

## Chapter 9

### Understanding Organisational Creativity: Insights from Pragmatism

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I am told I am creative—I don't know what that means ... I just keep on plodding ...

Peter Drucker quoted in

Csikszentmihalyi (1996: 14)

#### **Introduction**

Creativity is arguably one of the most crucial features of organisation as it infuses and influences all epistemic practices (Cook and Brown 1999). From an evolutionary perspective, creativity may be understood as the source of novelty in key organisational change processes such as product and process innovations, strategic renewals, restructurings, identity reconstruals, and market reorientations. Thus interest in creativity is by no means limited to the so-called creative industries since every organisation is inevitably at some time faced with imperatives to change. However, creativity remains significantly under-researched (Joas 1996, Sternberg and Lubart 1999, Hennessey and Amabile 2010), leaving many unanswered questions about its antecedents, the conditions in which it flourishes or is inhibited, and the social processes by means of which it emerges.

In this chapter we propose that American pragmatism, especially the works of Charles Sanders Peirce, John Dewey and George Herbert Mead, offers a potentially fruitful way of understanding creative practice as a dynamic social process. From this viewpoint, creativity *is* the human condition (Joas 1996) that exists as a potential in even the most mundane, everyday plodding actions of social practice (Kilpinen 1998). It begs a dynamic, real-time theorisation that can address *how* questions by accommodating the temporal aspects of social practice (Tsoukas and Chia 2002). We develop our argument by drawing on an empirical example that demonstrates the temporal emergence of creative practice in a small financial services company. We show that creativity cannot be explained simply in terms of the application of planned

techniques and formulae (Bohm 1996). Rather, it arises as a response to uncertain and unanticipated situations that call out changeable actions.

### **Researching Creativity**

Existing research on creativity is characterised by a huge diversity of disciplinary interests in design and performance, spanning the entirety of the arts and sciences. Of particular relevance to organisational scholars, creativity has been explored in both the psychological and sociological literatures. On one hand, critics of developments in the psychology literature point to the somewhat fragmented state of creativity research (Simonton 2003; Hennessey and Amabile 2010), and call for an integrative mechanism to draw the creative person, the creative product, and the creative process together in a contextualised and dynamic theoretical frame. On the other hand, in a comprehensive review of the classical writers in sociology, Joas (1996) concluded that none of these has succeeded in smoothly integrating a theory of creativity into their thinking, thus condemning creativity to remain ever an externality in social theory.

Attempts to overcome these problems have drawn on systemic, or ecological, understandings of human activity. For instance, Csikszentmihalyi (1996) argued that creativity arises in the interaction between individuals and their sociocultural contexts, in what Woodman, Sawyer and Griffin (1993) independently characterised as an interactionist view of creativity. However, these models do not explain *how* contexts influence behaviours, nor *how* creative behaviours at an individual level can be joined together to comprise group or organisation level creativity. Hargadon and Bechky (2006) challenged the dualistic separation between individual and collective levels of analysis, adopting instead a relational perspective that focuses on interpersonal interactions and their potential to produce 'moments of collective creativity' (2006: 484). They proposed a model that used collective mind (Weick and Roberts 1993) to describe the triggering of collective creativity through interpersonal interactions. Their interest in mind and cognition, however, creates an inappropriately individualistic focus that leaves much of the communicative potential of interpersonal interactions unexamined.

The pragmatists were trenchant in their opposition to the dualistic distinctions evident in much of this work on creativity. Dewey in particular railed against the separation of mind and body (thinking and feeling), arguing that although these are two different aspects of the process of living, by separating them into discrete conceptual categories, we effectively cut across the very practices that we seek to understand (Simpson 2009). In contrast to more rationalistic philosophies, the pragmatists understood human experience and conduct in practical, everyday terms wherein we are all active participants, rather than mere spectators, in the construction of social meanings (Bernstein 1972). From their perspective, the key to creativity is abduction, a process that generates creative insight by forming hypotheses to explain problematic situations (Peirce 1965). Abduction broadens the scope of experience mobilised in any given situation from habitual to less habitual forms of action, integrating emotional and rational judgments to overcome the classical dichotomy between ‘creative thinking’ and ‘rational thinking’.

However, a comprehensive understanding of creative action in organisations requires more than abduction alone. Drawing on the wider pragmatist canon, we argue firstly that abduction arises when habits of action are disrupted by unanticipated events, prompting a process of inquiry that seeks to transform experience and reinstate action (Dewey 1938 (1986)). Secondly, this creative process is inherently social and conversational (Mead 1934). To avoid possible confusion with ‘interactionist’ theories such as those mentioned above, we follow Dewey and Bentley (1949 (1991)) who made a distinction between interactions and transactions. They saw these as two different levels of inquiry: an interaction is something that happens between actors who are physically and mentally independent, while a transaction happens across actors who are aspects of a relationally integrated whole; whereas meanings are transmitted between actors in an interaction, the actors are the continuously emerging meaning in a transaction. Both selves and situations are continuously reconstructed in transactional processes (Elkjaer and Simpson 2011). Further, this process of transactional meaning-making is semiotically mediated by signs that facilitate the sharing of meanings (Mead 1934; Peirce 1965).

In our view, these pragmatist themes of abduction, habit, inquiry, transactional meaning-making and semiotic mediation are all necessary components of a theory of organisational creativity that is both social and dynamic. In the empirical example that now follows, we will elaborate these themes and demonstrate the interplay between them as the managers of a troubled company seek creative ways of regaining competitiveness in an increasingly challenging market. We hope, in this way, to offer a more complex and subtle understanding of the creativity inherent in everyday organisational practices.

### **Innovation in a Financial Services Company**

This example concerns X Corporation,<sup>1</sup> a small French asset management company that specialises in socially responsible investment (SRI) equities, managing funds amounting to €2 billion. An SRI equity portfolio usually comprises 40 to 50 companies, often the three to five best companies – in terms of both financial and SRI performance – in a variety of activity sectors (e.g. utilities, banking and insurance). There may be up to 20 different sectors represented in any portfolio. For promoters of socially responsible investment, better financial performance is achieved in the long term by minimising the costs that result from below-average performance in social, environmental and governmental domains. However, asset management companies find it difficult to achieve optimal financial and SRI performance. It was in this context that X Corporation's senior managers recognised an urgent need to develop creative new ways of designing their SRI portfolios.

Prior to 2007, the SRI equity funds of X Corporation were invested among the Eurostoxx, an index representing the 300 largest capitalisations of 12 Euro zone countries. A quarterly SRI ranking of the companies in each sector was calculated by X Corporation's SRI analysts to inform investment decisions made by its asset managers. The method of calculating this SRI ranking was very simple, and had not changed since 1998: an external social rating agency would provide company scores based on more than 100 different criteria, such as carbon emissions, board independence, mix of energy sources, human resource management practices,

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<sup>1</sup> X Corporation is a pseudonym.

and so on; these were then used by X Corporation's SRI analysts to assign a weighted average SRI grade between 0 and 100 for each company. Asset managers then followed the so-called 'best-in-class' approach: in each sector, they favoured companies with the best SRI grade relative to their peers. To maintain good financial performance, assets needed to be invested in different sectors so that if one particular sector suffered, other sectors could compensate for the loss. A monthly SRI grade was given to each portfolio – this consisted of assessing the weighted average SRI grades of companies present in the portfolio. Within X Corporation, it was mandatory for each portfolio to achieve an average SRI score greater than 50/100. In the event that this requisite grade was not achieved, the portfolio manager would be required to change the content of his/her portfolio for the following month. In practice, though, no such requirement was ever exercised.

The data for this example are drawn from a three-year ethnographic study that combined participant observation, semi-structured interviews (conducted with all the members one year after the systems redesign) and documentary evidence. One of the authors was present in the company for the year during which the investment decision systems were redesigned, and participated in all the meetings of the working group as an SRI analyst. Being full-time inside the company, she also attended informal discussions between the different members. Hundreds of pages of notes were taken on a daily basis to record the different events occurring at X Corporation. Emails, minutes of meetings and responses to invitations to tender were also analysed. Consistent with the pragmatist orientation of this chapter, we have adopted a non-representational approach to data analysis (Lorino et al. 2011) that focuses on the processual and narrative unfolding of an emergent system for evaluating investment choices within X Corporation. The following narrative of creative action plays out over five phases throughout which, we have explicitly woven pragmatist themes as an explanatory commentary.

#### *Phase 1: Normal Practice is Disrupted*

The challenge for SRI funds is twofold: (1) to perform well financially; and (2) to be perceived as very innovative in terms of SRI. Yet, the most socially responsible companies are not always

the most attractive financially speaking, which raises many problems in constructing balanced investment portfolios. In August 2007, X Corporation's SRI funds were judged to be no longer competitive by external consultants who act as intermediaries between institutional clients and asset management companies. They are paid by clients to select the best asset management companies to be invited to tender for shares. Therefore, if an asset management company is not chosen by consultants, it has almost no chance of receiving invitations to tender. The concerns the consultants raised about X Corporation's SRI funds were firstly, the form of the SRI constraint (a monthly score in excess of 50/100), which was insufficiently discriminating as a predictor of performance. Indeed, by combining very good and very bad companies in the same portfolio, this grade could mask consistently poor performing stocks. Secondly, the integration of SRI criteria in the company selection process was deemed too superficial: according to consultants, more companies had to be excluded for SRI reasons only, a criterion known as 'SRI selectivity'. Contrary to the company's existing SRI grading system, SRI selectivity forces asset managers to exclude a minimum percentage of the SRI laggards from the portfolios: in other words, SRI leaders cannot be used to compensate for SRI laggards. Thirdly, the company's SRI criteria lacked innovation compared to competitors. As a result, X Corporation was no longer able to meet the SRI demands of clients, consultants and competitors in the current market. Consequently, its survival was threatened.

To address this problem, the CEO of X Corporation decided to redesign the company's SRI equity funds. According to him, X Corporation had become a laggard due to its lack of innovation, so he established a cross-disciplinary working group comprising representatives of the Marketing Department (two sales representatives, responsible for selling the funds), the Asset Management Department (two asset managers, responsible for the investment decisions) and the SRI Department (three SRI analysts who were responsible for the SRI analysis inside the company). Based on the social rating agencies' information, they advised asset managers where to invest and controlled the SRI compliance of portfolios).

Post-mortem assessments were no longer useful [...] We had to think up new attractive products, which meant performance and originality in the presentation. The working group was launched for two reasons: we're cleverer when we work as a group and employees needed to appropriate the process. [...] It had to be a communal project. That's how it works best. (CEO)

The working group planned to meet face-to-face once a week; full-attendance at each meeting was compulsory. The agenda was to be set one week in advance so that each member would have time to prepare his/her input for the following meeting. Since they were responsible for responding to invitations to tender, it was the sales representatives who took the lead in shaping the working group activities. They believed that they could explain to SRI analysts and asset managers what was lacking in the existing funds and help them to achieve a compromise between SRI and financial concerns.

I tried to reconcile each party's interests, which were evidently different: SRI purists, asset managers without regret, and the Director of Marketing & SRI who really wanted to show that the process was, in fact, simple, robust and immutable. (Sales Representative)

*Pragmatist Commentary* – Prior to this first phase of change at X Corporation, the company appeared to be dwelling in a cosy state of complacency regarding its market competitiveness. In pragmatist terms, this state equates to 'habit'. For Peirce (1965: 5.388–410),<sup>2</sup> habit refers to a learned predisposition to undertake a standard course of action in response to specific circumstances, or to attribute a standard meaning to specific events. Dewey further elaborated this notion as follows:

[Habit is] that kind of human activity which is influenced by prior activity and in that sense acquired; which contains within itself a certain ordering or systematization of minor elements of action; which is projective, dynamic in quality, ready for overt manifestation; and which is operative in some subdued subordinate form even when not obviously dominating activity. (Dewey 1922 (1957): 31)

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<sup>2</sup> Citations to Peirce refer to the Collected Papers, volume number.paragraph number(s)

It is habit that allows us to reliably anticipate both our own and others' conduct in given situations by making the future seem predictable. However, although habits express social norms of conduct, they are neither rigidly fixed for all time, nor are they 'Pavlovian' reflexes. Rather, they are dynamically emergent practices that admit the possibilities of mutability and change over time through social transactions. The continuing accomplishment of habits depends upon the situated interpretation of circumstances. If nothing specific draws actors' attention in a given situation, then habit will prevail as the normal way of doing things. However, when the anticipations afforded by habit prove inadequate or inappropriate for the situation, then actors may choose to transform their course of action. The interruption of habitual action is a key point in pragmatist thinking as it is this that initiates the cycle of inquiry by means of which social practices mutate over time.

In the case of X Corporation, habitual ways of evaluating SRI investment portfolios are interrupted in this first phase by external consultants who argue that the company's products are no longer competitive in the changing marketplace. It is this disruption to habitual practice that propels the company into the extended process of inquiry, which plays out over the ensuing phases of this change story. We see that the CEO's first action is to establish a working group that offers a context for transactional conversations to tackle the seemingly intractable problem of restoring competitiveness to the company's products.

#### *Phase 2: Making Our Expertise More Visible*

The first meeting of the working group took place in September 2007. Group members did not have any shared views about how to tackle the situation, but they did have a shared purpose to reinstate the company's competitiveness. The sales representatives saw the problem as a communication gap: X Corporation only needed to prove its expertise; tacit knowledge needed to be formally represented and made visible to clients. For this purpose, they asked the SRI and Asset Management Departments to design 'company factsheets', which would summarise the SRI and financial profile of each company in their investment portfolios. In this, they were following what they perceived to be a market trend where increasing numbers of competitors

were providing such factsheets. After one and half months, the working group reached a deadlock: SRI analysts and asset managers were unable to design usable factsheets. Among several problems, there were not enough SRI analysts and asset managers to regularly update the information provided by the factsheets. Since they were always obsolete, factsheets could not be used by asset managers and SRI analysts in their own day-to-day practices.

The company factsheets were merely for commercial purpose [...] We completely disagreed. Sales managers really needed them as a commercial tool. Whereas, for us [asset managers and SRI analysts], it was rather the opposite. It wasn't a tool, it was pure reporting. And, I must say, reporting with very little added-value [...] It was completely of secondary importance.

(Asset Manager)

It was the worst thing we could have done! It was putting the cart before the horse. It was not triggered by the redesign of the process but by the external motivation to demonstrate that we had a process which did not exist! (SRI Analyst)

Even today, working on the company factsheets is not easy. Frankly, these company factsheets have been a failure. (Director of Marketing &SRI)

*Pragmatist Commentary* – In this phase we see the working group's initial response to the change imperative. The sales representatives have offered what seems, on the face of it, a plausible account of the problem (tacit knowledge needs to be made visible to clients) and its potential resolution (provision of factsheets). The other members of the working group appear, at least initially, to accept this position without debate, thus limiting the transactional potential that might otherwise have been afforded by working together.

The process of conjectural thinking that was employed by the sales representatives reflects Peirce's notion of abduction, which he proposed as a third type of inferential reasoning (alongside deduction and induction):

[Abduction] is the only logical operation which introduces any new idea; for induction does nothing but determine a value, and deduction merely evolves the necessary consequences of a pure hypothesis. Deduction proves that

something *must* be; Induction shows that something *actually is* operative;  
Abduction merely suggests that something *may be*. (Peirce 1965: 5.171)

He explained abduction as the process of inventing a hypothesis as a plausible explanation for surprising or unexpected events that arise in the social interplay of experience. Peirce defined the syllogistic form of abduction as follows:

The surprising fact, C, is observed;  
But if A were true, C would be a matter of course,  
Hence there is reason to suspect that A is true. (Peirce 1965: 5.189)

For example, if a witness looks away during cross-examination (C), we might observe that people look away if they feel guilty (A), and therefore conjecture that this witness is guilty. Continuing the analogy with criminal justice, Corrington suggested that detective work is more about abduction than deduction ‘because it must create a total picture of the crime and read the conjectural picture backwards onto the clues assembled’ (1992: 85). Similarly, Czarniawska (1999: 21) maintained that the social sciences ‘owe their insights mostly to abduction’ and indeed, abduction may be seen threading through all living experience, giving meaning and value to all social actions. In the case of X Corporation, this initial abduction proved inadequate as the asset managers and SRI analysts became increasingly aware of the limitations of factsheets. This outcome represents a second interruption to practice, which triggers a second phase of abduction.

### *Phase 3: Redesigning the Investment Process*

In October 2007, the working group members realised they were on the wrong track. There were more substantive issues than ‘making things explicit’; they realised that they should probably provide something else to clients. In other words, they needed to innovate. For this purpose, they decided to redesign the investment process for the SRI funds (i.e. the various stages through which companies are selected for the portfolio) by working together on a graphic representation. This collaboration evolved during the meetings but also between the meetings in

an informal way. Members discussed the different problems during coffee breaks, exchanged emails, and shared their ideas with each other on a daily basis.

**[Insert Figure 9.1 here]**

They came up with a new process comprising three steps (Figure 9.1):

1. Step (1) SRI analysts define an ‘investment universe’ comprising all companies in which asset managers may invest, and an SRI typology that encompasses the different strategies of companies regarding non-financial aspects.
2. Step (2) portfolios are constructed according to the risk ratios chosen by clients.
3. Step (3) asset managers select companies based on classical financial quantitative studies and controlled for the good performance of funds, including ‘arbitrage’ (taking advantage of a price difference between two or more markets).

Comparison of this investment process with competitors’ processes and clients’ and consultants’ demands revealed two further problems to be remedied: the asset managers had insufficient freedom when investing, and too few companies were excluded for SRI reasons.

*Pragmatist Commentary* – In this phase, we see abduction, deduction and induction working together in the meaning-making process that the pragmatists called ‘inquiry’. This process is central to their understandings of human, social and organisational change. The concept was originally proposed by Peirce (1965: 5.358–387) in his model of doubt and belief, in which he saw inquiry as a struggle in the face of doubt to attain a state of belief that is consistent with experience. In his view, inquiry is undertaken for the exclusive purpose of eliminating doubt and attaining belief. Thus any learning, or any new meaning, results from an active process of inquiry that is grounded in experience in a given context. It is neither the context nor the organism that is intrinsically and positively doubtful. Doubt and belief characterise the relationship between the organism, viewed as the locus of habits, and its context. Thus belief is an existential state of fitness between habits and context, whereas doubt

is a state of unfitness. Inquiry must therefore be understood as an existential, rather than merely cognitive, concept.

Dewey later developed this notion by adding the idea of ‘a situation’:

Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole. (Dewey 1938 (1986): 108)

For him, a situation is not a single object or event, nor a set of events (Dewey 1938 (1986): 72), but the entirety of all conditions under which, and within which, an organism functions at a given time. A situation is problematic or indeterminate when it is not intelligible because its constituent factors are in disarray. For Dewey then, the aim of inquiry is not the discovery of an antecedent fact, but rather the creation, or construction, of a new situation, bringing into being a new object of knowledge that did not exist prior to the act of inquiry. There are various identifiable phases in an inquiry process, though these do not necessarily follow in any prescribed, linear sequence. Still, inquiry is always triggered by existential unease associated with an unanticipated situation, which challenges ongoing habits of practice. This disruption is not yet a problem: it ‘becomes problematic in the very process of being subjected to inquiry’ (Dewey 1938 (1986): 111). Here, we have seen triggers to inquiry in both Phase 2 and Phase 3 of the X Corporation story, both of which were then constituted by the working group as problems; firstly, ‘our products are competitive, but customers do not know it’, and secondly, ‘our products are no longer competitive’. In each case the working group then abductively proposed a plausible scenario that could explain events (the lack of factsheets; products that are insufficiently discriminating).

With a hypothesis in place, inquiry then moves to testing by means of the deductive reasoning of experimentation. Whereas Phase 2 negated the hypothesis that factsheets are the correct solution, Phase 3 demonstrates a more inclusive and more comprehensive effort to develop testable hypotheses that address the interests of all the working group members. The

practical testing that then ensues reflects an inductive form of reasoning. Through this process, the members of the working group have themselves changed by coming to a greater awareness of the issues and concerns of colleagues in different departments, and their practices change accordingly. However, the conclusion of inquiry is always tentative and fallible, so we see there are still unsolved problems at the end of Phase 3, which trigger yet another cycle of inquiry.

The epistemology of inquiry contrasts with more familiar epistemologies of observation and correspondence. In the latter ‘knowing’ means observing a situation from outside in order to represent it as accurately as possible, so that it can then guide further action. With pragmatist inquiry, however, knowledge *is* intelligent action, intelligent action *is* knowledge, and the synthesis of knowledge and active experience is the inquiry. Learning then is the embodied and situated construction of meaningful experience rather than the production of ‘true’ representations in suspended time. Thus the concept of inquiry is a key tool in transcending dualistic separations between knowledge and action, decision and execution, design and utilization.

#### *Phase 4: Interacting to Transform Practice*

The main challenge for the working group was to meet the objectives of all three departments. However, SRI criteria and financial performance often contradicted each other, and asset managers and SRI analysts did not always understand business demands. To help them work through these challenges, they set up a white board for each member to physically transform the representation of the investment process shown in Figure 9.1. Over the course of a few weeks, the working group attempted to develop the three stages of the investment process. Arrows were added, new stages appeared, others disappeared, names changed and so on. Each actor reacted to the proposed changes from his/her perspective. By November 2007, they had come up with a new diagram upon which they all agreed (Figure 9.2).

**[Insert Figure 9. 2 here]**

The main change in this revised investment process was the addition of a fourth step concerning shareholder activism (i.e. the use of equity stakes at a European level in collaboration with other asset managers to put public pressure on the company's management – referred to in Step 4 of Figure 9.2 as 'preferential voting'). However, this new investment process still did not solve the problems. Indeed, the first three steps had hardly changed. Further work was required and the working group decided to continue transforming the process. Throughout, there was a constant iteration between reasoning and experimenting, as one of the sales representatives explained:

The problem was that we needed to sell the funds as we created them. This led to many tensions in the working group, notably in terms of timing. We submitted the presentation to a prospect one day, and the following day, we had to redesign the process [...] Each time I came back with new questions we needed to answer. (Sales Manager)

Working group members started to become discouraged by these additional demands and by the lack of closure in their project.

There came a moment when I felt worried because I could sense lassitude; this happened at the end of the first term of 2008. I saw that guys were dragging their feet, that some of them no longer wanted to attend meetings. We no longer knew what to do: one day, we did one thing, the next day, another [...] To my mind, we were steering off course, although we did finally get back on track. (Director of Sales & SRI)

However, the global financial crisis which had started just a few months earlier, perhaps surprisingly, provided a good incentive to continue the redesign process: the working group members found themselves with more time available for this task. Indeed, asset managers could barely invest (no buy, no sell to avoid financial losses) and the asset management company was almost 'frozen'. The transformed investment process was submitted to consultants and clients for comment. New problems were raised which in turn guided the subsequent steps of the redesign process.

When you provide an asset manager with a ranking, he/she tells you that there is a problem. So it makes you study the ranking. In doing so, you identify other problems in the analysis, though it was not your first purpose. You shouldn't have found this mistake. But, by solving one problem, you created another one. (SRI analyst)

Gradually, the goals of the three departments converged. In January 2008, the working group produced a new 6-step investment process (Figure 9.3). SRI analysts and asset managers agreed on the idea that SRI may be a means to select the most promising companies in the long term – financially speaking – whereas they first thought these objectives were contradictory. To achieve this compromise between SRI and financial performance, they decided to build a common analysis of companies based both on financial and SRI criteria. They worked on new SRI criteria they deemed essential for business reasons.

**[Insert Figure 9. 3 here]**

Whereas SRI analysis had previously preceded financial analysis, companies were now ranked using a decision matrix (Figure 9.4) that simultaneously took into account both the SRI and financial rankings. Since the SRI ranking had been redesigned according to the needs of asset managers, there were fewer contradictions between the two rankings. SRI selectivity (i.e. the acceptable proportion of 'SRI laggards') was set at 50 per cent of the investment universe. This meant that the lowest 50 per cent (in SRI terms) of the companies in each activity sector were to be excluded from the portfolio. Companies with the best SRI and financial profile would be overrepresented in the portfolio compared to their benchmark index. Companies with an excellent SRI profile but a very poor financial profile, or vice versa, would be excluded as 'laggards'. Other companies would be selected according to their SRI and financial profile.

**[Insert Figure 9. 4 here]**

*Pragmatist Commentary* – In this phase, we see the escalation of cycles of inquiry, where the problems arising from each solution immediately stimulated a new episode. But there is more yet to understand about inquiry, as it is a process that is mediated by language, routines,

drawings, tools and other signs. Semiotic mediation has strong foundations in pragmatist thinking, especially Peirce's seminal work on the interpretation of signs (Peirce 1965: 2.227–273), where he argued that the meaning of a sign is determined by the situated context of its use. As such, this meaning is always evolving through usage. Semiotic mediations allow historic memory, action rehearsal and creative imagination, by making present in inquiry elements that are distant in time or space, such as past behaviours or imagined future situations.

Mead (1934) later proposed that mediations in the form of what he called 'significant symbols' provide the basis for mutual intelligibility and the social coordination of actions. He argued that significant symbols promote the development of reflexivity by allowing us to stand in someone else's shoes to gain a new perspective on events. Significant symbols are constructed transactionally, providing narrative objects that are accessible to a community of inquirers. Thus they not only mediate, but are also mediated by inquiry, which develops as a pluralist controversy between different interpretations of signs. It is the resulting ambiguities that admit the possibility of creative insight and learning. Conversely, in the absence of significant symbols, conversation is reduced to a series of reflex reactions that cannot produce new meanings. In the case of X Corporation, progressive cycles of inquiry produce new diagrams, new rules and new procedures, which then mediate further inquiry. The diagrams were constructed collectively, so their meanings are shared by everyone in the group. This is not to suggest, however, that every group member has an identical interpretation of the diagrams. Each member brings a different experience to situate their interpretation of the diagrams, and indeed, it is the exploration of differences between their interpretations that opens up possibilities for new thinking.

#### *Phase 5: Towards Closure*

In January 2008, the investment process had been redesigned 'on paper', but had not yet been fully implemented. The working group first decided to conduct 'back-testing' (i.e. testing the new investment process on fictitious portfolios). As this was a first time methodological experience, they faced a number of unexpected problems (e.g. the choice of software or the

selection of technical constraints), which prolonged the back-testing beyond what had been originally planned.

The new investment process was finally implemented in May 2008. However, two weeks later, the 50 per cent SRI selectivity raised major problems: too many companies still had a contradictory SRI and financial profile. The working group then decided to lower SRI selectivity to 40 per cent, then to 25 per cent. Consequently, the investment process was less constrained in terms of SRI than had originally been anticipated: only 25 per cent of companies in each activity sector were excluded for SRI reasons. In July 2008, the working group officially finished the task and the new investment process seemed to work in practice. The inquiry was concluded when the working group – and more particularly the CEO – judged that the investment process was sufficiently transformed to be convincing and commercially effective:

There comes a moment when you have to stop looking for something else, since it's no longer useful – you don't find anything further ... It's a bit like doing research. But I don't have to tell you that, do I? There comes a moment when you have something that you shouldn't try to improve. You must go with it and then ... carry on. (CEO)

*Pragmatist Commentary* – Peirce (1965: 5.374–376) argued that inquiry comes to an end when the irritation caused by doubt is no longer sufficient to motivate further inquiring action. Here, we see that after a period of inductive confirmation of the chosen solution, X Corporation has reached a new point of equilibrium, albeit a temporary one, where the company's desire to continue to improve their investment decision-making process has to be tempered by other demands in the business.

## **Conclusion**

In this chapter we have argued that pragmatism provides a very practical perspective on creativity by locating it in the everyday human practices by means of which people make sense of their situations. Using X Corporation as an illustrative example, we have shown that the pragmatist ideas of abduction, habit, inquiry, transactional meaning-making and semiotic

mediation are all essential in coming to an understanding of creative action in organisations. Although the linear structure of chapter writing has forced us to elaborate each of these ideas in turn, we do not intend to suggest that they arise sequentially. Rather, we see them as intimately intertwined and mutually constituting. Overall, the case exemplifies an inquiry episode that begins with the disruption caused by the consultants' critique of the company's performance and ends with a return to habitual practice, albeit a different habit from that which was originally disrupted. Within this long-term episode which lasted for almost a whole year, there are many shorter cycles of abductive inquiry that attest to repeated occurrences of creative action embedded within the process of change at X Corporation. Thus we come to an understanding of organisational change as a continuous unfolding of creative actions that arise as people get on with plodding through their lives together. In this way, pragmatism demystifies creativity and suggests productive avenues for further research.

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