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DOI
10.1093/jpo/joz004

Publication date
2019

Document Version
Final published version

Published in
Journal of Professions and Organization

Citation (APA)
Bos-de Vos, M., Lieftink, B., & Lauche, K. (2019). How to claim what is mine: Negotiating professional roles in inter-organizational projects. *Journal of Professions and Organization*, *6*(2), 128-155. https://doi.org/10.1093/jpo/joz004

Important note
To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Journal of Professions and Organization, 2019, 6, 128–155
doi: 10.1093/jpo/joz004
Advance Access Publication Date: 25 June 2019
Scholarly Article

How to claim what is mine: Negotiating professional roles in inter-organizational projects

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Submitted 14 December 2017; Revised 3 May 2019; revised version accepted 7 May 2019

ABSTRACT

Professional roles within inter-organizational projects have become increasingly diverse and contested, yet little is known about how professionals react to such threats of marginalization. Drawing on empirical data from interviews with architects, a profession in which historically established role boundaries have become particularly blurred, we analyse how professionals negotiate their roles in inter-organizational projects. We identified three types of boundary work—reinstating, bending, and pioneering role boundaries—and illustrate their antecedents and effects for project collaboration. These categories exemplify different responses to the threat of marginalization depending upon professionals' perceptions of what the specific project called for. Our study provides important insights into boundary work practices emerging in the context of inter-organizational projects and how professionals adjust their claims-making to perceived opportunities, thereby triggering incremental as well as more radical changes in the professional role structures.

KEYWORDS: professional role; boundary work; role structures; inter-organizational projects; architects

INTRODUCTION

Professionals are confronted with threats of marginalization as their roles are increasingly contested (Ahuja, Nikolova, and Clegg 2017). The ongoing marketization of professional services (Freidson 2001), the increase in consumer control (Wallenburg et al. 2016), and the growing competition over professional work have blurred formerly established role boundaries. For many professions, the demarcations of the respective domain of work and the associated professional power, status, and remuneration have become challenged. Professionals respond to such threats of marginalization through boundary work (Gieryn 1983, 1999). Boundary work refers to the micro-practices in which professionals engage to create, shape, and disrupt boundaries that distinguish their work from the work of others (Fournier 2002; Zietsma and Lawrence 2010; Bucher et al. 2016). Previous work in established and relatively stable environments such as healthcare has shown that this boundary work may take different forms (Chreim, Williams, and Hinings 2007; Noordegraaf 2015; Reay et al. 2017): professionals may try to defend their task domain (Gray, Hogg,

and Kennedy 2011) or to legitimize new practices and roles (Reay, Golden-Biddle, and Germann 2006).

Our particular interest is in how professionals pursue boundary work in more dynamic and temporary contexts such as film or construction projects in which actors need to work across professional boundaries to deliver complex services and products to clients (Jones et al. 1998). Such contexts are likely to produce new and different dynamics: the temporary nature of such inter-organizational projects means that interactions are more fluid and roles may be renegotiated from one project to the next. As project-based inter-professional collaboration is becoming more prevalent (Bakker 2010; Bakker et al. 2016), it is important to better understand how these temporal contexts influence professionals' attempts to defend or adapt their professional roles. Hence, our research question is: how do professionals respond to threats of marginalization in the context of inter-organizational projects and how do their responses affect the subsequent dynamics of the project?

We selected the role of architects in construction projects as the empirical setting for our study. Until recently, professionals in the construction industry collaborated in relatively stable 'role structures' (Bechky 2006), which provide a shared understanding of each other's 'territory' in a project according to which work is allocated. Recent contractual and technical developments have disrupted the previously established demarcations and professional roles are increasingly in flux and under negotiation. In this article, we focus on efforts of the architectural community to deal with the changing nature of their work. Architects who were traditionally a key actor in construction projects (Cohen et al. 2005) currently often feel undervalued and marginalized (Ahuja, Nikolova, and Clegg 2017) and struggle to compete for work (Manzoni and Volker 2017).

We investigate episodes of boundary work and identified three different types: (1) reinstating, (2) bending, and (3) pioneering role boundaries. By examining how and under which conditions architects applied these types of boundary work, we show how professionals adapt their boundary work practices to what they believe the specific situation in a project calls for. We interpret these practices as different forms of cultural claims-making in response to challenges to their jurisdiction (Spillman and Brophy 2018).

Our study contributes to research on professions and more specific on professionals working in inter-organizational settings. First, by identifying specific forms of boundary work, we show how professionals choose flexible responses to threats of marginalization instead of merely trying to maintain (Gray, Hogg, and Kennedy 2011) or change (Reay, Golden-Biddle, and Germann 2006) their practice domains. Secondly, by focusing on role changes in the context of inter-organizational projects, we show how professionals' perceptions of opportunities and constraints lead to different forms of boundary work, which in turn affect the subsequent dynamics in the project. As our analysis shows, the same individual person or firm can find themselves in a different role in each project, thus increasing the diversity and dynamics of boundary work practices compared to more stable contexts. Finally, our study provides a link to research on professional subgroups (Thornton, Jones, and Kury 2005) by proposing that these different responses may ultimately lead to divergent paths of evolution within a profession if they become more stable over time.

The article is structured as follows: we first review the literature on boundary work, boundary work of professionals, and role boundaries in inter-organizational projects. In the methods section, we describe our empirical setting, how we selected projects and respondents and how the interviews were conducted and analysed. In the results section, we describe the three types of boundary work we identified. We conclude by discussing the theoretical contributions and practical implications of our findings, limitations, and directions for future research.

THEORETICAL BACKGROUND

Boundaries and boundary work

Boundaries are typically described as borders or demarcation lines that establish categories of objects, people, or activities and regulate interactions between them (Gieryn 1999; Lamont and Molnár 2002; Zietsma and Lawrence 2010; Stjerne and Svejenova 2016). Boundaries are constructed in social interactions and form 'unstable, ambiguous, multi-faceted and composite' elements (Stjerne and

Svejenova 2016: 1773), which are continuously redefined and adapted (Hernes 2004). Boundaries can be clear demarcations between dichotomous or mutually exclusive entities or 'permeable membranes' that allow some demarcation between one's situation and that of others (Ashforth, Kreiner, and Fugate 2000; Marshall 2003; Patru 2017).

Boundaries are not static—they are continuously (re)negotiated in the doings and sayings of actors. The notion of 'boundary work' refers to the strategic efforts of actors to create, maintain, or change boundaries (Gieryn 1983; Ashforth, Kreiner, and Fugate 2000; Lamont and Molnár 2002). Actors may use different forms of boundary work: monopolization, expansion, exclusion, and protection of autonomy (Gieryn 1983, 1999). Although boundary work occurs in many domains (Paulsen and Hernes 2003), professions represent an area in which boundary work is particularly salient (Abbott 1988; Anteby, Chan, and DiBenigno 2016).

In the context of professions, boundary work has been closely linked to struggles over jurisdiction in which professionals claim authority over the tasks within their domains (Abbott 1988; Bechky 2011; Boussard 2018). Professionalism can be seen as a language for expressing normative and ideological aspects of work worlds and can be used for making claims in response to challenges to their jurisdiction, as Spillman and Brophy (2018) showed in their analysis of business and medical professional associations. The authors conceptualize such boundary work as 'cultural claims-making' to convey assumptions of moral agency that may be employed as ideological justifications. In Gieryn's (1983) study, scientists' claims referred to rhetorically distinguishing 'real' from non-science, while Spillman and Brophy (2018) found that general physicians claimed to be the ones giving 'real primary care' and truly acting in the interest of the patient as an argument to defend their territory.

Boundary work of professionals

Studies have found that historically established distinction between professions and other occupations can be questioned (Evetts 2003) and that new boundaries are constantly constructed and (re)negotiated (Montgomery and Oliver 2007). The focus has been on the creation, maintenance, and altering of professional boundaries at field level (Abbott 1988; Lawrence 2004; Suddaby and Greenwood 2005; Bucher et al. 2016) and at the level of everyday work practices (Barley 1996; Allen 2000; Wikström 2008; Chreim et al. 2013). Field level studies paid attention to macro-level effects of boundary work by professionals. For example, the study of Bucher et al. (2016) showed how professional associations responded to a potential change in jurisdictional boundaries. In reaction to a government proposal to strengthen inter-professional collaboration, associations engaged in different forms of discursive boundary work to (re)shape professional boundaries: (1) issue framing from their professional perspective, (2) justifying of favoured boundary configuration solutions, (3) self-casting as framing their role as favourable from their own professional perspective, and (4) altercasting as describing the roles of others in a manner that seeks to cast them in a negative light.

At the level of everyday work practices, some studies have focused on micro-level strategies of professionals in order to protect their role boundaries (Gray, Hogg, and Kennedy 2011). Most of these studies have been conducted in healthcare, where initiatives such as patient-centred and holistic care have given rise to boundary disputes. In this inter-professional context, different groups deliberately positioned others as unfavourable to maintain existing boundaries. For example, higher status professionals attempted to preserve boundaries in the face of threat from newer occupational groups by referring to 'others' as technicians and positioning their own profession as more holistic (Allen 2000). Other studies showed how professionals were seeking to expand their role boundaries in new domains (Reay, Golden-Biddle, and Germann 2006). These studies focused less on discursive aspects, but looked at practices, such as performing each other's tasks through which role boundaries were continually negotiated (Apesoa-Varano 2013). This boundary crossing or mitigating was elaborated by Van Bochove et al. (2016) with what they referred to as 'welcoming work'. In their study, volunteers were 'invited' by professionals to enter their domain as the professionals noticed in their daily work that these volunteers possessed skills that they themselves did not have. In this case, roles of actors were actually

being transformed. These micro-level studies showed different strategies employed by professionals when dealing with blurring boundaries in more stable work environments, such as healthcare as opposed to the highly dynamic and temporary context of inter-organizational projects.

Role boundaries in inter-organizational projects

Our focus in this article is on the additional dynamics of negotiating role boundaries among professions in temporary forms of organizing (Söderlund, Hobbs, and Ahola 2014). Project-based work that requires different groups of actors to work together across their professional boundaries for a limited period of time is increasingly prevalent (Jones et al. 1998). In these temporary, inter-organizational settings, roles or role structures are used as mechanisms to coordinate the interaction of diverse collaborating professionals (Bechky 2006; Whitley 2006; DeFillippi and Sydow 2016). A role structure can be defined as a shared understanding of actors' roles and their respective expertise and responsibilities (Bechky 2006). In her studies of film crews, Bechky showed how role negotiations with mundane acts, such as role-oriented joking, enthusiastic thanking, and polite admonishing, enabled and constrained work activity. The repeated enactment of the role structure in successive projects stabilized the organizational structure across the film industry. As such, project participants with little or no shared history of working together easily agreed on their position within the role structure and were instantly able to work effectively together in temporary settings (Jones et al. 1998).

The interactions between actors in inter-organizational projects are thus carried out in line with a specific pre-existing structural context that is assumed to be relatively stable across projects. Role structures counterbalance the uncertainty that comes with collaboration in continuously changing settings. However, as the work that is performed in inter-organizational projects has become more complex and has involved more actors over time (i.e. new specialists entered the project constellation), the competition over task jurisdictions has intensified (Bakker 2010; Bakker et al. 2016). In addition, established demarcations between domains of work have become more fluid and contested because of ongoing societal developments, such as the marketization of professional services (Freidson 2001) and increase in consumer control (Wallenburg et al. 2016). As a result, professional roles in inter-organizational projects are increasingly under pressure and professionals often fear being marginalized (Ahuja, Nikolova, and Clegg 2017). Hence, the negotiation of professional work within inter-organizational projects has become particularly important. Professionals do not only need to work across boundaries to integrate different domains of expertise and practice, they also need to cope with the changing boundaries that define their work and associated autonomy. Our study delves more deeply into how professionals, in particular architects, negotiate their role boundaries in inter-organizational projects to respond to threats of marginalization.

METHODS

The objective of this study was to analyse how members of a profession under pressure of being marginalized engaged in boundary work towards other professions. Our aim can be best described as theory elaboration (Vaughan 1992), hence qualitative research procedures were most appropriate (Edmondson and Mcmanus 2007). Because we wanted to capture the diverse range of roles and forms of project delivery that professionals in our setting encountered, we deliberately opted for breadth rather than depth in this study, following an Eisenhardt approach with a diverse range of cases rather than a Gioia approach that zooms in on a single case (Langley and Abdallah 2011).

Research setting

We chose architects as the context for our study because they are 'a professional group that is commonly associated with creative and aesthetic work and with strong professional norms, values and identities' (Styhre and Gluch, 2009). In their daily work, architects make use of their aesthetic knowledge (Blau and Power 1984; Cuff 1992; Winch and Schneider 1993) and technical expertise to deliver design, engineering, and/or supporting services for complex spatial challenges in project-based collaborations involving various actors, such as engineers, project developers, clients, contractors, government

officials, users, and other consultants. This means their work requires interacting with other professions in inter-organizational projects and thus provides a rich setting for studying boundary work.

The work that architects perform in construction projects is embedded in established role structures (Jones and Lichtenstein 2008), which are based on and communicated through various industry protocols. Until recently, architects were hired by the client—the future owner of the building or government body, who were typically not architects themselves. The architect's services were delivered in the form of a traditional project delivery, also referred to as a 'design-bid-build' process. In this delivery system, the design phase and the construction phase are separated (Ibbs et al. 2003). Once the architect has finished the design plans, a general contractor is commissioned on the basis of their bid for constructing according to the architect's drawings. A trend in many countries is that besides these traditional projects initiated by private clients and government bodies, construction projects are also initiated by commercial actors, such as general contractors or project developers. Thus, traditional project delivery methods are used by both end-clients and commercial clients. In traditional projects, architects are typically commissioned for activities from the first design stage until the end of the actual construction of a project, including drafting the conceptual, schematic and technically developed design, providing constructing documentation (e.g. which material to use, how to construct the joints of different materials, etc.), and responsible for overseeing and controlling that the general contractor and subcontractors build the work according to the technically developed design of the architect (e.g. organizing and reporting meetings with the general contractor, giving directions for construction, ensuring that the construction work is executed according to drawing and within the available time and budget, etc.) (Burr and Jones 2010). We refer to this role as the 'traditional architect role'.

Many clients still use the traditional project delivery approach, but projects can also be realized in a more integrated way. In an 'integrated project delivery', a client commissions a firm or consortium of firms to provide an all-inclusive service from design to construction and sometimes even including maintenance and operation (Kent and Becerik-Gerber 2010). This type of project delivery has become more prevalent with the growing complexity of construction projects and required expertise, and can be beneficial especially for non-professional clients who often lack the capacity and skills to integrate all different parties involved in the construction process (Burr and Jones 2010). Integrated project delivery may also enhance project outcomes because multiple actors collaborate in an early stage (Kent and Becerik-Gerber 2010). This early collaboration enables actors to align their goals through sharing risks and rewards (Kent and Becerik-Gerber 2010). In many integrated project deliveries, such as 'Design and Build' or 'Design, Build, Finance, Maintain, Operate' (DBFMO) projects, general contractors (or a consortium of general contractors, project developers, facility managers, and/or investors) take the lead (Lahdenperä 2012). Compared with most architectural firms, general contractors are more knowledgeable about the construction phase and have more financial resources to take risks (Burr and Jones 2010). In some cases, integrated project deliveries are coordinated by end-clients or architects.

In both traditional and integrated project deliveries, the 'traditional architect role' (i.e. drafting the design, providing the construction documents, and controlling the construction phase) has increasingly been challenged. In traditional project deliveries, clients sometimes start the bidding process sooner, so that the general contractor is involved sooner and the design can be optimized during the building process. This typically reduces the role of the architect as he or she is no longer able to fully develop the design, also resulting in a devaluation of his or her coordination work during construction. Also the increased complexity of projects and the emergence of new professional disciplines in the value chain have resulted in the roles of architects becoming more specialized over time. This has reduced levels of professional autonomy, caused shifts in the activities and responsibilities that architects fulfil in construction projects (Duffy and Rabeneck 2013; Ahuja, Nikolova, and Clegg 2017), and disrupted historically established role structures. For example, in some countries, architects, who used to be responsible for the entire project management of the construction phase, are currently only involved in this

phase as aesthetic advisors. In many countries, architects experience a mismatch between their professional education and actual practice and often feel that their work in projects is undervalued and marginalized (Ahuja, Nikolova, and Clegg 2017).

In many integrated project deliveries, an architect is hired by the general contractor or consortium who integrates and controls multiple project phases and is often primarily interested in streamlining the construction process and/or optimizing maintenance and operation to realize cost reductions. Most architects resent that in such situations, they are unable to assure the quality and innovation of the design for the end-user, as their involvement is often limited to the conceptual and schematic design (Akintoye and Fitzgerald 1995). They are typically not commissioned to develop the design technically, nor to provide the construction documents or to control the construction phase, which makes it difficult if not impossible to guarantee the quality of the end result. Furthermore, architects feel their work is compromised by the limited time available and by the fact that it is assessed by a profit-oriented party instead of the actual user of the project (Akintoye and Fitzgerald 1995). Architects perceive integrated project deliveries led by architects, private or public clients as less troublesome than integrated project deliveries led by contractor clients, as in these situations architects have direct access to the end-user (Akintoye and Fitzgerald 1995), and actors tend to focus more on the design goals than the production, leaving room for the architect to fulfil a substantial role.

Finally, the traditional architect role has also been challenged by technological developments, such as the introduction of Building Information Modelling (BIM) (Sebastian 2011). BIM comprises a 3D modelling and communication technology, which has significantly altered processes of design, building, and communication in the global construction sector over the past few decades (Azhar 2011; Whyte 2011; Bryde, Broquetas, and Volm 2013). Building professionals collaborate in a 3D model that is often aimed to generate the exact information that is needed for construction, maintenance, or operation of a project. This caused changes in activities and responsibilities between involved actors. Detailed engineering work, for instance, is often performed or at least coordinated by the general contractor, leading to a decrease in the role of the architect. BIM has also introduced 'grey areas' of new activities and responsibilities that, as of yet, have not been allocated to a certain actor (Elmualim and Gilder 2014). For example, BIM requires new norms and guidelines for the integration of the drafting work of different disciplines into a single 3D model so that emerging 'clashes' can be identified and resolved. The technology has created room for the development of new methods, such as for calculating building costs or facility management. Different actors all try to claim (parts of) these grey areas to strengthen their position, which became particularly salient during our 4-year immersion in the field.

Data collection

Our primary method of data collection was in-depth interviews with project architects in the Netherlands. These interviews constituted part of a larger research project on new governance and business models for architectural services. To ensure that we would capture a comprehensive scope of boundary work performed by architects, our sampling strategy was based on purposefully selecting a broad set of architects working in traditional project deliveries and/or integrated project deliveries. We used a recent project that was still ongoing or had been finished no longer than a year prior to the interview as an entry to each interview to ensure that the respondents would be able to reflect on the 'doings' and outcomes of their role negotiation strategies. The discussed projects include residential buildings, hospitals, offices, educational buildings, cultural buildings, sport facilities, and an urban area development. These projects all moved through typical phases of briefing, conceptual design, schematic design, design development, constructing documentation, and actual construction (Cohen et al. 2005; Burr and Jones 2010). The clients of these projects were public or semi-public clients (e.g. schools, hospitals, museums, and housing corporations), general contractors, project developers, and private clients (e.g. companies, sport clubs, and house owners). The architectural firms that were involved differed in age (established between 1910 and 2015), size (1–120 people), and geographical location (locations spread across the Netherlands). For each project, we

interviewed the architect(s) responsible. Table 1 presents an overview of our sample.

In total, we interviewed 33 architects from 27 firms in the period between 2014 and 2016. In most cases, interviews were conducted by two authors. Interviews were held at the offices of interviewees, lasted between 45 and 120 minutes and were audiotaped and transcribed verbatim. Our interviewees were trained as professional architects and worked intensively on the selected architectural projects. We asked architects to talk about how the project was organized, which role they played in that specific project, and their actions, perceptions, and thoughts regarding their role in the project. This led to conversations about conflicts they experienced regarding their activities and responsibilities, how they handled these conflicts and how particular responses played out over time. The respondents also discussed other projects in which they had other roles to indicate how certain aspects had been similar in different projects or to contrast their experiences in the different projects. Marginalization appeared to be a recurrent theme in many of these interviews and if it was mentioned, we asked follow-up questions on how the interviewee had responded to this marginalization.

In addition to interviews with project architects, we conducted 12 interviews with the clients of 11 selected projects and 4 interviews with clients of 2 additional projects. The purpose of these interviews was to gain a better understanding of how different types of clients collaborated with architects in their projects. We sampled for professional clients that regularly work with architects on a daily basis, such as the central government real estate agency, housing corporations, hospitals, general contractors, and project developers. The interviews allowed us to identify tensions related to the role and performance of the architect in the project by including the client perspective (Ravitch and Carl 2015). We specifically asked clients why they selected the architect (or architectural firm), how they experienced the collaboration with the architect, and how satisfied they were with the outcome of the project, since the perception of clients might differ from the perception of architects on these matters (Volker 2012). We also collected archival materials: industry reports and protocols, to gain a more detailed understanding of architects' activities and responsibilities in Dutch construction projects (BNA and ONRI 2008; BNA and NLingenieurs 2013, 2014; Schoorl 2011); and project documentation, to develop greater contextual understanding of architects' roles in the projects under investigation. The client interviews and archival materials were used for triangulation purposes (Jick 1979).

Data analysis

In line with the grounded theory approach, we moved between data and theory in iterative 'steps' (Strauss and Corbin 1990). We followed a three-step iterative process in which we continually switched between analyses of individual boundary work episodes and cross-case comparisons of episodes to identify overarching patterns in the role boundary work of architects without losing the insights that the different episodes had to offer. We used the interview transcripts with project architects as primary data for the analysis. The interviews with clients and project documentation were used to generate additional information on the roles and role boundary work of architects and to verify whether architects' perceptions of the necessity for and outcomes of their boundary work matched the perspective of their clients.

The first step of our analysis involved identifying boundary work episodes in the individual interviews. This process began with each author reading and reviewing all the interview transcripts and independently developing potential codes related to boundary work in the margins. We used MAXQDA as a supporting tool to capture and systematically code all interview data. We compared and discussed the codes to develop a shared understanding of the key codes per interview. The codes were often related to activities performed in a project, perceptions of architects related to these activities, and attempts to perform additional activities. We also used codes related to the professional identity of architects, the changing nature of architectural work, developments in the field, and competing values in projects.

In the second step, we jointly compared and discussed the boundary work episodes that we identified in step 1. We found that architects used boundary work practices that were either strongly related to their professional expertise, their activities in

Table 1. Overview of interview sample

Type of client	Type of architectural firm			Type of project	Role of architect in project
		Founded in	Number of employees		
Traditional project delivery					
Public or semi-public client					
Museum	A9	2003	9	Renovation of cultural building, garden, and interior	Traditional role
Museum	A12	2007	4	Renovation interior of cultural building	Marginalized design role (only conceptual and schematic design)
Hospital	A3	1974	106	Hospital	Traditional role + BIM pilot
	A19	1928	42	Hospital	Traditional role
	A27, A28	1974	106	Hospital	Traditional role
	A32	1990	39	Hospital	Traditional role
Housing corporation	A18	1989	30	Residential building	Traditional role
	A22, A23	1976	45	Residential building	Marginalized design role (excl. constructing documentation)
	A24	1937	24	Residential building	Traditional role
Commercial client					
Project developer	A1	2014	22	Residential/utility building	Traditional role + BIM coordination
	A17	2005	16	Residential/utility building	Traditional role
	A20	1984	30	Residential building	Traditional role
General contractor	A21	2004	45	Residential building	Traditional role
Private client					
Student rowing association	A10	1993	1	Sports facility	Design + procedural checks + strategic advice
Tennis club	A30	2015	1	Sports facility	Marginalized design role (only conceptual and schematic design)
Integrated project delivery					
Public or semi-public client					
School	A2, A26	1930	31	Educational building	Traditional + programme of requirements + full project management, incl. calculation,

(continued)

Table 1. (continued)

Type of client	Type of architectural firm			Type of project	Role of architect in project
		Founded in	Number of employees		
					contracting, and supervision during construction
	A4	1955	23	Renovation of multiple educational buildings	Marginalized design role (only conceptual design)
Hospital	A5	1968	75	Hospital	Traditional role + programme of requirements development
Commercial client					
Project developer	A8, A25	1991	120	Residential/retail building	Marginalized design role (only conceptual and schematic design)
General contractor	A16	1978	16	Residential building	Marginalized design role (only conceptual and schematic design)
	A6	1985	40-50	Cultural building	Marginalized traditional role (excl. constructing documentation) + BIM coordination and data management
	A11	2013	24	Office/utility building	Marginalized traditional role (excl. constructing documentation)
	A13	1927	35	Urban area development	Marginalized traditional role (excl. constructing documentation)
Property investor	A7	2001	15	Office building	Traditional role + made magazine, initiated discussions, developed business plan
Private client					
Company	A14	2003	3	Office building	Traditional + research + selecting partners excl. constructing documentation
	A29	1973	60	Office building	Traditional role
	A31	1910	30	Office building	Traditional role
	A33	1985	40-50	Office building	Marginalized design role (only conceptual and schematic design)
House owners	A15	2005	15	Residential building	Traditional + developing business case for project (i.e. buying land, meeting buyers, and contracting)

a project, or the collaboration with other actors in a project. Multiple iterations of renaming and re-clustering eventually led to two expertise-related boundary work practices: 'demonstrating professional expertise' refers to attempts to showcase the value of the 'traditional' architect expertise and 'offering specific expertise beyond traditional professional tasks' describes attempts to acquire work with a new kind of expertise closely related to and contributing to the traditional architect job. Within boundary work practices related to project activities, we distinguished between 'reframing activities' when architects used their traditional skills to perform a slightly different role and 'performing new activities' to capture tasks for which architects needed completely different skills. Within boundary work practices related to the form of collaboration in a project, we distinguished 'putting the client under pressure', 'challenging the collaboration structure', and 'building alternative collaborative structures'.

In the third step, we carefully compared the role negotiation situations with one another to single out the similarities and differences between them. Emerging findings were presented and discussed in several meetings with involved researchers and practitioners, including some of the interviewees, in order to increase credibility (Ravitch and Carl 2015). This process revealed that the different boundary work practices revolved around different foci (i.e. focus on the own role or the entire role set), different roles (i.e. traditional, tailored, or redefined role), and different role demarcations (i.e. thick and segmenting or thin and permeable). We also found that the boundary work practices were triggered by different types of collaboration forms, roles, and contextual dynamics (i.e. conventional collaboration with marginalized role or potential dangers to professional standards, conventional collaboration with traditional or marginalized role and shared interests, and unconventional form of collaboration with shared interests), and different objectives they pursued in the context they were working in (i.e. guarantee project success by preventing change, by pursuing incremental change or realize benefits for the field beyond project success through radical change). Eventually, this led us to categorize the practices into three types of boundary work: (1) reinstating, (2) bending, and (3) pioneering role boundaries. These types represent distinct strands of architects' boundary work that illustrate how architects respond differently to the changing context of work in inter-organizational project settings.

FINDINGS

In this section, we describe the three types of boundary work practices in which architects engaged during role negotiations: reinstating, bending, and pioneering role boundaries (Table 2). For each practice, we provide examples of episodes with details on the context and initial role the architects faced, illustrate how they attempted to deal with this situation through boundary work, and report the effect of their actions and their own reasoning for adopting this practice. Based on this information, we draw potential conclusions about which characteristics of the situation prompt which forms of boundary work.

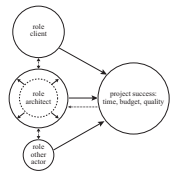
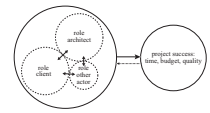
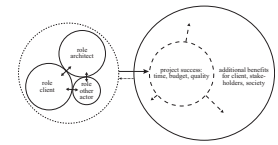
Type 1: reinstating role boundaries

The first type of boundary work, 'reinstating role boundaries' (Fig. 1) refers to episodes in which architects emphasized and justified the value of their traditional design, engineering, and coordinating work or contrasted their value to that of other project actors to emphasize and maintain the historically established demarcations that distinguished their role. Reinstating occurred when architects were confronted with a marginalized role vis á vis other actors that they felt would not enable them to do proper work given their own understanding of professional integrity and what the client or project required. They therefore attempted to negotiate a more substantial involvement in line with the traditional role of architects, referring to the past as a justification. As Fig. 1 illustrates, reinstating practices sought to increase the status and resources of the architect thereby potentially affecting the roles of other actors.

How do they negotiate? Practices of reinstating boundaries

We identified three practices of reinstating boundaries in our data: (1) demonstrating professional expertise, (2) putting the client under pressure, and (3) challenging the collaboration structure. Table 3 provides a detailed overview of these boundary work practices.

Table 2. Overview of types of boundary work

Aspects	Type 1: reinstating role boundaries	Type 2: bending role boundaries	Type 3: pioneering role boundaries
Boundary illustration			
Architect perception of professional expertise	Undervaluation: expertise is not being valued	In flux: expertise is constantly changing	Generalizable: expertise is broadly applicable
Time orientation	Past-oriented: role negotiation guided by views of the	Present-oriented: role negotiation based on evaluation of current situation	Future-oriented: role negotiation guided by future prospects
Point of reference	Profession	Market	Profession
What do they negotiate?			
Focus	Own role in project	Entire role set in project	Entire role set in project
Content of role	Return to established situation: activities and responsibilities in line with traditional role	Flexible: activities and responsibilities tailored to project demands	Break with established situation: activities and responsibilities redefined beyond traditional role
Boundary of role	Thick and segmenting: actors have clearly defined and demarcated roles	Thin and permeable: actors collaboratively define role boundaries	Thick and segmenting: actors (re)define clearly demarcated roles
How do they negotiate?			
Boundary work practices	• Demonstrating professional expertise • Putting the client under pressure • Challenging the collaboration structure	• Offering specific expertise beyond traditional professional tasks (i.e. offering a new kind of expertise that is closely related to and contributing to the traditional architect job) • Reframing activities (i.e. using traditional skills to perform a slightly different role)	• Performing new activities (i.e. fulfilling tasks that need completely different skills) • Building alternative collaborative structures
When do they negotiate?			
Form of project collaboration and role of architect	Conventional collaboration with marginalized role or potential dangers to professional standards	Conventional collaboration with traditional or marginalized role and shared interests	Unconventional form of collaboration with shared interests
Objective	Guarantee project success; prevent change	Guarantee project success; incremental change	Realize additional client/stakeholder benefits beyond project success; radical change

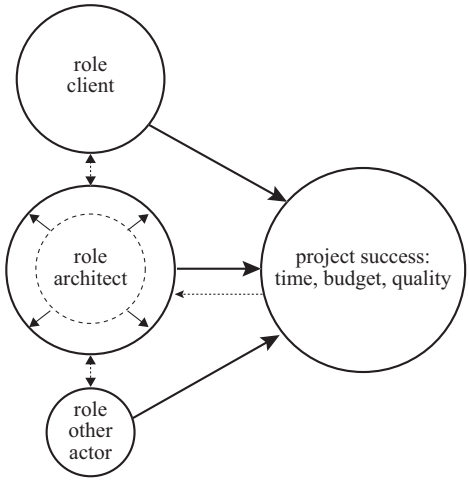


Figure 1. Reinstating role boundaries.

Demonstrating professional expertise refers to episodes in which architects sought to convince the client of their expertise and value by showcasing what they were capable of by giving examples from previous work or by providing additional services. For example, architect A12 found herself in a marginalized role in an interior renovation project of a museum that only involved designing new furniture. During the project, this architect started to informally take on a coordinating role towards other actors and to provide unrequested input. She helped her client to sort out technical problems by giving advice, making additional drawings, and involving suitable partners. She eventually acquired the entire set of engineering activities, including constructing documentation. Her conviction was that by demonstrating her worth, the client would be impressed and this would help to garner future work:

> In that project, we said 'let's just show what we can do'. We addressed a small question here, made a drawing of a detail there and dealt with the structural advisor who had made a mess of it. We attracted another structural advisor and showed that it was indeed possible to solve the problem. [And then the client asked us:] 'Oh, can you also make the constructing documentation for it?'

While in this episode demonstrating professional expertise led to the acquisition of additional tasks, it came at the price of not getting fully reimbursed for her work.

The second type of reinstating practices 'putting the client under pressure' was used in instances when architects felt that their marginalized roles would jeopardize their professional standards. For example, architect A19 threatened to withdraw from a hospital project for a semi-public client (a hospital) when his ideas were constantly overruled and his expertise was repeatedly called into question by the project management firm that coordinated the project (Table 3).

Examining different episodes of putting the client under pressure showed that the practice was successful when the architect could offer specific expertise that the client recognized and valued, as in the above case their experience with hospital projects, and less successful when the client did not need any specific expertise from the architect, as in the case of architect A22, where a housing association was primarily interested in speeding up the process of an urban area development by involving a general contractor in an early stage (Table 3).

The third practice of reinstating boundaries refers to episodes in which architects challenged the proposed collaboration set up by arguing that having others perform parts of 'their' role would be detrimental for the project. A successful example involved architect A5 who was asked to participate in an integrated project delivery for a hospital. He agreed to involving a general contractor early, but resisted being hired by that contractor arguing that he would be unable to fulfil his traditional role to serve the interests of the client (Table 3). Instead he proposed a new form of collaboration agreement in which the hospital, a project manager, and the architect together instructed and managed the contractor. An important contextual requirement for this practice seemed to be the architect's experience and respected expertise, and the familiarity of the actors. The new collaboration agreement essentially constituted a code of conduct to resolve issues by mutual understanding rather than specifying individual responsibilities and sanctions.

When do they negotiate? Potential enablers of reinstating practices

The trigger for reinstating boundaries was typically that architects feared the overall success of the

Table 3. Examples of reinstating role boundaries

Interviewee	Context and initial role	Boundary work practice	Effect of boundary work	Reasoning behind boundary work
A12	Traditional project delivery—public client: museum Marginalized design role (only conceptual and schematic design) in renovation of museum interior, another firm is commissioned for technical drawings by project manager	Demonstrating professional expertise: performing bigger role than paid for, incl. attracting suitable partner, developing construction documentation, and enlarging scope of project	Architect manages to perform bigger, more influential role, but does not get compensated for it	'you have to show that you are worth it. You simply have to prove it once, work hard, ensure there is nothing for them to criticise. And then [the client] will be pleased that you want to do it for them. And that's how we did it. We just showed it.'
A19	Traditional project delivery—semi-public client: hospital Traditional role in design of a new hospital, project management firm constantly questions the architect's activities	Pressuring the client: architect confronts client to choose between either the project management firm or them as architectural firm	Project management firm is eventually kicked out by the client, the architect and client together take over the project management role, the architect reasons that client needed their hospital design expertise more than the process management expertise of the project management firm	'In this case it was a really bad project management firm, which continuously confronted our client with extensive memos [about our work] saying "this and that is not right, this doesn't make sense, that is not true". That happened a couple of times and it led to frictions and a very unpleasant atmosphere. Our expertise was constantly called into question, while we knew for sure that what we were doing was good and with the right intentions. So we just said: "Okay, it's very simple: either they [project management firm] leave, or we quit." After a lot of fuss, it was finally decided to say goodbye to the project management firm.'

(continued)

Table 3. (continued)

Interviewee	Context and initial role	Boundary work practice	Effect of boundary work	Reasoning behind boundary work
A5	Integrated project delivery—Semi-public client: hospital Traditional role + programme of requirements development for design of a new hospital in a team consisting of client, project management firm, general contractor and advisors	Challenging the collaboration structure: architect agrees to the early involvement of a general contractor, but tries to safeguard his or her professional responsibility by negotiating to be hired directly by the hospital rather than the general contractor	Hospital, project manager and architect together act as client towards the general contractor, all actors discuss each other's work throughout the entire process to make it feasible from all perspectives (e.g. general contractor asks to reduce size of building in conceptual design phase) in this way, they all keep control over the end result	'We fought hard to ensure that we would be commissioned by the hospital. We look after the interests of the hospital in the classical way. We were not employed by the general contractor. [. . .] Together with [project management firm] and the hospital we have in fact represented the client-side from the beginning, to maintain more control over the quality and be able to steer the design. [The hospital] wanted to maintain control over the design.'
A22, A23	Integrated project delivery—Semi-public client: housing corporation Advisory role in urban area development, client wants to involve general contractor in an early stage to speed up the design and construction process	Challenging the collaboration structure: architect tries to convince client of risks of involving a general contractor too early and attempts to acquire more substantial role	Architect is not successful in his negotiation and only secures a role in the conceptual and schematic design	'Some aspects are simply not yet developed and thought through. This gives a general contractor who starts looking for flaws in the design a lot of ammunition to make the process really difficult, especially if you select a general contractor on a lowest-price base. So I particularly pointed that [risk] out to my client. And also mentioned "this is what it means if we arrange the contract documents. Perhaps it takes a couple of weeks extra, but it also means [fewer risks] for the further course of the project."'

project was at stake because technical design development tasks were allocated to non-design firms, such as general contractors, consultancy firms, or drafting firms. Table 3 shows that this occurred in traditional and integrated project deliveries when architects were only commissioned for a subset of their traditional role or in traditional projects when clients were tempted or forced into more integrated forms of project delivery along the way (e.g. due to the privatization of semi-public clients).

Reinstating occurred in episodes in which architects felt that it was their professional duty towards the client, end-user, or society to bring in their traditional domain knowledge and skills as architects. Respondents were critical of their peers who had deliberately distanced themselves from the technical and management aspects of their work over the years:

> We really have something to offer. The general contractor and the client were both wildly enthusiastic about our work. They thought we were 'the last of the Mohicans' [laughing], they didn't know that we still existed. [. . .] That's the handicap we have, generations of architects before us have always put themselves first, while it should really be about the project. (A12)

This episode illustrates that reinstating boundaries was a way for architects to convince clients of their ability to deliver the full spectrum of traditional services and to focus on project results. They aimed to counteract the image of not committing to budget constraints and strongly advocated their own performance of the traditional architect role in the process. In episodes in which respondents felt that the traditional architect role would be beneficial for the success of a project, respondents used self-casting to emphasize their traditional expert knowledge and skills as unique and essential for the project with the aim to set themselves apart from other actors.

Another trigger for reinstating boundaries was when respondents felt that they had to establish and uphold their reputation as professionals. Examples of 'putting the client under pressure' indicate that architects rather risked losing a project than being involved in something that did not match their professional standards. It suggests that in these situations, architects prioritized the end result of the project—and thus their professional reputation and symbolic capital—over the relationship with their current client or other project actors, which may be related to the fact that these episodes occurred in one-off collaborations.

Type 2: bending role boundaries

The second type of boundary work, 'bending role boundaries', refers to instances where architects chose to expand their activities beyond the traditional role, but were still guided by and contributing to their traditional architect expertise. Respondents believed that incremental change, such as adapting to the role changes associated with many integrated project deliveries and performing 'non-architectural' tasks, was needed to achieve the required outcomes of specific projects. By bending role boundaries, architects pursued a more fluid role demarcation and saw the overall division of tasks as less segmented (Fig. 2). They were less concerned about other actors performing parts of their roles and took on unconventional roles if requested in the project, or when it was collaboratively defined as the best way to accomplish the project's aims. In episodes of bending role boundaries, architects were willing to sacrifice professional status for a larger albeit different involvement in the project. They justified this with moral arguments, for example, it would lead to better buildings and better processes, but it also enabled them to follow market trends.

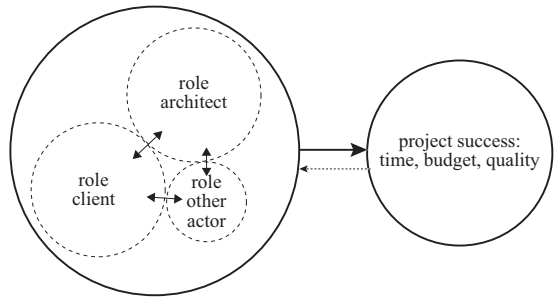


Figure 2. Bending role boundaries.

Table 4. Examples of bending role boundaries

Interviewee	Context and initial role	Boundary work practice	Effect of boundary work	Reasoning behind boundary work
A6	Integrated project delivery —commercial client: general contractor Marginalized traditional role (excl. constructing documentation) + BIM coordination and data management in addition to traditional role in a Design and Build project of a cultural building	Offering specific expertise beyond traditional professional tasks: architect offers BIM coordination and data management in addition to traditional role	Architect succeeds in securing the envisioned additional work beyond his marginalized traditional role, yet client is not convinced after project completion that the architect was indeed the most suitable partner for these activities	'[. . .] what we have done for the last couple of years and also carry through is that we would like to be the best and most reliable Design & Build partner. [. . .] In the end we really do this to obtain a better position and to be, also in the context of Design & Build, a very reliable partner.'
A1	Traditional project delivery —commercial client: project developer Traditional role + BIM coordination of a new residential project, BIM is seen as central to the project and all actors are already familiar with BIM, actors have meeting to discuss collaboration before project starts	Offering specific expertise beyond traditional professional tasks: architect's BIM expertise is a good match with the BIM ambitions of the client, architect wants to offer more regarding calculation of building costs and facilitating maintenance decisions, but recognizes that there are no resources in the project	Architect does not succeed in securing all the desired activities, because of time and budget constraints and because the client does not see the benefits of it	'We started making our internal activities more efficient and effective, oriented towards quality. We started developing all kinds of tools for that, followed courses, bought software and allowed our people to develop in that area. [. . .] But all these activities we do, that entire BIM story, we do that to support our architectural work and we think that we are a better architect because of that.'
A4	Integrated project delivery—public client: school Conceptual design role in the preparation of an integrated project delivery for the renovation of multiple educational buildings, the project also involves a project management firm	Offering specific expertise beyond traditional professional tasks: architect uses his expertise in design to help the school to understand the potential of their buildings and give strategic advice on how to design and manage the renovation process, this is done in the exploratory phase prior to commissioning an architect for the project	Architect's assignment is enlarged significantly over the course of the project as his design-oriented consultancy approach is appreciated by the client	'Sometimes it involves activities of which I think: well this is not really exciting, but we simply need it'. Once in a while you try to do things that are a bit more special. What is our goal? If you look at our strategy, it's definitely that continuity. [. . .] Our strategy is that you can be very successful if you can be flexible and do different things.'

(continued)

Table 4. (continued)

Interviewee	Context and initial role	Boundary work practice	Effect of boundary work	Reasoning behind boundary work
A10	Traditional project delivery—private client: student rowing association Marginalized traditional role for a new sports facility, architect is only requested by student rowing association to make a design	Reframing activities: architect addresses the underlying strategic questions, talks to municipality, investigates client organization to propose what they should do	Architect advises rowing association to develop a business plan and is asked to assist them in this process	'It is a big misconception that if you have a picture, you're already there, but that's only five percent of the work [. . .] I don't belong to the category of architects who are invited based on the design or their reputation. Because my approach is so different I lose competitions based on appearance or pictures. I soon realized, I need to be involved in the process.'
A14	Integrated project delivery—private client: landscaping company Traditional role (excl. constructing documentation) + research + selecting partners in an integrated project for a new office building	Reframing activities: architect collaborates with client and general contractor to select right parties for the construction work and they develop clear constructing documentation together	Architect receives a bonus after the project is finished from other actors involved (on request of the client) because they coordinated the process well	'We said: "we want to have a seat at the table with the client and the contractors. What we used to call subcontractors, we want them all around the table so that we can share expertise with each other. If this leads to new insights, we have to communicate that with the advisors. [. . .] And it could be the case that this leads to somewhat smaller or bigger pieces of the pie for each party, because that benefits the quality of the project."'

How do they negotiate? Practices of bending boundaries

We identified two bending practices: (1) offering specific expertise beyond traditional professional tasks and (2) reframing activities, which are illustrated in more detail in Table 4. Episodes involving offering specific expertise beyond traditional professional tasks were mainly triggered by clients requesting additional tasks or because the architects felt that they could expand their scope. Examples of such additional tasks included consultancy work to assist clients in the initial phases of project definition, BIM services, or user workshops. In one episode, an architectural firm that had invested heavily in BIM expertise (A6) took the integrated project delivery of a cultural building for a general contractor as an opportunity to offer BIM modelling, coordination, and data management in addition to their marginalized design role. Their reasoning was that they wanted to present themselves as a reliable Design and Build partner to general contractors for whom they often worked, arguing that their specific contribution would facilitate collaboratively working towards a high-quality and cost-efficient building within the requested time span and improve budget control and planning. Although the general contractor was pleased that the architect had taken on extra activities, he mentioned that the execution of these activities had not always been entirely satisfactory (Table 4).

The second bending practice, reframing activities (i.e. using traditional skills to perform a slightly different role), relates to episodes in which architects tried to unearth the underlying need behind the official client request and then reasoned back to propose a set of additional activities that from their professional perspective would be required. For example, architect A10 offered a rather inexperienced private client (a student rowing association) strategic advice throughout the entire building process instead of merely providing the requested design because she assumed that the association did not have the expertise to coordinate this process themselves:

> I made an offer that included the entire process, [. . .] of course the design plays a role in [the offer], but before you start designing out of the blue, you first need some boundary conditions. So that was what I proposed. [. . .] I took the initiative to bend their request into my own terms of 'what do you in fact need'? [. . .] And I immediately advised them 'develop a business plan, that's where all the lines connect. That includes your own organisational model, how you will pay for it, how you will run the operations and what you need'. I had an example of [another project] for them as a reference point. So I was quickly finished with the design and throughout the rest of the process I assisted them in developing the business plan.

As the quote shows, bending practices were not only focused on adjusting the architect's own role boundaries, but also involved changing the role boundaries of others. Architect A10 advised her client to develop a business plan and argued that otherwise financing and realizing the project would not be possible. The example illustrates how architects coached their client and/or other project partners in roles that diverged from the traditional role set in building projects and effectively brought in new skills beyond competing with other construction industry actors.

It specifically illustrates the importance of a close collaboration between project actors from the beginning of a project, in order to align their respective expertise and optimize the process towards reaching project goals. Collaborations like these seemed relatively easy to reach in integrated project deliveries where a commercial firm (i.e. project developer or general contractor) and an architect decided to engage in together on the basis of a shared vision. These actors, in comparison to most public or private clients, were all held accountable for the projects' realization and seemed therefore highly incentivized to make their collaboration work. In contrast, integrated collaborations for which core parties were contracted at a later stage of the project often led to actors trying to reinstate the boundaries of their roles. In these projects, the stage of defining shared goals and communicating interests was missing.

When do they negotiate? Potential enablers of bending practices

Bending was typically adopted when architects saw an opportunity to adjust to ongoing market developments by anticipating and accepting changes in their professional roles. They saw their own role in a project as part of a larger puzzle to realize a successful project, and their work as shaped by the demands of the client and other involved actors. As Table 4 shows, bending role boundaries especially seemed to occur in traditional and integrated project deliveries in which architects had a less comprehensive set of activities in the design development. Some architects and clients that were involved in integrated projects mentioned that the traditional role of the architect was often not desired or possible anymore as most general contractors and project developers preferred to perform these activities in-house or hire third parties with which they had good experience in previous projects. Repeated collaboration between commercial clients and architects rarely seemed to occur. Clients argued that as each project typically demanded a different style, they were inclined to hire different architectural firms. In forms of integrated collaboration that clients had already used more often and in which role structures were well established, such as most Design and Build projects, architects seemed to accept that they were not in a position to define their own role boundaries and largely went along with their clients' requirements. By offering specific expertise and reframing their

activities architects aimed to contribute to the process of collaboratively developing a successful project. Respondents argued that this required 'constantly delivering other added value besides the design' (A6) and 'constantly stretching yourself' (A4). They strongly believed that adding non-design activities to the traditional architect role would assist their commercial client in realizing a successful project. In traditional project deliveries for non-professional clients (e.g. the board of a school or the rowing association that was referred to earlier), or more novel forms of integrated project delivery, architects used the uncertainty and lack of definition around the division of tasks in a given project to their advantage to negotiate a role that both suited their existing knowledge and skills, and the aims of the project. In the sense that bending practices were focused on what could be achieved in a given project, these practices were largely oriented towards the present as opposed to reinstating practices that leaned on the past.

The bending practices that architects engaged in implied that architects attempted to change their traditional role in a project in order to please a specific client, and because the traditional architect role was not always available or suitable, such as in most integrated project deliveries. They wanted to realize effective and productive collaborations with commercial clients not only to make the project work but also to increase the opportunities for future work. Respondents all noticed that they needed to collaborate with commercial actors to keep being involved in projects, so when they collaborated in integrated projects, most architects tried to approach that in the best way possible. As multiple architects stated, bending the traditional architect role in projects was crucial to convince other project actors of the value of their work, create good conditions for collaboration, and keep the profession alive.

Type 3: pioneering role boundaries

The third type of boundary work, 'pioneering role boundaries' (Fig. 3), refers to episodes in which architects deliberately transgressed beyond traditional role boundaries with the aim to create additional benefits for the client and/or other stakeholders or to transform the field by constructing new role structures. To facilitate this radical change, actors fulfilled tasks that needed completely new skills than what they were traditionally trained for and took the initiative to explicate how the new roles could be defined and demarcated. Although the process of collectively redefining roles went quite natural in projects where actors had started off their collaboration at the same time with shared project goals and enhanced benefits in mind, architects experienced severe opposition by mainly commercial parties that had been involved at a later stage and had different goals in mind.

How do they negotiate? Practices of pioneering boundaries

Pioneering professional role boundaries was manifested in two boundary work practices: (1) performing

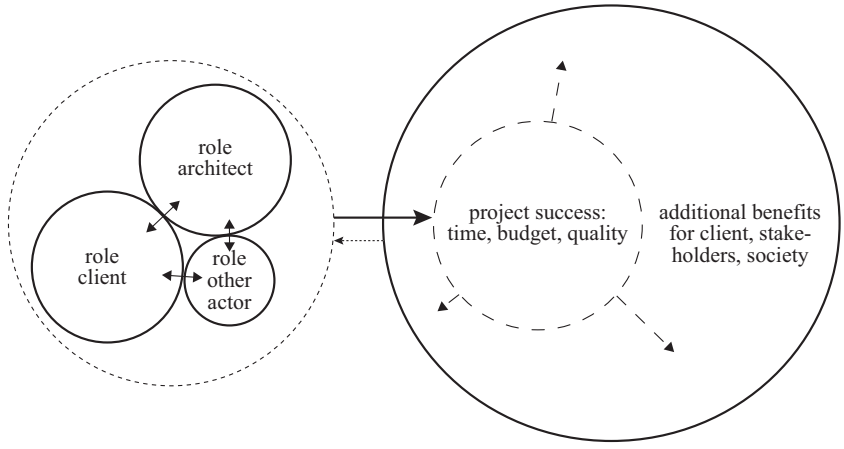


Figure 3. Pioneering role boundaries.

Table 5. Examples of pioneering role boundaries

Interviewee	Context and initial role	Boundary work practice	Effect of boundary work	Reasoning behind boundary work
A7	Integrated project delivery—commercial client: property investor Initiate plan for temporary use of office building that is supposed to be demolished, they collaborate with local government and project developers and involve a property investor to realize their plans	Performing new activities: architect writes a book, magazine, curates an exposition, initiates discussions, approaches partners to develop the business plan, and do the construction work	Although the project becomes a success, the architect does not manage to get paid for his or her work because the property investor does not see her as an important player	'What you see happening is that the market, the government and the citizens all think from a short-term, consumerism perspective. Everything is based on making money in the short-term, which creates a deadlock for the city. [. . .] that's something we question: 'then what's the role of architects? Do you only create a city to have buildings or do you create a city so that it functions well?' We play a big role in questioning that system.'
A5, A20	Traditional project delivery—private client: home owners Initiate housing development for private owners without any particular demand, envision themselves largely in traditional role of architect but initiate the entire project definition phase	Performing new activities: take initiative to search for available plots that have potential with local government, bring together parties, search for capital, and collaborate with other architectural firms to share knowledge and investment	Architects perceive their activities as largely experimental, they doubt the profitability but see huge potential for protecting the quality of the built environment by claiming a larger role in the development phase of projects so that they are involved in a project directly from the start and not dependent on other actors	'[. . .] the quality of housing in particular worries us. There is a lot of standardized housing and little variety. And we believe that the distance between us and the end-client has become too big to create something special. So we are currently exploring if we can develop small apartment buildings together with the future inhabitants. [. . .] Not that we think it will develop into a big commercial success, but just to see if it works and if we can make better quality in that way.' (A20)
A15	Integrated project delivery—private client: home owners Initiate demand-driven housing development for private home owners, significantly expands on traditional role by developing real estate concepts, developing business case for these projects, acquiring land, meeting with buyers, making contractual agreements with buyers, etc.	Building alternative collaborative structures: developing a new collaborative structure on the basis of a product development approach in which the future homeowner plays a significant role, organizes meetings for interested buyers, acquires land	Buyers need to invest and to develop the first project, a venture capitalist partner is needed. In one project, the partner (a general contractor) accepts the pioneering role of the architect, while in another project, the partner (a project developer) is not willing to pay the architect an adequate fee	'I thought maybe we should start a kind of republic of people who want to change, build or design their home with us. That would be super cool! So I'm thinking much bigger than other architectural firms – they see it more like an assignment. They don't believe in investing in this, because it simply costs a lot of time. [. . .] While we would like to expand it, to provide advice related to development, for self-building

(continued)

Table 5. (continued)

Interviewee	Context and initial role	Boundary work practice	Effect of boundary work	Reasoning behind boundary work
				and real estate development, and building customer-oriented, demand-oriented, doing market research and then the sales process. I think we would be very good at offering these services, besides the regular design work.'
A2, A26	Integrated project delivery —public client: school Develop an integrated project delivery for non-professional clients in which everything is taken care of, architect significantly expands on traditional role by developing entire programme of requirements, full project management, incl. calculation, contracting, and supervision during construction	Building alternative collaborative structures: developing a new collaborative structure in which architect and product suppliers collaborate intensively throughout the entire process without a general contractor, the architect carries risks in the project	Architect maintains control of overall project and subcontractors are directly involved. Cutting out the middle man enables the consortium to resolve open questions more quickly and in a more straightforward manner. Project is completed on time and on budget	'The knowledge of suppliers typically does not reach the design team - they only want to share it if they get the opportunity to participate [in the project]. Normally we cannot guarantee that they will be involved, because that is up to the general contractor. And the general contractor has to bid a very low price, or otherwise he will not be commissioned for the job, which means that he will pass on this pressure to all his subcontractors and suppliers to ensure that he can make as much profit as possible. We do not like that approach and thought: "that should and could be different".'

new activities and (2) building alternative collaborative structures. Table 5 provides detailed examples from the interview data. The first practice, performing new activities, refers to episodes in which architects expanded their repertoire of activities to proactively initiate their own projects. Examples included developing innovative service contracts for clients to better manage their building portfolio and looking for locations and investors to develop socially responsible projects as a means for improving the quality of the built environment. These new activities required different skills and were sometimes performed as entrepreneurial initiatives without any remuneration because architects strongly believed that these activities enabled them to realize projects that would have added benefits for society or other stakeholders involved. Such initiatives also enabled the architects to claim a bigger role in the actual development of these projects. For instance, architect A7 initiated all kinds of activities to get involved in discussions with the municipality and other influential actors, such as project developers and financial investors, because she strongly believed that current forms of collaboration did not enable cities to function well and she wished to address these issues:

> We created a magazine that kickstarted the process of giving unsolicited advice to the city council. [. . .] We made plans and distributed those plans. (. . .) what we've done is a form of activism. [. . .] Then we analysed all the plans and vision documents of the municipality and of project developers to see which recurring

> strategies characterized them and how we could build on that. We noticed that temporary building permits constituted a ill-defined area that we could use to initiate developments. This building already had a demolition permit, it didn't have any market value, didn't mean anything in the books. So we asked if we could use the building for five years.

This architect explained how she turned unsolicited advice into an unrequested project. Through interfering with the development of an area and specific building, she was able to obtain an architectural project and temporarily transform a shady, unpleasant area into a hub for creative entrepreneurs, thereby attracting all kinds of activities with great value for the city (Table 5). This example is illustrative for how architects expanded their role boundaries by performing additional activities while focusing on enhanced stakeholder benefits.

The second practice, building alternative collaborative structures, was used to break away from traditional role boundaries. In these episodes, architects took the initiative to redefine the roles of actors in a given project to improve collaboration and contribute to transforming the field. For example, one architectural firm (A2, A26) revolutionized the governance structure of school projects by replacing the general contractor in the process by the architectural firm and forming a consortium in which the subcontractors were actively involved in the design phase, and thus contributed to delivering better architectural quality on time and on budget (Table 5). Architect A2 explained how he used this alternative collaboration structure as a way to object against the traditional price-based approach for commissioning a general contractor, which he considered an obstruction to innovation in the field. He argued that general contractors offer their services for the lowest price possible to acquire a project, but then have to 'squeeze out' subcontractors, which obstructs innovation and decreases the quality of the project. His alternative approach not only created a new role for the architectural firm, but it also changed the roles of other actors, such as the general contractor, who was eliminated from the process, and the subcontractors, who were given more responsibilities and were now in direct contact with the architect. The architect mentioned how this enabled them to share expertise with each other and work towards project solutions that could gradually transform the entire field of construction into a better functioning system that would allow innovation.

When do they negotiate? Potential enablers of pioneering boundaries

By pioneering role boundaries, architects wanted to take ownership of processes that, in their opinion, were not functioning well, such as the short-term, consumerism way of contemporary city development, or the price-based commissioning of constructing work. Respondents' pioneering practices were driven by the objective to have, over time, more macro-level effects for the client or other stakeholders involved. Taking on new activities and responsibilities and building alternative collaboration structures were often accompanied by a strong desire to contribute to the overall good of the built environment. Architect A7, for instance, said:

> Personally, I believe that we should always ask ourselves in every assignment: 'Am I creating a more pleasant environment, a more liveable city or better building? Or am I only working on this project because it is an assignment'?

This quote illustrates how architects tried to look beyond the temporary needs of clients by constantly questioning their own influence in each project. By reflecting on their project work, they imagined alternative practice domains and other roles for themselves and other actors. They actively engaged in other areas of service delivery in which they could make greater use of their competencies and in which these competencies would lead to additional results beyond the scope of the project.

By pioneering their role boundaries, architects also attempted to colonize new positions in projects, which, over time and project by project, could lead to an expansion of their scope of work and new definitions of the architect's role. Respondents who gave examples of pioneering boundary work—often in addition to reinstating or pioneering work in other projects—saw opportunities for architects to step off the beaten track. They argued that they could regain

control in projects and have more impact by moving beyond established professional work and adopting a different mindset. As architect A26 put it:

> Our peers are, I guess, sort of scared to be more entrepreneurial or it is a missing quality in general. I'm not sure. They often say that architects should mainly focus on design activities, but with that kind of attitude we are, in my opinion, going to lose our market position completely.

The quote illustrates how certain architects saw opportunities in taking on new roles with activities that are different from the traditional architect role (i.e. not solely focused on the design and having that technically developed and constructed well). These architects even believe that it is necessary to take on these new roles to stay in business, while they see that many of their peers are only protecting the traditional realm of design-focused activities. Realizing the objectives of creating additional stakeholder benefits and colonizing new positions in projects seemed to be enabled by a close collaboration between actors inside and outside the boundaries of the project. Actors needed to have shared goals for the project and the additional benefits they aimed for. Projects in which the goals between actors diverged proved to be extremely complicated to realize. This became, for instance, clear in the interview of architect A7 in which the architect explained how her pioneering efforts were, on the one hand, enabled by the municipality she was collaborating with, on the other hand, constrained by the property investor who eventually acquired the project and did not want to pay for the architect's role in the redevelopment of the building (Table 5). Examples of pioneering practices in the interview data show that new type of collaborative forms where needed so that actors could redefine the entire role set in a project, the interests involved, and the benefits they were aiming for.

DISCUSSION

In this article, we examined how professionals responded to threats of marginalization in the context of inter-organizational projects. Since formerly established role structures in these projects have become increasingly unstable, the traditional role offers fewer opportunities to enact one's professional expertise, influence the course of action, and claim project resources as remuneration for their services. Our analysis revealed three types of boundary work that professionals engaged in to reconcile project demands with their professional values and beliefs: reinstating, bending, and pioneering role boundaries. These types show how professionals may frame the threat of marginalization differently depending on their assumptions of what constitutes professional work and the characteristics of the inter-organizational project in which their work is embedded. *Reinstating* boundary work was adopted when professionals felt that their expertise was undervalued or challenged by other project actors, typically when working for public or semi-public clients. The practice was successful when they could offer specific expertise that was recognized as such by the client. Reinstating work was unsuccessful when clients valued other benefits over the architect's expertise, such as reducing the time spent on the realization of a project. *Bending* boundary work was adopted across different types of projects when professionals saw an opportunity to offer additional services beyond, but strongly linked to the traditional scope of tasks. The practice was successful in instances where they offered strategic and process advice based on their professional experience and less successful when they attempted to adopt a new skill set. *Pioneering* boundary work was adopted when professionals felt that they needed to change the rules of the game and take personal initiative to create opportunities rather than responding to a specific request. This practice was successful when they were able to create a direct link to the end-client and to demonstrate the added advantage of their expertise. It was unsuccessful when their initiative depended on a financial partner who approached the collaboration from a traditional perspective and was not willing to take the risks of a novel role structure. These three types of boundary practices were adopted according to the opportunities and demands of a specific project and architects combined these practices as they saw fit. Some architects combined reinstating with bending role boundaries, and several architects trialled some new activities and initiated building projects through pioneering boundary work alongside their traditional role.

We interpret these practices as 'cultural claims-making' (Spillman and Brophy 2018) with which

architects convey assumptions of moral agency as ideological justifications for responding to challenges of their jurisdiction. Similar to primary care practitioners in the medical realm who argued that they were the ones who truly cared about patients in a holistic manner in Brophy's (2015) study, the architects in our study referred to the moral impetus of their profession in safeguarding architectural quality and the true needs of their clients. In their espoused reasoning presented in the interviews, they mainly engaged in self-casting (Bucher et al. 2016): they were keen to present themselves as the true and only guardian of the 'real' client and societal needs, while altercasting (Bucher et al. 2016)—the unfavourable description of other professions—was used less. In particular in reinstating and pioneering episodes, architects portrayed themselves as mastering a professional ethos as Boussard (2018) described for financial service professionals. As Gieryn (1983) already pointed out, such forms of boundary work are always ideological efforts to enlarge or protect material and symbolic resources or to defend professional autonomy. It is remarkable that in our setting professionals sometimes pursued the symbolic resources of safeguarding their reputation as competent architects even if they were not reimbursed accordingly—a phenomenon that has been discussed as 'value slippage' (Bos-de Vos, Volker, and Wamelink 2019).

Theoretical contributions

Our study has three important contributions. First, we contribute to the literature on boundary work by professionals. By identifying three boundary work types—'reinstating', 'bending', and 'pioneering' role boundaries—in response to threats of marginalization and their respective antecedents and effects, our study presents insights on different forms of boundary work in the same professional context. We find that professionals not only engage in boundary work to maintain (Gray, Hogg, and Kennedy 2011) or change (Reay, Golden-Biddle, and Germann 2006) their practice domains, but may also adopt a flexible strategy. In some projects, professionals may compromise for more traditional roles, while in other situations they might accept alterations in their work. The different forms of boundary work not only seem to be driven by competition with other professions or occupations, but also used as a competitive strategy against members of the same profession. The uncertainties and challenges to traditional role structures that inter-organizational project settings can create helped to surface insights that may be less pronounced in more stable work settings. While reinstating and pioneering practices were aimed at clearer demarcations of their professional role and to (re)gain professional autonomy, bending practices aimed for fewer jurisdictional divisions and more flexible role boundaries between professions to meet project demands. Our findings on pioneering practices through which professionals tried to reconstruct their professional role show that role change is not necessarily orchestrated by others (Reay et al. 2017) and enabled or constrained by the institutional environment (Greenwood, Suddaby, and Hinings 2002; Chreim, Williams, and Hinings 2007; Goodrick and Reay 2010): professionals can also attempt to follow their own routes regardless of the contextual conditions in which their work is embedded.

Second, we contribute to the literature on professional collaboration in inter-organizational projects (Jones and Lichtenstein 2008). Research in this area has mainly investigated how stability is created and maintained across projects by means of established role structures (Bechky 2006; Van Marrewijk et al. 2016). In these studies, role negotiations took place in a specific stabilized structural context. Our study shows that structural contexts can be more dynamic and may be shaped and redefined through boundary work of professionals. We found that when architects' roles were contested, architects sometimes also opposed the positions of other actors in the inter-organizational project. This happened typically when architects tried to reinstate role boundaries. When architects tried to restore their traditional claimed activities and responsibilities, they contested the expertise of others and demonstrated their value to clients to realize a successful project. As examples of 'demonstrating professional expertise' show, successful projects provided professionals with enhanced opportunities to negotiate their traditional role in a new project. This suggests that continuing reinstating practices to create successful projects could gradually improve architects' marginalized positions in projects. It could thus be argued that reinstating practices in projects reinforce future reinstating

attempts and may eventually enable professionals to reclaim the clearly demarcated traditional role in projects. Bending practices of 'reframing activities' show how architects tried to adapt their professional role to what was necessary in each particular project. This may lead to the development of additional expertise although our findings show that bending practices were more successful when they formed an extension of architects' existing knowledge. Pioneering practices aimed at redrawing the role boundaries between professions and had the greatest potential for radical change and transforming the overall role structure.

Our third contribution concerns the literature on professions and the ongoing debate on changing professionalism (Goodrick and Reay 2010; Noordegraaf 2015; Reay et al. 2017) by focusing on professional work in inter-organizational collaborations. We show how contextual changes challenge established roles and trigger different forms of boundary work—and thereby contribute to the evolution of professions. When negotiating boundaries of their jurisdiction in inter-organizational settings, professionals may alternate between maintaining their traditional role through reinstating professional boundaries, enabling incremental role change by bending role boundaries, or fuelling radical role change by pioneering role boundaries. Threats of marginalization seem to heighten already existing distinctions between professionals, including aspirations for different directions of professional evolution. Our findings demonstrate that such diversification, which so far has been found in neo-professions that operate in entrepreneurial spaces (Reihlen and Werr 2012), can also occur in established professions and may lead to them becoming more diverse and fragmented (Saks 2015).

Limitations and directions for future research

Our study has several boundary conditions and limitations that could be addressed in future research. First, we conducted a retrospective interview study covering a diverse range of inter-organizational projects and analysed boundary work from the perspective of one profession. This enabled us to generate a comprehensive overview of the current developments in our setting and we believe that the insights on antecedents and effects of boundary work are relevant for other dynamic settings. Yet, these dynamics warrant further exploration.

Rather than reconstructing the dynamics of boundary work, a longitudinal approach could investigate how professionals engage in boundary work in an inter-organizational project on a day-to-day basis (see Lieftink, Smits, Lauche, 2018). In adopting a process approach (Langley 1999), research could further examine how these boundary strategies play out over time (Covaleski, Dirsmith, and Rittenberg 2003), but also 'zoom out' and analyse if these diverse responses lead to a redefinition of the profession in the long run. Such an approach could further explore how the nature of integrated projects affects the knowledge asymmetry between professions, how these dynamics might enable or constrain actors in their role negotiations, and how these negotiations in turn may influence the inter-organizational project. As some of our quotes suggest, power dynamics can play an important role in whether actors engage in negotiating their roles and how successful these attempts are. As other studies in other professions have shown, power dynamics between different groups of actors are likely to affect how change is negotiated (Pas, Wolters, Lauche forthcoming). Future research could investigate more explicitly how power dynamics affect role negotiation in dynamic settings.

Second, our findings indicate that members of the same profession may engage in different types of boundary work in the same setting, yet we cannot make direct claims about the other professions involved in these projects. We therefore strongly encourage research that explores the negotiation of professional roles in other professional fields, and research that addresses the potential for inter-profession differentiation. We would also like to encourage further scholarly inquiry into boundary work within the same profession. As implied by several quotes, the three types of boundary work can also be used for positioning oneself against members of the same profession.

By examining the boundary practices of architects, our study also has significant practical implications. By showing the bigger picture of negotiating professional work in inter-organizational settings, our study helps practitioners to deal with marginalized roles in inter-organizational projects that are characterized by different dynamics. The strong distinction between the three types of boundary work suggests that to claim or reclaim aspired roles in inter-organizational

projects, professionals need to be more aware of what they aim for, why they consider that important, and whether the characteristics of the particular inter-organizational project could potentially be supportive, to find the most suitable approach for pursuing their aims. Our findings provide an overview of strategies and underlying mechanisms that professionals could use to take charge of their own future. By highlighting when certain strategies may be more or less effective, our study facilitates professionals in being sensitive to the characteristics of the project context to respond to threats of marginalization in an appropriate manner and provides them with better insights to determine whether they wish to engage in a certain project or not.

ACKNOWLEDGEMENTS

This study is part of future, a research project on new governance and business models for architectural services (www.future-architect.nl). We gratefully acknowledge the help of Armand Smits, Leentje Volker, and Hans Wamelink in the development of this article. We also thank the interviewees for participating in this study; both their time and their enthusiasm were greatly appreciated. We thank the Netherlands Organisation for Scientific Research (NWO) and our consortium partners for funding and supporting the project. Finally, we wish to express our gratitude to *JPO* editor Dr Elizabeth Goodrick for her excellent and meticulous guidance in developing this article and the three anonymous *JPO* reviewers for their valuable comments and suggestions.

FUNDING

This work was supported by the Netherlands Organisation for Scientific Research (NWO) [314-99-114] and a consortium of industry partners.

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