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AT THE TEMPORARY-PERMANENT INTERFACE: OVERCOMING KNOWLEDGE BOUNDARIES WITH BOUNDARY OBJECTS

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Abstract

There is no shortage of literature on managing complex projects. However, we lack an understanding of projects in which the complexity goes beyond technical, financial and time-related challenges. We report on two Nordic business school accreditation projects, where the major management challenge is the knowledge boundaries institutionalized deep into the ethos of the schools. We focus on the project team's use of boundary objects – a communication device across social groups – to expose and overcome knowledge boundaries materializing at temporary-permanent interface. We identify three progressively more challenging boundary object uses: informative, interactive and integrative. Consequently, we suggest a dynamic approach to boundary objects wherein their use evolves throughout the project life span as a consequence of the lived "in situ" experiences.

Keywords: accreditation, business school, project, university, boundary object, knowledge boundary, temporary organization, temporary-permanent interface

"No project is an island." (Engwall, 2003: 789)

1. INTRODUCTION

In this study, we focus on the interaction and knowledge exchange that occurs between the temporary project team and the permanent organization (van Berkel, Ferguson & Groenewegen, 2016; Burke & Morley, 2016). More specifically, we are interested in the temporary-permanent interface in *renewal projects* defined as a temporary process set to improve permanent organizations (e.g., Lundin & Midler, 2012; Vaagaasar & Andersen, 2007). Renewal projects are particularly common in the context of quality assurance processes in organizations. In the previous literature, renewal projects that have been discussed comprise, for instance, business process re-engineering (BPR), total quality management (TQM) and quality certification (Packendorff, 2002).

Boundary object is a sociocognitive concept intrinsically related to interaction and knowledge exchange at the temporary-permanent interface. The "interface" refers to the "point where two systems, subjects, organizations, etc. meet and interact" (Stevenson, 2010: 911). Defined as "an object that lives in multiple social worlds and which has different identities in each" (Star & Griesemer, 1989: 409), boundary objects offer promise in facilitating the management of projects with multiple stakeholders (e.g., Barrett & Oborn, 2010; Tukiainen & Granqvist; 2016; Yakura, 2002). Boundary objects can bridge different social worlds in which there is cooperation but not consensus (e.g., Bechky, 2003; Carlile, 2004; Star, 2010).

In the project literature, several types of boundary objects have been scrutinized, including project contracts (Koskinen & Mäkinen, 2009), project master schedules (Chang, Hatcher & Kim, 2013), project management tools (Barrett & Oborn, 2010; Sapsed & Salter, 2004), internet portals (Ruuska & Teigland, 2009), and technology (Kertcher & Coslor, 2018). What is less

known, however, is the use of boundary objects in projects where the main management challenge goes beyond the "iron triangle" of scope, cost and time (Atkinson, 1999). We refer specifically to projects that encompass a more complex stratum to be managed encompassing institutionalized knowledge boundaries and related politicking and power games (Ojansivu & Alajoutsijärvi, 2015; Söderlund, 2013).

Surprisingly, in the contemporary project management literature (for exception see Dille & Söderlund, 2011; Engwall, 2003; Jensen, Johansson & Löfström, 2006), very limited attention has been paid to the political and institutional context of projects and, in particular, to implementing projects in highly institutionalized organizations (Meyer & Rowan, 1977). As highlighted by Tukiainen and Granqvist (2016: 1821), "Only a few studies portray projects as intrinsically embedded in their institutional contexts, where project actors constantly shape and are shaped by institutions". Thus, we ask the following question: *How do project teams use boundary objects to overcome institutionalized knowledge boundaries in organizations?*

To answer this research question, we study the temporary-permanent interface in Nordic business schools. These academic expert organizations are characterized by discipline-based departmental structures and related knowledge silos and boundaries (e.g., Hatchuel & Weil, 2011; Parker, 2018; Simon, 1967). More specifically, we study and compare two international accreditation projects in Nordic business schools that were not previously accredited. During this self-ethnographic study, both schools achieved accreditation over the course of approximately 5 years of organizational renewal. This process was kept in motion by temporary project teams. The members of these teams had coexisting roles in the permanent organizations, making the interface rather fluid and dynamic and hence revelatory for the study.

The paper proceeds as follows: We start by conceptualizing the role and properties of boundary objects in renewal projects (chapter 2). Then, we discuss the types of institutionalized

knowledge boundaries in academic expert organizations and how these boundaries can be exposed and overcome in renewal projects (chapter 3). After that, we describe the research methodology (chapter 3) and present the two accreditation project cases (chapters 4 and 5). Finally, the paper draws together the main findings (chapter 6) and ends with a discussion and conclusions section (chapter 7), where the implications of our study for renewal projects are discussed and future research avenues are presented.

2. THE ROLE OF BOUNDARY OBJECTS IN RENEWAL PROJECTS

Boundary objects can be almost anything that helps people from different social worlds build a shared understanding (Star & Griesemer, 1989). To be considered a boundary object, an entity must be relatively stable (Ewenstein & Whyte, 2009), robust yet plastic (Star & Griesemer, 1989), shared across boundaries (Carlile, 2002) and recognizable (Nicolini, Mengis & Swan, 2012). When these conditions are met, boundary objects can link different groups together to collaborate on a common task (Star & Griesemer, 1989), while they are used to different ends by each group (Spee & Jarzabkowski, 2009). Boundary objects can function as a communication device by providing an artifact that interacts with members of various social groups (Henderson, 1991).

In this study, we define boundary objects as tools that may enable (or constrain; regarding boundary roadblocks, see Carlile 2002) exposing and crossing institutionalized knowledge boundaries in organizations (Spee & Jarzabkowski, 2009). When knowledge boundaries have become "institutionalized", they are a taken-for-granted aspect of the organization no longer questioned or reflected upon by its members (e.g., Ojansivu & Hermes, 2019; Tolbert & Zucker, 1999). Surfacing these "hidden" ingrained aspects of an organization becomes paramount for project teams tasked with their renewal. Boundary objects may offer ways to accomplish that by enabling the sharing and integration of information about the imaginable futures of an

organization, thereby creating urgency for its renewal (Granqvist & Gustafsson, 2016).

In renewal projects, many team members will perform "dual" roles and maintain a permanent position while simultaneously committing to a project (Packendorff, 2002). This embeddedness of the project team in the permanent organization continues to be one of the most enduring challenges in project management (e.g., Bakker, DeFillippi, Schwab & Sydow, 2016; Burke & Morley, 2016). As Bakker (2010: 481) aptly points out, a neglected issue in project management concerns "the (potentially conflicting) loyalties of project participants towards the project versus their ongoing activities in the enduring context". Self-reflection is essential, as those with dual roles may be indoctrinated into the knowledge boundaries and are therefore both part of the problem and the solution. Indeed, renewal projects place teams in historically contingent organizations in which the institutional prescriptions (Meyer & Rowan, 1977) of appropriate behavior and common practices have resulted from long socialization processes (Durkheim, 1956). Thus, project teams must make sense of longstanding normative and cognitive templates (D'Aunno, Sutton & Price, 1991; Lounsbury, 2001; Pache & Santos, 2010) within the prevailing culture of the permanent organization.

Our aim is to understand the activity and boundary object use performed by project teams. This "doing" includes actively self-reflecting, reading, interpreting and decoding culturally and socially loaded aspects of knowledge boundaries within organizations and actors. This is necessarily a shared activity (Emirbayer & Mische, 1998; Meyer & Jepperson, 2000) occurring at the temporary-permanent interface in the interactions between the project team and the permanent organization (Anell & Wilson, 2002). Indeed, a "mindset shift" (Kertcher & Coslor, 2018) or a "cognitive shift" (Engwall & Westling, 2004) among project stakeholders is required to stabilize boundary objects and to transition from divergence to convergence in projects. No project is an island, and neither are the actors involved (Engwall, 2003).

3. OVERCOMING INSTITUTIONALIZED KNOWLEDGE BOUNDARIES IN ACADEMIC EXPERT ORGANIZATIONS

Organizational features of business school accreditation projects

We focus on one specific type of renewal project that has recently come under academic scrutiny: *business school accreditations* (Alajoutsijärvi, Kettunen & Sohlo 2018; Teelken, 2012; Tourish, Craig & Amernic, 2017). Business schools are types of knowledge-based expert organizations (Hatchuel & Weil, 2011), where members with legitimate scholarly expertise in business and economic disciplines[1] are rewarded by positions of status and power. Business school accreditations (primarily AACSB and EQUIS[2]) import external standards as "recipes of success" (Sahlin-Andersson, 1996) to improve the performance and to certify the quality of a school. For this purpose, business schools launch temporary organizations *within* permanent organizations (Burke & Morley, 2016; Shenhar, 2001).

Thus, the team led by an accreditation project manager (or equivalent) employs academics and administrative staff for the duration of the project. Accreditation project managers can be hired internally or contracted outside the mother university as "consultants". Teams can have various configurations and encompass representatives from multiple business disciplines, just one discipline, or no disciplines, as in administratively led endeavors (Lejeune & Vas, 2014). Some team members may have stand-alone roles, such as the accreditation project manager, but most members will have their time divided between multiple roles.

We define project stakeholders as members of a permanent organization who are not part of the project team either through direct project management responsibilities or through dual roles. In

[1] Accounting, finance, entrepreneurship, international business, management and marketing are generally considered the "core" business disciplines. In Nordic countries, economics is also included in the disciplinary repertoires of many business schools.

[2] AACSB – Association to Advance Collegiate Schools of Business (based in the US); EQUIS – European Quality Improvement System (accreditation by the EFMD – European Foundation for Management Development).

principle, stakeholders may be “any identifiable group or individual on which the organization is dependent for its continued survival” (Freeman & Reed, 1983: 91). In our project context, the stakeholders who most frequently and actively interact with the project team are those with leadership roles (e.g., professors, heads of departments and administrative units) in their disciplines and departments. In the Nordic higher education field, professors are the most prestigious and highest ranked positions enjoying a high amount of independence, trust and intellectual freedom in their respective organizations (Juusola, Kettunen & Alajoutsijärvi, 2015; Alvesson & Spicer, 2016; Huzzard, Benner & Kärreman, 2017). The project team needs to seek convergence with these project stakeholders to navigate the project towards its goal, as illustrated by the overlap between the circles in Figure 1.

Insert Figure 1 about here

Notably, in a business school accreditation project, the distinction of the permanent-temporary interface is sometimes fuzzy, as project team members are rarely complete outsiders or entirely removed from their permanent disciplinary roles (e.g., department managers, professors, department heads, deans) and professional identities (Becher, 1989). This creates social and organizational path dependencies (Sydow, Schreyögg, & Koch, 2009) that complicate the work of the project teams. These path dependencies can be expected to become manifested in the power balance, social distance and trust between the team and the permanent organization, as well in the team’s mandate to act freely irrespective of professoriate approval. To understand these subtle sediments of institutional prescriptions (Meyer & Rowan, 1977), one needs to understand university as a historically contingent organization. The path to earning one’s academic reputation and expertise involves a lengthy process of indoctrination during which new members (doctoral students and early-career scholars) become socialized into the disciplines as they grow into accept their rules and norms (Becher & Trowler, 2001). The key

elements of a disciplinary culture are the "traditions, customs and practices, transmitted knowledge, beliefs, morals and rules of conduct, as well as their linguistic and symbolic forms of communication and the meanings they share" (Becher, 1989).

Knowledge boundaries in business school accreditations

Within academic institutions, organizational structures tend to follow disciplinary boundaries, thus perpetuating the division between the different cultures. Academic departments are typically organized around disciplines or groups of closely related disciplines. The resource allocation follows these structures and puts different departments (and the disciplines within them) in a competitive position against each other. Instead of collaborating, departments are incentivized to compete for money and prestige, and they make decisions independently (Simon, 1967; Parker, 2018). Furthermore, the division between administrators and faculty members in contemporary universities has widened, demarcating an "administrative" silo of its own, with a distinctive culture of knowledge and logic of operating (Ginsberg, 2011). As a result, three types of knowledge boundaries materialize (Carlile, 2004, 2002; Shannon & Weaver, 1949): syntactic, semantic and pragmatic.

A syntactic boundary refers to information processing and the transfer of knowledge between a project team and project stakeholders. For participants to overcome a syntactic boundary, there needs to be a sufficient "common lexicon" (Carlile, 2004: 560) to move knowledge across the boundary. An accreditation project requires specific knowledge about the accrediting organization, its standards and the key deliverables. Most academics are unfamiliar with accreditation, which can cause a "novice-expert" gap (Hinds, 1999) between the team and the faculty. Thus, a simple transfer of knowledge between the project team and the project stakeholders could be problematic (see Brown & Eisenhard, 1995).

A semantic boundary relates to interpreting and translating knowledge to resolve divergences

in meaning (Nonaka, 1994). This boundary can be expected to be important in academic organizations prone to disciplinary silos (Becher, 1989). In a business school setting, marketing faculty, for instance, may view the school's accreditation endeavor as an attempt to improve the institution's brand image, whereas HR scholars might emphasize the recruitment opportunities gained through accreditation. Operations scholars, on the other hand, may scrutinize the rigorousness of the accreditation process rather than its outcome. To overcome a semantic boundary, "common meanings" (Carlile, 2004: 560) across the knowledge boundaries are necessary. Thus, project teams need contextual understanding (e.g., Engwall, 2003; Jensen, Johansson & Löfström, 2006; Maaninen-Olsson & Müllern, 2009) to interpret and encode the meanings attached to the project by the discipline-based business school departments.

Finally, a pragmatic boundary has to do with altering knowledge to cater to the interests of the various stakeholders and their political gripes (Carlile, 2002; Clegg & Courpasson, 2004). Regarding this boundary, the challenges relate to the knowledge dependencies between the project team and the various project stakeholders. Therefore, project team members should generate "common interests" (Carlile, 2004: 560) among the project stakeholders. Given the one-off nature of an accreditation project, it is a novel situation requiring cross departmental collaboration and knowledge sharing (Weick, Sutcliffe & Obstfeld, 1999). Project success is dependent on stakeholder engagement because different standards require different amounts and kinds of faculty input. Furthermore, the team requires discipline-specific knowledge to produce the necessary deliverables, such as the self-evaluation report (SER), the school's mission statement and assurance of learning criteria (AACSB, 2020). Therefore, the dependencies between the team and the permanent organization are inevitable, and the process is prone to politicizing because when "making one's knowledge explicit, different interests are often revealed that create barriers to developing shared meanings" (Carlile, 2004: 559).

Boundary object use and the social stratum of business schools

Tenured professors and those aspiring to become such are known to be loyal primarily to their academic disciplines and endorse knowledge boundaries to protect their expertise, leading to disciplinary silos (Becher, 1989). Due to historical and political reasons, these knowledge boundaries (silos) are institutionalized deep into the ethos and modus operandi of universities and their schools and departments (e.g., Alajoutsijärvi, Kettunen & Tikkanen, 2012; Deem & Brehony, 2005; Teelken, 2015; Winter & O'Donohue, 2012). Disciplinary silos (Tett, 2015), or tribes as Becher (1989) refers them to, are defined by their own identity and culture, which are protected against those of other disciplines. The crux for the project teams is to expose the knowledge boundaries and their key challenges and then create boundary object solutions to overcome those challenges.

We consider the AACSB accreditation standard framework as the all-encompassing boundary object used in the project. These standards (15 in total[3]) and their related instructions, manuals, examples and practical applications are the "plasticine" negotiated at the temporary-permanent interface between the project team and project stakeholders until its "shape" meets university, faculty, department, discipline and individual interests. The outcome, prestigious quality label, is the "lure" of the imaginable organizational future. The AACSB accreditation standard framework is a rather rigid boundary object. However, AACSB allows schools in different countries to adapt the standards locally to their missions and national contexts. Hence, the teams are the key gatekeepers and orchestrators of local adaptation equipped with the "plasticity" of boundary objects (Star & Griesemer, 1989).

The success of any accreditation endeavor is highly dependent on the business school faculty's knowledge and engagement in the project (AACSB, 2020), as Nordic accreditation project

[3] Over the past ten years, AACSB standards have been revised as follows: Since 2008 there have been 21 standards. In 2013, the number of standards was revised into 15. The latest revision to 9 standards was made in 2020. The core content of standards, however, has remained the same throughout the different revisions.

managers cannot "force" the faculty members of their institutions to educate themselves or participate in the project. Instead, they need to use other, more subtle and dialogic means to interact with the various disciplines and to overcome their longstanding and often political grievances to obtain collaboration and coherence (Alvesson & Spicer, 2016; Alajoutsijärvi & Kettunen, 2016; Huzzard, Benner & Kärreman, 2017). Therefore, the way in which projects teams use boundary objects during the one-off process of accreditation becomes pertinent. In the following, we proceed to our empirical study.

4. RESEARCH METHODOLOGY

Research setting

During the past decade, the number of AACSB-accredited institutions in Nordic countries has increased steadily, reaching the point where the majority of university-based business schools in Denmark, Finland, Norway and Sweden are either accredited or accreditation-seeking members of this significant US-based accreditation agency (Table 1). Thus, accreditation projects have become a topical management issue in recent years (Alajoutsijärvi et al., 2018; Tourish, Craig & Amernic, 2017). For many academics, it represents their first experience in organization-wide renewal and, therefore, a memorable topic they can reflect on and relate to.

Insert Table 1 about here

Our research was conducted in two business schools in a Nordic country. The comparative research setting of two business schools was chosen, as the two institutions in question, labelled here as Newcomer Business School (BSN) and Status Business School (BSS), represented in many ways very different schools but were known to be successful in their accreditation endeavors (with the former being accredited in 2013 and latter in 2019). The primary differences between the two schools were their size (small vs. large), age (young vs. old),

location (peripheral vs. central), heritage (established within a large multidisciplinary university vs. originally a stand-alone institution and later merged into a large multidisciplinary university), and organizational position in the state-funded and state-regulated national higher education field (low vs. high status). Due to these characteristics, BSN and BSS provided us with an interesting starting point for comparing the use of boundary objects when navigating AACSB accreditation projects in their respective permanent organizations (Cunningham, 1997; Eisenhardt, 1989).

Research design

The methodological choices made in this study are guided by the objective of studying how project teams use boundary objects to overcome knowledge boundaries in organizations. First, we argue that the use of boundary objects to expose and overcome knowledge boundaries is not a one-off event but occurs through a longer and often ambiguous negotiation process (Kreiner, 1995; Packendorff, Crevani & Lindgren, 2014). Therefore, we argue that to meet our research objective, a process view of projects is necessary (Bakker et al., 2016; Söderlund, 2013; Langley, 1999; Langley et al., 2013).

A process is defined as "a sequence of individual and collective events, actions, and activities unfolding over time in a context" (Pettigrew, 1997: 338). In this sense, accreditation projects are in a "state of flux" for their entire life span, which typically stretches to 5-6 years and includes three broad phases (AACSB, 2020). These phases are (1) eligibility preparation (preparing and applying for accreditation), (2) self-evaluation (writing a 100-page SER in relation to the standards), and (3) peer review (an onsite visit to a business school, based on which the accreditation decision is made by the AACSB).

Second, to study individuals, groups or events in their natural settings, ethnographies offer a group of useful qualitative research strategies from which to choose (Tetnowski & Damico,

2014). Whereas a traditional ethnographer is an outsider whose fundamental job as a researcher is to "break in" the studied context and phenomenon, self-ethnography represents a more recent research approach where the researcher studies his/her own group (Eriksson, 2010). Originating in anthropology, traditional ethnographic studies emphasize fieldwork that is documented by the researcher while in the field. Self-ethnographical research, on the other hand, allows more versatile data collection methods and access points over extended periods of time. While an insider in a group being studied, the researcher has the opportunity to use data such as memories, documents about him/herself, official records, interviews with others and self-reflective and self-observational memos (Chang, 2013: 108). For this reason, self-ethnographical research has proven to be particularly appropriate for the study of higher education institutions (Anderson & Glass-Coffin, 2013; Willmott, 2003; Boud et al., 2006; Di Domenico & Philips, 2009; Bryman & Lilley, 2009).

Furthermore, the self-ethnographical approach allows engagement with the studied phenomenon in its natural environment (Brannick & Coghlan, 2007), but it forces the researcher to accept his/her own role and interdependencies in the process. Indeed, self-ethnography means "breaking out" of a group that we are part of to provide a viewpoint to groups and organizations from within (Alvesson, 2003; Eriksson, 2010). The aim of self-ethnography is to turn oneself towards the people and organizations whom we know and to study what others do and say and what this means.

From the social science perspective, the purpose of self-ethnography is to expand "the understanding of social realities through the lens of the researcher's personal experiences" (Chang, 2013: 108). In this study, the use of boundary objects occurs through a sequence of interactions between temporary and permanent organizations in the course of the accreditation project. Therefore, the self-ethnographic research strategy is appropriate: Recognizing boundaries and interpreting their meaning in the given organizational context require an insider

approach.

Data collection

It is typical in self-ethnographic research that data collection and analysis occur interchangeably. As astutely described by Chang (2013: 108), fieldwork takes place in "offices or homes, archival libraries, their significant others' places, interviewees' locations, and other locations pertaining to studies: anywhere where they [researcher] can create encounters and re-encounters with their memories, with objects, and with people". Ultimately, the focus of research determines how different types of data are collected, used and conceptualized (Anderson & Glass-Coffin, 2013; Chang, 2013).

Following a self-ethnographic approach and processual case research method, the researchers' role in this study was to act as observing participants who were administrators and faculty members *in situ* and to retrospectively integrate their observations in a research-oriented sense (Alvesson, 2003). More specifically, the responsibilities and participation of the authors varied from participation in the organizational renewal work in the role of a faculty member (author A) to hands-on administration of the accreditation project (author B) and the leadership of the school (author C).

Regarding BSN, authors B and C were members of the accreditation project team, while author A was a faculty member with a significant role in the accreditation and was therefore working closely with the team. Authors B and C kept their faculty roles for the duration of the project, thus playing "dual" roles. Regarding BSS, author B was the accreditation project manager of the school, focusing primarily on the project without a permanent faculty role. Authors A and C did not have a role in BSS, but they were actively following the project developments and discussing the progress of the project with author B. In addition, due to their central roles in the accreditation teams at BSN and BSS, authors B and C participated in numerous AACSB

conferences and seminars (~15 conferences and seminars between 2008 and 2018) and extended their knowledge on accreditations through consulting assignments and part-time/visiting faculty appointments outside the studied country and the two institutions.

Hence, the research data were collected longitudinally in the course of the two accreditation processes. Tables 2 and 3 specify the data sources used in the study, which fall under three main categories: (1) accreditation applications and formal correspondence with the accreditation organization, (2) schools' internal accreditation documentation and correspondence, and (3) interviews and participatory observation. Notably, regarding the latter, the interviews in our self-ethnographic research were conducted as unstructured discussions with our accreditation team members, colleagues and coworkers *in situ.* The insights collected from these discussions were used to complement and contrast our reading of the scenes for social interaction (Alvesson, 2003) that was gained through participatory observation. In addition, to understand the wider university and business school context of the studied phenomenon, we used our business schools' annual reports and histories, statistical material, and the accreditation organizations' webpages as sources of secondary background data.

Insert Table 2 about here

Insert Table 3 about here

Data analysis

As is typical in self-ethnographical research, our data analysis was conducted retrospectively, but it followed an iterative reflection: The cases informed our search for relevant theories that enabled us to specify and contextualize the cases (Siggelkow, 2007). We analyzed our empirical data from the two accreditation project cases following an inductive approach to content

analysis (Glaser & Strauss, 1967; Lincoln & Guba, 1985; Strauss & Corbin, 1998). The summary of this analysis is presented in Figures 2 and 3.

Insert Figure 2 about here

Insert Figure 3 about here

First, we identified the features of both the permanent and temporary organizations and the features that illustrated their mutual interaction (temporary-permanent interface). Second, informed by the syntactic, semantic and pragmatic knowledge boundaries suggested originally by Shannon and Weaver (1949) and popularized later by Carlile (2004, 2002), we identified three types of knowledge boundary challenges. We opted for this conceptualization as it allowed a comprehensive analysis of boundary object use across knowledge boundaries. Further, it complements our focus on "action" as it caters to project teams "doing" knowledge boundaries (exposing, overcoming) rather than theorizing about static boundary qualities. Subsequently, we identified three aggregated boundary object solutions that the project teams applied to overcome the identified knowledge boundary challenges. We use "power quotes" derived from our field notes to illustrate these solutions in action (Pratt, 2009).

Finally, we constructed the two case accreditation project narratives that illustrate the kinds of knowledge boundaries that existed and the types of boundary object solutions that were implemented by the project teams to overcome these challenges. These comprised three overarching boundary object uses: informative, interactive and integrative. As is typical of a self-ethnography, we retrospectively wrote about our epiphanies and recalled and reflected on significant moments, which being an established part of the organization made possible (Ellis, Adams & Bochner, 2011). While doing so, our aim was to provide thick descriptions of interpersonal experience by identifying patterns in the cultural fabric verified by field notes and

other artifacts and then elucidating these patterns in a narrative with authorial voice (Ellis, Adams & Bochner, 2011). Next, we present the case narratives. At the beginning of each narrative, we briefly describe the background of the institution and the circumstances under which the accreditation project was inaugurated and presented to the permanent organization. Subsequently, through representative examples from the two accreditation project cases, we describe how different types of knowledge boundaries (syntactic, semantic and pragmatic) with specific knowledge challenges (lexicon, meanings and interests) materialized at the temporary-permanent interface. Furthermore, we describe how the project teams progressively adapted the use of boundary objects as the projects moved towards their ultimate objective of gaining accreditation.

5. STUDYING BOUNDARY OBJECT USE IN TWO ACCREDITATION PROJECTS FROM WITHIN

Accreditation project of the Newcomer Business School (BSN)

BSN is a small school with a relatively short history as a degree-granting institution. While initially a business department within the school of engineering at its mother university (hereafter UniN), for the past fifteen years, BSN has existed as a school of its own, with a relatively high level of autonomy in terms of organizing its activities, recruiting faculty, and admitting students. Despite its rapid growth into a full-fledged business school, due to its short history, BSN was generally considered a newcomer both in the national business school field and among the larger STEM[4] schools of the UniN. Within BSN, this position was considered problematic, as it put the school on a poor trajectory in intra-university resource allocation.

The accreditation team of BSN was set up in 2009 and included both administrative staff and representatives of the marketing department. While the dean himself took the role of figurehead

[4] Science, technology, engineering and mathematics.

in the project, his accreditation project manager was also an active and influential quality director with a long employment history at BSN. The participation of the group from the marketing department largely stemmed from the dean of the business school at the time being a marketing professor with respect and authority, which were based not only on his leadership position but also on his academic merit.

Informative project boundary object use

The first challenge encountered by the team had to do with the syntactic boundary (Carlile, 2004, 2002). Some faculty members perceived the accreditation endeavor as a utopian goal for a small school with peripheral location and low status in the national "pecking order". This low self-esteem hindered any fledgling enthusiasm towards the project. The team needed to convince the faculty that this ambitious endeavor was indeed within their reach. Unfortunately, BSN was no exception to the rule that in academic organizations, departmental-level messaging and information sharing tend to take priority over "often too generic" school- and university-level announcements such as the accreditation project.

First, it is generally difficult to make individual faculty members interested in and take action on collective matters (for instance, to open and read emails and intranet news and to participate in joint events), as the time invested in these information sharing efforts is never compensated with a reduced work load in teaching and research, on which faculty performance evaluation is ultimately based. Second, department heads, who are in control of money and responsible for performance, are painfully aware of this fact, and they are likely to yield a reserved response to any additional, potentially time- and resource-consuming "projects" on behalf of the central administration. Therefore, the project team needed to create a strong endogenous motivation for the faculty to assimilate accreditation-related information (Kerr, 1963; Marginson, 2010). Insightfully, the team used the "plasticity" (Star & Griesemer, 1989) of the accreditation

framework when applying it locally. The team crafted the accreditation documents (memos and PPT presentations) for business school events to create a common language and to educate the various stakeholders about the project. The team portrayed the AACSB accreditation as "such a big fish that it is worth fishing even though one might not be able to catch it". This built confidence in the project across various disciplines, and it became recognized as the highest priority in the organizational agenda.

Interactive project boundary object use

After the project team had held numerous events and increased information sharing about the accreditation, the team needed to make sure the knowledge perceptions about the accreditation were consistent across disciplinary boundaries. Indeed, in an accreditation steering group SWOT analysis of BSN, two weaknesses were highlighted:

1. Strong divides between disciplines, internally dividing the business school into silos and cliques.
2. Lack of independence from the mother university means that the mother university can dictate decisions about the future of the business school. (Source: internal meeting memo, 21.2.2010)

These issues were pertinent to the semantic knowledge boundary and the meanings held about accreditation across disciplines. The team needed to increase mutual understanding through interaction and thus make tacit knowledge explicit (Carlile, 2004; Shannon & Weaver, 1949). Indeed, some of the discipline-based department heads remained skeptical about accreditation and continued to consider it as an unrealistic and risky endeavor that could consume the already scarce faculty resources and lead into a bitter aftermath. Others felt that participation in collective matters such as the accreditation project was expected but not rewarded. The team needed to understand what terms the various stakeholders would change their knowledge perceptions for the accomplishment of the project. As a longstanding professor at the school, the dean had an insight into the kind of "accreditation talk" that would resonate with the

faculty's concerns and aspirations.

In the internal communications of the school, the project team decided to articulate the accreditation as a "status-climbing" project. This created a common meaning across the otherwise aversive disciplines of accounting, marketing, economics, management and finance. A climb in status was a goal that was tangible and explicit enough for the majority of the disciplines to share and agree upon so that project progress was not hampered by departmental-level divides or misunderstandings. Indeed, faculty welcomed the opportunity for increased nationwide recognition and were therefore willing to cooperate on the accreditation project, even though they would struggle to find consensus on arbitrary everyday matters (e.g., Bechky, 2003; Carlile, 2004; Star, 2010).

The team made it very explicit that the benefits of the accreditation would trickle down and turn into individually experienced status gains for project stakeholders; for example, the competitiveness of BSN faculty and students in job markets would improve. Using the accreditation in terms of status climbing streamlined the perceptions about accreditation across the faculty, students and other staff members. In a seminar speech to various business school stakeholders, the dean of BSN explained the benefits that BSN would experience if it became part of the club of accredited institutions:

> "The purpose of accreditation is to raise the status of the business school and the students graduating from these institutions compared to business schools without accreditation. Accreditation creates an inner circle for student and faculty exchange with other accredited business schools". (Source: dean speech 8.2.2010)

Integrative project boundary object use

While the status-climbing strategy of the BSN accreditation team was relatively easily accepted by the different departments and disciplines within the school, the pragmatic boundary and creating common interests with UniN was a less straightforward process. BSN was ambitiously

changing its role and identity within UniN from a small business studies department to an accreditation-aspiring business school. As a response to the growing status aspirations of the business school, the interface between the project team and other schools and units within UniN became electrified by territorial rivalry and resource competition.

While the accreditation endeavor of the business school was formally supported by UniN, its awareness of the AACSB requirements was poor. Furthermore, it became evident for the project team that UniN was not prepared to make changes to its structure to support the accreditation. This lack of preparation was manifested at the very beginning of the project, when the organizational structure (i.e., organization chart) of BSN needed to be visualized. Defining an entity for AACSB accreditation requires listing all of the programs that would be included in the accreditation review. The rationale behind this stems from the mission-driven logic of the scheme: To accomplish the stated mission, the accredited entity should have sufficient control over the included programs, their quality, and their programmatic learning goals.

At UniN, all business programs at the time were organized by BSN, except for the postgraduate leadership program (LEAP). This was a centralized program under the leadership of UniN's rector and managed by UniN's School of Professional and Continuing Education (SPACE). In view of the AACSB's standards, this situation was problematic and a major obstacle for project accomplishment. UniN had its own vested interests in the LEAP program and the people whom the SPACE employed, carefully tucked away from the public. The LEAP program was the main revenue source for the SPACE, and it was utilized to fund other professional and continuing education programs. Relocating the LEAP program to the business school would change UniN's operational structure and jeopardize the future legitimacy and profitability of the SPACE. Thus, negotiations between the project team and the SPACE turned into a lengthy battle that had a political undertone.

The first attempt to relocate the LEAP program under the business school involved private negotiations with the project team, the director of the SPACE and LEAP program managers. To keep track of the negotiations that eventually dragged on for several meetings, an internal accreditation memo was created and updated in an attempt to document the meandering discussion and argument. Surprisingly, this memo nearly caused a boundary roadblock, as it created more problems than solutions (Carlile, 2002). One of the accusations made by the SPACE was that BSN and its project coordinator who drafted the memo were distorting the truth about accreditation standards for their own benefit. This illustrates the risks of stretching the "plasticity" (Star & Griesemer, 1989) of a boundary object too far. Not surprisingly, these negotiations quickly hit a dead end, as the SPACE was strongly opposed to the project team's initiative. Soon, the issue was no longer between BSN and the SPACE; both parties started to seek allies among their stakeholders, spreading their versions of the situation and how the issue could be solved in a way that met the accreditation standards.

To overcome a pragmatic knowledge boundary and the related politicking, individuals on different sides of the boundary must have common interests as well as willingness and ability to alter their views (Carlile, 2004; Shannon & Weaver, 1949). Hence, the team and the dean in particular initiated meetings with important stakeholders to make the business school's standpoint clear and to lobby them to join the initiative. These stakeholders included deans, professors, teachers and students from other schools at UniN and external business members on UniN's board. The project team highlighted BSN as a "unified entity" that would not shy away from challenging the mother university if its role as the number one business school in the region requires it. This aspiration was noted in the accreditation team-crafted SWOT analysis:

1. BSN faculty are active, dynamic, skilled, and enthusiastic and have a strong ambition to grow and develop the business school.
2. BSN is the representative business school in the large, northern region of the

country. (Source: internal meeting memo, 21.2.2010)

Behind the scenes and through their personal relationships, the project team made an effort to lobby the LEAP program managers at the SPACE and to create common interests. The idea of the project team was to illustrate that it would be in the best interest of the LEAP program and the people responsible for it to relocate: AACSB accreditation would attract more high-profile LEAP students, these students could use the facilities of the business school and interact with other business school students, and the professional LEAP staff would benefit from increased job security and career development opportunities. In one of the accreditation breakfast seminars, the team and the dean as its figurehead weighed the benefits that BSN employees would experience if it became part of the club of accredited institutions:

> "Acquiring international accreditations is a prerequisite for a business school seeking to become a highly respected international player in the academic market. Research, lecturer and student exchanges, and joint degree programs typically take place among accredited schools. From the student perspective, accredited business schools are the most attractive option. Accreditation also attracts the best faculty candidates and facilitates research and teaching funding that unaccredited business schools would struggle to acquire". (Source: internal memo 4.2.2009)

After almost three years had elapsed since the initial negotiations with the SPACE, the project team was able to convince UniN leadership to support the relocation. Indeed, it was the political process between BSN, the mother university and the SPACE that proved to be the crux of the project. After the LEAP program was successfully relocated, the BSN accreditation project started to progress. This progress was possible because the personal accreditation benefits were tangible enough and successfully communicated within the business school to keep both the department heads and the majority of the staff committed to the project. This commitment was evident in the way many other improvements required by the AACSB were implemented swiftly and without major disagreements. BSN received its accreditation in 2013.

Accreditation project of the Status Business School (BSS)

With a long tradition as a stand-alone institution, BSS was a large and full-scale business school that had recently merged with a big university in the same region (hereafter UniS); after the merger the school became one of a half dozen schools within its new mother institution. Compared with BSN, BSS had three times as many faculty and students and offered programs in a more versatile collection of business disciplines on two campuses. After several decades of history as a stand-alone institution, the merger with UniS had been experienced by the business school's faculty, staff, students, and alumni as a gradual renunciation of a business school-specific heritage. At a more practical and emotional level, the merger meant a progressive loss of traditions and related symbols, such as school logos, professional titles, conferment ceremonies, and fundraising activities related to its previously more autonomous status. In addition to the direct financial and administrative impacts (both positive and negative) of the merger, the years immediately following it were characterized by a lengthy and sentimental process of retaining the old business school identity while being part of the larger UniS entity.

Informative project boundary object use

Despite the successful accreditation endeavors of its Nordic role models, BSS started its accreditation project relatively late after the turbulence following the merger with UniS had settled. Despite some underdeveloped attempts to reach out to the accreditation agencies earlier, it was only after the new dean was appointed in 2012 that the accreditation plans started to gain traction. The formal decision to pursue an accreditation was reached in early 2014 in the BSS Council, a tripartite decision-making body consisting of representatives of the professoriate, other faculty, staff, and students.

Following the Council's decision, an accreditation project manager (an early-career academic

with experience in accreditations but no previous employment with BSS) was recruited in late 2014 to work with the dean and the administrative quality assurance coordinator. Additionally, four other team members with dual roles (vice dean of research, vice dean of education, head of administration and HR coordinator) were expected to participate in the project within the limits of their normal responsibilities. The dean and vice deans were professors in accounting, marketing and information systems science (later a professor of IB joined as a vice dean of internationalization). Collaboration among the project team intensified as the project progressed from the eligibility application phase to writing the initial SER as the different standards and necessary actions were realized.

The first knowledge boundary challenge for the team had to do with the syntactic boundary. Given the large organization of BSS (300+ faculty members and over 3000 students), sharing knowledge about the accreditation proved challenging. Despite the Council's formal decision to go ahead with the accreditation, the team was up against faculty resistance. Many held the opinion that the school should have been accredited under its previous management when it was still independent and before accreditation grew so popular. While these opinions were not formally expressed in accreditation events, they were voiced in coffee rooms and around lunch tables. The team was up against a siege mentality including skeptical discussions of the accreditation's "hidden agenda", buried in the foreign-based quality assurance system, likely to increase the bureaucratic burden. In the open "Nordic" communication atmosphere and because of the dual and triple roles, it was not difficult for the accreditation team to learn about the friction that was worsening as the project moved towards implementation.

BSS had a complicated structure consisting of traditional discipline-based departments and research centers relying on external funding. It was therefore easier for individual faculty members or even research groups to "disappear" into a social vacuum: to mind their own business and simply ignore accreditation-related messages. This was the case even if the

message came from the dean or the heads of their respective departments, to say nothing of the accreditation project manager. While internal strategy and development events would normally gather approximately 100-150 staff members, the accreditation project team quickly learned that accreditation events only reached a fraction of the faculty. Therefore, overcoming the syntactic boundaries within the faculty (Carlile, 2004, 2002) posed a severe problem. Although the project team had noticed that it was always the same people who did and did not show up to the faculty gatherings, it could not start to dictate or monitor the participation rate. This would have gone against the "Nordic" ethos of academic freedom. Instead, the team adapted to the local academic traditions and trusted the faculty's own judgment on the matter: Eventually, word would spread, and hopefully, more people would participate.

Interactive project boundary object use

By the time the accreditation project was approaching its final phase, peer review, these expectations relying on everyone "doing the right thing" proved overly optimistic. Therefore, it became urgent to inform the faculty of the upcoming peer review visit (PRT) and related requirements. Even those who had been ignoring the message for the past few years needed to become familiar with what was going on and how accreditation was everybody's business. Thus, the project team organized information sessions in each department and unit to remind the faculty about the initial motives for pursuing the accreditation. It appeared that many had only a scant idea of what the abbreviation "AACSB" stood for. On the accreditation project manager's presentation slide titled "Why do we seek to be accredited?", the following motives were re-emphasized:

- International accreditations have become important symbols of the quality and reputation of business schools
    - Our attractiveness for international students and faculty
    - Partner schools for student exchange and joint programs
    - Employability and academic careers of our alumni
- Continuous improvement in teaching quality

- Are our students truly learning what we think they are learning?
- How do we ensure that they are learning what we think they should be learning? (Presentation slide prepared by the accreditation project manager, September 2018)

Symbolically, it was important for the project manager to emphasize that accreditation would help to keep continuous improvement the highest priority for BSS. In this sense, higher status and better reputation would merely be inevitable byproducts. Therefore, instead of simply disseminating information, the accreditation project manager found it important to formulate the message such that it would be interpreted the same way across discipline-based departments and research centers (Carlile, 2002). As had occurred in several earlier faculty gatherings, the project team explicitly argued that the school was not applying for accreditation for some "quality label alone" but was using the AACSB standards and criteria as a tool to develop the organization. It would honor the strategic goals that had been deemed important priorities long before seeking eligibility under the accreditation process. These higher aims and motives included educating managers, providing students with inspiring and intellectually challenging learning experiences, and improving research quality and output. Hence, the team maintained the language of quality improvement in its public communications, while in the SWOT analysis shared among the management team and the school's council members, it explicitly addressed the underlying status concerns:

Weaknesses:
- no international accreditation at the school level

Threats:
- the school fails to keep its position among the top three business schools in the country (BSS SWOT analysis, April 2016)

Integrative project boundary object use

Compared with the relatively low faculty resistance to accreditation projects experienced by BSN, BSS had a more complex stratum of faculty with accreditation-questioning agendas. This

made the pragmatic knowledge boundary (Carlile, 2004; 2002) the most difficult for the project team to overcome. The strongest counterarguments regarding the benefits of accreditation for the school were expressed by professors who were also acting as department heads or serving in other responsible roles in their disciplines. They viewed AACSB accreditation as the herald of standardization that would jeopardize their disciplines and what remained of academic freedom, flexibility and related rules and traditions. This prejudice stemmed from the numerous reforms executed after the school's merger with UniS. Thus, despite the project team's efforts to clear up misunderstandings and create common interests across disciplines, any new initiative that was introduced was considered at the outset a potential threat to the independence of the school and the disciplines.

The project team had to accept that it would not achieve complete organizational approval for the accreditation. Instead, it needed to fully engage with those in critical decision-making roles in different departments and units. More so, the team had to make sure these senior managers understood the organization-level goal of the project beyond their departmental viewpoints and subspecialty. Indeed, there was no certainty whether the old collegial spirit of the school was still vigorous enough to convince the faculty and staff to work together to achieve the common organization-level goal. The risk was that the accreditation-opposing (and threatening) cliques would cause a problem during the final PRT of the AACSB organization:

> Dean [summing up a discussion he had overheard at a professors' dinner to the management team]:
>
> "I deeply wonder about the topic and tone of the discussion that was started and continued at the dinner table… These professors, they seem to blame accreditation for everything that is wrong in our organization. This one professor repeatedly said that accreditation standardizes everything and that we will ultimately end up losing our freedom… he will gain allies from among those who are always against everything…What do you say [directing his question to the accreditation project manager], are these the people who just happen to travel to a conference somewhere when the AACSB peer review team comes? Or shall we just trust that, in the crunch, they will ultimately say and do what's best for the school to achieve the accreditation?" (Management Team discussion, October 24, 2018)

While these discussions took place only a couple of months before the final hurdle of the PRT, the imagined worst-case scenarios never materialized, and the school was successfully accredited the following year (2019). It was evident that organizational acceptance and understanding of the accreditation scheme remained partial. Therefore, the project team ensured that at least a critical mass of BSS faculty, including those in critical decision-making roles, familiarized themselves with the accreditation scheme and understood its necessity for the sustainability of the organization. Fortunately, the project team included a collection of influential members of the community with dual/triple roles as deans, vice deans, professors and heads of administrative functions. These people continued the successful coupling of the school's strategic work and the AACSB's requirements.

6. FINDINGS

In this study, we defined boundary objects as tools that play a crucial role in organizational learning and renewal. More precisely, we considered the AACSB accreditation standard framework to be the all-encompassing boundary object applied in the context of a public university and its business school. Both project teams used this boundary object to expose the institutionalized knowledge boundaries and their key challenges in the permanent organizations and to eventually overcome these challenges with different boundary object uses (see Tables 4-5). The project teams needed to take a *dynamic approach* and adapt the use of boundary objects as the projects progressed. Despite both schools initially welcoming the accreditation endeavors, as the projects unfolded, the knowledge boundary challenges became progressively more complex. These challenges materialized *in situ* the interactions that the project team members had with the various project stakeholders. Therefore, project team members needed social skill and insight (Fligstein, 2001) to interpret the actions, reactions and overreactions occurring at the temporary-permanent interface. We identified three broad boundary object uses by the project teams: informative, interactive and integrative. The teams used the "plasticity"

of boundary objects (Star & Griesemer, 1989) for their benefit. The underlying boundary object (AACSB accreditation standard framework) remained unchanged while the teams adapted its use to match the evolving knowledge boundary challenges.

Insert Table 4 about here

Insert Table 5 about here

In the case of BSN, the team needed to first tackle the syntactic knowledge boundary and the challenge of modest faculty accreditation awareness, skepticism expressed by the various disciplines and low self-esteem as a business school. The team needed to educate the faculty about the accreditation scheme and convince them that it was within their reach. Accreditation quickly became the highest priority in the organizational agenda referred to as the "big fish that it is worth fishing". We call this *informative* boundary object use aiming to generate more information, more communication and more team strategies. The next challenge for the team had to do with the semantic boundary and the inconsistencies in the meanings held about the accreditation. Many perceived the accreditation to consume time and effort without direct personal compensation leading to low faculty motivation and participation. Thus, the project team used accreditation in a more symbolic manner referring to a "climb in status" (e.g., Gioia, Patvardhan, Hamilton & Corley, 2013; Kodeih & Greenwood, 2014; Lounsbury, 2001). We refer to this as *interactive* boundary object use geared towards increasing mutual understanding through interaction and making tacit knowledge explicit across boundaries. Subsequently, boundary challenges appeared on the pragmatic boundary with the mother university. The team discovered that the mother university was more loyal towards its School of Professional and Continuing Education (SPACE) than the business school. Therefore, the team needed to illustrate that the business school was a "unified entity" within and against the mother university

(Clegg & Courpasson, 2004). It needed to create common interests with the SPACE, surface all hidden practical and political agendas and state the explicit and tangible byproducts of the accreditation for its members. This is what we call *integrative* boundary object use.

At BSS, the first challenge had to do with organizational fatigue and skepticism towards "top-down" projects that were seen to threaten academic freedom. This caused low interest and participation rates in the accreditation. The team's solution to this syntactic boundary challenge was to run events and educate the faculty about the project. The team also used the legitimacy granted by the BSS Board's formal decision to recruit an AACSB project manager and pursue accreditation. This Council had strong authority, as it incorporated representatives of the professoriate; therefore, all of its decisions were highly respected. Hence, it was important for the team to remind various project stakeholders of the decision and the approved accreditation documentation, especially at the beginning of the project. We label this as *informative* boundary object use. Later, the project team encountered undesirable interpretations of the accreditation and its consequences for business schools, such as increased "standardization" and bureaucratic burden. As a response, the team adopted *interactive* boundary object use to actively couple the accreditation project with the more longstanding strategic goals of the permanent organization. By focusing on "quality improvement" and improved student experience, faculty across disciplinary boundaries became more receptive towards the accreditation scheme. Towards the end of the project, the project team had to accept that organizational-wide approval would not materialize, as some professors were strongly against the project. Therefore, the team adopted *integrative* boundary object use and focused on increasing mutual understanding with those in critical decision-making roles in the organization. The aim was to ensure that at least these critical stakeholders would understand "the bigger picture" and the importance of accreditation beyond their subspecialty.

While both schools were eventually successful in gaining accreditation, it took longer for the

project team to expose the knowledge boundaries and overcome them in the BSS case. This was partly dependent on the project team's insight and ability to read the permanent organization – what works and what does not. Perhaps the fact that BSS's accreditation project manager was recruited externally caused delay – (s)he needed time to become familiar with the organization first. On the other hand, the timing of the project with respect to ongoing organizational life mattered as well: While there was a will and momentum for BSN to "climb the status hierarchy", BSS suffered from fatigue and skepticism resulting from the university merger and earlier failed attempts to start the accreditation process. These factors caused obvious negative implications such as low traction and faculty enthusiasm and a general feeling that accreditation was not necessary.

The most complex boundary to overcome in both schools was the pragmatic and politically inflated boundary. Indeed, projects may include stakeholders with unique and contradictory motives (Aaltonen & Kujala, 2010, 2016; Sapsed & Salter, 2004) who are willing to defer project objectives to defend their individual interests or to maintain the status quo (Clegg & Courpasson, 2004). All these interests were not necessarily visible at the outset but emerged as the projects unfolded and the (often not very easy or pleasant) requirements of the accreditation became revealed to different stakeholders. In the case of BSN, the relationship between the business school and the mother university and one of its schools proved to be the most difficult, while in the BSS case, the most trouble was caused by professors protecting their disciplines' interests. What is needed in these situations is a common interest among actors and a shared understanding that this interest constitutes an appropriate course of strategic action for all stakeholders (Spee & Jarzabkowski, 2009). In this sense, renewal projects progress quickly when their objectives are interpreted as being meaningful and aligned with institutional prescriptions and local codes of conduct (Meyer & Rowan, 1977). These insights from the two case studies allow us to combine a process framework for overcoming knowledge boundaries

in renewal projects (Figure 4).

Insert Figure 4 about here

Moreover, we found that when renewal projects are conducted in longstanding, stable, and complex academic expert organizations, disagreements and symbolic divides cannot be detached from organizational hierarchies, norms or power structures (D'Aunno et al., 1991; Meyer & Rowan, 1977). Indeed, these hierarchies – based on subtle and implicit rules, norms and pecking orders between individual academics, disciplines, research groups, and departments, for instance – set perhaps the most important knowledge boundaries for what can be accomplished (and within what time frame) by the project team aiming at organizational renewal.

Once the two projects were accomplished in our case business schools, the project management at both BSN and BSS witnessed an interesting post-project reaction: disagreements faded and even the former opponents of accreditation celebrated and seemed to feel ownership of the gained recognition. Hence, in order for the more permanent organizational renewal to take place, the project team needs sensitivity to design and align the use of boundary objects in accordance with the rules, norms, practices, and motives of all project stakeholders (Fig. 4, phases 1-6). This, we suggest, can be managed by using language that is understood across disciplines; endowing the project objective with a meaning that is interesting, relevant, relatable and widely shared within the permanent organization; and overcoming individual interests by altering the team's own and the permanent organization's knowledge above and beyond the renewal project ("the bigger picture").

7. DISCUSSION AND CONCLUSIONS

Implications for managing knowledge boundaries at the temporary-permanent interface

The aim of this research was to seek an answer to the following research question: *How do project teams use boundary objects to overcome institutionalized knowledge boundaries in organizations?*

We argued that enacting change in academic expert organizations embodied by disciplinary silos and the related politicking and power games (Alvesson & Spicer, 2016; Becher, 1989; Huzzard, Benner & Kärreman, 2017) remains a major challenge for renewal projects. As stated aptly by Grabher (2002: 206), the focus of project management research is too often "restricted to projects only, leaving out the permanent ties and organizations in and through which projects operate". In this research, we sought to highlight these permanent ties and the organizational contextuality of projects. We found boundary objects to be a useful tool for project teams seeking consensus over the means and ends of projects within the permanent organization over an extended period of time. This elucidates the *dynamic* use of boundary objects in academic expert organizations and in renewal projects more broadly. Indeed, we found that project teams adapt their use of boundary objects as knowledge boundary challenges become progressively more complex: from *informative* to *interactive* and finally to *integrative* boundary object use. Important here is constructing a meaning that fits with the local institutional prescriptions (Meyer & Rowan, 1977; Perkmann & Spicer, 2007; Sahlin-Andersson, 2002; Stjerne & Svejenova, 2016) for the project to integrate several stakeholders who lack consensus but are willing to cooperate.

Söderlund (2013: 126) captures the need for such understanding within projects as follows: "…there is a need to make use of process theorizing to illustrate how managing happens in time, how managers transcend the past to create the future". It is evident that the previous

project management literature has not captured the full potential of the contextual and political aspects of project management. Engwall and Westling (2004: 1559) wittily state that "Traditional techniques of project management are ineffective, or even counterproductive…before a shared conceptualization of the project mission had become commonly enacted among the participants". However, in academic expert organizations, collective enactment is challenging, as those in positions of power have a high amount of independence, privileges and exemptions (Alvesson & Spicer, 2016; Simon, 1967). Thus, boundary objects offer hope in assimilating the convergence in the interactions between the project team and the permanent organization (Anell & Wilson, 2002). The proposed frameworks depicting the temporary-permanent interface (Fig. 1) and the process for overcoming knowledge boundaries (Fig. 4) are useful for both scholars and practitioners dealing with complex renewal projects. More precisely, we make five contributions to managing knowledge boundaries at the temporary-permanent interface.

First, our dynamic view adds to the boundary object literature in project management (e.g., Barrett & Oborn, 2010; Chang, Hatcher & Kim, 2013; Kertcher & Coslor, 2018; Koskinen & Mäkinen, 2009; Ruuska & Teigland, 2009) by illustrating how the use of boundary objects only materializes *in situ* the interactions between the project team and the permanent organization. It is in these interactions (e.g., Emirbayer & Mische, 1998; Goffman, 1983) that the project team can make sense of the muddled reality of project management under conditions of institutionalized knowledge boundaries and conflicting stakeholder expectations, thus enabling it to progressively adapt the use of boundary objects.

Second, our approach emphasizes the communicative nature of boundary objects (Dyson, 2004; Hodgkinson et al., 2006): Often, information sharing takes place during meetings, workshops, and different formal and informal discussions on accreditation. Thus, the "performance" of a boundary object should not be evaluated based only on the output, i.e., the degree of renewal

that is created or whether the accreditation was successfully obtained or not. Instead, what is relevant for boundary object performance is its ability to facilitate the process. Project teams cannot change an organization alone; they need to interact with members of the permanent organization and equip them to become "vehicles for change". Thus, the value of boundary objects for project management ultimately lies in their ability to create social interactions that may create renewal.

Third, we illustrated how project teams need to interpret the motives of project stakeholders to find a common language, meanings and interests with them. Thus, our findings support the need for the "soft" side of project management, including "cultural awareness, political skills, [and] public relations" (Söderlund, 2013: 123). As elaborated by Engwall and Westling (2004: 1572), "If the meaning of action and organizing in projects is to be better understood, further research is required that closely aligns itself with how the participants deal with and make sense of the task at hand during project execution". Indeed, our results illuminate the importance of interpreting what is "accepted" when faced with multiple stakeholder demands (Dille & Söderlund, 2011; Meyer & Rowan, 1977). Managers must first understand norms and their shared meanings before they can initiate a shared perception around a boundary object. Moreover, conforming to all stakeholder demands may jeopardize the project's objectives. Thus, managers must be farsighted and seek compromise when using boundary objects as management tools. Our empirical examples of the use of symbolic means such as a "climb in status" or "quality improvement" to create a compelling boundary object use illustrate the need to establish a soft-skill toolbox for project managers.

Fourth, our research has a bearing on reviving the so-called "Scandinavian School of Project Studies" (e.g., Sahlin-Andersson & Söderholm, 2002), which is known for its organization theory perspective on the interface between temporary projects and permanent organizations (e.g., Engwall, 2003; Lundin & Söderholm, 1995). Along with recent papers (e.g., van Berkel,

Ferguson & Groenewegen, 2016; Stjerne & Svejenova, 2016), we aim to contribute to this tradition and hope that it attracts more attention among project scholars.

Finally, we found Carlile's (2002, 2004) three levels of knowledge boundaries valuable in the study of renewal projects. These boundaries make complexity visible yet managerially comprehensible. Rather than just sharing the project objective with relevant stakeholders, the successful management of a project requires contextual understanding and insight in formulating a "higher aim" that resonates with the permanent organization and is "collective" enough to not become tangled in silo thinking and politicizing. However, compared to Carlile's (2002, 2004) studies on product development, the one-off nature of accreditation projects and their organization wide implications mean that much more is at stake. Therefore, in our research, a pragmatic boundary refers to more fundamental knowledge renewal in which different stakeholders not only need to collaborate with one another across disciplinary silos but also need to *rise above* these silos to engage with an organization-level goal.

Research limitations and future research

This research reported and contextualized the two Nordic business schools under scrutiny in as much detail and variety as possible to maintain the anonymity of the institutions and related informants while also enabling readers to transfer knowledge to other contexts (Lincoln & Guba, 1985). Being insiders in the two organizations studied provided us with a preunderstanding of the research settings under scrutiny, including the organizational history, culture, and language of the business schools being studied. Despite the applied iterative research approach, there was, of course, an obvious risk of insider bias, as all three authors were employed in the business schools under study. To reduce this bias, we followed three procedures to break away from our taken-for-granted organizational contexts and fellow organizational members.

First, we prioritized primary sources of written communications, including internal meeting memos, email correspondence, presentation materials and accreditation documentation, over our own memories of events and personal notes. Second, we reviewed our past notes and informal discussions in light of our theoretical framing and empirical understanding gained through the data comparison from two business school accreditation projects. Third, we discussed our interpretation of the data carefully and exposed any differences in view to repetitive dissection. We maintain that to truly understand how boundary objects were used in their natural project environments, they needed to be approached with research methodologies that allowed us to examine the studied phenomenon *in situ* (Alvesson, 2003; Coghlan, 2007).

In this research, we identified three different boundary object uses from *informative* to progressively more challenging *interactive* and *integrative*. We witnessed, however, glimpses of even deeper understanding of knowledge boundaries in the observed projects. We refer to these as *immersive* experiences profoundly influencing the thinking of the project teams. These were tacit *in situ* personal experiences, not explicit enough to be communicated with other project stakeholders. These immersive experiences resulted from prolonged time periods spent interacting, negotiating and arguing with members of the permanent organization. Although these experiences did not morph into identifiable boundary object uses in the observed cases, they provide an interesting future research avenue.

For these immersive experiences to be shared and enacted, project stakeholders need to go beyond common interest to establish a common mindset. This will take time, posing a challenge for short-term projects. The observed projects extended over five years, which was still not enough for the project team members to create a common mindset with the members of the permanent organization. This points to the temporality of boundary objects. While renewal projects may leave a long-lasting sociocognitive mindset for key individuals, the permanence of renewal is debatable. How long will the organizational memory of the renewal outlast the

resilient institutional prescriptions of the permanent organization? If organizational renewal is reinitiated in the future (e.g., re-accreditation), will it need to commence from the basic level of establishing common language?

These questions are beyond the scope of this research but will leave an interesting sediment for future research. To that end, we should delve more deeply into the institutional and organizational histories that establish the context and knowledge boundaries for project teams as well as their potential to achieve consensus among multiple project stakeholders. Research on project turning points as cognitive shifts (Engwall & Westling, 2004) and process research on evolving project tasks (Kreiner, 1995; Packendorff, Crevani & Lindgren, 2014; Vaagaasaar & Andersen, 2007) deserve to be revisited as we continue to pursue a softer, more historically and contextually grounded understanding of project management.

References

AACSB, (2020). Standards overview. https://www.aacsb.edu/accreditation/standards. Accessed: April 2, 2020.

Aaltonen, K., & Kujala, J. (2010). A project lifecycle perspective on stakeholder influence strategies in global projects. *Scandinavian Journal of Management, 26*(4), 381–397.

Aaltonen, K., & Kujala, J. (2016). Towards an improved understanding of project stake-holder landscapes. *International Journal of Project Management, 34*(8), 1537–1552.

Alajoutsijärvi, K., & Kettunen, K. (2016). The "Dean's Squeeze" revisited: a contextual approach. *Journal of Management Development*, 35(3), 326-340.

Alajoutsijärvi, K., Kettunen, K. & Sohlo, S. (2018). Shaking the status quo: Business accreditation and positional competition. *Academy of Management Learning & Education*, 17(2), 203–225.

Alajoutsijärvi K., Kettunen K., & Tikkanen H. (2012). Institutional evolution of business schools in Finland 1909–2009. *Management & Organizational History,* 7 (4): 337-367.

Alvesson, M. (2003). Methodology for close up studies: Struggling with closeness and closure. *Higher Education*, *46*, 167–193.

Alvesson, M. & Spicer, A. (2016). *The stupidity paradox: The power and pitfalls of functional stupidity at work*. London, UK: Profile Books Ltd.

Anderson, L., & Glass-Coffin, B. (2013). I learn by going. In: S. H. Jones, T. E. Adams & C. Ellis (Eds.), *Handbook of autoethnography* (57-83). New York, USA: Routledge.

Anell, B. I., & Wilson, T. L. (2002). Organizing in two modes: on the merging of the temporary and the permanent. In: K. Sahlin-Andersson, & A. Söderholm (Eds.), *Beyond project management: New perspectives on the temporary-permanent dilemma* (pp. 170–186). Malmo, Sweden: Liber.

Atkinson, R. (1999). Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International Journal of Project* Management, 17, 337–342.

Bakker, R. M. (2010). Taking stock of temporary organizational forms: A systematic review and research agenda. *International Journal of Management Reviews*, *12*, 466–486.

Bakker, R. M., DeFillippi, R. J., Schwab, A., & Sydow, J. (2016). Temporary organizing: Promises, processes, problems. *Organization Studies*, *37*, 1703–1719.

Barrett, M., & Oborn, E. (2010). Boundary object use in cross-cultural software development teams. *Human Relations, 63*(8), 1199–1221.

Becher, T. (1989). *Academic tribes and territories: Intellectual enquiry and the cultures of disciplines.* Buckingham: Society for Research into Higher Education and Open University Press.

Becher, T., & Trowler, P. R. (2001). *Academic tribes and territories: intellectual enquiry and the culture of disciplines.* Buckingham: SRHE and Open University Press.

Bechky, B. A. (2003). Sharing meaning across occupational communities: The transformation of understanding on a production floor. *Organization Science, 14*(3), 312–330.

van Berkel, F. J., Ferguson, J. E., & Groenewegen, P. (2016). Speedy delivery versus long-term objectives: How time pressure affects coordination between temporary projects and permanent organizations. *Long Range Planning, 49*(6), 661-673.

Boud, D., Dahlgren, L.-O., Dahlgren, M. A., Larsson, S. Sork, T. J. & Walters, S. (2006). Creating a 'world class' programme: Reciprocity and constraint in networked global collaboration. *International Journal of Lifelong Education*, *25*, 609–622.

Brannick, T., & Coghlan, D. (2007). In defense of being "native". The case for insider academic research. *Organizational Research Methods, 10*, 59–74.

Brown, S. L., & Eisenhardt, K. M. (1995). Product development: Past research, present findings, and future directions. *Academy of Management Review, 20*(2), 343–378.

Bryman, A., & Lilley S. (2009). Leadership researchers on leadership in higher education. *Leadership, 3*, 331–346.

Burke, C. M., & Morley, M. J. (2016). On temporary organizations: A review, synthesis and research agenda. *Human Relations*, 69(6), 1235–1258.

Carlile, P. R. (2002) 'A Pragmatic View of Knowledge and Boundaries: Boundary Objects in New Product Development'. *Organization Science, 13*(4), 442–55.

Carlile, P. R. (2004). Transferring, translating, and transforming: An integrative framework for managing knowledge across boundaries. *Organization Science*, *15*(5), 555–568.

Chang, H. (2013). Individual and collaborative autoethnography as method. In: S. H. Jones, T. E. Adams & C. Ellis (Eds.), *Handbook of autoethnography* (107-122). New York, USA: Routledge.

Chang, A., Hatcher, C., & Kim, J. (2013). Temporal boundary objects in megaprojects: Mapping the system with the integrated master schedule. *International Journal of Project Management*, *31*(3), 323–332.

Clegg, S., & Courpasson, D. (2004). Political hybrids: Tocquevillean views on project organizations. *Journal of Management Studies*, *41*(4), 525–547.

Cunningham, J. B. (1997). Case study principles for different types of cases. *Quality and Quantity*, *31*(4), 401–423.

D'Aunno, T., Sutton, R. I., & Price, R. H. (1991). Isomorphism and external support in conflicting institutional environments: A study of drug abuse treatment units. *Academy of Management Journal*, *34*(3), 636–661.

Deem, R., & Brehony, K. J. (2005). Management as ideology: The case of 'new managerialism' in higher education. *Oxford Review of Education*, *31*(2), 217–235.

Dille, T., & Söderlund, J. (2011). Managing inter-institutional projects: The significance of isochronism, timing norms and temporal misfits. *International Journal of Project Management, 29*, 480–490.

Di Domenico, M. & Philips, N. (2009). Sustaining the ivory tower: Oxbridge formal dining as organizational ritual. *Journal of Management Inquiry*, *18*, 326–343.

Durkheim, E. (1956). *Education and Sociology*. New York, NY: The Free Press.

Dyson, R. G. (2004). Strategic development and SWOT analysis at the University of Warwick. *European Journal of Operational Research*, *152*(3), 631–640.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, *14*(4), 532–550.

Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: an overview. *Historical Social Research/Historische Sozialforschung*, 273–290.

Emirbayer, M., & Mische, A. (1998). What is agency? *American Journal of Sociology, 103*, 962–1023.

Engwall, M. (2003). No project is an island: Linking projects to history and context. *Research Policy, 32*, 789–808.

Engwall, M., & Westling, G. (2004). Peripety in an R&D drama: Capturing a turnaround in project dynamics. *Organization Studies*, *25*(9), 1557–1578.

Eriksson, T. (2010). Being native – distance, closeness and doing auto/self-ethnography. *ArtMonitor, 8*, 91–100.

Ewenstein, B., & Whyte, J. (2009). Knowledge practices in design: the role of visual representations asepistemic objects'. *Organization Studies*, *30*(1), 07–30.

Fligstein, N. (2001). Social skill and the theory of fields. *Sociological Theory*, 19(2), 105–125.

Freeman, R. E., & Reed, D. L. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California Management Review*, *25*(3), 88–106.

Ginsberg, B. (2011). *The Fall of the Faculty*. Oxford University Press.

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

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. London: Weidenfeld and Nicholson.

Goffman, E. (1983). The interaction order: American Sociological Association, 1982 presidential address. *American Sociological Review, 48*, 1–17.

Grabher, G. (2002). Cool projects, boring institutions: Temporary collaboration in social context. *Regional Studies, 36*, 205–214.

Granqvist, N., & Gustafsson, R. (2016). Temporal institutional work. *Academy of Management Journal*, 59(3), 1009-1035.

Hatchuel, A., & Weil, B. (2011). *Experts in organizations: a knowledge-based perspective on organizational change* (Vol. 63). Berlin: Walter de Gruyter.

Henderson, K. (1991). Flexible sketches and inflexible data bases: Visual communication, conscription devices, and boundary objects in design engineering. *Science, Technology, & Human Values*, *16*(4), 448–473.

Hinds, P. J. (1999). The curse of expertise: The effects of expertise and debiasing methods on prediction of novice performance. *Journal of Experimental Psychology, 5*(2), 205–221.

Hodgkinson, G. P., Whittington, R., Johnson, G., & Schwarz, M. (2006). The role of strategy workshops in strategy development processes: Formality, communication, co-ordination and inclusion. *Long Range Planning*, *39*(5), 479–496.

Huzzard, T., Benner, M., & Kärreman, D. (2017). *The corporatization of the business school: minerva meets the market*. Taylor & Francis.

Jensen, C., Johansson, S., & Löfström, M. (2006). Project relationships–A model for analyzing interactional uncertainty. *International Journal of Project Management, 24*, 4–12.

Juusola, K., Kettunen, K., & Alajoutsijärvi, K. (2015). Americanization from a comparative perspective: Business school systems in Finland and the UAE. *Journal of Management Inquiry*, 24 (4): 347-369.

Kerr, C. (1963). *The uses of the university*. Cambridge, MA: Harvard University Press.

Kertcher, Z., & Coslor, E. (2018). Boundary Objects and the Technical Culture Divide: Successful Practices for Voluntary Innovation Teams Crossing Scientific and Professional Fields. *Journal of Management Inquiry*, 1–16.

Kodeih, F., & Greenwood, R. (2014). Responding to institutional complexity: The role of identity. *Organization Studies*, *35*(1), 7–39.

Koskinen, K. U., & Mäkinen, S. (2009). Role of boundary objects in negotiations of project contracts. *International Journal of Project Management*, *27*(1), 31–38.

Kreiner, K. (1995). In search of relevance: Project management in drifting environments. *Scandinavian Journal of Management, 11*, 335–346.

Langley, A. N. N. (1999). Strategies for theorizing from process data. *Academy of Management Review, 24*, 691–710.

Langley, A. N. N., Smallman, C., Tsoukas, H., & Van de Ven, A. H. (2013). Process studies of change in organization and management: unveiling temporality, activity, and flow. *Academy of Management Journal, 56*, 1–13.

Lejeune, C., & Vas, A. (2014). Institutional pressure as a trigger for organizational identity change: The case of accreditation failure within seven European business schools. In: A. M. Pettigrew, E. Cornuel & U. Hommel (Eds.), *The institutional development of business schools* (pp. 95–125). Oxford, UK: University Press.

Lincoln, Y.S., & Guba, E.G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.

Lounsbury, M. (2001). Institutional sources of practice variation: Staffing college and university recycling programs. *Administrative Science Quarterly*, *46*(1), 29–56.

Lundin, R. A., & Midler, C. (Eds.). (2012). *Projects as arenas for renewal and learning processes*. New York: Springer Science & Business Media.

Lundin, R. A., & Söderholm, A. (1995). A theory of the temporary organization. *Scandinavian Journal of management*, *11*(4), 437–455.

Maaninen-Olsson, E., & Müllern, T. (2009). A contextual understanding of projects—The importance of space and time. *Scandinavian Journal of Management*, *25*(3), 327–339.

Marginson, S. (2010). The university: Punctuated by paradox. *Academic Matters*, May, 14–18.

Meyer, J. W., & Jepperson, R. L. (2000). The 'actors' of modern society: The cultural construction of social agency. *Sociological Theory, 18*, 100–120.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), 340-363.

Murray, F. (2010). The oncomouse that roared: Hybrid exchange strategies as a source of distinction at the boundary of overlapping institutions. *American Journal of Sociology, 116*(2), 341–388.

Nicolini, D., Mengis, J., & Swan, J. (2012). Understanding the role of objects in cross-disciplinary collaboration. *Organization Science*, *23*(3), 612–629.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science, 5*(1), 14–37.

Ojansivu, I., & Alajoutsijärvi, K. (2015). Inside service-intensive projects: Analyzing inbuilt tensions. *International Journal of Project Management, 33*(4), 901–916.

Ojansivu, I. T., & Hermes, J. (2019). Maintaining business relationships: resilience through institutional work. Journal of Business & Industrial Marketing.

Owen-Smith, J. (2003). From separate system to a hybrid order: Accumulative advantage across public and private science at research one universities. *Research Policy*, *32*, 1081–1104.

Pache, A. C., & Santos, F. (2010). When worlds collide: The internal dynamics of organizational responses to conflicting institutional demands. *Academy of Management Review*, *35*(3), 455–476.

Packendorff, J. (2002). The temporary society and its enemies: Projects from an individual perspective. In: K. Sahlin-Andersson, & A. Söderholm (Eds.). *Beyond project management: New perspectives on the temporary-permanent dilemma* (pp. 39–58). Liber.

Packendorff, J., Crevani, L., & Lindgren, M. (2014). Project leadership in becoming: A process study of an organizational change project. *Project Management Journal, 45*, 5–20.

Parker, M. (2018). *Shut down the business school*. University of Chicago Press Economics Books.

Perkmann, M., & Spicer, A. (2007). Healing the scars of history': Projects, skills and field strategies in institutional entrepreneurship. *Organization Studies*, *28*(7), 1101–1122.

Pettigrew, A. M. (1997). What is a processual analysis? *Scandinavian Journal of Management*, *13*, 337–348.

Powell, W. W., & Sandholtz, K. W. (2012). Amphibious entrepreneurs and the emergence of organizational forms. *Strategic Entrepreneurship Journal*, *6*(2), 94–115.

Pratt, M. G. (2009). For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research. *Academy of Management Journal, 52*(5), 856-862.

Ruuska, I., & Teigland, R. (2009). Ensuring project success through collective competence and creative conflict in public–private partnerships–A case study of Bygga Villa, a Swedish triple helix e-government initiative. *International Journal of Project Management*, *27*(4), 323–334.

Sahlin-Andersson, K. (1996). Imitating by editing success: the construction of organizational fields. In: B. Czarniawska & G. Sevon (Eds.), *Translating organizational change* (pp. 69–93). Berlin: De Gruyter.

Sahlin-Andersson, K. (2002). Project management as boundary work: Dilemmas of defining and delimiting. In K. Sahlin-Andersson & A. Söderholm (Eds.), *Beyond project management: New perspectives on the temporary– permanent dilemma* (pp. 241–260). Copenhagen, Denmark: Liber.

Sahlin-Andersson, K., & Söderholm, A. (2002). Beyond project management: *New perspectives on the temporary-permanent dilemma*. Liber.

Sapsed, J., & Salter, A. (2004). Postcards from the edge: Local communities, global programs and boundary objects. *Organization Studies*, *25*(9), 1515–1534.

Shannon, C., W. Weaver. (1949). *The mathematical theory of communications*. Urbana, IL: University of Illinois Press.

Shenhar, A. J. (2001). One size does not fit all projects: Exploring classical contingency domains. *Management Science, 47*(3), 394–414.

Siggelkow, N. (2007). Persuasion with case studies. *Academy of Management Journal, 50*, 20–24.

Simon, H. A. (1967). The business school a problem in organizational design. *Journal of Management Studies*, 4(1), 1-16.

Spee, A. P., & Jarzabkowski, P. (2009). Strategy tools as boundary objects. *Strategic Organization*, *7*(2), 223–232.

Star, S. L. (2010). This is not a boundary object: Reflections on the origin of a concept. *Science, Technology, & Human Values, 35*(5), 601–617.

Star, S. L., & Griesemer, J. R. (1989). Institutional ecology, 'translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social studies of science*, *19*(3), 387–420.

Stevenson, A. (Ed.). (2010). *Oxford dictionary of english*. Oxford University Press, USA.

Stjerne, I. S., & Svejenova, S. (2016). Connecting temporary and permanent organizing: Tensions and boundary work in sequential film projects. *Organization Studies*, *37*(12), 1771–1792.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.

Sydow, J., Schreyögg, G., & Koch, J. (2009). Organizational Path Dependence: Opening the Black Box. *Academy of Management Review, 34*(4), 689–709.

Söderlund, J. (2013). Pluralistic and processual understandings of projects and project organizing: towards theories of project temporality. In: N. Drouin, R. Müller, & S. Sankaran (Eds.), *Novel approaches to project management research: Translational and transformational* (pp. 117–135). Copenhagen, Denmark: CBS Press.

Teelken, C. (2012). Compliance or pragmatism: How do academics deal with managerialism in higher education? A comparative study in three countries. *Studies in Higher Education*, *37*(3), 271–290.

Teelken, C. (2015). Hybridity, coping mechanisms, and academic performance management: Comparing three countries. *Public Administration*, *93*(2), 307–323.

Tetnowski, J. A. & Damico, J. S. (2014). Autoethnography. In: C. J. Forsyth, & Copes H. (Eds.), *Encyclopedia of Social Deviance* (48–50). Thousand Oaks, CA: SAGE Publications.

Tett, G. (2015). *The silo effect: the peril of expertise and the promise of breaking down barriers*. New York, NY: Simon & Schuster.

Tolbert, P. S., & Zucker, L. G. (1999). The institutionalization of institutional theory. In: S. R. Clegg, & C. Hardy (Eds.), *Studying organization: theory and method* (pp. 175–190). London, UK: SAGE Publications.

Tourish, D., Craig, R., & Amernic, J. (2017). A mania for assessment: How an audit culture undermines the purpose of universities. In: T. Huzzard, M. Benner, & D. Kärreman (Eds.), *The corporatization of the business school: Minerva meets the market* (pp. 34–55). New York, NY: Routledge.

Tukiainen, S., & Granqvist, N. (2016). Temporary organizing and institutional change. *Organization Studies*, *37*, 1819–1840.

Vaagaasar, A. L., & Andersen, E. S. (2007). On task evolvement in renewal projects. *International Journal of Project Management*, *25*(4), 346–353.

Weick, K., K. Sutcliffe, D. Obstfeld. (1999). Organizing for high reliability: Processes of collective mindfulness. In: B. Staw, & R. Sutton (Eds.), *Research in organizational behavior* (pp. 81–117). Stamford: JAI Press Inc.

Willmott, H. (2003). Commercialising higher education in the UK: The state, industry and peer review. *Studies in Higher Education*, *28*, 129–141.

Winter, R. P., & O'Donohue, W. (2012). Academic identity tensions in the public university: Which values really matter? *Journal of Higher Education Policy and Management*, *34*(6), 565–573.

Yakura, E. K. (2002). Charting time: Timelines as temporal boundary objects. *Academy of Management journal*, *45*(5), 956–970.

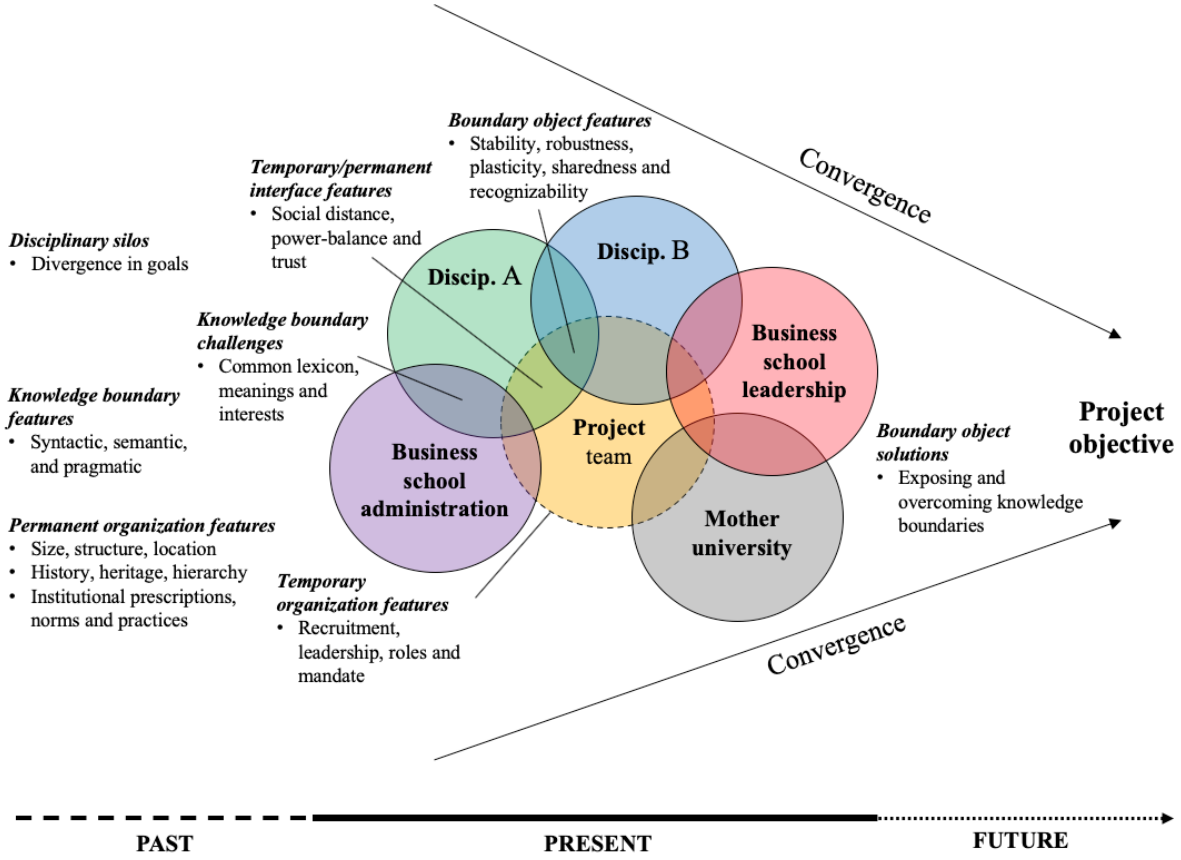

Figure 1. A framework illustrating the temporary-permanent interface and the related knowledge boundaries in academic expert organizations.

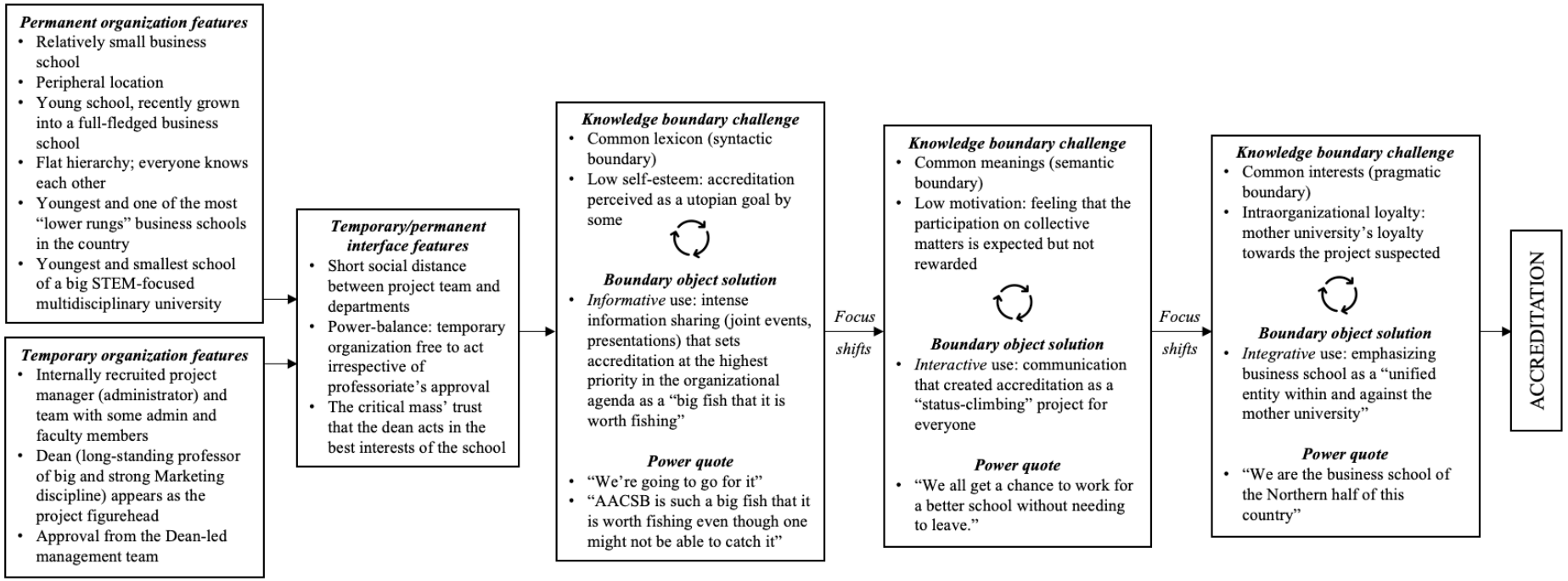

Figure 2. Analysis of the case BSN

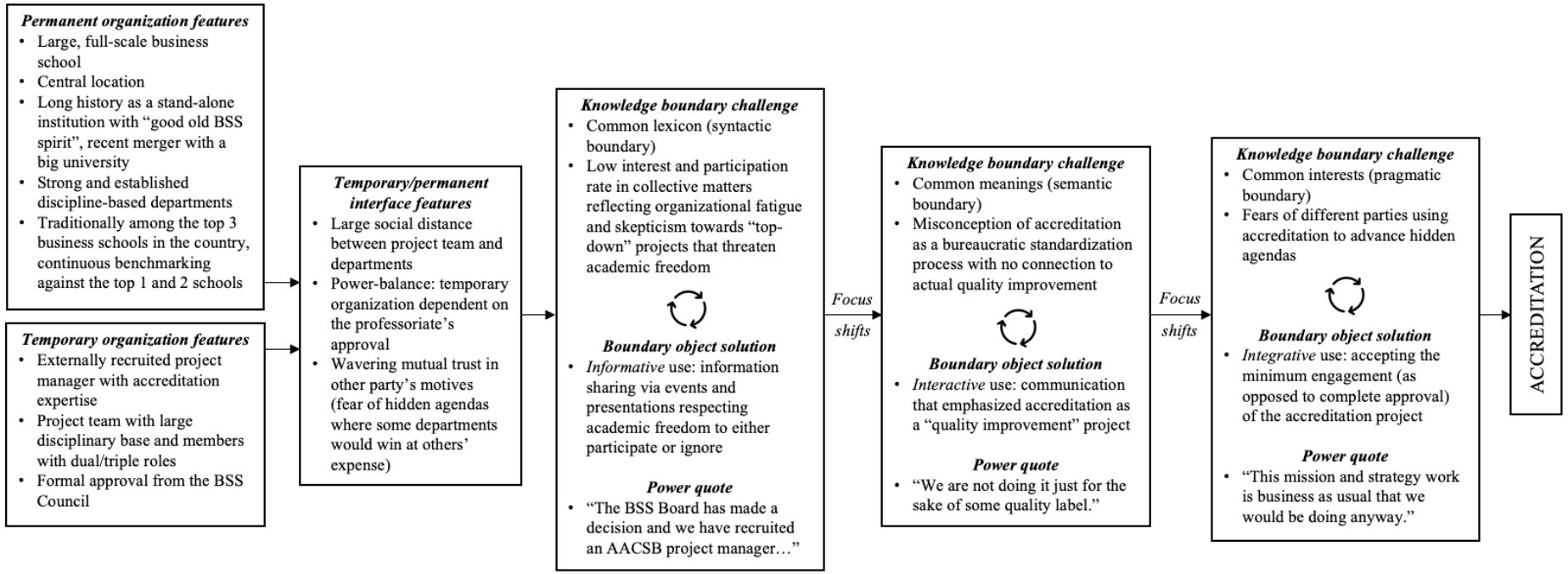

Figure 3. Analysis of the case BSS

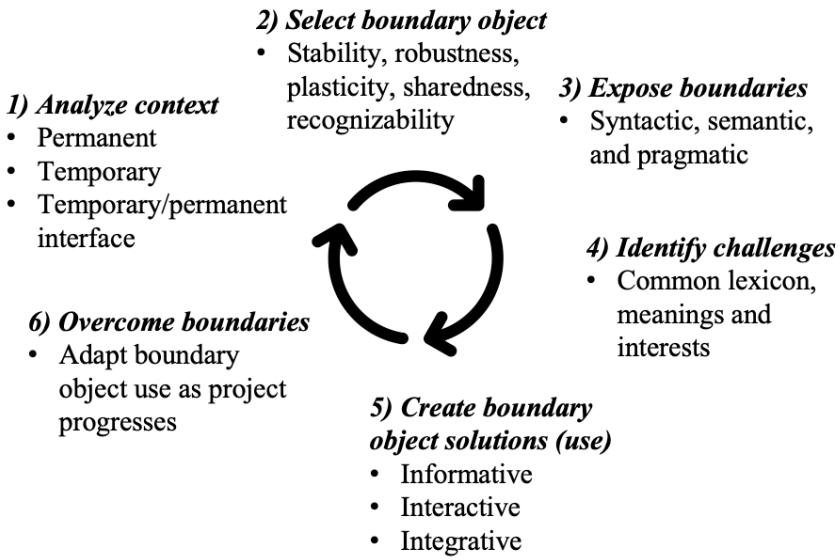

Figure 4. A process framework to overcome knowledge boundaries in renewal projects.

Table 1. AACSB members and accredited business schools in Nordic countries (2009-2021).

	Finland		Sweden		Norway		Denmark	
	Members	Accredited	Members	Accredited	Members	Accredited	Members	Accredited
2009	2	1	2	0	1	0	3	0
2010	2	1	3	0	1	0	3	0
2011	3	1	5	0	1	0	3	0
2012	5	1	5	0	1	0	3	1
2013	6	1	6	0	1	0	3	1
2014	8	2	6	0	1	0	2	2
2015	9	2	7	0	3	1	2	2
2016	10	3	8	1	3	1	2	2
2017	10	3	8	2	3-4	1	2-3	2
2018	10	3	8	3	4	1	3	2
2019	10	5	8	3	6	2	3	2
2020	10	5	8	4	6	2	4	2
2021*	10	5	8	5	6	2	4	2

*** Data from March, 2021**

Source: AACSB, Global Membership Listings.
https://www.aacsb.edu/membership/listings/all-educational-members

Table 2. Data accessed and used in the analysis of the Newcomer Business School (BSN) accreditation project

Data type	**Data use**	**Intraorganizational documentation and observations accessed throughout project phases**		
Accreditation applications and formal correspondence	Depicting the timeframe of project's progress	Eligibility application (20 pgs.) and decision letter (2 pgs.); related email correspondence with the accreditation agency representative	Initial self-evaluation report/standard alignment plan and its different draft versions (final document 100 pgs. + 20 pgs. of attachments); mentor's evaluation based on an onsite visit (10 pgs.); decision letter (1-2 pgs.); related email correspondence with the appointed liaison officer from the accreditation agency	Final self-evaluation report and its different draft versions (final document 100 pgs. + 20 pgs. of attachments); previsit letter from the peer review team chair (5 pgs.); decision letter (1-2 pgs.); related email correspondence with the appointed liaison officer from the accreditation agency
Internal accreditation documentation and correspondence	Making sense of the project team composition and different roles, understanding the project's positioning and justification in the permanent organization	Memos and notes from meetings; faculty & staff meeting presentations; email correspondence (91 emails + their attachments sent and received by the dean, 2007-2011)	Memos and notes from meetings; faculty & staff meeting presentations; email correspondence (91 emails + their attachments sent and received by the dean, 2007-2011)	Memos and notes from meetings; faculty & staff meeting presentations
Interviews and participatory observation	Understanding the team's interactions and related challenges with the permanent organization	Participatory observation; informal discussions and interviews with the professoriate and faculty and within the accreditation team	Participatory observation; informal discussions and interviews with the professoriate and faculty and within the accreditation team; the school's development day/faculty meeting workshops and memos	Informal discussions between the dean, accreditation project manager and coordinator; interviews with the accreditation agency's directors and staff, the school's peer review team chair and the school's contact person at the accreditation agency; participation in ~15 AACSB conferences and seminars between 2008 and 2018
Data type	**Data use**	**Relevant background material on the university and business school context accessed**		
Annual reports and histories	Portraying the history, structure, size and strategic priorities of the organization	School's annual reports, 2010-2018; university's annual reports, 2005-2018; authored history of the school, 2008		
Statistics	Making sense of the national higher education system and landscape, positioning and viewing the organization in its national context	Education ministry's databases, 1980-2019		
Web pages	Following the accreditation agencies' priorities requirements and priorities, reflecting these against the project progress and project teams' actions	AACSB, 2007-2019; EFMD, 2005-2019		

Table 3. Data accessed and used in the analysis of the Status Business School (BSS) accreditation project

Data type	**Data use**	**Intraorganizational documentation and observations accessed throughout project phases**		
Accreditation applications and formal correspondence	Depicting the timeframe of project's progress	Eligibility application (54 pgs. + 12 pgs. of attachments) and decision letter (2 pgs.); related email correspondence with the accreditation agency representative	Initial self-evaluation report and its different draft versions (final document 99 pgs. + 69 pgs. of attachments and related material); mentor's evaluation report based on an onsite visit (10 pgs.); decision letter (1-2 pgs.); related email correspondence with the appointed liaison officer from the accreditation agency	Final self-evaluation report and its different draft versions (final document 105 pgs. + 99 pgs. of attachments and related material); previsit letter from the peer review team chair (8 pgs.); decision letter (1-2 pgs.); related email correspondence with the appointed liaison officer from the accreditation agency
Internal accreditation documentation and correspondence	Making sense of the project team composition and different roles, understanding the project's positioning and justification in the permanent organization	Memos and notes from meetings; faculty & staff meeting presentations; email correspondence (all emails sent and received by the accreditation project manager, 2014-2018)	Memos and notes from meetings; faculty & staff meeting presentations; email correspondence (all emails sent and received by the accreditation project manager, 2014-2018)	Memos and notes from meetings; faculty & staff meeting presentations (all emails sent and received by the accreditation project manager, 2014-2018)
Interviews and participatory observation	Understanding the team's interactions and related challenges with the permanent organization	Participatory observation; informal discussions and interviews with the professoriate and faculty and within the accreditation team	Participatory observation; informal discussions and interviews with the professoriate and faculty and within the accreditation team; the school's development day/faculty meeting workshops and memos	Participatory observation; informal discussions and interviews with the professoriate and faculty and within the accreditation team; the school's development day/faculty meeting workshops and memos; faculty's accreditation info session presentations materials and discussions; participation in ~15 AACSB conferences and seminars between 2008 and 2018
Data type	**Data use**	**Relevant background material on the university and business school context accessed**		
Annual reports and histories	Portraying the history, structure, size and strategic priorities of the organization	School's annual reports, 1950-2018; university's annual reports, 2010-2018; authored histories of the school: 1950, 1975, 2000, 2012		
Statistics	Making sense of the national higher education system and landscape, positioning and viewing the organization in its national context	Statistical yearbooks, 1950-1980; education ministry's databases, 1980-2019		
Web pages	Following the accreditation agencies' priorities requirements and priorities, reflecting these against the project progress and project teams' actions	AACSB, 2007-2019; EFMD, 2005-2019		

Table 4. Summary of findings: Newcomer Business School (BSN).

	Project phases and boundary object uses at the temporary-permanent interface		
Project phases	Eligibility preparation (applying access to the accreditation process)	Self-evaluation (development and documentation against accreditation standards)	Peer review (finalization and preparation for the review visit of accreditation evaluators)
Identified knowledge boundary	Syntactic	Semantic	Pragmatic
Identified knowledge boundary challenges	Lack of a common language and commitment to collective matters, primary interest in departmental/discipline-specific information	Lack of common meanings across disciplines and departments causing divides and misunderstandings	University-level institutionalized interests in keeping the business school as a small and regional operator; fear of losing the steady income from the Executive MBA program
Identified boundary object uses	Informative: information sharing from temporary to permanent to establish common lexicon. "Accreditation talk" attracting faculty attention and inform various stakeholders	Interactive: interactions between temporary and permanent to create common meanings. Faculty-unifying "higher aim" of a climb in status explicitly argued by the dean-led project team reducing misinterpretation and misunderstanding at the departmental/discipline level	Integrative: integration of temporary and permanent to communicate common interest. LEAP issue led to a boundary roadblock and thus lobbying was needed to advance the project and to create a common interest and understanding of the business school as an international-level actor

Table 5. Summary of findings: Status Business School (BSS)

	Project phases and boundary object uses at the temporary-permanent interface		
Project phases	Eligibility preparation (applying access to the accreditation process)	Self-evaluation (development and documentation against accreditation standards)	Peer review (finalization and preparation for the review visit of accreditation evaluators)
Identified knowledge boundary	Syntactic	Semantic	Pragmatic
Identified knowledge boundary challenges	"Fatigue" and skepticism towards administration-led projects and fear of losing academic freedom reduced interest in engagement in the project	Unfavorable meanings attached to accreditation such as "we are late in this project", "standardization", "loss of academic freedom", "loss of identity" and "is it truly necessary"	Skepticism towards the "real" value of accreditation; accusation of accreditation as a "one-size-fits-all" standardization jeopardizing what was left of its identity after the merger with UniS
Identified boundary object uses	Informative: information sharing from temporary to permanent to establish common lexicon. Legitimation of the project by the school's Council and external accreditation project manager helped to gain a critical mass to progress the project	Interactive: interactions between temporary and permanent to create common meanings. Open communication was an advantage, but allowed negative and false messages about accreditation; language of continuous quality improvement used by the project team to motivate the faculty	Integrative: integration of temporary and permanent to communicate common interest. Accepting the minimum engagement as opposed to complete approval of the accreditation project ("higher" aims were only accepted by those in the leading roles)