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## 16. Balancing divergence and convergence: stimulating creativity through hybrid thinking

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Creating a climate that fosters organisational creativity is a critical challenge for many managers today. We know for example that strategic uniformity across organisations leads to reduced returns, whereas difference leads to higher performance (Nattermann 2000). Creative thinking is an important component of developing such uniqueness in an organisation, both in terms of its strategic positioning as well broader internal understandings (Jacobs and Heracleous 2005, 2006).

Incentive structures that favour short-term results, combined with limited budgets and the notorious difficulties associated with quantifying creativity payoffs (Amabile and Khair 2008), pose significant challenges to managing for creativity. At the same time, the long-term survival of most organisations in dynamic business environments will ultimately depend on their ability to nurture and mobilise creativity, that is, to generate outputs and outcomes that are both *novel* and *valuable* (Ford 1996). While standardised strategy tools and techniques can provide useful inputs for strategic analysis, the ability to move beyond 'dry' analytics and make a creative leap is often essential to developing strategies with sufficient distinctiveness and uniqueness to confer competitive advantage. The creative process itself can energise managers and motivate them to exert discretionary effort.

Managers often face a variety of challenges when attempting to stimulate creative thinking and implement innovative strategies in their organisations. Today's increasingly diverse and complex organisations can hinder the intersubjective sensemaking among individuals and groups necessary to develop a negotiated order (Drazin et al. 1999) favourable to creativity. It has been well documented that diversity is a necessary condition for real creativity; that is, only by bringing together individuals from diverse backgrounds and with diverse views can true novelty emerge. Further, simply hiring more creative people is not enough; research suggests that in unstructured settings, people tend to interact mostly with people similar to themselves (Ingram and Morris 2007). It is also easy

for organisations to fall into habits, and for subcultures and managerial structures and systems to tend toward conservatism, thus impeding the incentive to participate in collective creativity. It is not always clear how managers can most effectively foster processes, subcultures and managerial systems that might play a direct and important role in encouraging individuals to participate in collective creativity (Drazin et al. 1999).

Many managers also lack effective mechanisms or intervention techniques for facilitating the generation of more novel and valuable outputs in their work environments. This chapter is focused on this issue, as we examine intervention techniques aimed at enhancing collective – not merely individual – creativity, and harnessing it to address real organisational challenges. We begin by reviewing a number of conventional management intervention techniques that purport to facilitate the development of creative outputs. We first focus on interventions that we propose draw on ‘divergent thinking’. We define divergent thinking as a process of expanding the pool of ideas and incorporating different perspectives and assumptions, within a fluid framework or parameters, without directly seeking to address a specific business challenge. Brainstorming, mindmapping and storyboarding are some examples of divergent techniques that we will discuss.

We contrast this review by looking at other intervention techniques that focus more on their ability to converge and integrate inputs into manageable and useful results. We define such ‘convergent thinking’ as a process of focusing on particular ideas, perspectives and assumptions, within a structured framework or parameters, to achieve a specific business outcome. Many of these techniques come from the world of strategy. In this chapter we will discuss two such techniques: formalised strategic planning and management simulations.

Finally, we describe what we refer to as ‘hybrid thinking’, which includes both opening up (divergent) and refocusing (convergent) components. We define hybrid thinking as synthesising relevant ideas, perspectives and assumptions into a coherent whole in a way that provides a direction ahead, with respect to a specific business challenge. We provide a detailed example of one hybrid approach – serious play – that is designed to engender high levels of organisation-specific inquiry and engagement, ultimately generating outputs that are both novel and useful.

## A CLOSER LOOK AT ‘DIVERGENT’ APPROACHES TO MANAGEMENT CHALLENGES

The first set of intervention techniques we explore relates to those focused on the generation of a wide range of novel ideas in a divergent fashion,

that is, in a way that does not seek to integrate these ideas and does not aim to directly result in a resolution of a specific challenge. These techniques all share a focus on having participants give voice to and acknowledge the legitimacy and equal plausibility of different viewpoints (Schein 1996), a process of ‘divergence’.

### **Brainstorming**

Brainstorming is a commonly used creativity enhancing technique developed in the 1950s. It was originally designed as an intervention technique that involved individuals, groups and organisations following four key rules to generate ideas: 1) generate as many ideas as possible, 2) avoid criticising any of the ideas, 3) attempt to combine and improve on previously articulated ideas, and 4) encourage the generation of ‘wild’ ideas or ‘free-wheeling’ (Osborn 1957).

One of the purported strengths of brainstorming is its capacity to generate a significant number of high-quality ideas, due to its encouragement of participants to build on each other’s contributions. Whether brainstorming indeed generates higher-quality ideas, however, remains to be demonstrated empirically (Girotra et al. 2010). Indeed, brainstorming has been critiqued for a number of shortcomings, starting with free riding – as not everyone is obliged to participate, and the quality of the output is generally measured at the group level. Further, despite encouragement to not criticise the ideas of others, evaluation apprehension – i.e. failure to speak due to fear of negative reactions of others – has also been observed. Finally, production blocking may occur when one person dominates the exercise while others must wait in order to speak (Diehl and Stroebe 1987).

Indeed, although people who participate in brainstorming may feel that they are being more creative than when they work individually, face-to-face team brainstorming has been shown to produce fewer results than individuals generating ideas alone (Paulus et al. 1995, Paulus and Brown 2003). While the breadth of ideas generated collectively through this technique can be impressive, it can be challenging to subsequently draw such disparate ideas together into coherent messages that can be useful for an organisation. While brainstorming groups may generate a large number of ideas, the quality of the ideas can be highly variable and of ambiguous relevance to the organisation’s challenges, making it hard to select the ‘best’ idea (Girotra et al. 2010).

A variety of mechanisms have been suggested to improve idea quality generated from brainstorming. The use of information technologies in ‘electronic brainstorming’ – developed to facilitate idea generation in contexts where people cannot be co-present – helps mitigate the production

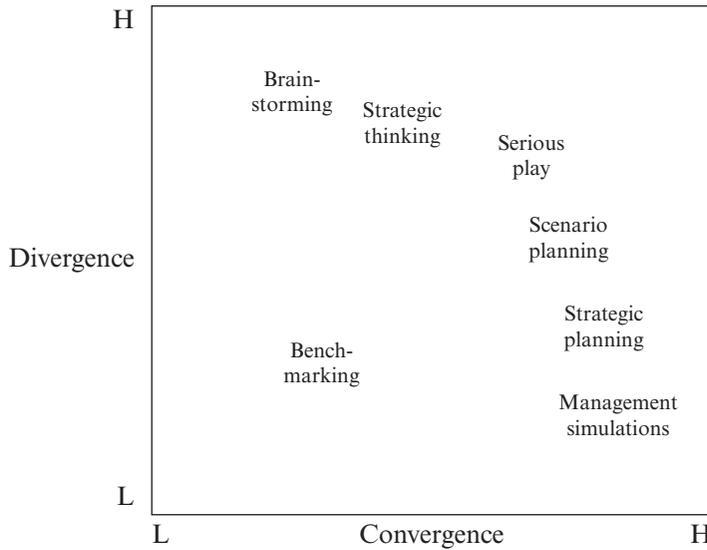


Figure 16.1 *Mapping of intervention techniques along the dimensions of divergence and convergence*

blockage issue. However, such groups are transformed into sets of individuals with lower group interaction richness (Potter and Balthazard 2004), and indeed the problem of drawing together the ideas in the end remains. Litchfield (2008) has recommended the introduction of goals to brainstorming in order to improve both idea quality and targeting to management problems, although the feasibility of this attempt to foster idea convergence lacks empirical support for the time being.

In summary, brainstorming is an approach that is strong on divergence (generation of a variety of ideas from various perspectives) but weak on convergence (bringing these ideas together in a coherent whole which indicates a direction to address a specific challenge). Figure 16.1 illustrates the mapping of brainstorming and other approaches we refer to in this chapter.

### **Mindmapping and Storyboarding**

Mindmapping (Buzan 1983) is another divergent means for generating strategic ideas. Starting with a key problem in the centre, participants work outward in a random, yet somewhat organised fashion to ultimately produce a complex ‘map’ of the issue. Even though the resulting maps

appear integrated by virtue of several interconnections, as with brainstorming, it can be difficult to pull the disparate maps of different individuals together in a coherent output that can help to address a specific challenge. A variant of brainstorming, storyboarding involves attaching ideas to a wall or whiteboard, and using them to construct a story (Higgins 1996). While this technique provides a more structured means of pulling together ideas at the end of the process, it is monological, dependent on written textual representations of complex ideas whose connections may be multi-faceted. Further, it can be difficult to group unrelated ideas into a coherent story using this method.

In sum, brainstorming, mindmapping and storyboarding are examples of divergent creativity intervention techniques that can be used for strategising. All three generate a wide variety of perspectives and ideas, but limited mechanisms for pulling them together into a coherent plan, strategy or framework.

## A CLOSER LOOK AT ‘CONVERGENT’ APPROACHES TO MANAGEMENT ISSUES

Convergence of ideas requires negotiation of meaning, often leading to the development of shared mental models and a common understanding (Oliver and Jacobs 2007). Many conventional techniques aim to provide such structured convergence in order to enable shared strategy insights. We argue that techniques that emphasise convergence in the absence of prior divergence, however, may lead to premature closure of debates about strategic direction or other challenges facing the organisation, with the result that suboptimal decisions may be taken and political support for implementation not sufficiently developed. Approaches that are strong on convergence but weak on divergence run the risk of becoming routine annual rituals (such as the strategic planning cycle) where real, incisive insights into customers, markets and competition are not substantively pursued or expected.

### **Strategic Planning**

Strategic planning has been criticised as a time-consuming, programmatic, formalised process which rarely results in creative outputs, a process which, rather than helping organisations effectively respond to environmental turbulence, merely offers the illusion of controlling such turbulence (Mintzberg 1994). McKinsey found that only 45 per cent of their sample of executives said they were satisfied with their strategic planning process, and

only 23 per cent said that major strategic decisions were taken within this process (Dye and Siboni 2007). Some proposed remedies include starting with debating the issues rather than the numbers, involving the right executives in the conversations, focusing on effective execution, paying attention to the implications of the plan for people development, and adjusting planning practices to the needs of different business units (Dye and Siboni 2007). Despite these challenges and the gradual reduction of academic interest in the topic, strategic planning is a prevalent tool, being used by more than 80 per cent of organisations (Whittington and Caillaud 2008).

The perceived importance of the practice has resulted in the appointment of chief strategy officers in many organisations. Going beyond the rather limited idea of strategy as planning, however, chief strategy officers and their colleagues perceive strategy as a multi-faceted, contextually specific, metaphorical concept, intimately bound up with their identity as strategists and as a resource to be employed when institutionalising new practices in organisations (Paroutis and Heracleous 2013). Planning has even been viewed as learning if carried out in an exploratory, inquisitive spirit (de Geus 1988), transcending Mintzberg's critique that strategies seemed to be emergent and based on learning rather than in-advance planning (Mintzberg 1991). The traditional understanding of planning remains, however, as a numbers-driven endeavour which is often intended to operationalise already decided strategies rather than to generate radically new ones (Heracleous 1998).

### **Management Simulations**

Simulations work by creating an artificial or synthetic environment that serves as the context for managers to experience 'reality'. Computer-based simulations involve simulating reality in an effort to understand the future impact of various strategic ideas, including product design (Vaccaro et al. 2011), organisational architecture (Ethiraj and Levinthal 2004) and organisational structure (Marengo and Dosi 2005). 'Wargaming' simulations are frequently used to enable managers to 'experience' competitive dynamics in their industry and think more creatively about the future, in an effort to test strategic ideas (Schwarz 2011). They are also widely used to teach strategic management (Wolfe and Rogé 1997).

Simulations are high on convergent thinking as in most cases 'players' must make decisions within a framework defined and constrained by computer algorithms in order to deal with organisational or strategic issues. The effectiveness of simulations depends considerably on the granularity of problem framing, that is, the decomposition (or not) of the question into a variety of sub-problems (Vaccaro et al. 2011). Although partici-

pants in multi-player simulations interact in order to generate some competitive dynamics, the result of these interactions continues to be mediated by the computer algorithms built into the simulation.

In sum, convergence techniques are grounded in assumptions that tend to reduce complexity and lead to somewhat narrowly focused collective outputs. Such techniques may lead to useful and practical insights, but in many cases not novel ones. Furthermore, some of these outputs can also be relatively standardised, whereas in order to be effective, strategic plans and organisational change initiatives need to take account of organisational particularities. They also frequently suffer from participant disengagement with the process, even though it is well documented that people are most creative when they are involved, excited and challenged by a task, i.e. when they are intrinsically motivated (Amabile 1996).

## UNDERLYING ASSUMPTIONS OF DIVERGENT AND CONVERGENT THINKING

March (1979) distinguished between technologies of reason that insist on the necessity of consistency among action and give primacy to instrumental rationality, with technologies of foolishness that acknowledge the emergence, ambiguity and open-endedness of action and relax – at least temporarily – the instrumental imperative. We suggest that convergent approaches to creativity in organisations tend to be grounded in technologies of reason, whereas divergent approaches tend to lean towards technologies of foolishness. While the former might overly constrain creative thinking and force premature closure (inducing the risk of myopia), the latter approaches might open up too much and neglect the need for closure (inducing the risk of confusion). Thus, hybrid approaches to creativity aim at balancing technologies of foolishness with technologies of reason so that the generation of options (opening up) is supplemented with the necessary gesture of assessing, prioritising and selecting the most viable options (closure) (see Table 16.1).

To summarise our argument to this point, managers need creativity interventions that avoid both the risk of premature closure (myopia) as well as unlimited opening up (confusion), that balance an orientation to exploitation with exploration, as well as foolishness with reason. While brainstorming and other divergent techniques are useful for opening up, and strategic planning and more convergent techniques tend to operate on a set of given convergent assumptions about issues such as market trends and organisational competencies, hybrid approaches would appear most able to question established assumptions and aim to envision new futures.

*Table 16.1 Key assumptions of divergent and convergent thinking*

	Divergent approaches	Convergent approaches
Mode of rationality	Frivolous, foolish, but with a serious purpose	Functional, following the instrumental imperative
Mode of thinking	Synthetic	Analytic
Main risk	Confusion, lack of direction	Myopia, lack of breakthroughs
Main orientation	Exploration-oriented generation of novel options	Exploitation-oriented work on existing options
Degree of structuredness of approach	Low to medium	High
Degree of directiveness of approach	Low to medium	High

## HYBRID THINKING: BOTH DIVERGENT AND CONVERGENT

Our review above identifies a significant need for creativity intervention techniques that allow for both processes of divergence and convergence in order to develop novel and useful strategic organisational insights. This is consistent with findings in other organisational domains, which indicate that it is beneficial to balance alternative approaches. For example Girotra et al. (2010) have found that ‘hybrid’ structures, in which the group works individually for some time and then works together, is superior to having the team work together the entire time. We now review intervention techniques that mobilise this insight, as well as the understanding that convergence which follows active, broad divergence is more likely to lead to creative insights because it brings into the decision-making process a broader set of influences.

### Scenario Planning

Developed in the 1970s at Royal Dutch Shell, scenario planning has been adopted in a wide number of organisations operating in contexts of environmental uncertainty (van der Heijden et al. 2002). It involves the identification of key strategic issues and contextual variables, around which a number of scenarios are developed and their consistency and plausibility evaluated. Thinking is initially divergent, as environmental trends and their likely interactions are identified and debated, until these crystallise

in different scenarios. Ultimately, a script or narrative of each scenario is written which provides a detailed and rich description of its contingencies (Schoemaker 1995). The concluding phase of scenario planning involves selecting strategies which would be viable in any of the key likely scenarios identified, rather than a single scenario.

Scenario planning has been critiqued due to its dependence on use of rational analysis to project into the future, although there have been more recent calls to integrate higher levels of intuition and creativity (van der Heijden et al. 2002). We classify this form of scenario planning as hybrid, as it concludes in a convergent fashion, having begun with divergent thinking.

### **Strategic Thinking**

Strategic thinking as a divergent, synthetic, creative thinking process has been suggested as a necessary antidote to the programmatic, convergent nature of strategic planning (Heracleous 1998). Strategic thinking can be aided by various types of tools and frameworks, including scenario planning, even though scenario planning as proposed by Schoemaker (1995) can be seen to contain a stronger element of convergence than divergence. Frameworks act as ways to stimulate thinking about the big picture of the industry landscape, strategic options and feasibility in terms of organisational capabilities, people, organisation design and values, as for example the ESCO model (Heracleous et al. 2009) recommends. By exploring both the big picture and long-term trends, as well as organisational realities and feasibility, strategic thinking can integrate divergence and convergence, analysis and synthesis. Schoemaker (2012) clarifies the capabilities involved in strategic thinking. He notes that effective strategic thinkers are able to look ahead and anticipate what might happen in the industry, can think critically beyond conventional wisdom, can interpret data and situations effectively through seeking patterns and avoiding quick heuristics, are able to take a stand and reach difficult decisions, can align various stakeholders behind a certain direction by understanding their agendas, and can learn from both successes and failures.

## **SERIOUS PLAY INTERVENTION TECHNIQUE**

The notion of serious play refers to an approach to adult learning – initially suggested by Plato – that combines a playful mode of interaction with a serious intent. Central to its effective use is a clearly defined goal of the construction process (‘the serious issue’) that will then be carried

out in several steps. A first, important step consists of so-called warm-up exercises aimed at mitigating or reducing conceptual resistance that some participants may experience when working manually and with unusual objects, such as toy construction materials. Thus, a more playful exploration of the material at hand tends to create a sense of comfort with the material if less serious issues are explored initially. For instance, asking participants to build a particular model of some kind, followed by a model representing their job or family, will enable them to appreciate the expressive potency of the materials at hand. Carefully debriefing these models in terms of the level of the artefact (what do we see?), the meaning of it (what is it supposed to mean?) as well as the process (how did it come about?) shows the systematicity of the construction and debriefing process.

A second important step then consists of individually constructing a model of the serious issue (e.g. build a model of your organisation; your current team climate; your role as a leader; an effective planning process; what your organisation will stand for in five years, etc.). The framing of the issue is crucial here: it should be sufficiently broad to allow for interpretive variation and adaptation, but focused enough to allow for cross-individual comparisons. In the best case, such instruction is brief, precise and clear, although in contexts where the issue is less clearly defined, the facilitator may adopt somewhat more ambiguous questions (e.g. build a model of your team experience in the MBA programme) in order to generate a wider breadth of interpretations. The resulting individual models should be debriefed in detail and probed into by others.

A third step consists of building a collective construction of the issue at hand. This process typically starts by inviting participants to explore the individual models of the serious issue in terms of differences and commonalities, as well as to discuss whether and how these might be meaningfully integrated in a joint model. It is here that the distinction between artefact and its meaning is most helpful. Even if the models differ at the artefactual level, their intended meanings might actually converge. Allowing sufficient time for these meaning negotiations in terms of exploring and appreciating divergent viewpoints in order to then explore opportunities for a shared, convergent take on the serious issue is crucial. Debriefing the model provides another opportunity to 'triangulate' the narrative of the serious issue. Typically, we ask several participants to debrief the model – deliberately to again check for divergent and convergent interpretations. Lastly, and while the three-dimensional endeavour can create positive team dynamics, it is crucial to capture the key insights gained in a two-dimensional way (typically through flipcharting), related both to the focal issue and other insights triggered by the models beyond the actual focus of inquiry.

A quick note on materials – although serious play was developed using toy construction materials, i.e. LEGO, it is not necessarily limited to using these objects. Over the years, we have experimented with a wide range of materials, including those without preconfigured meaning, such as wooden bricks or clay. Such materials have the benefit of a ‘white sheet’ effect, that is, the meaning is mainly, if not exclusively, attributed by participants; although creation ‘from scratch’ also tends to be a bit more time-consuming. On the other hand, materials with preconfigured meanings such as construction toys have the benefit of swiftly providing participants with an image-rich repertoire, but may influence or constrain participants’ imaginations. We suggest that depending on the object of inquiry and time constraints, one might opt for the former or the other with respect to choice of materials.

## SERIOUS PLAY AS AN EXAMPLE OF HYBRID THINKING

The serious play technique thus combines elements of both divergent and convergent approaches to organisational creativity. As with divergent thinking techniques, participants draw heavily on intuition and play in developing constructions based on original metaphors and analogical reasoning. Much of the outputs are narrative-based, which emphasises the contextual uniqueness of the situation, as well as the reflexivity involved in telling the stories (Tsoukas and Hatch 2001). Processually, it is also more democratic than many of the convergent techniques, as it provides a common platform on which individual participants may freely contribute their perspectives and voices into the process – it is structured in such a way that no single perspective dominates. The insights developed are anchored in stories that prove more memorable than bullet point lists or statistics generated by other techniques. The process itself stimulates the generation of unexpected and insightful content (Bürigi and Roos 2003, Statler and Oliver 2008).

However, the serious play technique also includes elements that are more convergent. The subject of discussion is the organisation in its environment – thus it is more particularistic and grounded than techniques more divorced from specific organisational realities. The analogical reasoning that takes place is facilitated by what is built in the constructions (source domain), which represent specific organisational challenges or dimensions (target domain). The stories developed during serious play sessions integrate diverse considerations and evaluations, as expressed by the group participants, and point towards a direction for resolving the challenge that serious play was employed to address. Thus, at the end

of the session, implementation of the solutions has already started, since agents are involved in constructing the story and making sense of the challenge and how it might be resolved.

To illustrate the combined divergent and convergent aspects of serious play, in the next section we provide three case vignettes of workshops run using the technique.

#### *Vignette 1: ChemInc*

The management team from ChemInc, the speciality chemical division of a mid-sized Swiss company, was responsible for developing a three-year strategic plan. The team engaged in a traditional strategic planning process and developed a plan that closely resembled ChemInc's previous three-year strategy, despite the fact that the company's customer base was rapidly changing. Corporate management decided ChemInc's plan lacked ambition and originality, so it sent its management team back to the drawing board to develop one that was more innovative. The team embarked on a two-day serious play process intervention in order to develop a more original strategy. The first day of the workshop involved the six-member management team (the VP of strategy and five functional heads) constructing individual representations of the identity of ChemInc, and narrative accounts describing these constructions. The use of the 3D construction materials allowed for a wide diversity of constructions, and indeed each team member developed a very different (and divergent) initial representation of his or her organisation, including a magician operating behind a barrier, a highly mobile vehicle with tube-like structures, a surveillance tower surrounded by threatening polar bears, and a factory controlling scattered sales people through use of an antenna.

Subsequently, the team was asked to combine their models into a single construction. This more convergent exercise proved difficult; they slid their individual constructions into the centre of the table, and only after much debate constructed a highly elaborate structure representing three main parts of the business connected by clogged communication channels or 'tubes'. After additional discussion, the group agreed that operational complexity was indeed a key element of the company's identity. Subsequently, participants constructed representatives of competitors, suppliers and other players in their business environment, which were all then positioned around and linked to ChemInc. In a final step, the group added communication channels connecting three key customers with logistics that bypassed the rest of the organisation. These 'tubes' subsequently formed the basis of a new element of the strategy plan involving the need to implement key account management (i.e. 'build more tubes') to circumvent organisational complexity and improve the company's

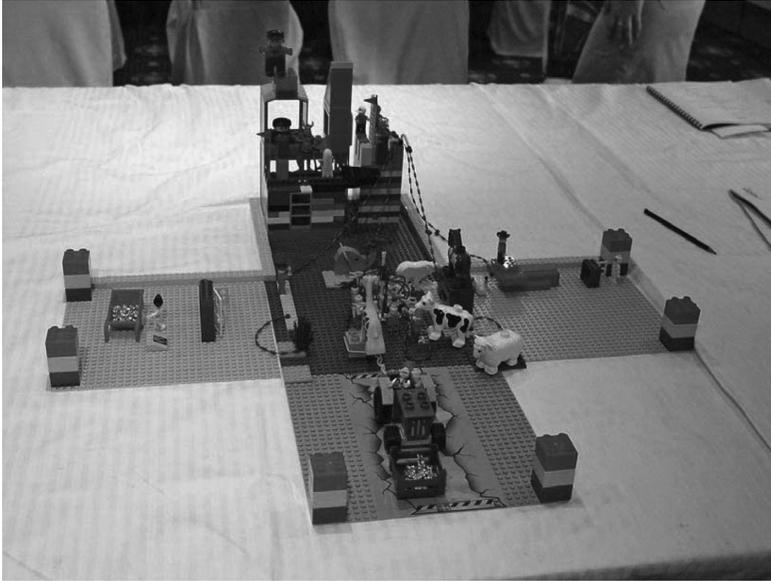


Figure 16.2 Resultant construction for ChemInc including tube-like structures

customer orientation. The emergence of these tubes was a result of 'hybrid thinking', in that they first appeared in an unrestrained individual construction but subsequently became part of a convergent structure, in which they played a major role in the subsequent strategy revision.

#### *Vignette 2: PaintInc*

A European paint company, PaintInc, had a well-established brand identity in its home market, and had recently embarked on an extensive international expansion. Senior management had launched a new customer-focused strategy as part of a broader effort to improve customer service, which included the objective of promoting the company's brand identity in its newer markets. One of the co-authors was hired to provide a two-day workshop using serious play to help managers from across the company better understand their company's brand identity and its role in the new strategy. The 20 workshop participants were divided into two groups of 10, each of which included participants from a variety of different company operations, although the company's 'international operations' were disproportionately represented in Group 2. Following some warm-up activities, each participant was asked to build an individual model of PaintInc's identity and present it to their group for discussion. These models included a divergent variety



*Figure 16.3 Group 2's representation of PaintInc, including critical elements*

of metaphors, including mazes, skeletons, red flags, networks, ninjas, tightropes and bridges. Several of these representations were critical of the organisation; a fact that several participants indicated to facilitators during the break had surprised them.

Subsequently, each table was asked to build a collective model representing the identity of PaintInc. Group 1 quickly built a single consolidated model of company identity, which eliminated everything of a critical nature that had been included in the individual models. The model consisted only of a 'peacock' (representing adaptability, friendliness and professionalism), 'heart' (representing compassion within the company, a kindly and helpful attitude toward customers, and concern for the environment) and 'family' (representing the founding family, a 'family-style' way of working internally, and treating customers like 'family'). The model constructed by Group 2 was quite different, showing much more complexity and including many critical elements, while no mention was made of peacocks or hearts. Each of the two tables then described its identity representations to the other.

At this point, strong disagreements between the groups ensued, leading several participants to become visibly tense and upset, with several members of Group 2 commenting that Group 1 appeared to be living

in a 'dream world'. In particular, one participant from China insisted that the peacock and heart symbols were simply not relevant in her part of the organisation. Following further discussion, however, Group 2 began to integrate these symbols into a revised model of PaintInc's identity. Further animated discussion ensued when the groups were then asked to build models showing perceptions of the company's most important customers. A wide diversity of perceptions became evident, which was a painful revelation for some of the managers from head office. Indeed, one appeared on the verge of tears at this point of the workshop. The group ultimately converged on the view that while its brand identity might usefully be highlighted in its new customer-focused strategy in Europe, other aspects of the company, such as attention to pricing, would have to be prioritised in its new markets such as China.

*Vignette 3: MobileInc*

A European mobile telephone company, MobileInc, was dealing with a number of major strategic challenges related to a significant debt burden linked to its acquisition of expensive 3G licences, and its recent acquisition by a large competitor. Assured of a high degree of autonomy by its new owner, MobileInc senior management decided to engage in a two-day serious play workshop in order to develop some principles to guide its future strategic decision-making. Ten managers participated in the workshop (seven from strategy and three from human resources). Following some warm-up exercises, participants built individual constructions showing key organisational characteristics of MobileInc. A number of differing individual views of the organisation's identity were presented, including boat-like figures, towers and assorted platforms, yet consensus over a shared representation of the firm proved difficult, as the metaphors and individual identity representations were quite different from one another. The significant differences in assumptions and viewpoints became highly visible, which led to a lowering of overall energy in the room.

The second day began with some in-depth conversations among team members concerning the root causes of these differences. These conversations enabled team members to inquire into their own and other's privately held assumptions in a non-threatening way, leading the overall energy level to gradually increase as commonalities began to be discovered. Ultimately, the group converged on a shared identity representation drawing on the metaphor of 'a flotilla of ships'. The next step involved the construction and addition of 'agents' in the company's landscape – for example, important customers, competitors and regulators – then building connections between these agents and the shared MobileInc identity representation. Subsequently, group members individually

generated some possible unexpected events that could emerge on this landscape, which were then ‘played out’ by the team using the model on the table. The playing out process included working through *how* the team should respond to the event, and then *why* such a response was most appropriate. With some help from the facilitator, the answer to the ‘why’ question would go on to lead to the development of the following guiding principles: ‘be the meaning machine’, ‘take control of the complete narrative’, ‘maintain our difference’ and ‘be thought leaders’. When the guiding principles were discussed and developed at the end of the second day, the energy level in the room remained high. Many participants expressed satisfaction with the overall outcomes of the workshop, and the guiding principles would go on to be invoked many times by members of the strategy team in the days following the intervention. In contrast, five months later and following some major organisation changes, the group – joined by some new individuals – decided to use a more conventional, discussion-based method to develop guiding prin-



*Figure 16.4 Serious play intervention at MobileInc*

principles, involving break-out groups, PowerPoint templates, and hours of wordsmithing of the final phrases. The output of this second process involved a one-day workshop followed up by two half-day meetings of a designated ‘committee’ to refine the output. The result was a 12-page PowerPoint presentation, which follow-up discussions revealed had little buy-in from participants in the exercise, and was quickly forgotten.

In sum, the three vignettes each include elements of both divergent and convergent thinking, which led in each case to outputs that were both creative and useful to the organisations concerned (see Table 16.2).

*Table 16.2 Summary of divergent and convergent thinking in serious play organisational vignettes*

	Task	Divergent thinking	Convergent thinking	Consequences
ChemInc	Revise strategy	Magician behind wall; surveillance tower with polar bears; car including tubes	Shared representation of organisation as complex entity with ‘tubes’ symbolising new strategic objective	Strategic plan modified to include objectives for more key account management (i.e. ‘tubes’)
PaintInc	Improve customer service by expanding brand identity internationally	Individual symbols such as mazes, skeletons, red flags; also differing interpretations of core org identity symbols such as peacocks and hearts	Shared view of core organisational identity but diversity of customer perceptions across countries	Collective understanding of brand perception in international markets – directions for how to improve
MobileInc	Develop strategic ‘guiding principles’	Elaborate boats, towers, platform-like structures	Shared metaphor of a flotilla of ships; four shared guiding principles	Guiding principles integrated into organisational conversations and decision-making

## DISCUSSION AND CONCLUSION

Hybrid thinking serves as a useful approach to generating organisational creativity as its divergent side encourages novelty, while its convergent side ensures that the discoveries will be valuable to the organisation. On their own, divergent approaches may ultimately cause frustration on behalf of participants if the ideas produced are difficult to implement, which may lead to reduced ownership. On the other hand, overly convergent techniques may close off creative opportunities due to the predetermined, probabilistic reasoning often embedded in these processes.

The hybrid approaches we discuss in this chapter attempt to draw benefits from both sides (see Table 16.3). For example, serious play generates outputs related to ‘traditional’ management problems that are imaginatively rich and build on multifaceted metaphor and narratives. Serious play allows for concepts to be physically manipulated and interconnected during process, adding a tactile dimension to conceptual notions such as

*Table 16.3 Comparison of serious play to divergent and convergent intervention techniques*

	Divergent techniques (e.g. brainstorming)	Convergent techniques (e.g. planning)	Hybrid techniques (e.g. serious play)
Types of outputs	Oral and textual	Oral and textual	Physical construction of conceptual ideas, narratives represented in constructions
Breadth of participation	Based on objective of session	Usually narrow – confined to top managers	Broader, allowing for inputs from diverse organisational members
Level of engagement in process	Medium	Medium / low	High
Commitment to result	Low to medium, low level of convergence	Variable, low sense of ownership	High, as there is high sense of ownership
Primary mode of engagement	Cognitive	Cognitive	Cognitive, emotional, embodied
Element of creativity and surprise	Intended but often accomplished to a limited degree	Not intended, plans aim to reduce surprise and variance	High, outputs are emergent and surprising

'organisation' and 'strategy' that has been found to be better retained by participants than more cognitivistic approaches.

It should be noted that hybrid approaches such as serious play include some risks similar to those found with divergent techniques. These approaches are more difficult for senior management to control – the process can generate unpredictable outputs that some might find threatening. For example, serious play frequently generates unanticipated outputs that draw on tacit or unconscious understandings of organisational phenomena (Oliver and Roos 2007). We also note that while such outputs are potentially useful in generating creative solutions to conventional problems, the insights gained still need to be operationalised using more conventional frameworks so that they can enter the realm of action rather than stay in the realm of imagination and creativity. In conclusion, we agree with Heracleous (1998) that imaginative techniques should be seen as complementary and mutually reinforcing with more conventional techniques, rather than opposing them.

## QUESTIONS FOR DISCUSSION

1. What other management techniques appear to draw on 'hybrid' thinking?
2. How can hybrid thinking as a strategic capability be organisationally embedded and institutionalised – if at all?
3. What challenges might you expect to encounter if implementing 'hybrid' techniques such as serious play in an organisational setting?
4. What skills or personal characteristics of a change agent or an organisation development practitioner do you believe would be most useful in implementing hybrid thinking?

## REFERENCES

- Amabile, T.M. (1996), *Creativity in context*, Boulder, CO: Westview Press.
- Amabile, T.M. and M. Khair (2008), 'Creativity and the role of the leader', *Harvard Business Review*, **86**, 101–9.
- Bürgi, P. and J. Roos (2003), 'Images of strategy', *European Management Journal*, **21**, 69–78.
- Buzan, T. (1983), *Use both sides of your brain*, New York: Dutton.
- De Geus, A. (1988), 'Planning as learning', *Harvard Business Review*, March–April, 70–74.
- Diehl, M. and W. Stroebe (1987), 'Productivity loss in brainstorming groups: Toward the solution of a riddle', *Journal of Personality and Social Psychology*, **53**, 497–509.
- Drazin, R., M.A. Glynn and R.K. Kazanjian (1999), 'Multilevel theorizing about creativity in organizations: A sensemaking perspective', *Academy of Management Review*, **24**, 286–307.

- Dye, R. and O. Sibony (2007), 'How to improve strategic planning', *McKinsey Quarterly*, **3**, 40–48.
- Ethiraj, S.K. and D.A. Levinthal (2004), 'Bounded rationality and the search for organizational architecture: An evolutionary perspective on the design of organizations and their evolvability', *Administrative Science Quarterly*, **49**, 404–37.
- Ford, C.M. (1996), 'A theory of individual creative action in multiple social domains', *Academy of Management Review*, **21**, 1112–42.
- Girotra, K., C. Terwiesch and K. Ulrich (2010), 'Idea generation and the quality of the best idea', *Management Science*, **56**, 591–605.
- Heracleous, L. (1998), 'Strategic thinking or strategic planning?', *Long Range Planning*, **31**, 481–7.
- Heracleous, L., J. Wirtz and N. Pangarkar (2009), *Flying high in a competitive industry*, Singapore: McGraw-Hill.
- Higgins, J. (1996), 'Innovate or evaporate: Creative techniques for strategists', *Long Range Planning*, **29**, 370–80.
- Ingram, P. and M. Morris (2007), 'Do people mix at mixers? Structure, homophily, and the pattern of encounters at a business networking party', *Administrative Science Quarterly*, **52**, 558–85.
- Jacobs, C. and L. Heracleous (2005), 'Answers for questions to come: Reflective dialogue as an enabler of strategic innovation', *Journal of Organization Change Management*, **18**, 338–52.
- Jacobs, C. and L. Heracleous (2006), 'Constructing shared understanding – the role of embodied metaphors in organization development', *Journal of Applied Behavioral Science*, **42**, 207–26.
- Jacobs, C., and M. Statler (2006), 'Toward a technology of foolishness', *International Studies of Management and Organization*, **36**, 77–92.
- Litchfield, R. (2008), 'Brainstorming reconsidered: A goal-based view', *Academy of Management Review*, **33**, 649–68.
- March, J.G. (1979), 'The technology of foolishness', in J.G. March and J.P. Olsen (eds) *Ambiguity and choice in organizations*, Bergen: Universitetsforlaget, pp. 69–81.
- Marengo, L. and G. Dosi (2005), 'Division of labour, organizational coordination and market mechanisms in collective problem-solving', *Journal of Economic Behavior and Organization*, **58**, 303–26.
- Mintzberg, H. (1991), 'Learning 1, planning 0: Reply to Igor Ansoff', *Strategic Management Journal*, **12**, 463–66.
- Mintzberg, H. (1994), 'The fall and rise of strategic planning', *Harvard Business Review*, Jan–Feb, 107–14.
- Nattermann, P.M. (2000), 'Best practice is not best strategy', *McKinsey Quarterly*, **2**, 22–31.
- Oliver, D. and C. Jacobs (2007), 'Developing guiding principles: an organizational learning perspective', *Journal of Organizational Change Management*, **20**, 813–28.
- Oliver, D. and J. Roos (2007), 'Beyond text: Constructing organizational identity multimodally', *British Journal of Management*, **18**, 342–58.
- Osborn, A.F. (1957), *Applied imagination*, New York: Scribner.
- Paroutis, S. and L. Heracleous (2013), 'Discourse revisited: Dimensions and employment of first-order strategy discourse during institutional adoption', *Strategic Management Journal*, forthcoming.
- Paulus, P.B. and V.R. Brown (2003), 'Enhancing ideational creativity in groups: Lessons from research on brainstorming', in P.B. Paulus and B.A. Nijstad (eds) *Group creativity: Innovation through collaboration*, New York: Oxford University Press, pp. 110–36.
- Paulus, P.B., T.S. Larey and A.H. Ortega (1995), 'Performance and perceptions of brainstormers in an organizational setting', *Basic and Applied Social Psychology*, **17**, 249–65.
- Potter, R.E. and P. Balthazard (2004), 'The role of individual memory and attention processes during electronic brainstorming', *MIS Quarterly*, **28**, 621–43.
- Schein, E.H. (1996), 'Kurt Lewin's change theory in the field and in the classroom', *Systems Practice*, **9**, 27–47.

- Schoemaker, P.J.H. (1995), 'Scenario planning: A tool for strategic thinking', *Sloan Management Review*, **36**, 25–40.
- Schoemaker, P.J.H. (2012), '6 habits of true strategic thinkers', *Inc.*, 20 March, <http://www.inc.com/paul-schoemaker/6-habits-of-strategic-thinkers.html>, accessed 20 November 2012.
- Schwarz, J.O. (2011), 'Ex ante strategy evaluation: the case for business wargaming', *Business Strategy Series*, **12**, 122–35.
- Statler, M. and D. Oliver (2008), 'Facilitating serious play', in G. Hodgkinson and W. Starbuck (eds) *The Oxford handbook on organizational decision-making*, Oxford: Oxford University Press, pp. 475–94.
- Tsoukas, H. and M.J. Hatch (2001), 'Complex thinking, complex practice: The case for a narrative approach to organizational complexity', *Human Relations*, **54**, 979–1013.
- Vaccaro, A., S. Brusoni and F. Veloso (2011), 'Virtual design, problem framing, and innovation: An empirical study in the automotive industry', *Journal of Management Studies*, **48**, 99–122.
- Van der Heijden, K., R. Bradfield, G. Burt, G. Cairns and G. Wright (2002), *The sixth sense: accelerating organisational learning with scenarios*, Chichester: Wiley.
- Whittington, R. and L. Cailluet (2008), 'The crafts of strategy', *Long Range Planning*, **41**, 241–7.
- Wolfe, J. and J. Rogé (1997), 'Computerized general management games as strategic management learning environments', *Simulation and Gaming*, **28**, 423–41.