How It All Began: The Origins Of LEGO® Serious Play®

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Abstract:

As the originators of the idea, concept, and initial product more than two decades ago, we have seen the LEGO® Serious Play® (LSP) method evolve beyond our wildest imagination. Empirical and anecdotal evidence attest to the widespread use and many benefits it brings to individuals, groups and organizations around the world. The ongoing research, conferences, communities of practice, teaching applications, and growing list of publications suggest a veritable field of study.

Today, thousands of professionals label themselves LSP practitioners/ facilitators, and hundreds of thousands in organizations have benefited from our idea. LSP training and facilitation has become a multi-million dollar business, including for the LEGO Company that sells dedicated material sets. For both of us, conceiving and developing LSP is probably the most impactful contribution we have made as management scholars. We are proud "fathers" of what many called an "insane" idea two decades ago.

Over the last years, we have noticed conflicting stories about the origins of the theory, development, and applications of LSP. To set the record straight, this article reviews the story of how LSP arose from the intersection of tedious strategy practices, engaging play, passionate scholars, open-minded executives, and the owner of LEGO Company.

Keywords: LEGO Serious Play, Real-Time Strategy, Imagination, Identity, Landscape, Guiding Principle

1. Rethinking how to make strategy

In the mid-1990s, we were serving as professors of leadership and strategy at the International Institute for Management Development (IMD) in Lausanne, Switzerland. In our teaching, research, and consulting, we constantly saw that objective analysis backed up by hard numbers was typically put at the forefront of strategy discussions. Managers' own subjective views were typically placed in the background, or even disregarded. The literature on strategy making is vast and we do not review it here, but the main reason for this approach to strategy appeared to be management worries about not being able to legitimize their own (different) conclusions with facts, and/or not being able to articulate their own intuitions and insights using conventional strategy concepts and models.

However, our own work had increasingly led us to doubt the effectiveness of how leadership teams develop strategy (Lorange and Roos, 1992; Lorange *et al.,* 1993; Roos *et al.*, 1996; Roos *et al.*, 1997; Victor and Cullen, 1988).We shared a profound interest in designing more imaginative, effective, and responsible ways to guide leaders and organizations in their strategy making. We thus set out to find a replacement for strategy retreats, workshops and the like with a higher energy method that offered deeper insights and better outcomes.

2. Ideas that informed us

Strategy has a long and august intellectual history based on different ideas about rational thinking, shared beliefs and collective vision, politicking, information creation and serendipity. Instead of revisiting this well-known literature, to launch our project we began tapping into concepts adjacent to our fields, especially theories about *autopoiesis*, complex adaptive systems, collective mind, imagination, and storytelling. Each of these seemed to be a gateway leading us to new ways for how strategy could be conceived and developed.

2.1. Autopoiesis
Inspired by the biological theory *autopoiesis* (Greek for "self-production") developed by Maturana and Varela (1980), Johan had conceptualized a different way to define and work with knowledge in organizations. With Georg von Krogh he had proposed a "self-referential" (subjective) epistemology distinct from cognitivist (computer-like) and connectionist (networked) ways of knowing. Their organisational epistemology posited first that knowledge is personal, history-dependent, context sensitive, and oriented towards problem-identification more than problem-solving (von Krogh *et al.,* 1994; von Krogh and Roos, 1995; Roos, 2006).

The consequence is that what we see, and what distinctions we make, depends on who we are. This may be common sense to some, but most analytical works in organisations assume observer-independency and value-free knowledge. From this perspective, *identity* is always the foundation from which we (subjectively) experience and interpret the world. It also explains why people naturally make different sense of matters when presented with the same data. It reinforces why

knowing who we are as individuals, groups, and leadership teams is vital to understanding what distinctions we make about the world (Roos, 1996).

Some argue that we have one core identity— our essences— while others suggest that our identity changes over time, and yet others believe we have multiple identities. In terms of organizations, the question of how they develop a sense of self and how that provides distinctive continuity and collective performance across space and/or time is equally debated. From its original focus on the identification of a convergent set of central, enduring, and distinctive attributes of an organization (Albert and Whetten, 1985), the concept of organizational identity has evolved into many concepts with different meaning, some even controversial.

For our purposes, leadership teams who claim to represent an organization first need to be able to express a coherent, core identity. They must individually and collectively be able to answer the question: *Who are we, really?* Conversely, they also need to understand how others view their organization.

2.2. Ethical Climate and Aspirational Identity

Because an organization's identity encompasses values and norms, it always has an ethical dimension about what is right vs. wrong and good vs. bad. Drawing on philosophical and leadership traditions, Bart had been researching the sources and varieties of such "ethical climates" in institutions (DiMaggio and Powell, 1983; Scott, 1987) and other more sociological understandings, such as what Chester Barnard (1938) had called the fundamental executive responsibility as a source of competitive advantage.

Bart was also inspired by the 19[th]century Danish philosopher Søren Kirkegaard, who deliberated about how to *become* "who you are." Kirkegaard worked at a time when society rapidly transformed from a feudal into a capitalist system, which suddenly made social identities very fluid. Instead of relying on religious authorities to tell people who they want to and should become, he controversially placed that responsibility on the individual.

We concluded that people in leadership teams, individually and collectively, must be able to answer the question *Who would we really like to become?* We concluded that aspirational identity too needed to be *starting points* for a new approach to strategy.

2.3. Complex adaptive systems theory

In his research and writing, Johan had also found inspiration in complex adaptive systems (CAS) theory developed in the 1970s that could help elucidate a further assumption we made – that people in organizations continuously try to understand and make sense of what is happening around them. CAS theory, in essence, is about how natural systems with many parts interact in a non-linear way (see Holland, 1995; Kaufmann, 1993). The theory posits that underlying what seems like a complicated mess are more orderly basic principles; however, they just are not the same principles we normally look for. Important ideas from CAS had already been helpful (and controversial) to better understand how social systems function, including dynamic fitness landscapes, emergent behaviour, and simple rules.

Inspired by these three offshoots of CAS, Johan worked with David Oliver to convert the concept of fitness landscapes into "knowledge landscapes" (Oliver and Roos, 1999; 2000) as an effective way to help people make sense of business environments. Landscapes are powerful images and even our corporate language is full of land and sea metaphors—like horizons, roadmap, king of the hill, valley of death, navigating, blue ocean and deep structure —that give us new meanings. Based on Johan's experiments asking company executives to express their business environments as metaphorical landscapes, we decided to substitute tired terms used in strategy conversations for the more dynamic landscape terms. Exhibit 1 illustrates how Johan depicted the idea of subjective metaphorical landscapes in his teaching and consulting 1996-1997.

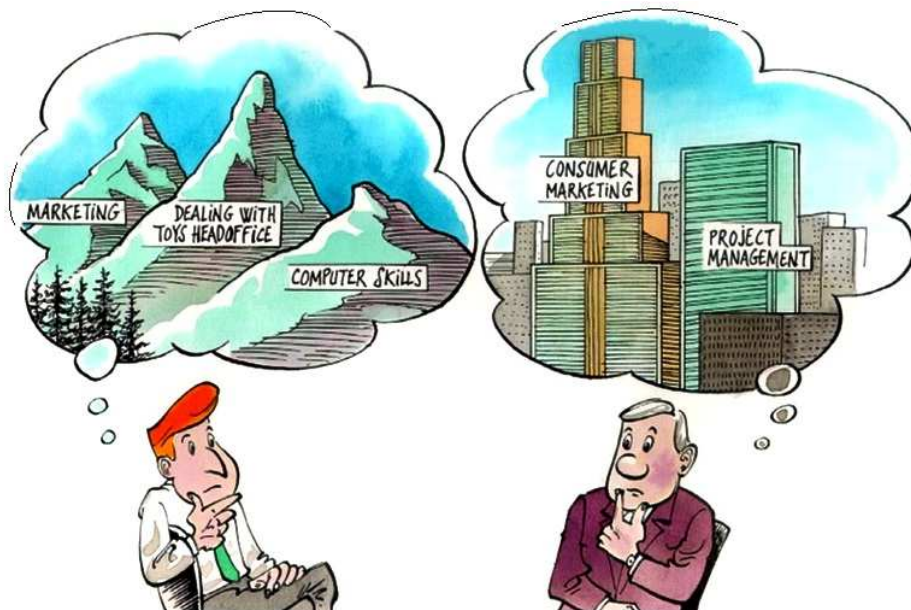**Exhibit 1: Seeing the world in terms of subjective landscapes**


Image Courtesy: Johan Roos

The CAS concept of emergent behaviour posits that new and often surprising behaviour happens at many levels of scale so that, at each level of complexity, entirely new properties appear. It can be thousands of birds in a field suddenly forming a flock moving as one, traffic jams suddenly forming or disappearing, or unexpected dynamics in financial markets. The takeaway for Johan was that interactions among interconnected groups, entities, and organizations both cause and experience sudden unexpected change (see Oliver and Roos, 2000).

The intriguing question was how might emergent behaviour impact strategy making in a volatile world? Leaders in dynamic, high-velocity business environments face significant challenges and must make quick decisions against a background of ambiguous information and an inability to gather relevant objective data and verify all facts.

Based on ethnographic research of the team that developed the new, programmable brick, LEGO Mindstorms (Oliver and Roos, 2003), and in-depth studies of a small, artificial intelligence start-up company in New York (Oliver and Roos, 2000), Johan suggested that dealing with such leadership decisions is best done using softer heuristics, not strict simple rules as suggested by CAS theory.

To acknowledge that humans have intentions, not just pre-programme instincts, Johan argued that rules should be replaced with "simple guiding principles" (SGPs): principles, not rules; guiding, not dictating; and simple, not complicated (Lissack and Roos, 1999). Furthermore, in his ethnographical research with David Oliver, he found that such SGP-heuristics can function as *headlines of deeper organizational narratives*, and that these narratives typically are grounded in emotional as well as purely rational considerations as depicted in exhibit 2 (see Oliver and Roos, 2003; 2005).

Exhibit 2: Theoretical underpinnings of Guiding Principles
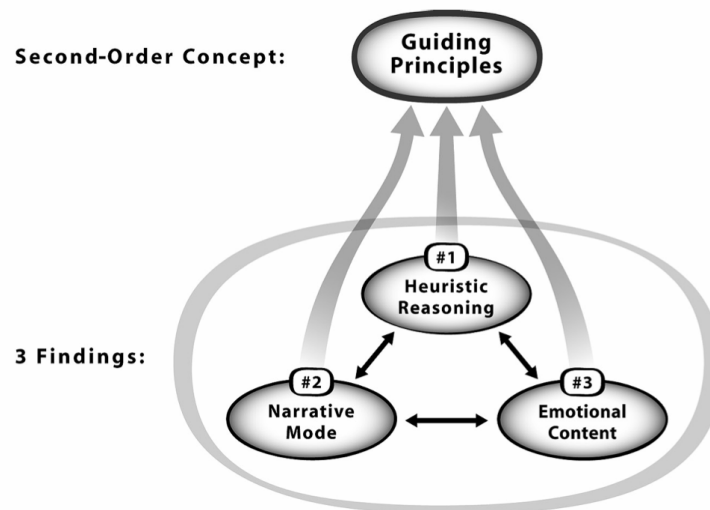
Source: Oliver and Roos (2005: 898)

With Andy Boynton, Bart had also been working on a process that began in the imagination of crafts and then developed, codified, routinized, perfected, and finally modularized along a consistent path (Boynton and Victor, 1988). This resonated well with the idea of SGPs, and Bart quickly saw the value of using this concept to develop strategy. We concluded that both *landscapes* and *simple guiding principles* needed to be integral parts of our new approach to strategy.

2.4. Collective mind
A fourth source of inspiration to rethink how strategy might be made were the notions of "heedful interrelating," and "collective mind" proposed by philosophers in the 1940-1950s and expressed in organizational theory in the 1990s (Ryle 1949; Weick and Roberts. 1993).

The former notion suggested that strategists needed to focus on *heedful interactions* among customers, suppliers, technology, regulations, important individuals, and other known or unknown "agents" in the environment. Being heedful meant that participants of conversations must (i) talk and act in a way that really contributes to the whole, (ii) deeply understand what everyone contributes, and (iii) relate their ideas and actions to the entire system developed together.

Johan had also used the concept of collective mind for a prior LEGO Company consulting project about the growing "edutainment" (educational software for children) business. In his final presentation to the company's leadership team in late 1995, instead of a traditional industry analysis, he suggested they see an emerging and complex "landscape of interconnected and dynamic villages" of large traditional and small new companies from a range of industries, among which skilled experts moved around freely (see exhibit 3). His analysis focused on how these "agents" were interconnected and interacted, and how the entire system of new entrepreneurs, venture capital and traditional toy, entertainment and software companies collectively brought forth a new business that cut across traditional industries. The conclusion was that before anyone entered this market they had better carefully heed these interactions.

Exhibit 3: Map of the emerging and interconnected edutainment landscape in November 1995

Image Courtesy: Johan Roos

From these ideas about collective mind and heedful interrelating in dynamic landscapes, we agreed that more effective strategy conversations should be designed to enable participants to act attentively, purposefully, creatively, critically and conscientiously, in other words, *heedfully*. In effect, strategy makers need to notice, attend, and put their heart into something *they* see as important in their landscapes, there and then. We concluded that conversations about *connections* among relevant agents in the landscape needed to be an important aspect of the new approach to strategy.

2.5. Imagination
Bart was also familiar with the literature of imagination and had discovered that throughout history the term "imagination" has been given many different cultural and linguistic connotations. While all share the basic idea that humans have a unique ability to "image" or "imagine" something, the variety of uses of the term imagination implies not one but several meanings.

We were particularly intrigued with the insightful literature on the complementary parts of imagination—to describe, create and destroy (Kearney, 1988). Imagination can mean the mind's evoking of a new understanding of a complex world (describe), but it can also mean the mind's vision of an idea that is entirely new to the world (create) and the mind's negation of what it sees or creates (destroy). This triple sense of imagination is threaded throughout the fabric of Western thought, and it appeared to us that these three distinct kinds of imaginations were equally the stuff of strategy making. We thus opted to make these three kinds of imagination a cornerstone of our new method to develop strategy, and why we focused on imagination in our first few publications.

2.6. Story making and story telling
We both have a strong feeling that the problem of communication in strategy making was a problem of narrative (see the personal story in Roos 2005). We were thus drawn to Joseph Campbell's (1949) classic work on the underlying patterns in myths, stories, and spiritual traditions. His insights offered a method that made it possible to uncover and utilize the compelling impact of narrative structures and archetypes that could underlie a powerful strategy method.

Bart was equally inspired by the epic work by Howard Gardner (1995), describing the common feature of transformative leadership as the crafting and sharing of stories that allowed followers to see, understand, and ultimately adopt new visions of themselves and others. According to Gardner, for a story to be successful, it has to connect with the audience. When leaders address a sophisticated team of experts, the story can be complex, but when addressing "the masses," the stories must be simple.

At that time, a "narrative turn" had grown increasingly popular in organizational studies. If storytelling is the preferred way for humans to make sense then surely strategy must be a prominent story told in organizations. A compelling story of strategy lies somewhere between the theatrical drama, historical novel, futurist fantasy, and autobiography. As authors of fiction, leaders have the same challenge as fictional writers, namely to develop an engaging, compelling account, one that

followers will understand, agree with, and gladly implement (Boje, 1991; Czarniawska-Joerges, 1996; Elmes and Barry, 1997).

We concluded that our new approach to making strategy should be designed to encourage and integrate contextualized story making and storytelling.

3. The new concept: real-time strategy

Re-conceiving strategy making through these conceptual lenses, we came up with the notion of "real-time strategy" (RTS) as opposed to traditional planning. Five theoretically grounded principles made up the RTS practice we envisioned:

1. Subjective views matter
2. Metaphors and storytelling are powerful sense-making tools
3. Start by depicting the identity, then look at the outside landscape
4. Interactions among agents of all kinds matter enormously, so heed them carefully
5. Let simple principles guide appropriate action in complex environments

Whatever we would do, it would be based on finding ways to combine these principles into a single unified method to strategy making. In this regard, our notion of real-time strategy stands on its own conceptual foundations *regardless of how the approach is implemented*.

In the next phase of our work, ironically, it was serendipity that led us to develop our ideas in an unconventional, playful way. We began to focus on the *medium* and *mode* constraints of traditional conversations about important matters, like the future of a company. To burst open the conventions of discussion, we sought to find techniques that would encourage imagination, surprise, and even shock (read: emergent behaviour)—and we were drawn to the toy industry.

We were aware this would be perceived as beyond odd. Framing strategy as real-time was clearly unconventional; placing identity at the beginning of this process was contrarian; using landscape images to depict the business environments was peculiar; and replacing action plans with simple guiding principles was strange. If all these were not enough, inviting serious managers to use toy construction materials to build a real-time strategy was clearly nuts—or was it? We thought it was worth a try.

4. Playing seriously in LEGO Company

In early 1996, the President of IMD asked Johan to design and lead a strategy program for the top 300 managers of the LEGO Company. Through his prior consulting work with the company, Johan had got to know many of their managers and the CEO. After a few client meetings, he asked Bart to join him to help design and deliver a compelling program to help formulate their new direction.

The challenge raised by Kjeld Kirk Kristiansen, the Owner and CEO, was particularly daunting. Kjeld had recently returned to work after recovering from a health issue and

noticed how the rapid and dramatic globalization of products, supply chains, and economies were combining with the emergence of new technologies in homes to create the market for edutainment. This threatened to seriously diminish the market for the core LEGO business of physical construction materials. Kjeld recognized that the company would have to both change almost everything yet simultaneously preserve its core defining values, often described in short hand as residing "in the brick," referring to the iconic six-studded LEGO piece. The task presented to Johan was to develop a process that supported Kjeld's leadership in formulating and implementing the required change. Ironically, the process we developed would ultimately be rooted in that same deep foundation. LSP is, at its core, "in the brick."

4.1. Challenging LEGO managers to be more imaginative

We began the workshop with LEGO managers with the intent to use LEGO products to support a more creative, imaginative strategy process. At first, we thought that the generous bowls of colourful bricks placed in every meeting room and copies of a popular epistolary novel with LEGO figures on the cover (Copeland, 1995) in managers' offices implied a more playful company culture. Soon we realized that few managers even played with bricks during meetings, and fewer had even opened the book. Despite the playful aura around this family-owned company, in 1996 LEGO managers were not much different from managers anywhere. In their view, methods or materials that appeared playful, childish, or frivolous did not belong in serious business discussions, like strategy making. The company liaison appointed to work with us was particularly faithful to this view.

Nevertheless, we more or less forced LEGO managers to abandon their two-dimensional visual presentations of texts, graphs, and numbers using flipcharts, overheads, slides, spreadsheets, and the like (read: changing the medium constraint). Moreover, instead of just sitting (still) in chairs in atriums and group rooms with occasional trips to the flip chart or white screen, we encouraged them to use the bricks in the same playful way they invited children to use them (read: changing the mode constraint). Bart, whose background included Early Childhood Education and who had both taught and administered Day Care Centres was certainly familiar with play as "children's work." But even with a familiarity with materials such as LEGO brick, it was not obvious to him how adults would fruitfully engage in such play.

During these programs, we tasked managers to give their own subjective meaning to the great variety of colours, textures, shapes, and sizes of LEGO materials and use their hands to construct, deconstruct, and reconstruct that meaning, then develop and share stories about what they had built. *Note that we did not literally ask them follow the RTS process; our only direction to them was to "play".* Play with construction toys rests on strong theoretical foundations and most LEGO managers took pride in knowing the terms *constructivism* (Piaget and Inhelder, 1958) and *constructionism* (Papert and Harel, 1991). Yet, the LEGO managers were less aware of classical theories describing the many benefits of play, which partly explain what happened during our experiments and prototyping.

Furthermore, instead of suppressing the emotional and social elements in favour of cognitive elements of a serious business conversation, we encouraged participants to

bring all of these to the table. Our experiment immediately and visibly boosted participants' engagement in the topics and the depth of their conversations. People involved were genuinely taken aback by the pedagogical process, including the emergence of new and surprising insights and how the playful constructions facilitated serious dialogue.

The processes we used at that time were similar to what Barry (1994) did with military commanders a few years earlier, but more intentionally playful. We too found that such a process amplified the opportunities to make the invisible visible. Our experiments also enabled managers to describe what they already knew in new way, and to collaboratively develop new insights. Moreover, we observed that our playful process supported the idea of identity as the starting point and dynamic landscapes as helpful and natural metaphors. Many managers were able to easily but profoundly depict themselves caught up in a messy political, technological and competitive context. The results were similar to what many of the contributions in this special issue describe in their own work decades later.

5. The insane idea: real-time strategy through serious play

In January 1997, we met to discuss our next steps. In the midst of an excited dialogue, Johan pulled up an empty envelope and started to draft ideas for a new tool based solidly on our RTS principles that could be used in teaching and consulting (see exhibit 4). We first gave it the code name *LEGO M-Tool* (M for management), but Johan later proposed the term *Serious Play* for the facilitated process, which is now a trademark owned by LEGO Company.

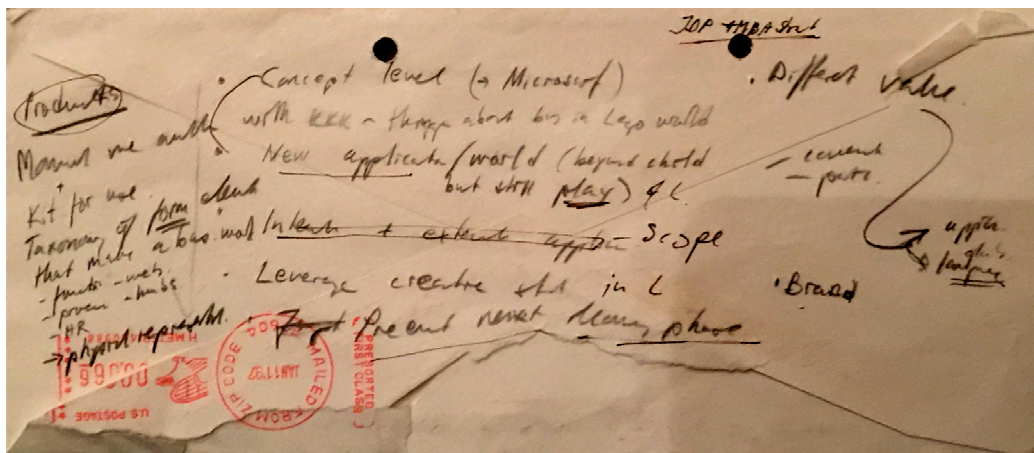**Exhibit 4: Envelope with the early concept January 1997**

Image Courtesy: Johan Roos

After some time (it took a while to bypass a less helpful company liaison), in early 1997, we eventually sat down with CEO Kjeld to share what we had done and our newest ideas. This is precisely when we presented the "insane" idea to not only use LEGO materials of different shapes, textures, sizes and colours *as a language*, but to do this with *working adults*. Not surprisingly, he was taken aback; in his view, adults

playing with bricks were enthusiasts, collectors, building models, or still children at heart. But his interest grew and he became encouraging.

Soon after, he assigned to us from their UK faculty a young designer and skilful model builder, Paul Howells, and tasked him to help materialize our thinking. Over the next 18 months, Paul helped us build a variety of bridges, walls, forests, and vehicles and selected several branded retail sets like Pirates, Western and Ninja to combine into our program. He also arranged the use of white bricks only as a comparison. He came up with ideas for how to make boring-looking board rooms more playful. Our goal was to mix pre-built meaning with "free" materials, initially try it out on the IMD program for LEGO Company and elsewhere, and see what would happen.

During the next eight months, we invited hundreds of participant-managers attending the IMD program to play seriously with LEGO materials. We offered a range of materials and observed how managers constructed a wide variety of shapes and expressed opinions about their organizational challenges and opportunities. Over this time, we noticed that some materials were used far more than others, such as materials symbolizing "connections" and "people" being part of most constructions. We also noted that that managers often defaulted to building and integrating models of themselves or their teams. Another observation was that many constructions were used to tell a story while moving, or even detaching or destroying parts of it.

To gather more data unbiased from LEGO values and norms, we asked a few other company presidents to bring their teams together to try out our RTS process on a particular tricky strategic issue that kept them awake…using LEGO materials. It was a tough sell, but we had personal relationships, professorial goodwill, and the enthusiasm to persist. The CEO of Tetra Pak (today chairman of industrial giant ABB) was first person to try the process out (he stands in the centre of the photo in exhibit 5, taken by Johan).In parallel, Johan used other IMD programs he managed or taught into expose managers from Roche, KLM, Aegon, British Steel, IBM, Lafarge and other multinational companies.

Exhibit 5: Early serious play with company executives 1998

Image Courtesy: Johan Roos

In August 1998, we again met with Kjeld and a few of his senior executives to review our experience and what we had learned. Based on the data we collected, our top five conclusions were that:

1. *The concept is exciting, but people can be anxious to engage:* we saw consistently high levels of interest, but also concerns about how participants' colleagues react to the idea of "play."
2. *Warming up is vital:* gradual warm-up and skill building needs to set the tone and validate the play, since simply offering LEGO materials was intimidating.
3. *Material choices matter:* materials should be unified and sorted, and there should be neither too much nor too little.
4. *The atmosphere must be safe, playful and comfortable,* though there is flexibility in the setting.
5. *The process is delicate:* Facilitators are absolutely essential; they must be able to play several roles during the process like convener, instigator, feedback provider, and process manager.

We also found that serious play sessions progressed best in carefully crafted phases:
- *Action phase* with parallel constructions ending with satisfaction that the build is true to their imagination.
- *Interaction phase* with story telling and sharing ending with collective understanding and appreciation.
- *Transformation phase*, when people change their views and discover aha and wow experiences.

The overall conclusion was clear: *our method worked really well.* But we also recognized that *careful and qualified facilitation* was absolutely vital. Kjeld now bought into it, but kept reiterating the need for professional facilitators to avoid negative results and mis-usage of his product and brand.

6. Firming up the RTS process

Consistent with our early principles, we now reframed the serious play process *to develop strategy in real-time* to include the following clear steps:
1. Build identity, using metaphors and storytelling
2. Create the landscape (agents and connections)
3. Heed the interactions among interacting agents in this landscape
4. Articulate simple guiding principles, not rules to deal with potential change scenarios

The more or less final product and process to develop real time strategy with 3D materials had been born. In December 1998, we published our ideas in a short article in an IMD series distributed to14.000 alumni of IMD programs (Roos and Victor 1998). With that article, we sent three messages to executives:

- *The problem with strategy making is that it is not imaginative enough!* Imagination is the missing outcome from analysis and experience. All three

types of imagination (describe, create, destroy) are needed to make great strategies.

- *Serious Play is a neglected source of imagination to develop strategy!* Play stimulates imagination in three ways.
- *Play is valuable for serious business!* Serious Play can strengthen business values. To compete well, you have to play well. Serious Play starts at the top.

The response from our article was positive and we recruited even more volunteer leadership teams and collected more data to further refine the prototype serious play method and materials.

In early 1999, our experimentations had evolved into a stable RTS concept, plus new ideas about additional applications in a serious play process that worked. That year *European Management Journal* published a peer-reviewed academic article (Roos and Victor, 1999) that further helped legitimize and spread our ideas, which were now gradually seen as less and less insane.

We knew that our method worked, but it needed a friendly nudge to solidify the need for good facilitation. We thus developed a prototype manual for facilitators, which Johan called *Imaginopedia* (a term LEGO Company subsequently trademarked).

We also knew that our real-time strategy application could be a bit overwhelming for many managers and teams, so we started thinking about how to break it down to simpler applications and Identity was an obvious one. But, that development is part of the *commercial* rather than the history of the RTS and LSP *concepts*.

7. The new millennium shift

In mid-1999 Bart returned to the US to take up a professorship in Moral Leadership at Vanderbilt University, but remained connected with the work to develop a commercial LSP product and our continued research. In Spring 2000, Johan announced his resignation from IMD so he could build from scratch a think-tank inspired research institute devoted to further the work on serious play and adjacent concepts. With Kjeld, Johan founded Swiss-based *Imagination Lab Foundation* (www.imagilab.org) in 2000 and became its Director. The Lab's formal purpose is to develop, disseminate, teach and support business management concepts and models that go beyond traditional management theories into the arts and sciences, especially theories of play and imagination.

This entrepreneurial-academic initiative launched a decade of extensive empirical and conceptual research with a core group of researchers from a range of academic disciplines, including complex adaptive systems theory, psychology, sociology, anthropology, and music in addition to management, as well as experiments with some 1,500 managers. In the first six years, Lab researchers (including Bart) produced more than 70 papers, presented at dozens of international conferences, and built a new brand for serious but playful research in the scholarly management community. Many articles about the Lab appeared in international media, increasing the request for engagement. During these years, Johan raised CHF 13 million in funding from a

range of companies in the telecom, manufacturing, service, and banking sectors, including donations from LEGO Company.

With one of the first Imagination Lab scholars, Matthew Statler, we carefully crafted and eventually in 2004 published an article in a renowned peer-reviewed journal (paradoxically called *Long-Range Planning*) in which we formally defined serious play as activity that "*draws on the imagination, integrates cognitive, social and emotional dimensions of experience and intentionally brings the emergent benefits of play to bear on organizational challenges*" (Roos *et al.*, 2004: 15).

The research performed by Imagination Lab scholars was certainly flavoured and inspired by both LSP and RTS, but never limited to either or to the use of LEGO materials. In fact, Lab scholars and practitioners were free to think, debate, experiment, present and write about a range of adjacent ideas, concepts, theories and practices, and they did. This included experiments mixing hard and soft and natural and artificial materials, as well as theoretical deliberations and data gathering from other contexts, such as musical performances (*e.g*. Marotto *et al*., 2007). Johan's 2006 book, *Thinking from Within* integrates much of the varied research that was done up to that time.

After serving as its leader for almost seven years, Johan took on new challenges in 2007 but remains on the Lab's Board of Directors. He has used LSP in several organizations he has led, and on occasion, he facilitates engagements for senior leadership teams. His colleagues at Hult International Business School (including Ashridge) recently found out about his role in developing LSP, and its use there is rapidly spreading.

8. Putting LEGO Serious Play in perspective

The story of LSP is one of the sweat, tears and frustration but also the passion, engagement and courage to be different that go into entrepreneurship. It is also a story of persistence. The time from entrepreneurial idea to benefits usually ranges between 3 and 10 years, but for us, it was more like 12 years, coinciding with the rapid increase of interest and use following LEGO Company releasing LSP under a Creative Common Licence in June 2010, which we applaud.

Success has many parents, it is said, and LSP recognizes that. Many people contributed to scale our prototype LSP product and facilitation process now used by thousands of people all over the world. While we contributed the intellectual foundation and theoretical models of both RTS and LSP, other researchers too have elaborated, tested and extended the underlying serious play concepts, especially people who were affiliated with Imagination Lab Foundation. From an academic perspective, the research, conferences, communities of practice, teaching applications, and growing list of publications, including in this special issue, to our delight even suggest an emerging field of study.

We both have done much research and published many articles and books, some widely cited. But conceiving and developing RTS and LSP is probably the most

impactful contribution we have made in our careers. Unlike other purely academic articles, this intellectual venture has progressed through all four steps of scholarly impact outlines by Ozanne *et al.* (2016). We *created* the ideas and published our research findings for both practicing managers and academic audiences. Thousands of managers, consultants and scholars have become *aware* of it by reading and citing our works, media articles, or listening to our talks. The active and widespread *use* of the LSP method is evidenced by the sheer numbers of people who have been trained to use it, and use it. We have heard many testimonials of resulting changes in perspectives, attitudes, and behaviours, the profound differences made, and the *benefits* to individuals and a range of private, public and volunteer organisations - *when our method has been skilfully facilitated.*

We are proud "fathers" of what quite a few people labelled a crazy idea two decades ago, and we hope the world has become better from playing seriously the way we developed it!

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