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The Ambidextrous Employee: Exploiting and Exploring People's Potential

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Introduction

How do you follow the rules and break them at the same time? This is a tricky question which increasingly numbers of employees are faced with during their workdays (and increasingly nights). They are asked to comply with established organizational rules and routines which are thought to be the basis of the organizations' ability to produce results and survive. At the very same time they are also encouraged to explore new ways of working, experiment with new routines and rules and engage in processes of continuous innovation. Increasingly numbers of workers are asked to both follow the rules as well as be creative; comply with carefully managed work processes at the same time as they are also asked to invent the future. For instance, in Holmqvist and Maravelias's (2011) recent study of the renowned Swedish truck and bus manufacturer Scania the authors reported how workers were requested to adapt to the present lean production system at the same time they were asked to reflect upon and criticize the standard operating procedures of their behaviors. They were demanded to be able to refine, engage in repetitive action and implement collectively shared beliefs regarding production and manufacturing; but they were also expected to take actions in new and unexpected ways to make the production work even better, play out new solutions and even challenge fundamental ideas about the production philosophy. As the authors stressed, Scania is not a single case but shares many features of other global corporations and organizations. A pressing issue that comes out from this and other similar studies is, how do employees cope with these apparently conflicting demands?

While there is a cottage-industry producing knowledge about 'organizational ambidexterity' where organizations are said to address both the need for continuous repetition and discipline, as well as experimentation and innovation (see, e.g., Bontis et al., 2002; Crossan and Berdrow, 2002; Gibson and Birkinshaw, 2004¸ Tushman and O'Reilly, 1996), we know very little about how it plays out at the individual level, i.e., 'the human side' of the ambidextrous work ideal (Raisch and Birkenshaw, 2008). This means, we have little idea about what exactly ambidextrous strategies look like in practice and what are its human implications. Perhaps more importantly, we don't actually understand ambidexterity from the point of view of the (human) resources that are to be *exploited* or *explored* (see March, 1991). We have little idea about how employees (who are often seen as an important source of 'firm competitive advantage' actually go about managing the tensions between processes of exploration and

exploitation. How do people actually make ambidexterity work in a day-to-day fashion and how do they cope with often incommensurable demands of being both exploitative and explorative; both regarding their organizational roles and their wider lifestyles? Can they actually cope and 'balance' exploitation and exploration as is implicit in the notion of the ambidextrous organization? Or is the 'ambidextrous employee' that is so often idealized in today's management literature nothing but a myth, an ideal character that has little to do with real life?

In this special issue we seek to address this glaring gap by exploring the lot of the ambidextrous employee. Given there is such a dearth of research in the area, we will seek to provide a broad theoretical framework to orient future research in the area. To do this we will draw together James G. March's fundamental work on exploitation and exploration; studies of ambidexterity; and more recent work on the sociology of contemporary workplaces. We will draw together this rather eclectic range of theories to making the following argument in three parts.

In the first part of this Introduction we propose March's ideas about organizational learning as well as work inspired by this to argue that organizations enact their environment and then engage in processes of retrospective attention and reflection which is guided by organizational rules and routines. Enactment remains a critical human activity and can be seen as a fundamental explanation to why humans and organizations have problems balancing exploitation and exploration. In the second part we turn to research on Organizational Ambidexterity to point out that organizations face an important trade off between whether they exploit existing rules and routines in their attempts to negotiate the environment or whether they explore novel rules and routines. As we suggest, the popular notion of ambidexterity seems to be a nice idea, but is hardly realistic in reality. In the final part we draw on research in the sociology of work to consider how this trade-off plays out at the individual level. We argue that organizations seek to adopt organizational ambidexterity by implementing ambiguous control systems, thus addressing a classic idea in the literature on how to avoid either excessive exploration or excessive exploitation. However, these often create a series of 'double binds' for employees which means that they are trapped between often incompatible demands of exploitation and exploration, leading them to either exploit or explore. To negotiate these demands, employees need to engage in forms of self-management that balance these competing demands; but this proves seldom successful.

These modes of self-management can prompt experiences of autonomy and possibly high levels of individual performance. However they can also lead to significant experiences of stress, eventual breakdowns and dramatic falls in individual performance, further amplifying traps of exploitation or exploration. Having made this argument, we then go on to introduce the contents of this special issue, where the different contributions substantiate and elaborate these ideas and claims.

Enacting the Environment

A key idea in James G. March's research program is that organizations learn by encoding experience into rules, routines and standard operating procedures. For instance, Cyert and March (1963: 118) argued that "an organization is an adaptive institution. In short, the firm learns from its experience". Ideally the experiential learning by an organization requires that an organization be able to experience the environment perfectly and objectively. This means it should be able to understand the environment's full variety and complexity. But, since the complexity of the environment is always immensely greater than the computational powers of

the organization (see Simon, 1996), no organization can experience and thus learn from all potentially relevant experiences. This leaves organizations in a quandary – how do you learn about the environment on the basis of incomplete information about the very thing you are trying to learn about?

For the cacophony of environment information to become meaningful, it is necessary that some aspects of that information capture actors' attention. Weick (1969: 91) points out that '(i)t is actors and actors alone who separate out for closer attention portions of an ongoing flow of experience. It is their making of experience into discrete experiences that produces the raw material for organizing'. Thus, through individuals seeking to direct their attention, experiences of a chaotic environment begin to gain some degree of unity: 'The fact that I become aware of the meaning of an experience presupposes that I notice it and 'select it out' from all my other experiences' (Schutz, 1967: 41). Without conscious attention involving 'selecting out' aspects of the environment for particular attention, all an individual in an organization is faced with is a confusing buzz of almost infinite information. In this regard '*my experience is what I agree to attend to.* Only those items which I *notice* shape my mind – without selective interest, experience is an utter chaos' (James, 1981: 381). Once an experience has been caught in the "cone of light" as Schutz (1967) put it, the experience is "lifted out" from the ongoing stream of lived experience, and becomes discrete. It is at this moment that the experience acquires meaning. Through activity, actors "freeze" some experience that they subsequently reflect upon. As a result, particular aspects of the environment become the focus of attention and some aspects of chaotic information about the environment are endowed with significance.

Experiences of the environment are not just randomly selected out of the flow of experience by individuals. They are often selected on the basis of prior experience. Prior experience direct (but not determine) people's attention in a selective manner to situations and thus allow them to experience certain things. Any situation is "pre-managed" through existing experiences – people may gain new experiences to the extent that they combine their existing experiences in a novel way. Hence, it is not the case that people encounter new situations that are then interpreted by using existing experiences. People select out relevant information based on past experiences. In other words, an individual selects aspects of the environment which they should subsequently attend to.

One important aspect of this learning is individual reflexivity. This involves an individual reflecting and thinking about, selecting and questioning their own experiences. A crucial part of this reflexive process involves an individual engaging in an 'internal conversation' with regarding to their experiences and decisions (Archer, 2003). A crucial aspect of this entails a procession of reflection and selection of one's individual "stock of experience" that is basically only accessible to oneself. But this reflexive knowledge of oneself requires attention and reflection. To make it available requires that the person stops, arrests the continuous spontaneity of her experience, and deliberately turns her attention back upon herself.

Although this process of individual reflexivity is crucial in learning, it cannot take place with only an individual's experiential resources. When engaging in reflexivity, people typically take into account the assumptions, judgments and categories of assessment which others use to define what is considered to be useful experience. Indeed, Berger and Luckmann (1966: 41) point out 'reflection about myself is typically occasioned by the attitude towards me that *the other* exhibits. It is typically a 'mirror' response to attitudes of the other'. Thus, shared experience and understandings are necessary to form any kind of individual process of

reflexivity. While the relative importance of these common categories and experiences may vary from individual to individual (Archer, 2005), the attitude and behaviors of others are crucial to an individual's understanding of herself. In social processes, an individual learns to attend to his or her private experiences in a sensible and meaningful way. Thus people's selective attention to experience is a social process where humans bargain with others in order to enact socially valid experiences. By this we mean they bargain about which experiences in their past might be considered that are socially meaningful. As Dewey (1916: 94) points out 'the individual in his isolation is nothing; only in and through absorption of the aims and meaning of organized institutions does he attain true personality'. What this suggests is that although learning stems from acting and then attending to and reflection upon one's actions, it is only through social interaction that an individual becomes aware of what experience they should attend to and how they might go about reflecting upon this experience. Dewey (1938: 39) argues that 'experience does not go on simply inside a person. It goes on there, for it influences the formation of attitudes of desire and purpose. But this is not the whole of the story … There are sources outside an individual which give rise to experience'. In this sense, selecting and reflecting on experiences that can be learned from is a social rather than individual process. The experience that we use to select out aspects of the environment is socially situated; every experience is the result of interaction between a person and the world in which he or she lives. In that regard any meaningful experience is necessarily "intersubjective" (Schutz and Luckmann, 1973).

In an organizational context, 'inter-subjective' processes of selecting and reflecting on experiences are profoundly shaped by shared organizational rules and routines (see March and Olsen, 1976). These are explicit or implicit guidelines that provide organizational members with shared ways of attending to their experiences. Rules and routines provide a kind of shared screening device that helps to draw the attention of organizational members to a particular aspect of the environment. In this sense, rules and routines help the organization to make sense of their environment. But at the same time they draw individual actors to a very limited set of data about the environment. This enables individuals to learn 'organizationally appropriate' experience (Weick, 1979). Without this ability to routinely ignore and select information from the environment, the organization would become overloaded with competing interpretations and become swamped by incommensurable demands from its environment. Lacking ability to collectively focus on similar relevant experiences through discriminative attention, no lessons from its construction of the environment can be drawn at all.

Organizational rules and routines can provide a resource for directing individual attention and reflexivity. By doing this, they provide individuals in an organization a resource for coping with what can often be the overwhelming complexities of information produced through their action on the environment. In this sense organizational rules and routines provide an individual with a cognitive safety blanket which helps to block out the potential confusing and anxiety-inducing flux of information. In addition, these rules and routines can provide an important co-ordinating mechanism which helps to ensure that individuals have a shared understanding of what confusing and ambiguous results of action. They help to create collective simplifications which allow people in an organization to see the environment in the same way. Finally, these rules and routines can help to facilitate action (Brunsson, 1982). It can move people in organizations beyond a through-going, yet time and effort consuming analysis of information about the environment and focus them on taking action. By focusing on only a limited selection of information about the environment (which rules and routines

direct their attention to), individuals are able to cast aside their concerns and simply do something.

Through engaging in this ill-considered action, people in organizations are able to build up a sense of enthusiasm and commitment to a course of action. If individuals had cast these organizational sponsored rules and routines aside, then they may have needed to consider a wider range of issues. Such careful analysis can consume time, dampen enthusiasm, and ultimately stymie collective action. In this sense, organizational rules and routines are important co-ordinating mechanism which organizations often fall back on when faced with new information from the environment. Particular configurations of rules and routines in organizations that are unique to the organization and are relatively difficult to imitate can become competencies.

There is a now a long running strand of work in strategic management that suggests that these competencies form the basis of an organization's competitive advantage (see Levinthal and March, 1993). This leads to the conclusion that if an organization wants to create successful collective action, it needs to exploit shared rules and routines which have proved to be a successful means of responding to the environment in the past.

However, enacting rules and routines can be a double-edged sword. While they can allow organizations to co-ordinate collective action, they can also become behavioural traps. This happens when a set of rules and routines which an organizational members have used to attend to and reflect upon the environment blind them to other aspects of the environment (which may become crucial). Hence, 'attentiveness to one's own past experience . . . continue(s) unpunished for surprisingly long periods of time' (Weick, 1979: 239). Eventually, organizations become 'closed systems' where it is reasonable to suggest that the 'environment is inside the organization' (Hedberg, 1981). This can make organizational members increasingly one-dimensional and trapped into a set of out-dated rules and routines (see Hedberg and Jönsson, 1978; March, 1991). An important result is that individuals in an organization can become socially blinded to important information about the environment; indeed 'myopic' (Levinthal and March, 1993). And it is often difficult to break out of this organizational imposed blindness. This is because it is precisely the rules and routines that have enabled the organization to cope with the over-whelming flux of information and create collective action in the past that actually begins to hind meaningful attention to new aspects of the environment and novel forms of collective action. In such situations, the rational response for actors is to begin to drop their collectively shared rules and routines which they might have exploited for so many years and to begin to explore new ways of attending to and reflecting upon the environment. Such 'unlearning' (Hedberg, 1981) and discarding of obsolete knowledge (March, 1999) is, however, very hard or even unlikely. As a result of positive feedback between experience and competence, organizations are likely to persist in their activities, further exploiting and refining the programmes and routines that are critical to their present behaviour. Hence, the process of enacting the environment suggests that organizations and their members become increasingly attached to a certain worldview, and all the more loyal to an established scheme of action. Enactment is essentially the result of humans' bounded rationality where people learn to both simplify and specialize their behaviour (see March, 1994).

To briefly summarize, organizations encode their experiences into rules and routines, which is the result of a process of enactment. This involves individuals in organization acting, then attending to and reflecting upon particular information about the environment produced by

their own action. By creating shared patterns of attention and reflective (and hence enactment), these rules and routines can be vital competencies in organizations. But at the same time, they can turn out to be dangerous 'competency traps' (March, 1991) which confine organizational members to narrow and myopic ways of attending to, reflecting on, and enacting the environment (see Holmqvist, 2004). What this suggests is that one of the central dilemmas which organizations face is how they might both ensure there are sufficient rules and routines which allow effective collective action, but at the same time avoid these rules and routines becoming so entrenched that they blind the organization to many salient aspects of the environment and effectively cut short potentially valuable paths of enactment. It is to this familiar and well-known dilemma we will now turn.

The Quest to Organizational Ambidexterity

In 1991, James G. March specified how organizations might deal with rules and routines which can be both an important source of competitiveness but also inflict collective blindness and myopia. He formulated this dilemma in the following terms: On the one hand, organizations can *exploit* rules and routines by focusing their attention on specific competencies. This involves refining their rules and routines which creates a sense of reliability among organizational members. On the other hand, organizations can *explore* their beliefs, values and ideals by innovating, taking risks and experimenting. This breaks down existing rules and routines and creates a variety of different patterns of attending, reflecting upon and enacting the environment. Exploitation thrives on discipline, management, organization and control. Exploration thrives on playfulness, ambiguity and relaxed control.

March (1991: 71) argued that "maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity". This message is reinforced by Levinthal and March (1993: 105) who argued that firms need to "engage in enough exploitation to ensure the organization's current viability and to engage in enough exploration to ensure future viability". Likewise, Crossan et al. (1999: 522) maintain that "renewal requires that organizations explore and learn new ways while concurrently exploiting what they have already learned". In the *Academy of Management Journal's* Special Research Forum on "Managing Exploration and Exploitation", the editors (Gupta et al.: 2006) stressed the importance for organizations of balancing exploitation and exploration by becoming "ambidextrous". This involves organizations nurturing the ability "to simultaneously pursue both incremental and discontinuous innovation and change" (Tushman and O'Reilly, 1996: 24; see also, e.g., Bontis et al., 2002; Crossan and Berdrow, 2002; Gibson and Birkinshaw, 2004).

There is now a growing body of literature that outlines how organizations seek to balance competing demands of exploitation and exploration at the organizational level by fostering 'organizational ambidexterity' (Raisch and Birkenshaw, 2008). Some point out that the problems of simultaneously nurturing processes of exploration and exploitation can be addressed through the outsourcing or developing alliances with external organizations (Baden-Fuller & Volberda, 1997; Lavie & Rosenkopf, 2006; Rothaermel & Deeds, 2004). Others have argued that organizations can seek to resolve problems of ambidexterity through temporal separation, whereby they cycle through times by either focusing on exploitation or exploration (Brown & Eisenhardt, 1998; Nickerson & Zenger, 2002; Siggelkow & Levinthal, 2003; Venkatraman et al., 2007). Others point out that organizations can nurture ambidexterity through creating spatial separation between these different activities in a firm. This can include specialist business units which either focus on exploiting existing competencies or exploring and developing new competencies (Brenner and Tushmann, 2003),

developing teams within a business unit, which each have a different focus (Adler, 2001), or even assigning different roles (which either emphasize exploitation or exploration) to different individuals within a team (Jansen et al, 2008). Yet others have pointed out that it is possible to nurture ambidexterity through the creation of parallel structures that operate simultaneously. These typically involve a more formal organizational structure which ensures the exploitation of existing competencies as well as a more informal and flexible set of aspects such as project teams which provide space for the exploration of new competencies (e.g. McDonough and Leifer, 1983). More recently, some have sought to look at the position of managers and how they attempt to resolve these dynamics. They have pointed out that managers are required to engage in paradoxical thinking whereby they are able to hold both demands of exploitation and exploration in mind simultaneously (Smith and Tushman, 2005). Others have noted, they must have both a short-term as well as a long-term orientation (O'Reilly and Tushman 2004, Probst and Raisch 2005). Still others have stressed that managers seeking to encourage ambidexterity should engage with both top-down knowledge and bottom-up knowledge flows (Mom et al, 2007).

These ideas go some way to suggesting the characteristics that may help individuals to become ambidextrous, or at least appear so. However, they say very little about what the experiences of ambidexterity are for those who are being managed, or if it is indeed possible to accomplish. As already said, can employees manage to simultaneously exploit collective rules and routines, but at the same time explore and experiment with new ones? What tensions does this set up and can they be resolved? What does it mean for experiences of work when employees are being simultaneously asked to exploit existing knowledge but also engage in profoundly new rules and routines? In line with what was said above on organizational enactment, in his classic treatment of the subject, March (1991) notes that individuals may face some significant cognitive shortcomings in their ability to simultaneously engage in both exploitation as well as exploration. Indeed, it appears as if the popular notion of ambidexterity goes contrary to established ideas in the organization studies literature on organizational learning.

Idealizing the Ambidextrous Employee

Despite many years of serious and interesting conversations on March's notions of exploitation and exploration, few, if any studies have more closely examined the resources that are to be both exploited and explored, namely human beings' attitudes, behaviors, mindsets, and bodies. 'Balancing exploitation and exploration' implies that people need to have the intellectual, social and physical capacity, will, strength and ability to produce, execute, and refine existing rules and routines. But they also need to have the intellectual, social and physical capacity, will, strength and ability to experiment, search, and play with new rules and routines for attending to and interpreting the environment. They need both be able to discipline themselves in line with narrowly proscribed ways of interpreting the environment, and 'go crazy'. They need both focus and fantasy. They need to adhere to organizational proscriptions, as well as challenge them.

This work suggests that the ideal employee is no longer only a submissive 'organization man' that responsibly executes pervasively regulated rules and routines; rather they are also an 'entrepreneur' who resourcefully and enthusiastically explores new rules and routines in organizational life. Rather than suppressing their personal characteristics and quirky interpretations, the 'self-managing employee' puts their whole selves and desires to productive work (see Holmqvist and Maravelias, 2011). This means employees are encouraged "to use their alleged independence to express their resourcefulness as well as to

submit themselves to continuous self-scrutiny and audit in the name of accountability" (Costea et al, 2007: 253). This suggests that self-exploration and self-exploitation are encouraged and that traditional restrictive controls recede into the background. It also means that control is displaced from an external authority that ensures compliance with organizational rules and routines to the inner authority of the self-management subject.

In this world, managing experiential learning becomes primarily a matter of management of self, where individuals' ability to enact a relevant world based on their individually enacted experiences becomes critical for their behavioral success in that world. Furthermore negotiating these dual demands of exploration and exploitation in the workplace requires employees to work with a series of tense and indeed painful 'double binds' (Ekman, 2010). These are impossible paradoxes that employees seem to never be able to adequately resolve. The result of attempts to resolve or at least work with these tensions can be simultaneously high performing as well as very creative employees that eventually can lead to a 'success trap' of excessive exploitation. At the same time, it can also lead to significant emotional strain and eventual breakdowns in performance and productivity; hence a 'failure trap' due to excessive demands for exploration. The tension between exploitation and exploration becomes a key aspect of everyday life within the organization. But this gives rise to a pressing question – how is it possible to encourage employees to do two apparently different things at once? How do organizations encourage employees to simultaneously scrupulously follow organizationally proscribed rules and routines at the same time as they encourage employees to break these very rules and routines and playfully explore new ones?

One way that organizations have sought to deal with this tension is through the adoption of ambiguous control systems, which has been a key idea in the organization studies literature for long time (see, e.g., Hedberg and Jönsson, 1978; March and Olsen, 1976; Weick, 1976). These control systems work simultaneously through more technocratic means which try to emphasize smooth throughput of material and the exploitation of existing competencies in the organization as well as normative control mechanisms which accent personal development, playfulness, and other virtues such as community. This can, for instance, be seen in a study of a large consultancy firm which found consultants typically being subjected to both technocratic means of control aimed at ensuring the careful management of projects as well as normative modes of control which gave them a sense of attachment and belonging (Kärreman and Alvesson, 2004). The crucial aspect here is that control over employees tightened as they were not just being controlled through the delivery or results or through attempts to manipulate their hearts and minds – but both. The result was a significant extension of workplace control to a range of often incompatible dimensions. This means employees are required to both show that they can unceasingly produce results at the same time as they can show a spirit of community service and playful jocularity (Costas and Fleming, 2009).

These are paradoxical experiences which cannot be meaningfully resolved in which an employee frequently feels to be trapped. For instance, a professional service employee is often required to engage in widespread and frequent socializing and networking in order to display their social competencies and build their social networks (which are often crucial for the assent of the corporate ladder). However, the employee is required to carefully measure and track their time by dividing it down into 'billable hours'. This sets up a difficult contrast as every second minute spent socializing is one which is taken away from the tally of one's billable hours (Alvehus and Spicer, 2012). Similarly, employees in two creative firms often engaged in highly experimental projects which pushed the boundaries of their practice and often created novel formats and ideas on a regular basis. However, at the same time they

demanded a sense of security, regularity and even sometimes limitations from their managers and the organizations as a whole (Ekman, 2010). This meant they remained forever caught between the desire for creative exploration of novel formats and the securities of exploiting their existing stock of ideas and the routines and procedures set up by the organizations. What was particularly striking in this case is that these creative employees would wildly oscillate between these poles – often during a single day. But what is perhaps even more important for our purposes here is that these double-binds proved to be difficult, if not impossible to escape. Employees remain continually locked into them.

To address these 'double-binds', employees are typically prompted to engage in processes of self-management. This involves an attempt to regulate, monitor and control one's own behavior (see Holmqvist and Maravelias, 2011). The assumption is that through more careful internal balancing and monitoring, an employee will be able to negotiate and cope with the competing and often contradictory demands which are placed on them by the various double-binds they find themselves in. This involves articulating and developing a sense of authenticity in the workplace (Fleming, 2009). To do this employees turn to a wide range of self-management techniques which are on offer throughout society including self-help literature, work-place spirituality programmes, employee health activities, and various forms of therapy and coaching (Maravelias, 2009). Many of these activities rely on some notion that through getting in contact with one's authentic inner self and establishing a healthy life style, one will be able to somehow cope or transcend the various double-binds which employees find themselves eternally trapped within. For instance, a recent study of investment bankers found that they frequently turned to a range of self-nurturing and self-management techniques (ranging from coaching, therapy, and obsessive exercising) in their search for some desired equilibrium (Michels, 2012). What is particularly striking about the desire for these kinds of self-management techniques is that they seem to be largely sort outside of the official managerial channels of the organization. Perhaps this is done in order to project a sense that one can cope with the impossible and contradictory demand that are frequently placed upon people.

The attempts at self-management described above can typically give rise to two very different, but clearly linked outcomes. On the one hand, through processes of self-management, some employees may be able to bring together the contradictory demands which they do indeed face without seeing them as being unsavory external demands. Rather the contradictory double-binds which an employee faces are effectively internalized – resulting in a significant sense that the problems which they face are in fact 'of their own making'. For example, if you feel tired, experience stress or fatigue, or even perform under expectations, you should primarily look at yourself for solutions, and not the surrounding work environment. This can certainly have major up-sides for the individual. It means that they experience considerable sense of control over the issues and contradictory demands that they face. They are seen as being a kind of internal struggle that must be surmounted through an employee's own ingenuity and ability. This can give rise to high degrees of involvement, significant emotional investment and also intense attachment to this conflict-ridden task on the part of employees. These conditions can produce high performance on the part of some employees who are willing to consistently go beyond expectations that are externally set for them.

However, the internalization of these conflicts does not just result in high commitment and high levels of sustained performance. It can also lead to far more negative experiences. In particular the constant tension between what are apparently irreconcilable demands can lead

to an overwhelming sense of anxiety on the part of employees. This is because there is a lack of clear means for resolving what seem to be ongoing and unresolvable issues. A further outcome of these tensions may be experiences of severe stress and overload as employees seek to address what appear to be overwhelming demands which cannot be clearly faced up to with ones own internal resources. Finally, these feelings of stress and anxiety can often become so overwhelming that they lead to experiences on breakdowns and severe depression on the part of employees. This typically leads them to completely withdraw and to associated dramatic drops in performance. What is often more difficult is often these highly volatile emotional experiences are internalized and become experienced as being an additional pressure which an employee needs to self-manage alongside of other pressures.

Most importantly, however, is the conclusion that balancing exploitation and exploration is highly unlikely for any human being; thus the picture of the so popular ambidextrous employee in the literature cannot remain but an ideal type (see Holmqvist, 2009). Indeed, people typically get trapped in competency traps of either exploitation or exploration, i.e., "processes that involve short-term positive feedback on either exploration or exploitation and thus upset a balanced attention to both" (Levinthal and March, 1993: 105). Despite being an ideal which is hard to live up to, the notion of the ambidextrous work is often a regulatory ideal in many workplaces. This means that despite the (inevitable) breakdowns which comes about as employees seek to balance incompatible demands, they nonetheless tend to cling to the ideal of the ambidextrous employee. This ideal is often reinforced through organizational cultures which place a significant premium on both being highly disciplined but also being creative and playful. Furthermore, this image of the ideal employee is reinforced in broader cultural discourses that simultaneously emphasize creativity as well as ruthless delivery of results (Boltanski and Chiapello, 2006). The result is that failure to live up to the ideal of the ambidextrous work is experienced as a painful shortcoming on the part of the individual. And what is even more striking is that these experiences of failure to live to an ideal and insufficiencies can actually prompt even more fervent attachment to the ideal of trying to become an ambidextrous employee; paradoxically then ending up in excessive exploitation of a certain ideal. This means it can be a difficult ideal to give up.

Conclusion

In the introduction to this special issue, we sought to build of the work of James G. March in order to introduce the issue of the ambidextrous employee. In particularly, we have argued that organizations confront uncertain information. In such contexts, organizations act intendedly rational, but only limited so by using their existing experience to garner information about the environment. However, this information frequently exceeds organizations' ability to understanding and interpret it. This necessitates patterns of selective attention and reflexivity on the part of individuals. These processes of interpreting and understanding are typically guided by organizational rules and routines. While such shared rules and routines can create a commonality on the part of employees (thereby making collective action easier), they can also create collective blind-spots which do not allow attention and reflection on changing aspects of the environment. This poses a significant and familiar trade-off to many organizations – should they seek to exploit their existing rules and routines that have helped them to (successfully) enact the environment in the past, or should they seek to explore new potential rules and routines which would allow them to attend, reflect on, and enact the environment in novel ways? While most organizations either end up in exploration or exploitation, some may seek to follow a path of ambidexterity through the establishment of ambiguous organizational rules and routines whereby they aim to engage in both exploitation of existing experiences at the same time as they explore new ones. While

existing work has examined how this process occurs at the organizational level, we have focused on the implications of ambidexterity on individual employees, highlighting that the ambidextrous employee, if he or she at all exists, is likely to be the subject of incommensurable demands, stress and anxiety.

To understand this issue, we have begun to sketch out a broad theory of the ambidextrous employee. We have argued that the ideal of organizational ambidexterity which is pursued through the simultaneous use of exploitation and exploration require ambiguous control systems. These often put employees into tricky double-binds whereby they are asked to simultaneously deal with competing demands in their day to day work. In order to deal with these demands, employees typically engage in strategies of self-management to balance these competing demands. Paradoxically, however, self-management strategies are likely to even more make people end up in competency traps of either exploitation or exporation. The results of these processes of self-management can be experiences of autonomy and excitement which can give rise to high levels of employee performance. However, this can be difficult to sustain and the tensions involved in seeking to be an ambidextrous employee can give rise to very high human costs such as breakdowns and significant declines in individual performance in terms of human 'failure traps'.

Our Introduction to the special issue proposes a number of remarks in relation to existing debates about exploitation, exploration and ambidexterity. First, we address the yawing gap in the literature of accounts of individual level ambidexterity. By doing this we outline an account of previously hidden mass of employees who are requested to engage in processes of exploration and exploitation. This allows us to begin to explore how the actual employees who are supposed to engage in exploration or exploitation are said to do this. This leads to our second remark: by paying attention to ambidexterity at the level of the employee, we hope to direct research attention to the day-to-day practices of ambidexterity which actually form the basis of much ambidextrous strategy and what are its human implications of that. We hope this will begin to focus attention on the more mundane practice which is involved in 'being ambidextrous'. Such a critique is particularly important for the study of organizations that idealize ambidexterity. Our final remark is to draw student of organizations' attention to the potential high human costs of organizational ambidexterity. We have done this by highlighting how the burden of developing organizational ambidexterity is often pushed down to individual employees. Actually living with these pressures can prove to be a mighty burden to carry for many employees. Understanding this burden and how employees seek to cope (or otherwise) is a vital, if conveniently ignored dimension of understanding organizational ambidexterity.

Outline of the Special Issue

This volume consists of nine independent papers that all deal with the problem of balancing exploitation and exploration in contemporary organizational life, highlighting 'the human side of the ambidextrous employee'. The first paper by Donncha Kavanagh, however, is a further specification of the main ideas in March's research program. Kavanagh focuses on James March's 1991 article on 'Exploration and Exploitation in Organizational Learning', which is now the seventh most highly cited paper in management and organization studies. March's paper is based on a computer program that simulates the collective and individual learning of a group of fifty individuals. The largely forgotten story that this paper re-calls, is the real-life experiment that March, in large part, designed and conducted when he was the new 'boy Dean' of the School of Social Sciences in the University of California at Irvine between 1964

and 1969. Taken together, both stories illuminate important moments in the history of organization studies. According to the author, the comparison suggests that March's model, which was probably the first simulation of an organization learning, also worked to constitute rather than model the phenomenon. This paper provides some fascinating insights into the lost role of the individual in the negotiation of exploitation and exploration in organizational life.

In second paper, Bogdan Costea and colleagues investigate March's concepts of 'exploration' and 'exploitation' in relation to the graduate labour market. The authors focus on its use of the imagery of potentiality as key criterion of employability. They argue that the balancing act of exploring and exploiting one's potential becomes one of the main coordinates through which contemporary organizations attempt to configure the profile of the future employee. This creates an idealized ambidextrous employee who is trapped between the continuous demands of routinized production, execution and implementation, and those of equally sustained experimentation, self-expression, and creativity. They conclude by arguing that this ideal can be interpreted as another example of an unsustainable utopian image of work in the context of contemporary management. The theme of potentiality illustrates the dual dangers of creating an inescapable framework guiding the individual's sense of self, and predicating the self based upon an image of limitless potential. This paper provides an important insight into the kind of self-management strategies which employees engage in as they (continuously) prepare to make themselves into employable ambidextrous workers which are attractive to employers.

The third paper by Silvia Gheradi and Annalisa Murgia examines the dilemmas of exploration and exploitation faced by flexible knowledge workers. They consider how workers move among organizations in their attempts to 'get by'. This involves employees seeking to navigate the difficult straights which lie between their desire for autonomy and their lack of the resources necessary to pursue their passions and to fulfill their projects. Through analysis of the life-stories of flexible knowledge workers and their relationships with the organizations for which they work, the authors illustrate how flexible knowledge workers handle the tension between exploration and exploitation and how organizations resist their attempts. This paper shows some of the self-management strategies which employees develop in negotiating the demands for exploration and exploitation which they face in their own working lives. It also calls our attention to some of the profound human costs – such as a pervasive sense of insecurity – which pervades the lives of these ambidextrous employees.

The fourth paper in this volume by Peter Fleming argues that the classic distinction between two types of organizational learning – exploitation and exploration – has been unsettled under new forms of workplace regulation. He explores how management practices that exploit by exploring, capturing and enclosing employee efforts (including learning) that occurs beyond the formal enterprise. He points out how everyday life itself (or what he calls *bios)* is put to work. This largely unpaid work is of increasing importance to organizations that require employee qualities it cannot provide on its own accord. He then identifies three types of 'free work' which are often put to work in the ambidextrous workplace: free time, free self-organization and free self-development. This paper is an important step towards beginning to identify some of the complex mechanisms of control which are deployed in response to organizational ambidexterity. Building on previous work, Fleming's paper highlights how many contemporary organizations seek to control employees by harnessing their everyday life. In this sense self-management becomes the prime form of workplace control for the ambidextrous worker.

In contrast to the largely functionalist and apolitical literature which dominates organizational scholarship on exploitation and exploration after March, Christian Maravelias and colleagues' paper, "March Meets Marx: The Politics of Exploitation and Exploration in the Management of Life and Labour", complements this view of exploitation and exploration with a Marxist reading which is unwittingly implied by these terms. More specifically, the authors combine neo-Marxist and paleo-Marxist arguments to more fully understand the conflictual relations that underpin exploitation and exploration in the management of firms. This enables them to address both the objective and subjective dimensions of exploitation and exploration which firms and workers are involved in through the contemporary capitalist labour process. The authors illustrate this by drawing on a case study of a large Swedish manufacturing firm which sought to improve lean production by systematically helping employees to explore their own lifestyles and possibilities for a healthier and happier life.

The sixth paper by Aleksi Aaltonen and Jannis Kallinikos describes the evolution of Wikipedia and how it moves from a focus on exploration to an increasingly set of exploitation based forms of employee control. They argue this move involved Wikipedia becoming increasingly reliant on policies and guidelines, signalling certain stabilization in the knowledge making processes underlying the encyclopaedia. The authors interpret such a state of affairs as reflecting the need to provide a few principles and guidelines of coordination, in a context that has otherwise been marked by vast diversity, high membership turnover and the lack of traditional exploitative structures. Rather than reflecting bureaucratization and a shift away from its constitutive principles, the consolidation of these coordinative mechanisms further embeds the distinctive profile of knowledge making processes characteristic of the online encyclopaedia. They reinforce the diversity of the collective (rather than individual capabilities and skills) as the primary source of knowledge and render the mechanisms of harvesting that diversity and assembling it to a reasonable knowledge output key means of social learning. This paper provides us with a sense of how control mechanisms in this organization shift over time as it seeks to find new ways of balancing the demands of exploitation and exploration in contributors' work.

The seventh paper by Sara Louise Muhr and colleagues consider how human subjectivity itself has increasingly become mobilized as an organizational resource. The change as such builds on the assumption that the successful accomplishment of work-tasks cannot be formalized in detailed standards and pre-scribed through general norms alone but also directly relies on the subjective involvement of the employees. The authors suggest that to some extent this has always been the case in significant parts of working life, but there seems to be an increased emphasis on the mobilization of broader aspects of subjectivity during recent decades in professional service work and other businesses relying on a high level of worker commitment. As such these developments can be said to make the employees' identity concerns – and aspirations for what they might become – central for organizational concerns. Once again this paper, provides us with a sense of how addressing the competing concerns of exploration and exploitation is often mobilized through the management of individual selves. In particular, the paper gives us a sense of the challenges and tensions involved in self-management.

The eight contribution to this volume by Jana Costas and Chris Grey discusses how the concepts of exploration and exploitation are fruitful for understanding individual fantasies of escape from the demands of contemporary workplaces. The authors examine one influential articulation of such fantasies, namely the best-selling self-help book '*The 4- Hour Workweek*'. This book advocates that individuals outsource the bulk of the routine ('exploitation') tasks of

their lives, leaving themselves free for creativity, play and leisure ('exploration'). In this way, a radical separation of exploitation and exploration at the individual level is proposed. They examine the meanings and contradictions of such ideas by discussing how they may function as powerful escape fantasies for those facing corporate overwork. However the authors argue that the solution proposed is unsatisfactory because of its individualism, which fails to see the inherently social nature of work and life. What this paper provides is an interesting insight into the kinds of techniques of self-management which many ambidextrous employees are seduced to take on in their attempts to cope with competing and apparently incessant demands of working life.

The final paper by Paul du Gay and Signe Vikkelso suggest that in recent years there has been a notable pre-commitment to values of associated with innovation, improvisation and entrepreneurship over other criteria. This has shifted the terms of debate concerning organizational survival and flourishing firmly onto the terrain of 'exploration'. This shift has been accompanied by the return of what they describe as a 'metaphysical stance' within Organization Studies. In this article the authors highlight some of the problems attendant upon the return of metaphysics to the field of organizational analysis, and the peculiar re-emergence of a 'one best way of organizing' such as 'the ambidextrous organization' that it engenders. In so doing, they re-visit two classic examples of what they describe as 'the empirical stance' within organization theory – the work of Wilfred Brown on bureaucratic hierarchy, on the one hand, and that of Paul Lawrence and Jay Lorsch on integration and differentiation, on the other. By doing so, they highlight the continuing importance of March's argument that any organization is a balancing act between different and non-reducible criteria of (e)valuation.

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