

Performing projects with constant connectivity: interplay of consulting project work practices and smartphone affordances

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The broad view of projectification and the broader perspective on constant connectivity have produced insights that question the conventional wisdom. However, how project practices are mediated by constant connectivity is under-explored and under-theorized. We conduct a case study of the interplay between consulting project work practices and constant connectivity to address this gap. Our findings point to three potential insights. First, we highlight that consulting projects in the focal context are characterized by clockwork coordination logic. Second, we show there is affinity between front-stage practices and synchronous smartphone affordances on the one hand as well as between backstage practices and asynchronous smartphone affordances on the other. Third, we describe how clockwork coordination and connectivity affordances give rise to decoupling of legacy timespace from backstage practices while reinforcing the legacy timespace of the front-stage practices. Our work extends the literature via a highly nuanced and differentiated understanding of the focal phenomena.

Keywords: projects, constant connectivity, practices, affordances, timespace.

Introduction

Critical studies of project-based organizing and projectification of work embrace a broad view of project-ness and highlight nuances that are otherwise 'missed' by the 'mainstream' project literature (e.g., Lindgren and Packendorff, 2006; Packendorff and Lindgren, 2014). For example, Peticca-Harris *et al.* (2015) provide evidence that in building gaming software, projects appear to be both a source of gratification on the one hand and resistance to the 'inevitable' crunch mode

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of development on the other hand. In theatre production projects, Lindgren *et al.* (2014) highlight how the temporariness of projects and the associated insecurities are considered trade-offs against the adventure and thrill of the work. There is a similar stream of work that also adopts a 'broader view' of constant connectivity phenomena, taking issue with the contradictory findings of traditional studies of how professionals employ connectivity (especially smartphone technology), i.e., positive/negative and liberating/dominating. Instead, these broad-view studies advocate a more fine-grained approach (e.g., Dén-Nagy, 2014). For example, within this stream of research, Wajcman and Rose (2011) push us to think of 'interruption' as simply too narrow a label for how telecom professionals employ smartphones. Similarly, Mazmanian *et al.* (2013) conclude that lawyers' use of smartphones is not simply either autonomy-enhancing or autonomy-limiting. Interestingly, how constant connectivity of smartphones mediates project-intensive work practices and outcomes has been relatively under-explored and under-theorized. In our work we attempt to address this gap.

In particular, the intelligibility of focal practices may no longer be limited to a specific location and a distinctive time called the work site and work time. Doing certain things at the office, at home, in the park, in the restaurant, at the airport, during a visit to the doctor, during the day, during the night, in early morning, late at night, etc. are all part and parcel of what are now considered work practices. However, how precisely the appropriation of smartphone technology may influence the 'timespace' of project-based temporary organizing practices remains somewhat under-explored and under-theorized. As such, a deeper understanding of these processes and outcomes can be very useful. Therefore, we propose the following research question: *How do smartphone technology affordances interact with the timespace of project work practices and what outcomes do they contribute to?*

To address this research question we focus on a firm's use of smartphones by professional management consultants and their supervising managers when they engage in the development and execution of projects – the firm is a branch of a world-top-10 consulting company with regional headquarters in a Mediterranean country. The management consultants appear to go to great lengths to ensure their projects are successful and deliver added value to clients. They often accomplish these outcomes while being 'on the road' for long stretches of time. The high reach and range that is provided by email-enabled smartphones appears to underpin the connectivity afforded to consultants' project work. Therefore, the context of consulting project work practices in conjunction with a distinctive pattern of smartphone appropriation among professional consultants provides us with an opportunity to study the focal phenomena with greater cartographic relief.

Our work points to three potential contributions to a deeper understanding of the interplay between smartphone affordances and the timespace of consulting project work practices. First, we identify a distinctive pattern of project work associated with consulting practices, which we characterize as *clockwork coordination* due to the low-error-margin nature of focal consulting projects. Second, we highlight how the twin asynchronous and synchronous *connectivity affordances* of smartphones aids in the enactment of clockwork coordination practices. Third, we show how the interplay of project clockwork coordination and smartphone connectivity affordances gives rise to a dualistic pattern in the timespace underpinning consulting work practices – reinforcing *legacy temporality/spatiality* versus bringing about *a-temporality/a-spatiality*.

Theoretical foundations

Work projectification and constant connectivity: an intersection worthy of study?

Discourse on new forms of organizing and organization of work has underscored the importance of project work in most industries at a time that has seen the

rise of the Project Management Institute and associated certification efforts (e.g., Hobday, 2000; Söderlund and Tell, 2009). Subsequently, two streams of research have emerged on the project-ness of work: a narrow view and a broad view (Packendorff and Lindgren, 2014). The narrow view takes the *status quo* for granted and focuses on project-ness as largely a form of restructuring (e.g., Maylor *et al.*, 2006). For example, Maylor *et al.* (2006) highlight that projectification means an increased number of projects, more reliance on codified bodies of knowledge on project management (e.g., PMI), a greater salience of project performance in organizations, and the existence of project management offices. The narrow perspective largely conceptualizes project-ness as an internally consistent and 'rational' response to situations. In this light, notions of cultural constructions and discursive influence are regarded as peripheral.

A parallel stream of research that focuses more critically on projects and projectification of work has emerged and is referred to as the broad perspective (e.g., Packendorff and Lindgren, 2014). The broad perspective acknowledges the utility of narrow view but is critical of it and more generally has opened the door to the study of project-ness based on notions of social construction (Sergi, 2012), rationalizing discourse (Lindgren *et al.*, 2014), reification (Pellegrinelli, 2010) and performativity (Cicmil *et al.*, 2006; Orlikowski and Scott, 2013). One advantage of the broad view from our standpoint is that it allows for the superimposition of project-ness onto interesting settings (e.g., software game code writing and theatre production), thereby enhancing our theoretical understanding of a focal phenomenon under the rubric of studying changes in work. This is consistent with the call by Barley and Kunda (2001) to bring work back into organizational studies. For example, Peticca-Harris *et al.*'s (2015) research on writing gaming code highlights that projects have a duality characteristic. They are a source of gratification on the one hand but also engender resistance to the 'inevitable' crunch mode of development on the other hand, especially as the timeline gets closer to the release date and the associated hype increases. Another example is Lindgren *et al.*'s (2014) focus on how discursive strategies are employed to justify the precariousness of temporary project employment in theatre production work by appealing to the adventure and thrill of doing artistic work.

In the arena of constant connectivity, as exemplified by the explosive growth and use of smartphones in doing work, the research has been prolific (Perlow, 2012). In a similar vein to project-ness scholarship, constant connectivity research may be categorized in two streams: a narrow structural view (e.g., Leonardi *et al.*, 2010) and a broad cultural-constructivist-discursive perspective (e.g., Wajcman and Rose, 2011). The narrow view takes for granted the reified perceptions of smartphone technology by individuals' decision making, which leads to dichotomous perceptions of connectivity – linking media use to stress from interruptions (e.g., Fonner and Stache, 2012). The broad perspective, on the other hand, goes beneath surface dichotomies and upon close scrutiny reveals a deep structure and nuanced insight (Dery *et al.*, 2014).

By employing a broad view, we aim to put constant connectivity in the context of project work under the research microscope. By doing so we hope to go beyond the standard dichotomies of anywhere/anytime connectivity, e.g., mere triggers for enhanced autonomy due to working anywhere/anytime versus feeling trapped by the need to work anywhere/anytime. Next, we outline two further elements of our theoretical scaffolding for analyzing project work practices and connectivity: Schatzki's (1996, 2010) dispersed practices and their associated time-space and Gibson's (1979) affordances.

Social practices of work: dispersed practices and their timespace

We are not the first to propose that the social practice lens affords a useful theoretical and methodological approach to the analysis of underlying phenomena.

This has been proposed, for example, by Schatzki (1996), as well as Reckwitz (2002), and illustrated by Orlikowski (2002) in the ICT-organizational change context. Focusing on social practices can provide the means to potentially avoid the usual agency/structure, mind/body, action/habit dichotomies. More importantly, some of the recent scholarship on practices suggests that an enhanced understanding of how people act technologically in a social environment can be achieved via a *practice lens* (Nicolini, 2012).

In other words, thinking about project work through the practice lens is an entrée to focusing on how this understanding is effectively perturbed via connectivity. Our approach to the study of practices is inspired in part by Schatzki (1996, 2002, 2010). In particular, we make use of his notion of how the intelligibility of a practice is central to the latter's constitution due to practices being 'integrative/dispersed' (Schatzki, 1996) and via their so-called social 'timespace' (Schatzki, 2010). First, practices can either be integrative or dispersed as follows. The integrative practices are complex higher order practices, which include dispersed practices and activities (Schatzki, 1996: 98). The integrative practices may include both work practices and leisure practices. Dispersed practices flow within all areas of social life and appear in many higher order practices, which 'center around a single type of action' such as answering calls, answering emails, and tapping on a computer keyboard (Schatzki, 2002: 88). Second, a practice transpires within a 'timespace' where practice elements form an intelligible whole. Timespace 'is a central constitutive feature of' practice, where constitutive means 'helping to make up what something, in this case practice, essentially is' (Schatzki, 2010: ix-x). Accordingly, a practice 'thus institutes and bears a timespace whose temporal and spatial dimensions are inherently, connected. Indeed, the two dimensions are coordinately instituted together' (Schatzki, 2010: 38). We will employ the notions of 'dispersed/integrative' practices and 'timespace' of practices to analyze the connectivity mediation of project work.

Affordance lens: accounting for technology material features and actor line of action

In an effort to explain how actors enroll their material environments in performing tasks, Gibson (1979), an ecological psychologist, argued that an object like a chair could be used very differently by the same actor. That is, each actor may perceive a particular set of activities for which the chair would be useful (sitting at a desk or standing on the chair to hang pictures on the wall). He postulated that actors perceive not what an object is, but rather what kinds of uses it affords; he called such perceptions of an object's utility an 'affordance.' In Gibson's formulation, people do not interact with an object prior to or without perceiving what the object is good for. He suggests that the physical features of an object exist apart from the people who use them, but those features are infused with meaning 'relative to the posture and behavior of the actor being considered' (pp. 127-128). Although the features of an object are the same across contexts, the affordances of that artifact may not be. Affordances are unique to the particular ways in which an actor, or a set of actors, perceive and use the object in a specific context. Gibson (1979) offers the following explanation of the relationship between materiality and affordances:

The psychologists assume that objects are composed of their qualities ... color, texture, composition, size shape and features of shape, mass, elasticity, rigidity, and mobility.... But I now suggest that what we perceive when we look at objects are their affordances, not their qualities...what the object affords us is what we normally pay attention to (p. 134).

Scholars who study the relationship between new technologies and social practices have found great utility in the affordance concept (Leonardi, 2011) because it helps to discern how different material features of the same

technology (e.g., the voice and email features of smartphone) may allow disparate appropriation patterns by the same actor (e.g., a consultant) utilizing a relational construct (Faraj and Azad, 2012). Since Gibson's formulation of the notion of affordance, some scholars have used the concept to explore the ways in which new technologies can be better designed (Norman, 2013), while others have used it to explore the dynamics of technologically occasioned social change (Majchrzak *et al.*, 2013).

As such, the notion of technology affordance can help us overcome criticisms of the traditional approaches to technology whereby functionality, e.g., connectivity, is often a nominal label rather than a concrete material feature capable of being grasped, turned off, or purposefully ignored. In particular, we will employ affordance for the following reasons. First, the notion of affordance can explicitly take materiality into account by focusing on the distinctive functionalities of the same smartphone technology such as voice (e.g., classification by caller-ID) and email (e.g., storing for later response). Second, it can incorporate the contextual influences broadly conceived that make a difference in how the technology is appropriated in a relational manner based on an actor's line of action – e.g., front-stage versus backstage work practices of consultants.

Research methodology

Case background

The case involves the branch of a world-top-10 consulting company in a Mediterranean country. The majority of respondents did their work as part of a team of consultants to perform a consulting project at an expected quality level and within a specific deadline; they could be assigned to multiple projects and work in different teams in various locations. The consultants often travelled weekly to the client sites to carry out their work. The rest of the sample is support staff to those consultants.

The project nature of the consultants' work often implied long hours. They appeared to 'enjoy' the work due to the constant intellectual challenge, and perhaps also because of the short term financial benefits or the long term prospect of being elected an executive of the firm. The organization consists of two main functions, a client function that consists of the consultants and a support function that includes all administration and support departments. The consultants are provided with a number of connectivity and mobile devices: a laptop configured to support their mobility as soon as they join the firm [The scope of our research did not cover the use of laptops]; mobile phone service as soon as the consultant is put on staff with a client project; and, at the time of the data collection, a smartphone was provided to those in managerial positions, while most of the other consultants appeared to obtain them on their own. Thus, the case selected for this research provides the appropriate setting to investigate the project-intensive nature of consulting work and how the smartphone affordances mediate the time-space of projects.

Research approach

To investigate the role of constant connectivity, specifically involving a smartphone, in mediating the work practices of consulting projects, we adopted a qualitative case study method (Burawoy, 1998). A case study aims at reaching an in-depth understanding of situational experiences, relationships, and human interactions with technology (Clarke, 2005). The focal organization provides a rich context in which to do so. Given the hyper-emphasis in consulting project work on constant connectivity, the selection of the focal case was in part driven by an a priori

awareness that the focal context is a rich environment to conduct revelatory research aimed at disentangling the seemingly dichotomous role of constant connectivity (Yin, 2003: 52). Furthermore, revelatory cases allow the researcher to clarify contradictions and misunderstandings and are compatible with interpretive and critical research (Walsham, 1995; Flyvbjerg, 2006).

Collecting data

Data were collected about consulting project work practices using structured interviews and a questionnaire to increase reliability. Our focus was on the practices of consulting projects and the mediating role of constant connectivity. Often informants' interpretations (answers) led to subsequent questions in order to better understand their work practices and how they were being affected by the use of smartphones. This allowed us to probe issues that were not sufficiently developed in the interview protocol. Interviews were conducted with the consultants in their company offices. In all, thirty-six respondents were interviewed (see Table 1). Twenty meetings were held face-to-face, and interviews with sixteen respondents were conducted over the phone. There was little if any significant difference with regards to answers or interview length between the two interviewing modes. Interview duration was an hour and a half on average. Follow-up correspondence was used with about half the respondents. The interviews were conducted in three rounds, first in 2009, then in 2012, and a final round in 2015. The last round of interviews focused on the details of consulting practices known as investment due diligence. By honing in on investment due diligence practices we were able to understand their underpinning project-ness features, such as 'being under the spotlight' and 'low margin for error,' with greater cartographic relief.

Protocols of data analysis

In this section we describe the protocols of data analysis that we employed to answer the two research questions: *How do smartphone technology affordances interact with the timespace of project work practices and what outcomes do they contribute to?*

The majority of interviews were recorded and transcribed. For a few we took copious field notes. The recorded data and field notes were coded with the aim of answering the research questions. Our coding efforts gelled along three themes: characterizing the distinctive project-ness of backstage and front-stage work practices of consulting; how smartphone affordances resonate with the enactment of these practices; and the potential outcome of the interplay between former practices and latter affordances. The details of these three coding efforts are described next.

Theme 1 – characterizing the distinctive feature of backstage and front-stage consulting practices

We started by coding the data to further refine the 'project-ness' of consulting practices. We attempted to identify distinctive patterns among the responses so as to see what distinguishes consulting projects from other projects and identify the specific project practices. Initially, several categories emerged, such as the routineness of performing consulting projects, the uniqueness of each project, the qualitative difference between front-stage project practices and backstage project practices, the radical sequence dependence of practices, and the high synchronicity dependence of practices. We eventually converged onto three categories in our codes: (1) The distinction between front-stage consulting project practices and backstage consulting project practices, the latter being necessary for the success of the former [we were inspired by Goffman's (1967) dramaturgical notions that

Table 1: List of respondents, organizational role and interview method

Respondent	Organizational function (client or support)	Title	Gender	Method of interview
Chris	Client	Senior associate	M	Face-to-face
Nick	Client	Senior associate	M	Face-to-face
Pete	Client	Senior associate	M	Face-to-face
Mike	Client	Senior associate	M	Face-to-face
Ted	Client	Senior associate	M	Face-to-face
Ron	Client	Senior Project Leader	M	Face-to-face
Sam	Client	Senior associate	M	Phone
Dave	Client	Senior associate	M	Phone
Raf	Client	Senior associate	M	Phone
Kevin	Client	Senior Project Leader	M	Phone
Roy	Client	Senior associate	M	Phone
Kam	Client	Senior associate	M	Phone
Andy	Client	Senior associate	M	Face-to-face
Ella	Support	Administrative manager	F	Face-to-face
Henri	Client	Senior associate	M	Face-to-face
Emma	Client	Consultant	F	Face-to-face
Mark	Client	Senior consultant	M	Face-to-face
Diego	Support	IT support manager	M	Face-to-face
Sasha	Client	Senior associate	M	Face-to-face
Sophie	Client	Consultant	F	Face-to-face
Paul	Client	Senior project leader	M	Face-to-face
John	Client	Project leader	M	Face-to-face
Tania	Support	Personal assistant	F	Face-to-face
Ellen	Support	Travel coordinator	F	Face-to-face
Mia	Support	Graphic design coordinator	F	Face-to-face
Maya	Support	Personal assistant	F	Face-to-face
Judy	Support	Personal assistant	F	Phone
June	Support	Personal assistant	F	Phone
Oliver	Client	Consultant	M	Phone
Matt	Client	Senior consultant	M	Phone
Rudi	Client	Senior consultant	M	Phone
James	Client	Senior project leader	M	Phone
Amy	Client	Senior consultant	F	Phone
Tiffany	Client	Senior associate	F	Phone
Sara	Client	Senior project leader	F	Phone
Kara	Client	Senior associate	F	Phone

are presumed to shape the social organization of interactional experience in deriving these codes]; (2) radical sequence dependence and high synchronicity dependence, which characterize the coordination of parallel tasks or sequential tasks critical for 'completing the project on time', 'conveying the right image' and 'keeping the client satisfied'; and (3) clockwork coordination as a label for ultra-high-dependence of the focal consulting project on precision choreography and orchestration to enact the backstage and front-stage practices.

Theme 2 – resonance of clockwork coordination and smartphone affordances

The affordance construct is fairly new in its applications beyond ecological psychology. As such, we provide a detailed picture of how we employed the construct. We used Faraj and Azad's (2012) explanation as an entry point to develop a greater understanding of the construct. Affordances are like 'features', functionalities afforded by the technology materiality which shapes and favors but at the same time constrains use. They are considered an action possibility provided by a technology (Faraj and Azad, 2012). Materiality embodies various aspects of the technology, including the physical details, the form, the function, the associated symbolism and the imbrication with the social, which cannot be ignored. More specifically, 'within organizations, the affordance of artifacts is not simply based on their materiality but also on relational properties that arise due to the symbolic and social nature of the setup' (Faraj and Azad, 2012: 253). The affordance links the specific feature to both actor and usage environment. It is a 'multi-faceted relational structure', which materializes through several mutuality relations between the technology (materiality, functionalities) and the actor (role, line of action and practices) in a focal context. This leads to the possibility of multiple affordances for the same technology materiality, such as a smartphone's voice and email features (Faraj and Azad, 2012; Treem and Leonardi, 2012).

We applied the above insights to arrive at a coding scheme that focused on how affordances of smartphone technology resonated with the consulting project work practices. In our data analysis efforts, we coded the data to highlight what the respondents regarded as the material features and corresponding action possibilities afforded to them via the smartphone, i.e., affordance as a mutuality of material features and action potentialities. The convergent coded data categories included: the voice (synchronous) material feature; the email (asynchronous) material feature; and associated actor's lines of action (just-when-you-need-it and just-where-you-need-it).

Theme 3 – outcome of interplay between clockwork coordination and affordances

All practices exist in timespace. Schatzki posits timespace as having an 'infrastructure-like' quality: 'timespaces form an *infrastructure* of social phenomena, including coordinated actions, social organizations, [and] the interrelated spatial and temporal features' of practices (Schatzki, 2010: 65). The timespace of interest is a kind of virtual 'interwoven infrastructure' that underpins a practice. Our goal was to better understand when/where these practices were performed and how these were mediated by constant connectivity affordances. The timespace of a practice is a 'virtual infrastructure-like' quality that underpins a practice, i.e., its temporal and spatial context. It renders the practice intelligible and points to norms shaping the performance of the practice (e.g., answering a client call on a week-end at 10:30 am during a family brunch).

Armed with these understandings, we thoroughly re-examined the data and recoded the practices within which a smartphone was employed to understand its role, identify the type of practice (integrative versus dispersed practices),

and identify what is understood by informants with regards to a 'suitable time and location' for enacting that practice. We looked at several dispersed practices but we focused on 'emailing' because our respondents provided rich information about how they managed to rearrange this practice's timespace. As regards integrative practices, we quickly converged on the face-to-face meeting practices for data gathering and concluding an investment transaction. In terms of emailing, the specific timespaces included 'mall when shopping', 'airport when travelling', 'coffee shop when taking a break', 'movie theater during leisure time', etc. In the case of data gathering and investment transactions, the emergent timespace was invariably a client office, sometimes before lunch and other times after.

We used our analysis of whether practices were performed in a place and at a time traditionally associated with that practice or not to disentangle how the decoupling/reinforcing between a practice and its timespace took place in relation to the enactment of a focal dispersed or an integrative practice.

Findings

Here we present our findings based on empirical analysis of the data in four parts: (1) in the preamble we provide a quick summary of a specific type of consulting projects involving investment due diligence to ground the reader in the social (and material) context of our findings, highlighting a key characteristic of project practices – clockwork coordination; (2) then we point to how consulting project work practices exhibit a greater level of clockwork coordination, which is thought to be leading to both higher sequence dependency among practices and a greater need for synchronization of practices; (3) subsequently we show how clockwork coordination patterns of backstage and front-stage practices are underpinned by the twin voice and email-enabled affordances of smartphones; and (4) finally we describe how the interplay of these connectivity affordances and clockwork coordination may contribute to reinforcing legacy timespace for front-stage practices and to the decoupling of timespace from backstage practices.

Consulting work practices – clockwork coordination when doing firm due diligence

In order to provide a better understanding of the practices under study we have chosen to highlight firm investment due diligence and investment transaction projects, a specific class of consulting work that is part of this industry's work portfolio. The context of this practice serves to highlight the distinctive coordination-intensivity patterns that are specific to focal practices but are also generally exhibited by most consulting work.

The process of investment due diligence is an organizational routine for a consulting firm that has repetitive as well as novel components. In general, the consulting company develops a due diligence report, presents it to the target firm and then to the interested investor, and finally work is done to conclude an investment transaction. The due diligence project involves setting up a meeting with the principals to collect information on the firm. This information is then augmented by other external environment information. The company information is mostly gathered on-site with a heavy emphasis on interviews as well as on going over documents face-to-face with specific personnel of the target firm. This process can take between 5–25 days depending on the size and complexity of the company's operations. The remainder of the information is gathered off-site. Usually, 3–5 people compose the information gathering team, and most often a team leader and a team member are located on-site while the rest of the team works at the headquarters or off-site. Subsequently, the information is compiled

and analyzed by the team. Then, the due diligence report is presented to a consulting company partner. After quality assurance/quality control is done, the report is presented in person to the target firm management in a face-to-face meeting. The same report is presented to the investor and an electronic copy is presented to both parties. Finally, major and minor amendments may be requested both by the target firm and by the investor; these changes are then made as requested. The consulting company often collects 40% of its fee upon signature, another 50% upon submission of its report to the investor and the final 10% on making the amendments and delivering the final version. This breakdown may vary in different situations.

This process as presented above appears simple and straightforward. However, in real situations the process is rarely 'routine,' as each company has special circumstances that have to be taken into account. For instance, target firms that are below a certain threshold of revenue (\$5–10 million) and a certain number of employees (40–50) appear not to maintain the standard documentation that larger companies do. More importantly, the organizational structure of the target firms is highly variable, with reporting lines and functions that reflect their historical evolution. Accommodating these variations among the firms while performing their due diligence is the hallmark of 'great professional' consultants. In particular, the consultants often rely on their 'intuitive' sense of companies they are assessing, especially in face-to-face meetings to 'read' the management and personnel of these firms. The importance of face-to-face meetings was underscored to us several times by the consultants, who indicated that documents can lie. That is why the consultants insisted on face-to-face meetings to validate and find out 'What makes the company tick?' (Andy). Some things that are said and noted in face-to-face meetings are often not apparent in numbers and documents.

In this context the consultants pointed to the fact that successful conclusion of a due diligence project depends on 'cooperation between them and the target firm for everything to work like clockwork,' as James explained. This cooperation entails a significant amount of work, which we label *clockwork coordination*. Furthermore, this clockwork coordination of the project practices appears to exhibit distinctive characteristics, which we will address in the next section.

How is clockwork coordination manifested within consulting project practices?

We begin our presentation and analysis of the findings by highlighting a distinctive project-ness and projectification of work that is apparent especially within management consulting practices, viz., clockwork coordination. First we focus on why there appears to be an order of magnitude more 'work intensity' in enacting what we term clockwork coordination in the focal consulting practices – i.e., what appears to be driving this clockwork? Second, we provide evidence of how this is enacted in practice, i.e., what are the specific mechanisms at work that underpin the observed clockwork coordination?

Clockwork coordination: back-stage/front-stage performances in consulting projects

Here we describe how our informants understand the consultancy projects and how this understanding of consultancy projects appears to be different from other projects along two dimensions. One dimension is associated with the normative culture and its manifestation in various practices, which can be boiled down to the backstage work of the consulting firm. There is a low margin for error or only one shot at doing things right, due to the highly

negative impacts of costs associated with re-working deliverables. The other dimension concerns how these normative cultural practices translate into client-facing practices and behaviors, or what we term performing on-the-stage with a high reputational risk and potential loss of face – front-stage. We offer evidence of these distinctive patterns of project-ness in the focal environment under study.

Backstage performance: low margin for error/having one shot at things/reputational risk and actual cost of re-work The project nature of consulting work practices means that income originates from billable hours. As a service business its personnel is its primary resource, and the focus on knowledge work means that there is a very low threshold and zero tolerance for consultants making errors. Consultants clearly conveyed this message to us. For example, veteran consultant Nick said:

The consultancy industry inherited the billable work ethos from lawyers and accountants who have been doing this for many decades...What is different is that for us it is even more intense: because of the nature of the project there is almost no margin for error, at least not if you want to make partner and rise up in the company.

In the context of doing due diligence the consultants are hard pressed to get results and produce their reports by getting them right the first time. A characteristic response among informants was that 'they get one shot at doing it.' Of course, most were clear that the bottom-line economics of consulting work drives this ethos in large measure. That is, re-work of project deliverables (including the work leading to it) is not billable and also reduces profitability. Rudi, a consultant who had learned the hard way when he left another firm before joining his current employer, had this to say:

When I started with my last employer I knew I had to be perfectionist. But what I did not realize was that I could not keep doing it until I got it right. No, the expectation was I got it right and did so the first time. The partner in charge after the probation period did not mince any words telling me that I should dust off my CV immediately.

For senior consultants, there is very little room for a slip-up of any kind in the front-stage practices.

Front stage performance: first impressions are most important/no second chances/performing on stage A related aspect of this same pattern of work was effectively the other side of the coin: client relations or reputational risk. Ron, a supervisor, conveyed this to us:

The image conveyed to the client is absolutely critical; it is the brand we market and sell... From a brand perspective, your people are your brand; the people are the biggest asset. So you always want to be seen by the client as an asset. "I have hired this firm," the client brags about us. He expects his deliverable to be positioned as very high quality and the best. That starts with how we the consultants behave on site and in interactions.

The normative expectation on the client side, which is internalized by almost all the consultants, is as follows:

When you are at the client site, when you are communicating with the client, the content, the look/feel of deliverables, how we get information, what we collect and ...are all part of the work. We are under constant scrutiny. I feel I am on stage...not acting a part but actually being in the limelight...(Sara)

Consultants experience the feeling that all the time they have to be on good behavior and avoid bad impressions so they can build their network of clients and their ability to accommodate their requests. This relationship ultimately leads to repeat work as well as projects with new clients through word of mouth.

Clockwork coordination: radical sequence-/high synchronization-dependence of practices

Against this backdrop of almost zero-fault tolerance in consulting practices, the necessity for near-perfect coordination of work among consultants and between consultants and their clients becomes quite apparent. This *clockwork coordination* points to the need for consultant and client activities that are on the critical path to be properly sequenced and synchronized. Of course, all organizations plan their work, and that involves a certain amount of sequencing and synchronization. However, in the context of consulting project work practices, the nature of sequencing and synchronization appears to be an order of magnitude more demanding. In other words, the previously highlighted backstage and front-stage performance characteristics of practices translate into clockwork coordination. This clockwork coordination in turn appears to be manifested in high sequence-dependency of practices and greater synchronization-dependency across practices. We describe our findings on these two mechanisms of clockwork coordination below.

High sequence-dependency of consulting practices To illustrate this form of high sequence-dependency, we again refer to the example of consulting practices associated with doing due diligence reports on several target firms located in several cities. Amy, a consultant, relays her recollection:

Look when I am arranging a series of meetings that are all day and with four companies... they had to happen like clockwork; I do a planned schedule for each firm/client; and then some CEOs and their staff do changes last minute; my own schedule can be disrupted, say, because of an emergency board meeting. So one key thing is that we need to have a chain of activities that follow each other for doing due diligence on one firm within that client's organization and doing the prerequisite work within our own team.

The consultant has clearly conveyed the message that sequencing of work within the team and with the client is critical. On the one hand, collecting information from a client entails identifying all the proper sources of information and relevant personnel to get it from. On the other hand, within the consultant team, the members meet to create a shared understanding of the whole process. For example, Matt, another consultant, mentioned that:

Along this process any potential "unknowns" or "show stoppers" should be surfaced. Advance knowledge of the firm is very important to avoid a situation where we are surprised by the state of record keeping within the target firm. We want to know this ahead of time as much as possible, that way we would delay our meeting and proceed with requesting more specific data.

Oliver, another consultant, only half-jokingly uses a battle analogy, and points out how 'it is like General Schwarzkopf said, all this preparation is like making battle plans which are 'useless' when the battle starts, but the process of planning is 'useful' since it prepares you for the unexpected!'

High synchronization-dependency of consulting practices The synchronization-dependence of consulting practices is underpinned by the fact that while sequencing of activities has to happen within a practice, synchronization has to happen for effecting proper choreography across practices, especially when these involving multiple people. For example, consultants go to great lengths to avoid 'holes' or 'troughs' in their schedule due to waiting for clients or their responses. Consultants clearly conveyed this message to us. A respondent highlighted:

I am a maniac! I scream at the central office if they leave holes in my schedule or make me wait stranded in a city while I could be in another city collecting information or making a presentation or closing a deal. Tasks, activities have to be in order or in tandem/parallel. Time is money for everybody. I am saying it half facetiously for us consultants – time is platinum at least for the company (Chris).

Tiffany, another consultant, made the point that 'syncing' in consulting is key because:

I feel like we are in the business of managing all kinds of interactions to make sure a meeting happens where and when it is supposed to. The number of interdependencies is somehow out of control. Maybe my job title should have that in it. Have you ever tried to go out shopping versus arranging times with friends or relatives? In shopping there is no "syncing," but boy, try to get 5 friends to go to dinner or for a drink – it literally "requires" a Google Calendar.

These comments collectively point to the salience of synchronization in clockwork coordination.

Clockwork coordination and just-when/where-you-need-it smartphone affordances

In this section we describe how our informants appear to appropriate the key material features of the smartphone technology in the context of consulting project work practices. It goes without saying that it is the technology materiality of the smartphone that affords 'as needed' connection, independently of the location of the user and the time. We label this as-needed potentiality of smartphone connectivity, i.e., facilitating a connection 'just-when-you-need-it' and 'just-where-you-need-it'. It is important to clarify what we mean by connectivity of the smartphone technology in this context.

The above notion of connectivity may be linked to the level of effort actors must expend to effect a communicative connection to others in order to carry out their work practices – which, as we noted above, involves clockwork coordination in the context of consulting projects. That is, if people perceive that effecting a communicative connection when they need to – in a particular location or at a particular time – is relatively effortless or effortful, they will be either more or less likely to engage in making that connection, as the case may be. Expressly, as a paraphrase of a comment we heard several times, the smartphone connectivity was 'a potentiality of 24/7 reachability which is allowing us to reach others and others to contact us when and where needed' (Emma). The pattern of use conveyed to us by informants regarding the constant connectivity associated with voice and email affordances was interestingly differentiated and nuanced: they appeared to employ synchronous voice contact as a last resort to sort things out at the last minute. Most often they used email as a first line of defense, since it is asynchronous and allows a more contingent engagement by the recipient.

Voice-based affordances and clockwork coordination of consulting project work practices

Our informants highlighted the caller-ID/call-reception handling, roaming, and general reach/range capabilities of smartphones as being highly consonant with the clockwork coordination requirements of consulting project work practices in several respects: caller-ID/call-reception handling allowing for classification of the importance of the call; multi-phone and roaming capability making it possible to do things at the last minute that would otherwise be difficult to do; and visibility/accessibility being provided to managers and clients alike. We describe the appropriation of these affordances next.

The consultants are very clear about the nature of consulting work and the 'pecking order' within their own firm and also the client's organization: a call from a partner or client project counterpart is high on the priority list. They always look at the caller-ID and respond accordingly (employing specific phone features). Kevin's view was common among the informants:

When I am meeting with a client I can see who is calling though it is on silent; I look inconspicuously and decide what to do. In most cases I call back right after the meeting if it is my supervisor or another client or a team member. But if it is a partner, it is different: it is usually not good news or else it is super urgent; these have to be dealt with immediately... I apologize and halt the meeting to handle the critical call.

The materiality of the caller-ID and call-handling features of the smartphone afford this kind of classification by consultants and helps them determine how to respond.

Another action possibility afforded by the reach and range of smartphones in the context of consulting project work is dealing with a last-minute 'crunch' or 'urgency.' This means that the consultant herself 'had to be in the communication loop', 'to resolve a disagreement', 'to reschedule a meeting', or 'to provide clarification' regardless of when it happened or where she was. The voice affordances of mobile phones, and the synchronous communication they afford, are highly consonant with the pace and rhythm of work in consulting projects. Mike's description illustrates this situation very graphically:

We go through a lot to coordinate things in advance to arrange meetings, to get the right information and make sure we are in agreement over the scope of work. But I am the first to recognize Murphy's Law – when it happens it happens at the worst time. This means you [are] getting on the cell phone massaging egos, smoothing it over with an irate client, changing meeting times, etc. Last week, my team reached me 3,000 km away to check some balance sheet details that I had prepared for a due diligence report.

Also, the dispersed work practices of consulting projects is consistent with the company policy to provide new hires with a mobile line as soon as they are put on staff on a consulting project so they are reachable when need to be. This is clearly appreciated by team leaders; the following comment was heard repetitively:

As long as consultants have their phones...I don't have to think where they are. I can call them and know exactly which client they are with and which task they are doing (Dave).

Effectively, consultants are highly dependent on each other to perform their work, and consequently, they are expected to be always reachable by team members. In the words of John, a respondent, 'My seniors expect me to be reachable anytime, even on the weekend.'

Web-based affordances and clockwork coordination of consulting project work practices

Our informants highlighted that push notification, web-based browser access and the messaging affordances of web-enabled smartphones are highly resonant with the clockwork coordination of consulting project work practices in several respects: on-demand access to project resources without resorting to laptops; scheduling and sequencing of work without the need to be talking to the project team and the client individually; and overcoming the material limitations of SMS-based communication. We elaborate the interplay of these affordances and clockwork coordination requirements below.

Several consultants linked the use of smartphones with lessening the need to employ the laptop to do email or access project resources. They made comments similar to this:

With an email-enabled smartphone, you're always connected to all project resources on the web. You are less dependent on your laptop. Also you worry less about connecting to a Wi-Fi network, which may not be available (Henri).

Related to this affordance, the 3G [at the time of research data collection] capabilities of smartphones obviated the need to connect to Wi-Fi networks at client sites. Invariably the informants echoed the following sentiment:

You are working at the client site and very few of them allow Wi-Fi access as guests on their network. Most do not, and even when they do, they have security protocols that make it very slow. With the new smartphones [WAP at the time] all you need is 3G access and you avoid any problem (Roy).

In addition, the work of project consultants is very meeting-intensive. Therefore, arranging meetings, which means synchronizing several team members' and clients' schedules, is a critical activity. Moreover, ensuring that one receives the requisite input in terms of information provided and preparation performed prior to and after the meeting (from both the consultant and the client side) makes the difference between a profitable project and one that is not so profitable. Consultants and their support staff were unanimous in their praise of the email capability of consultants' smartphones to afford them this possibility while minimizing the number of individual calls. Most support staff, like this one, said something like the following:

For a project and one consultant in one day I may have to contact and arrange two to four meetings. Contacting them individually and going through their calendars is almost a never-ending task. But I give them an initial choice of dates/times and then wait for the email to come back. It is not easy but on the phone it would be next to impossible (Tania).

Mobile phones have been around for some time, so reaching consultants asynchronously via SMS has long been possible. However, the material limitations on the length of SMS messages in terms of the maximum number of characters and the generally limited features of SMS render it a poor choice for corporate communication technology compared to smartphone email. This point was echoed by a number of consultants when they were asked why they do not use SMS instead of smartphone email:

Look, SMS is OK, but it is like giving a chef a small, 10 cm (4 inch) knife to use for all his cutting and food preparation. He can do it but it would take forever and be very annoying to use. I have used SMS, but email is simply superior for communicating with the office (Sasha).

More to the point, the smartphone that is email-enabled offers asynchronous connectivity affordance far beyond SMS. A consultant used the label 'cryptic' to highlight the constraints imposed by SMS compared to email, and others offered similar criticisms:

Have you ever tried to edit a 20 word SMS message on your smartphone? Try to cut and paste the contents of a message selectively into another. I rest my case. Since we depend on being in touch with clients and the office – email vs. SMS in doing consulting work... there is simply no comparison; of course email (Emma).

Entanglement of project work practice timespace and smartphone affordances

In this final part of the findings, we present evidence about two patterns of entanglement between the timespace of consulting project work practices and smartphone affordances. The connectivity provided by smartphone voice and email-enablement affordances interacts with the clockwork coordination requirements of consulting practices, albeit in different ways, giving rise to two distinctive temporal/spatial patterns: decoupling versus reinforcing of timespace.

Connectivity affordances decouple backstage work practices from their legacy timespace

Although previously, backstage dispersed consulting work practices were tied fairly rigidly to specific times and locations (or were at least very hard to decouple

from specific times/locations), with the advent of the smartphone, they have become more or less independent of time/location. This is effectively accomplished by performing a practice in a timespace that was not traditionally associated with the enactment of that practice, often in order to 'free up' timespace for doing other work practices.

Our respondents provided ample evidence of how they enacted timespace decoupling when handling email on their smartphone or getting in touch on their cell phones to perform project work. The timespaces employed by them to read their email and respond to it were numerous and included, 'while they were bored in a meeting', 'while at the movies with their kid', 'while the spouse is shopping', 'during travel time', 'while being driven in the car', 'waiting for a colleague or a client for lunch', and 'while waiting in general for something to happen'.

The detailed justification given by one consultant for engaging in this kind of decoupling of practice from the underlying timespace of answering email at odd times/places is worth looking at:

We have many small emails that you have to respond to, like 40–50 typically per day. ... small email where you need to respond by "yes" or "no", "maybe", or "yes I would do this"... So things that do not require typing long emails... when I'm in the car ... Sometimes when I'm even at lunch or when I'm waiting for something... when I'm standing I respond to them. ... So when I come to the office, I actually gain a few hours, because if you sit and do this in a row, it takes time. When I do it every time I have two or three minutes empty, it actually kills a lot of those emails (Chris).

This consultant's explanation was echoed by several others, who said that by dealing with a couple of emails every time one has some free time, one can expedite one's emails without using up 'precious' office hours during which one can concentrate on what Chris called more 'substantial tasks' such as 'validating a report to be sent to a client.'

Another consultant gives further clarification and a window on how this is done:

I sometimes feel it was long ago when I used to do most of my work at the desk with my computer and landline phone in the office...answering calls, arranging meetings, doing emails, preparing charts, doing research on companies, etc. For sure, I do a lot of work at the desk via telephone. But I also do a lot of work when NOT at my desk and on the office phone and plainly not in the office – the smartphone has changed all that. It is not good or bad; it is the nature of consulting work. You used to be on the road anyway but with the smartphone you end up taking care of a lot of tidbit things that you can while on the road (Paul).

This consultant was not alone in conveying this explanation. Indeed, more than three-quarters of the respondents made similar points. That is, aspects of consulting work, which he called tidbits and which we call dispersed practices, especially backstage ones, are generally now decoupled from their traditional timespace. This decoupling was considered a 'convenience' by some consultants. By performing the email-like dispersed practices during their 'idle' time that would have been lost otherwise, consultants consider that they are effectively 'saving' office time for more crucial and time hungry integrative practices.

In the same vein, Kam, another consultant, conveyed the following thoughts as to the process of engaging in sending emails late at night in order to gain time and obtain a faster response in the office:

Having smartphone-email for me is very good because it also saves me a lot of time and phone calls to other people, so for me it's much easier to send emails even at 2 am ... This way, by sending at night, when I wake up I am almost guaranteed to have an answer.

The potential pattern emerging from the above discussion is that smartphone affordances of voice and email may have contributed to a decoupling of consulting work practices from their traditional timespace. In particular, the dispersed practices of communication, scheduling, and information gathering which often took

place backstage in the offices of consultants now happen when and where needed, if voice and email-enabled smartphone is working. On the surface this may look like a mundane shifting of time and place for enacting the focal practice. But on closer inspection, there is a potentially significant decoupling taking place that is rendering the practice independent of its traditional timespace. We surmise that, in the context of consulting project work, there appears to be a trend toward de-temporalization and de-spatialization of the dispersed backstage practices. We term these potential patterns a-temporality/a-spatiality of timespace associated with the enactment of the backstage project practices, especially the interplay of the smartphone voice and email affordances.

Connectivity affordances reinforce legacy timespace of front-stage work practices

In the context of the front-stage consulting project work practices, the traditional timespace pattern of enactment appeared to be maintained and reinforced even in the presence of the connectivity affordances. In other words, these practices, i.e., consultant-client information gathering meetings and presentation sessions and investment transaction deals, were more or less rigidly tied to their traditional timespace underpinnings. Indeed, the whole clockwork coordination is implicit in the high sequence dependence and synchronization dependence of such practices. This is in part due to the front-stage nature of these practices pointing to the need for an order of magnitude greater orchestration and choreography.

Ted, one of our informants, was very creative in using metaphors to highlight that smartphones or not, the face-to-face meeting is where it happens:

We have a dress code... We have a method... We shake hands in a certain way ... everything in client meetings is planned down to the minute details, regardless of who we are meeting, but more so the higher we go on the totem pole,... this may look like too much emphasis on appearances. But we have to, these meetings are where our work culminates and hopefully leads to successful deals. At the end of the day whether we used the latest iPhone or a pigeon to communicate, the deal happens in a meeting.

This consultant was not alone in emphasizing the critical importance of face-to-face meetings as 'where rubber meets the road' in projects – the setting where the investment due diligence work and the subsequent deal transactions take place. In other words, the timespace of the face-to-face meeting, which often takes place at the client site, is unlikely to be changed, at least not until some of the cultural handicaps of tele-meetings are mitigated.

Another consultant, James, used the metaphor of 'bandwidth' to convey a similar message in response to our probing about the significance of smartphone affordances for some of the front-stage practices:

When we are doing due diligence and then moving toward completing a transaction, the need for greater and greater "bandwidth" becomes essential. I have never seen due diligence reports delivered on a teleconference facility. I have never seen investor and firm meetings conducted over the phone. You need a lot of "bandwidth" to size up the situation, look [at] who you are dealing with, etc.

Again, other consultants highlighted similarly how smartphones are facilitators 'to get us here' but front-stage meetings are 'the real thing' that make or break a consulting project in terms of outcomes.

Another consultant used the notion of a 'piece of cake' to underscore the fundamental role of legacy timespace in the enactment of certain front-stage practices:

You are asking me if these smartphones and other gadgets with new features and apps make a difference to my work and how I conduct my daily routines. Of course they do. But I would say that is not the whole picture. What you should ask is what goes on in the

background to make this happen in front of you and more importantly to make it look like it is a piece of cake. We know it is not and we make it look like it is. Smartphones may and do play a big role but they are invisible for all practical purposes (Pete).

What this consultant said was also discussed by others, but not as explicitly and not with such frankness. He points to the fact that the timespace of certain practices is very hard-wired with the normative and cultural givens of consulting project work. Furthermore, what he is also pointing out is that all the work that goes into making 'the meeting' and 'the deal' happen, including all the 'latest gadgetry', still ends up reinforcing the legacy timespace of focal practices.

Discussion and conclusion

Our research focused on how the voice and email connectivity of smartphone technology mediates the consultants' project work practices in a major regional branch of a top-tier management consulting firm. The objective of our research was to contribute to the broad perspective literature on project-ness and by extension also to the broader view of constant connectivity through an interpretive case study: going beyond the traditional dichotomies (e.g., the autonomy paradox) associated with smartphone use and attempting to tease out a more differentiated understanding of patterns of mediation between project work practices and constant connectivity. Our findings provide a preliminary glimpse of this differentiated understanding as follows. First, we provided a more detailed and process-rich understanding of project work in the management consulting environment, which we characterized as *clockwork coordination* in conjunction with front-stage and backstage practices. This suggests a Goffmanesque potential extension of the broad view on projectification of organizing practices. Second, we highlighted in detail how the same smartphone technology is associated with two distinctive patterns of constant connectivity appropriation: synchronous affordance facilitating front-stage work and asynchronous affordance underpinning backstage work. This adds to the increasing evidence of the nuanced-ness of the constant connectivity appropriation process. Third, we described how this dual pattern is intertwined with the clockwork coordination requirements of front-stage and backstage consulting project practices, which on the one hand appear to be maintaining the legacy timespace associated with front-stage work, while on the other hand they tend to contribute to the de-spatializing and de-temporalizing of the timespace associated with backstage practices. A more detailed account of our proposed contributions to the existing literature follows.

First, the prior research on project-ness and projectification, especially project discourse, has taken a broad-based view pointing to the logic of rationality and reification (Pellegrinelli, 2010; Sage *et al.*, 2013). For example, the prior literature has looked at the consequences of the logic of rationality and planning-intensity (e.g., Hodgson, 2004; Lindgren and Packendorff, 2006, 2007; Packendorff and Lindgren, 2014). This stream of research has examined the underlying discursive developments in which the notion of rational project management has become both legitimate and desirable in contemporary society and a driver of projectified organizing forms. The more recent research has begun to look at projectification beyond contributing to an outcome; it has found that projectification is also a process (e.g., Lindgren *et al.*, 2014; Peticca-Harris *et al.*, 2015). One example is the research by Peticca-Harris *et al.* (2015), which highlights the crunch mode process of work in software development projects as having a distinctive rational and reified dynamic that tends to be regarded as inevitable but also leads to resistance. Another example is the paper by Lindgren *et al.* (2014), which details the process of producing discursive justifications for balancing the insecurities of temporariness in theater production against the purported adventure and thrill in the artistic work. This type of research is very useful since it outlines specific processes and

mechanisms through the projectification of work in specific settings, taking shape and producing the project-ness effects that deepen prior understanding. Through our research we have similarly focused on one aspect of project work, namely, clockwork coordination. In particular, we have highlighted how this clockwork coordination is enacted through the intertwining of the front-stage and the back-stage (utilizing the dramaturgical organizing notions advanced by Goffman, 1967/2005). Therefore, we suggest that the notion of clockwork coordination is a specific rational mechanism that takes on a life of its own and tends to be reified in consulting project work. As such, we have contributed to the extant research by specifying a distinctive rational and reified projectification mechanism.

Second, a stream of the extant research on constant connectivity has started to embrace a broader view of focal phenomena (e.g., Wajcman *et al.*, 2008). The broad-based view does not take connectivity's contents and mechanisms for granted, and instead problematizes both the variety and the patterning of the constant connectivity being enacted (e.g., Kolb *et al.*, 2012). For example, under this rubric Kolb *et al.* (2012) identify four distinctive mechanisms of connectivity: hypo-connectivity, hyper-connectivity, requisite and optimal (flow) connectivity. In a similar fashion, Wajcman and Rose (2011) focus their energies on delineating how an interruption is handled in the wake of constant connectivity by defining it 'as a change in an episode of work' rather than as a 'distraction.' Indeed, Wajcman and colleagues find that changes in episodes of work, interruptions, and their handling by professionals in a telecom firm are neither uniform nor treated indiscriminately as distractions. Instead, they paint a nuanced picture involving the exercise of agency subject to the cultural norms of the firm.

In our work, we focus on the constant connectivity associated with the use of the smartphone in consulting project work. In particular, we discern two distinctive patterns of engagement within project work: one with voice or synchronous affordance connectivity and another with email or asynchronous affordance connectivity. First, the consultants and their team members appear to rely on asynchronous affordance to enact backstage dispersed practices involved in bringing clockwork coordination to fruition – they often referred to this affordance as 'the first line of defense.' For example, in scheduling meetings, getting information, giving information, communicating various deadlines, etc., email was used exhaustively because it was regarded as 'hopelessly inefficient' to do these things via voice affordance. Second, the consultants and the team members (including members of the client side) resorted to voice or synchronous affordance in doing last-minute things or things that needed 'a person's immediate attention at the other end' – they preferred to use this affordance 'as the last resort.' What emerges from our findings on consultants engaging with the smartphone's affordances in performing projects is a differentiated and nuanced pattern of connectivity – different from the 'crackberry' addiction highlighted by Mazmanian *et al.* (2013). To be sure, rationality norms and reification are at work governing clockwork project coordination. However, consultants also exercise agency in engaging with the two affordances subject to situational exigencies that are highly differentiated in the context of their project work.

In summary, we have outlined two distinctive mechanisms of appropriation associated with different materialities of the smartphone's asynchronous and synchronous connectivity (in consulting project work). As such, we have contributed to the extant research by further de-black-boxing constant connectivity and painting a more elaborate picture of how constant connectivity is enacted within project work practices beyond standard dichotomies.

Third, the scholarly work on constant connectivity has generally regarded the notions of anywhere and anytime smartphone interactions as givens and focused on how the latter can trigger stress and anxiety (e.g., Barley *et al.*, 2011). The projectification of work research has similarly highlighted that 'addicted to projects' syndrome exists as a backdrop whereby it is hard to disconnect from work no matter where you are (e.g., Rowlands and Handy, 2012). However, the extant

scholarship on the project-ness of work and constant connectivity has often left the 'when and where' both under-explored and under-theorized. Our findings point to the constant connectivity of smartphones vis-à-vis synchronous and asynchronous affordances shaping the timespace of consulting project work practices. Specifically, in regards to the backstage dispersed practices such as arranging meetings, obtaining information, communicating with team members, and preparing reports, as might be expected the asynchronous connectivity affordances contribute to a pattern often recognized as a stylized fact: that these practices now take place 'anywhere/anytime.' However, our research points to an interesting and perhaps deeper nuance that we labelled the *de-temporalization and de-spatialization* of dispersed practices, which are directly mediated by constant connectivity. It is not just that they take place anytime/anywhere but that the constant connectivity has effectively decoupled these dispersed practices from the institutionally anchored timespace – bringing a sense of a-temporality/a-spatiality to these practices. Another interesting pattern of constant connectivity mediation in consulting project work practices also emerged from our findings. That is, in regards to front-stage practices the constant connectivity affordances appeared to more or less maintain the legacy timespace associated with their legacy enactment. In other words, the timespace of front-stage consulting project practices is effectively reinforced via constant connectivity.

In summary, we have uncovered a mechanism through which constant connectivity is contributing to and shaping the decoupling of traditional timespace from backstage practices at the same time as it is reinforcing traditional timespace in the case of front-stage practices (within project work). Thus, we have contributed to the literature by providing a more differentiated and nuanced understanding of the timespace of project work practices as mediated by constant connectivity.

Our study has several limitations that can be addressed in further research. First, we focused on constant connectivity via voice and email – at the time the BlackBerry phone was the primary platform – in a particular form of investment and management consulting. Since we did our research, a whole host of system alerts and social media functionalities (WhatsApp, Facebook, etc.) have become available, and studying them can provide a more realistic picture of constant connectivity. Second, the practices of consulting projects may be varied, and differences in consulting practices may be important to consider. Third, rather than looking at smartphone connectivity alone, future iterations of this paper can look at the broader notion of mobility, which would include laptop-based affordances. Fourth, studying other dispersed practices beyond email and additional integrative practices other than front-stage meetings will allow us to enhance the validity of our observed findings. Fifth, our single site was the regional office of an international consulting firm, which can be augmented in future research to include multiple offices and other industries that exhibit project-ness characteristics, allowing us to extend the range of our findings. Finally, multiple case design can significantly enhance the potential theoretical generalization that is afforded by such research.

We conclude by pointing out that we encountered an interesting performative shift in the project work practices of consultants and the associated constant connectivity. If constant connectivity in doing project work is increasingly performative, then the notions of project work and constant connectivity are mutually enrolled in constituting the very phenomena under study. As such, this constitutive property starts functioning like a prosthesis – like how a handicapped person adapts to a prosthetic limb so that it increasingly turns invisible, at least within her enacted practices. Indeed, the fact is that the notions of project-ness and constant connectivity are only meaningful if the 'other' is an 'opposite' sociomaterial form that can somehow be intelligible as separate (non-project-ness and non-constant connectivity). However, this 'other-ness' is evolving rapidly in a world of work characterized by universal projectification and ubiquitous connectivity. Thus, how does one 'separate' project-ness from non-project-ness and connected from non-connected when most work is both projectified and digitally connected – embodied in the same sociomaterial timespace? Indeed, the consultants

relayed to us that they are so embroiled in project work and constant connectivity that the 'other' is increasingly hard to imagine. However, it is precisely for these reasons that our approach (and other scholars' broad view) may hold greater hope for problematizing taken-for-granted and black-boxed notions underpinning project-ness and constant connectivity in order to shed more light and produce an enhanced understanding of the focal phenomena.

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