices, and cultural norms associated with their dual roles.

5.3 | Liminality and academic entrepreneurship

Building on the dual insights that identity formation is rooted in work practices, and that academic entrepreneurship involves ongoing transitions between professional domains, we argue that academic entrepreneurs remain in a liminal state. Yet this state is not necessarily problematic. Instead, they achieve identity coherence by actively orchestrating transitions and aligning work practices (i.e., cross-fertilizing) with broader narratives and institutional norms (i.e., normalizing). Like Giunti and Duberley (2023), we find that liminality can be a stable, enduring condition, made sense of in part through engagement with legitimizing discourses. However, our findings extend this view by

showing that academic entrepreneurs also rely on material artifacts—such as separate office spaces, computers, and phone lines—to reduce role confusion and proactively signal ethical conduct (cf. Aljabr et al., 2022; Chamakiotis et al., 2024). Our findings thus contribute a more granular and practice-oriented perspective by showing how academic entrepreneurs actively navigate and negotiate liminality, as opposed to merely experiencing it.

Our findings also extend Hayter et al.'s (2022) concept of "liminal venturing," which denotes a macro-transitory phase where academics experiment and work with their identities, which results in either development and enactment of a new entrepreneurial identity, exit and retreat back to the academic identity, or an enduring state of maladaptive liminality. We nuance this image by proposing that academic entrepreneurs always remain in a liminal state, but also achieve stability through the active and materially mediated orchestration of micro-transitions in combination with a measure of "reincorporation" (Hayter et al., 2022, p. 1471) that is grounded in the character and content of work.

In their effort to stimulate academic entrepreneurship, policy makers should be aware that a rigid role separation between science and entrepreneurship may be a necessary, but is probably not a sufficient condition, for achieving desired outcomes. Indeed, our study suggests that university scientists' ability to nurture mutually reinforcing relations between their different roles may hold the key. Therefore, creating a conducive environment that allows professors to experiment with and try out the role of startup founder while keeping their jobs at the university can be valuable. Here, cross-fertilization between concrete work practices, underpinned and facilitated by appropriate role demarcations, is an important factor for developing productive hybrid identities.

In sum, we highlight three key contributions to research on identity work, professional transitions, and academic entrepreneurship. First, we reframe hybrid professional identity not as a hierarchical combination of abstract roles (e.g., academic versus entrepreneur), but as grounded in the content and character of work tasks. By showing how academic entrepreneurs distinguish between "qualified" and "pedestrian" work across both domains—and build identity around the former—we advance a more practice-centered understanding of hybrid identity that moves beyond categorical accounts. Second, we extend research on materiality in professional identity work by showing that material artifacts are not merely expressive, but instrumental in managing role micro-transitions. Prior work has explored how professionals use objects to signal identity (e.g., Anteby, 2008; Elsbach, 2009), but we show that academic entrepreneurs use artifacts like computers, phones, and office routines to structure boundaries, sustain ethical clarity, and facilitate smooth transitions between conflicting professional domains. Third, we offer a novel conceptualization of liminality in the context of academic entrepreneurship. While prior work often treats liminality as a transitory or problematic phase, our findings show how academic entrepreneurs can sustain a stable hybrid identity by actively orchestrating micro-transitions through material and practice-based strategies. In doing so, we reconceptualize liminality as a durable and adaptive condition that can support, rather than undermine, identity coherence.

6 | FUTURE RESEARCH

First, we showed that material artifacts—such as separate offices, devices, or communication channels—play a key role in managing identity tensions and signaling ethical boundaries. Future work could examine more systematically how specific material configurations and spatial arrangements support or constrain identity work, particularly in hybrid or liminal work settings. Comparative studies across institutional or national contexts could shed light on how material strategies for managing liminality vary and what conditions enable their success.

Second, future research could explore how differences in involvement level in the venture—such as time commitment, ownership, or decision-making authority—shape identity work. While our study focused on academic entrepreneurs who were actively involved in both academic and entrepreneurial roles, participants varied in how much time they dedicated to the venture, their ownership stakes, and their decision-making responsibilities. These differences likely influence how they experience role tension and the identity work they rely on. A more systematic

comparison across different levels of involvement could offer deeper insight into how identity is shaped by the structure and demands of working across two professional domains.

Finally, future research could usefully examine how gender shapes experiences of identity work and role micro-transitions between academia and entrepreneurship. Given the underrepresentation of women in STEM fields, and the likelihood that their presence is even more limited within the subset of academic entrepreneurs, it is important to investigate how women—and other underrepresented groups—experience, manage, or challenge role expectations in these hybrid contexts. Such studies could illuminate whether identity tensions and transition strategies differ by gender, and how structural or cultural factors may shape the conditions for identity work across social positions.

7 | PRACTICAL IMPLICATIONS

This study offers several practical implications for university leaders, entrepreneurship support units, and policymakers seeking to foster academic entrepreneurship in meaningful and sustainable ways. Our findings show that academic entrepreneurs at all career stages experience both identity related and practical tensions stemming from their dual roles as academics and entrepreneurs. Here our findings that identity conflicts can be overcome in ways other than buffering and delegation (Jain et al., 2009) suggest implications from a university management perspective. For many academics, commercialization support such as licensing and 'surrogate entrepreneurship' (Lundqvist, 2014) are likely very attractive options, however it is also clear that many academics see great benefits from the combination. However, productive cross-fertilization requires clear differentiation. As we could see, academic entrepreneurs often take it upon themselves to create rules and routines to manage separations, transitions, and synergies between the two roles. Here, institutions can make life easier for academic entrepreneurs by establishing and publicly communicating transparent guidelines for dual affiliations, university resource use, and disclosure practices, along with physical workspace arrangements that support responsible engagement across both domains. While such policies are often perceived as restrictive, they also function as enablers by providing clarity, legitimacy, and psychological safety that support experimentation and deeper engagement in academic entrepreneurship.

Universities should frame it as a productive tension that can enrich research, teaching, and societal impact. When supported by appropriate routines, ethical safeguards, and cultural legitimacy, academic entrepreneurship can be a site of professional growth—where new forms of identity are not only tolerated but meaningfully developed.

8 | CONCLUSION

In this paper, we have explored how academic entrepreneurs construct and sustain their professional identities amid frequent transitions between academic and entrepreneurial roles. Focusing on academic entrepreneurs—scientists who found research-based startups while remaining in academia—we have shown how hybrid professional identities are not simply a matter of reconciling abstract role categories but are fundamentally shaped through the material and practical character of work. By framing academic entrepreneurial identities work in terms of a distinction between qualified and pedestrian tasks, rather than domain-based role labels, we offer an alternative to existing accounts that tend to regard hybrid identity as hierarchical, transitional, or otherwise problematic.

Building on this, we have introduced the concept of professional micro-transitions as a distinct site of identity formation and argued that material artifacts and routines play a central role in navigating and stabilizing such transitions. Rather than viewing liminality as a temporary or maladaptive state, we have shown how ongoing liminality can be actively managed through material boundary-setting, practice-based cross-fertilization, and normalization anchored in broader discourses and work-related similarities. In doing so, we contribute to the literature on identity

work, professional role transitions, and academic entrepreneurship by offering a more granular, materially grounded account of how hybrid identities are enacted and sustained in practice.

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REFERENCES

Aljabr, N., Chamakiotis, P., Petrakaki, D., & Newell, S. (2022). After-hours connectivity management strategies in academic work. *New Technology, Work and Employment*, *37*(2), 185–205.

Alvesson, M., Lee Ashcraft, K., & Thomas, R. (2008). Identity matters: Reflections on the construction of identity scholarship in organization studies. *Organization*, *15*(1), 5–28.

Anteby, M. (2008). Identity incentives as an engaging form of control: Revisiting leniencies in an aeronautic plant. *Organization Science*, *19*(2), 202–220.

Ashforth, B. E. (2001). *Role transitions in organizational identity-based perspective*. Lawrence Baum Associates.

Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review*, *25*, 472–491.

Bailey, K., & Madden, A. (2016). What makes work meaningful—Or meaningless? *MIT Sloan Management Review*, *57*(4), 53–61.

Barley, S. R. (1986). Technology as an occasion for structuring: Evidence from observations of CT scanners and the social order of radiology departments. *Administrative Science Quarterly*, *31*, 78–108.

Bercovitz, J., & Feldman, M. (2008). Academic entrepreneurs: Organizational change at the individual level. *Organization Science*, *19*(1), 69–89.

Boudreau, J., Dubé, L., & Robey, D. (2014). Digital transformation and the changing identity of the library: A case study. *Journal of the Association for Information Science and Technology*, *65*(7), 1388–1396.

Brown, A. D. (2015). Identities and identity work in organizations. *International Journal of Management Reviews*, *17*(1), 20–40.

Campion, E. D., Caza, B. B., & Moss, S. E. (2020). Multiple jobholding: An integrative systematic review and future research agenda. *Journal of Management*, *46*, 165–191.

Caza, B. B., & Creary, S. J. (2016). *The construction of professional identity*. Cornell University.

Caza, B. B., Moss, S., & Vough, H. (2017). From synchronizing to harmonizing: The process of authenticating multiple work identities. *Administrative Science Quarterly*, *63*(4), 703–745. https://doi.org/10.1177/0001839217733972

Caza, B. B., Vough, H., & Puranik, H. (2018). Identity work in organizations and occupations: Definitions, theories, and pathways forward. *Journal of Organizational Behavior*, *39*(7), 889–910.

Chamakiotis, P., Symon, G., & Whiting, R. (2024). Agentic interplay between hybridity and liminality in contemporary boundary work. *Information Systems Journal*, *34*(1), 261–283.

Coser, L. A. (1974). *Greedy institutions: Patterns of undivided commitment* (1st ed.). Free Press.

Courpasson, D., & Monties, V. (2017). "I am my body." Physical selves of police officers in a changing institution. *Journal of Management Studies*, *54*(1), 32–57.

Delanoeije, J., Verbruggen, M., & Germeys, L. (2019). Boundary role transitions: A day-to-day approach to explain the effects of home-based telework on work-to-home conflict and home-to-work conflict. *Human Relations*, *72*(12), 1843–1868.

Draga, S., & DeCelles, K. A. (2024). Highly oppositional occupations and cognitive behavioral script-based mechanisms of work–home conflict. *Academy of Management Review*. https://doi.org/10.5465/amr.2022.0524

Elsbach, K. D. (2009). Identity affirmation through signature style: A study of toy car designers. *Human Relations*, *62*(7), 1041–1072.

Ebaugh, H. R. (1988). *Becoming an ex: The process of role exit*. University of Chicago Press.

Fenters, V. W., Balven, R. M., Ashforth, B. E., Waldman, D. A., & Siegel, D. S. (2025). How identity structure influences identity adoption: the case of hybrid entrepreneurs. *Academy of Management Journal*. https://doi.org/10.5465/amj.2023.0520

Galán-Muros, V., van der Sijde, P., Groenewegen, P., & Baaken, T. (2017). Nurture over nature: How do European universities support their collaboration with business? *The Journal of Technology Transfer*, *42*(1), 184–205.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, *16*(1), 15–31.

Giunti, G., & Duberley, J. (2023). Academic entrepreneurship: Work identity in contexts. *Entrepreneurship & Regional Development*, *35*(5–6), 532–552.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Sociology Press.

Goldfarb, B., & Henrekson, M. (2003). Bottom-up versus top-down policies towards the commercialization of university intellectual property. *Research Policy*, *32*(4), 639–658.
Hatch, M. J., Schultz, M., & Skov, A. M. (2015). Organizational identity and culture in the context of managed change: Transformation in the Carlsberg Group, 2009–2013. *Academy of Management Discoveries*, *1*(1), 58–90.
Hayter, C. S., Fischer, B., & Rasmussen, E. (2022). Becoming an academic entrepreneur: How scientists develop an entrepreneurial identity. *Small Business Economics*, *59*(4), 1469–1487.
Hennekam, S. (2017). Dealing with multiple incompatible work-related identities: The case of artists. *Personnel Review*, *46*, 970–987.
Hoang, H., & Gimeno, J. (2010). Becoming a founder: How founder role identity affects entrepreneurial transitions and persistence in founding. *Journal of Business Venturing*, *25*(1), 41–53.
Ibarra, H. (1999). Provisional selves: Experimenting with image and identity in professional adaptation. *Administrative Science Quarterly*, *44*, 764–791.
Ibarra, H., & Barbulescu, R. (2010). Identity as narrative: Prevalence, effectiveness, and consequences of narrative identity work in macro work role transitions. *Academy of Management Review*, *35*(1), 135–154.
Jain, S., George, G., & Maltarich, M. (2009). Academics or entrepreneurs? Investigating role 615 identity modification of university scientists involved in commercialization activity. *Research Policy*, *38*(6), 922–935.
Kaplan, S. (2011). Strategy and PowerPoint: An inquiry into the epistemic culture and machinery of strategy making. *Organization Science*, *22*, 320–346.
Karhunen, P., Olimpieva, I., & Hytti, U. (2017). Identity work of science-based entrepreneurs in Finland and in Russia. *Entrepreneurship & Regional Development*, *29*(5–6), 544–566.
Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L. (2006). Where is the "me" among the "we"? Identity work and the search for optimal balance. *Academy of Management Journal*, *49*(5), 1031–1057.
Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L. (2009). Balancing borders and bridges: Negotiating the work-home interface via boundary work tactics. *Academy of Management Journal*, *52*(4), 704–730.
Lam, A. (2010). From "ivory tower traditionalists" to "entrepreneurial scientists"? *Social Studies of Science*, *40*(2), 307–340.
Lifshitz-Assaf, H. (2018). Dismantling knowledge boundaries at NASA: The critical role of professional identity in open innovation. *Administrative Science Quarterly*, *63*(4), 746–782.
Lundqvist, M. A. (2014). The importance of surrogate entrepreneurship for incubated Swedish technology ventures. *Technovation*, *34*(2), 93–100.
Mäkinen, E. I., & Esko, T. (2023). Nascent academic entrepreneurs and identity work at the boundaries of professional domains. *The International Journal of Entrepreneurship and Innovation*, *24*(3), 167–177.
Merton, R. K. (1968). *Social theory and social structure*. The Free Press.
Muscio, A., Quaglione, D., & Ramaciotti, L. (2016). The effects of university rules on spinoff creation: The case of academia in Italy. *Research Policy*, *45*(7), 1386–1396.
Muscio, A., Quaglione, D., & Vallanti, G. (2014). University regulation and university–industry interaction: A performance analysis of Italian academic departments. *Industrial and Corporate Change*, *24*(5), 1047–1079.
Nelson, A. J., & Irwin, J. (2014). "Defining what we do—All over again": Occupational identity, technological change, and the librarian/internet-search relationship. *Academy of Management Journal*, *57*(3), 892–928.
Nicolini, D. (2012). *Practice theory, work, and organization: An introduction*. Oxford University Press.
Nippert-Eng, C. E. (2008). *Home and work: Negotiating boundaries through everyday life*. University of Chicago Press.
Orr, J. E. (1996). *Talking about machines: An ethnography of a modern job*. Cornell University Press.
Pattnaik, S., Mmbaga, N., White, T. D., & Reger, R. K. (2023). To entrepreneur or not to entrepreneur? How identity discrepancies influence enthusiasm for academic entrepreneurship. *The Journal of Technology Transfer*, *49*: 1444–1470.
Pratt, M. G., & Rafaeli, A. (1997). Organizational dress as a symbol of multilayered social identities. *Academy of Management Journal*, *40*(4), 862–898.
Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal*, *49*(2), 235–262.
Ramarajan, L., & Reid, E. (2013). Shattering the myth of separate worlds: Negotiating nonwork identities at work. *Academy of Management Review*, *38*, 621–644.
Scheibe, S., Retzlaff, L., Hommelhoff, S., & Schmitt, A. (2024). Age-related differences in the use of boundary management tactics when teleworking: Implications for productivity and work-life balance. *Journal of Occupational and Organizational Psychology*, *97*(4), 1330–1352.
Schumpeter, J. A. (1934). *The theory of economic development*. Harvard University Press.
Stuart, T. E., & Ding, W. W. (2006). When do scientists become entrepreneurs? The social structural antecedents of commercial activity in the academic life sciences. *American Journal of Sociology*, *112*(1), 97–144.

Van Maanen, J. (2010). Identity work and control in occupational communities. In *Control in organizations: New directions in theory and research*. Cambridge University Press.

Van Maanen, J., & Barley, S. R. (1984). Occupational communities: Culture and control in organizations. In B. M. Staw & L. L. Cummins (Eds.), *Research in organizational behavior* (Vol. 6, pp. 287–365). JAI Press.

Waizenegger, L., Remus, U., Maier, R., & Kolb, D. (2023). Did you get my email?!—Leveraging boundary work tactics to safeguard connectivity boundaries. *Journal of Information Technology*, *39*(1), 123–148. https://doi.org/10.1177/02683962231175924

Wang, M., Soetanto, D., Cai, J., & Munir, H. (2021). Scientist or entrepreneur? Identity centrality, university entrepreneurial mission, and academic entrepreneurial intention. *The Journal of Technology Transfer 47*: 119–146.

Watkiss, L., & Glynn, M. A. (2016). Materiality and Identity: How organizational products, artifacts, and practices instantiate organizational identity. In *The Oxford handbook of organizational identity* (p. 317). Oxford University Press.

Zellweger, T., & Zenger, T. (2023). Entrepreneurs as scientists: A pragmatist approach to producing value out of uncertainty. *Academy of Management Review*, *48*(3), 379–408.

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APPENDIX 1: INTERVIEW GUIDE

I | Career background and involvement in commercialization

- Can you tell me about your path into academic research?
- How did your involvement in commercialization begin?
- How has that involvement developed over time?
  Follow-up: Was there a turning point, or has it been more gradual?
- What kinds of commercialization-related activities have you engaged in?

II | Current work and role configuration

- What does your work look like at the moment?
- What kinds of tasks or activities are you involved in across different settings?
- How do you navigate between different parts of your work?
  Follow-up: Are there moments when the shift feels more difficult or disruptive?
- Are there things—places, routines, or objects—that play a role in how you move between roles?

III | Professional roles and viewpoints

- How do you relate to the idea of entrepreneurship?
- How would you describe your relationship to it now?
- In what ways, if any, does this work relate to or differ from your academic role?
- How, if at all, do these roles influence each other?
  Follow-up: Have you seen effects—positive or negative—across domains?

IV | Self and others

- How would you describe yourself, professionally?
- Has your involvement in entrepreneurial activities influenced how you see yourself?
- Have you noticed any changes in how others (colleagues, students, family) relate to you?
  Follow-up: Have these changes been encouraging, challenging, or both?

V | Transitions and tensions

- Are there certain tasks or situations that make switching roles easier or harder?
- How do you respond when your roles place competing demands on you?
- Have there been moments of friction or discomfort that stood out to you?
- Do you try to set boundaries—formal or informal—between roles?
- Have you made any adjustments to your working environment over time?
  Follow-up: What prompted those changes?

VI | Looking ahead

- How do you see your work evolving in the near future?
- What do you think is important to sustain this combination of roles?

VII | Closing

- Is there anything we have not covered that you'd like to add?
- Would you be open to a follow-up conversation later on?
- Thank you for your time.