

THROUGH THE MEMBRANES – REFLECTIONS ON HOW WE DEPICT IDEAS FOR INNOVATION

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ABSTRACT

This article, just like innovation processes, revolves around ideas; ideas that has to be instigated, developed and put to use before they become organizational and societal innovations. Innovation ideas are in this respect quite complex and contextual. At the same time, the symbol commonly used for depicting ideas is quite simple and generic - a light bulb. Even though we are satisfied with the current situation, we might ask ourselves how would a communicative idea symbol fit for innovation look like? Symbols are adopted through a process of social consent. In that perspective, it appears pointless to challenge current use in order to replace the light bulb. The aim of the article is though not thus. Instead, it is to start a research dialogue on current use of preferred symbols for organizational innovation. The article describes how ideas are developed at the rim of formal organizations before penetrating the boundary *getting in*; and secondly how ideas need to penetrate the boundary of the organization *getting out* at launch. Hence, innovation can be viewed as a process of developing ideas in order to penetrate membranes. The article suggests a new symbol for ideas as “enlightened paths on a black orb”.

INTRODUCTION

Ideas are held as most important in innovation processes (Van de Ven, 1986), where we also emphasis business ideas as being the core of all competitive organizations (Francis & Bessant, 2005; Prahalad & Hamel, 1994). Ideation management and idea generation has become an important part for many companies (Björk & Magnusson, 2009; McAdam, 2004), and then just not limited to R&D-departments and within the boundaries of the firm (Van Lancker, Mondelaers, Wauters, & Van Huylenbroeck, 2015). Collaborations, sometimes organized as open innovation, are important (Chesbrough, 2003, 2006; Cooper & Edgett, 2009). Nowadays we tend to view both ideation and innovation as created in complex interactions between an organization and its network (Baldwin & von Hippel, 2011), where introducing new ideas into an organization is not a simple task (Lichtenthaler & Lichtenthaler, 2009).

At the same time our depictions of ideas are limited to quite unreflected symbols (cultural dependent visual emblems that stand for something else), where the light bulb seems to be the most common one. Below you find some examples, visible in three screen shots from a Google image search on “ideas”, “innovation ideas” and “business ideas” in May 2016, showing the first pictures that appear for each search. Even though we actually mean different things with these three types of ideas, we tend to use the same symbols. Observing the different pictures, we can note that there are some other representations present, but the light bulb stands out



Figure 1: Depictions of “ideas” in Google Images



Figure 2: Depictions of “innovation ideas” in Google Images

as being the by far most common distinct symbol in all three searches. There are also other representations in these pictures that show some similarities, depicting more complex streams of inter-related objects and movements, and possibly more accurate for organizational ideas. “Innovative ideas” also comes out as more complex than just “ideas”.

Noticeably, when I first did this search in October 2015 there were two representations of exchanges between people for “ideas” but not any depictions for this for the searches on “innovation ideas” or “business ideas”. In this latest search, these two depictions have vanished, and we’re left with more individual focused depictions for all three concepts. Although these are just snapshots, giving a rudimentary overview of preferred symbols for depicting ideas in relation to innovation and business, it troubles me that there is no other symbol as distinct, repeatedly used and misguidingly easy to interpret as the light bulb. It troubles me as the light bulb as a depiction of an idea in an organizational context encages our thinking on ideas. By using the light bulb as a symbol we are lead to believe that ideas suddenly would appear and enlighten us, where this is rarely the case (Goffin & Mitchell, 2005; Schweitzer, 2004); especially not in organizations where ideas must be constantly moulded in order to first fit in and later on change together with the organization in the innovation it triggers (Björk & Magnusson, 2009; Hoppe, 2013; McAdam, 2004; Stevens & Burley, 1997).

Few organizational ideas are actually realized, where Stevens and Burley (1997) give us the numbers that from 3000 unwritten innovation ideas, 125 reaches first stage development and one reaches commercial success. Explaining these extreme numbers, Steven and Burley



Figure 3: Depictions of “business ideas” in Google Images

reasons that few original ideas stay original – they change in the normal way of dealing with ideas inside organizations. This normal change of organizational ideas also pin points a complementary problem in using a physical and apparently stable symbol as the light bulb in depicting ideas. At best, the light bulb can be switched on and off, but there is no other obvious visible movement possible. Heeding the deficits of the present preferred symbol, a question in relation to innovation arises: how would a communicative idea symbol fit for organizational innovation look like?

I realize that answering this question will not be easy, given the well-established use of the light bulb. Still, this article is mainly written for innovation scholars and professionals, where my aim is to start a research dialogue on current use of preferred symbols for organizational innovation.

METHODOLOGICAL NOTES

The paper take the form of an essay built on ‘disciplined imagination’ (Weick, 1989) where I combine material from my previous research on organized intelligence work and current readings on ideas and innovation with reflections on the problem at hand. My method and the construction of this article rests on my interpretation of critical social science (Habermas, [1968] 1972), where a scientific texts main objective is to provoke reflection in order to liberate us from structures (here as preferred thought structures, symbols and theories for ideas and innovation) that bind us. It is also inspired by Davis (1971) and his appeal to write something interesting instead of trying to fit in.

The first case-narrative in the article builds on the stories I was told by intelligence professionals for my thesis (Hoppe, 2009). In the narrative, I describe the idea process from the perspective of a technology scout; an intelligence professional with the mission not only to identify novelties in the contextual environment, but to process these novelties into ideas suitable for the company. The second case-narrative, about Thomas Alva Edison’s experiments with the light bulb, is built on journal articles but also information gathered from popular media.

ON SYMBOLS, IDEAS AND INNOVATION

Symbols are cultural dependent visual emblems that stand for something else, and are studied within the field of semiotics. Within this diverse field symbols are viewed as guiding communication and the creation of certain meanings. When new metaphors and connotations lead us to adopt new symbols we may also speak of a semiotic innovation, where the new symbol may replace or complement old symbols through new meanings, adding value to our communication. Each symbol used also has a ‘semiotic potential’, describing the kinds of meaning it affords (Van Leeuwen, 2005).

The introduction and spreading use of an alternative symbol to the light bulb as depicting ideas would, in line with this reasoning, constitute a semiotic innovation. For reaching this objective, the semiotic potential of the new symbol must evoke a communicative value that present symbols miss out on; helping us to better understand what we mean by ideas in innovation processes. But, what do we then mean by ideas in innovation? An idea can be many things. For starters, an idea is a central concept in philosophy, where our ability to handle and manipulate ideas, as thoughts, are seen as important in defining us as humans. Our lives thus revolve around ideas of many sorts. Non-the less, there do exist definitions and descriptions of what constitutes an idea, where Dictionary.com (20171215) give us the following six different meanings.

1. any conception existing in the mind as a result of mental understanding, awareness, or activity
2. a thought, conception, or notion
3. an impression
4. an opinion, view, or belief
5. a plan of action; an intention
6. a groundless supposition; fantasy

Judging just by the first bullet of the six, one can conclude that an idea can be almost anything. This is though not the case of organizational innovation. In this context, ideas concerns development and changes and are at the heart of the innovation process. On a general level e.g. Damanpour and Schneider (2006, p. 216) define innovation as the creation or adoption of new ideas. More specifically, in a review Baregheh, Rowley, and Sambrook (2009) compared 60 different definitions of innovation from economics, innovation and entrepreneurship, business and management, technology, science and engineering. In their analysis, they conclude that “idea” is described as the most common ‘means of innovation’, mentioned in 22 definitions. It was followed by “invention” (12), “technology” (12), “market” (11) and “creativity” (10). Furthermore, “Idea” was in total the sixth most used word in the analysed definitions, with 22 mentions, junior just to the words “new” (76), “product” (40), “organization” (29), “service” (25), and “process” (23). From their research Baregheh et al. (2009, p. 1334) also derived the following definition:

Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace.

From this short survey, we can deduct that ideas are vital to innovation. Indirectly we can also understand that innovation ideas are not just any ideas, but ideas on products, services and processes. Having established this, we’ll move on to how ideas relate to the innovation process, starting with the emergence of ideas.

ON ORGANIZATIONAL IDEAS FOR INNOVATION

In the definitions by Baregheh et al. (2009) as well as Damanpour and Schneider (2006) we can once again note the central use of the word idea, but also that it relates to the organizational transformation of ideas. Ideas are not stable; instead they are part of a process of transformation moving from the intangible to the tangible in a process that roughly follows the steps: idea generation, maturation, selection, refinement, implementation and diffusion. Depending on context (and author) the description of the process will differ.

As discussed in the introduction, ideas for innovation are highly sought after today, but how do they come about? Sometimes you get the impression that you just have to sit down with a few peers, brainstorm a bit, and then – eureka – there is the idea. These so called ‘light-bulb-moments’ exist (Bartholomew, 2014) but they are scarce (Goffin & Mitchell, 2005; Schweitzer, 2004). Organizational ideas for innovation are instead developed from new knowledge and interpretations (Hoppe, 2009) where ideas successively are adapted to current organizational needs and conditions, thus constituting a vital part of an innovation processes (cf. Björk & Magnusson, 2009; Börjesson, Dahlsten, & Willander, 2006; Stevens & Burley, 1997).

Organizational ideas can thus not be any idea. Instead ideas for innovation are part of a knowledge process (McAdam, 2004). A ‘candidate idea’, at the rim of the organization, will help us define knowledge needs and start knowledge combinations that eventually will make it possible for us to judge if and how to turn a candidate idea into an organizational idea and from there move into the first stages of innovation.

Exploring ideas for innovation connects well with the need of exploring knowledge (e.g. Lichtenthaler, 2011; Lichtenthaler & Lichtenthaler, 2009), adhering to the fact that ‘breakthrough knowledge’ (new ideas), necessary for more radical innovation, is commonly found at the fringe of existing organization, at some length from the research core or focal discipline (Kanter, Kao, & Wiersema, 1997). At the same time the organization must have ‘absorptive capacity’ (e.g. Zahra & George, 2002), upholding existing knowledge for being able to handle new knowledge/ideas. This knowledge gap also explain why organizations are more likely to benefit from ‘internal knowledge’ than ‘external knowledge’ (Argote, McEvily, & Reagans, 2003) decreasing the innovation capabilities as well as making it harder for new ideas from the outside to penetrate the boundaries of the organization. It simply is not that easy to take an idea, especially a more challenging idea from the outside, and use it directly for innovative purposes inside an organization. Instead it has to be moulded for fit. After that the organization must transform (in products, services and/or processes) in order to construct a ‘candidate innovation’ from the idea (McAdam, 2004)

and launch the novelty, where after the idea have spreading impact on society (cf. Hutter, Knoblauch, Rammert, & Windeler, 2015; Van Lancker et al., 2015), thus transforming from a candidate innovation to innovation.

This leaves us with two distinct stages where the idea at first will have to penetrate the boundaries of the firm and in the second stage penetrate the boundaries of the contextual environment and society. In figure 4 below, I have sketched this process. Both these penetration processes are geared at getting acceptance at the other side, making an impact. In relation to the organization the first stage will be the introduction and the second stage the launch. There is also an intermediary step when the organization successively turns the organizational idea into more concrete development of products, services and processes, organizing itself around it. This process can also be more or less open to stakeholders in the contextual environment (Van Lancker et al., 2015) where the organizational boundary is less distinct.

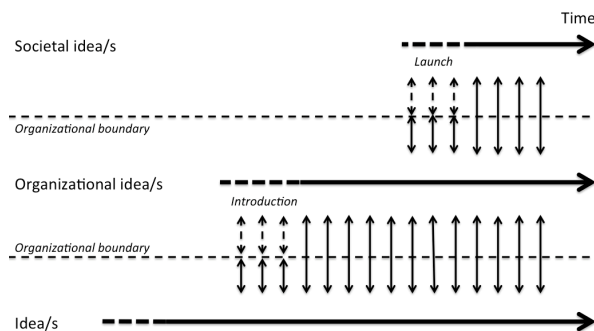


Figure 4: The transformation of an idea into innovation (original)

The first stage, introduction, sometimes described as the ‘front-end’ and ‘back-end’ of innovation, is what seems to interest researchers of organizational innovation the most (Sperry & Jetter, 2009). For instance, open innovation is portrayed as an alternative to in-house R&D and more secluded development processes. From the back-end and on, interest differs a bit depending on the type of innovation. The second stage, launch, is a primary concern for product and service innovation, relating them to marketing and sales issues. The intermediary stage on the other hand is a primary concern for process innovation, relating it to production and HRM issues.

FIRST STAGE OF PENETRATION: INTRODUCTION

To understand the idea process at the introductory stage we can turn to a narrative on the process of spotting and adapting ideas for the innovative needs of a company, sometimes referred to as the ‘fuzzy end’ (cf. Börjesson et al., 2006). The narrative below builds on the interviews for my thesis and especially one informant’s description on how to mould something interesting (a candidate idea) in the contextual environment into an

idea for product, process or organizational development inside the organization. In this narrative, the idea does not appear as a sudden flash of light, but as part of a knowledge process for constructing something useful that when the idea leaves the scouting stages it is still in motion in a process for organizational fit. There are of course other ways of introducing ideas, but the systematic approach described here makes it possible for us to spot a variety of aspects of the introductory process.

My job is to deliver technology ideas to our business, though I tend to simplify it and say my job is to scout. I especially look for things that could drastically change the market situation for us, or our customers; and to do that I have to scout both inwards and outwards. Outwards goes without saying, but scouting inwards is necessary in order to know what’s important and what to look for.

Scouting is about browsing a lot of sources of information, but perhaps primarily to talk to my network, both here at our site and outside; sometimes also with competitors. I tell them what I know and believe, and my contacts tell me in turn. Of course, I will not tell them the whole story, but bits of this and that. And one must never lie, as this would jeopardize our relationship.

It sounds easy, but to get something, one must also be able to give something. What most people want in an exchange is a good conversation; a conversation in which we provide information to each other, helping each other by sorting loose thoughts and other stuff. Sometimes it’s about a specific problem, but often more loosely around something you saw or heard. It is important to keep the relationship vital, keeping up intimacy and trust, so that when an issue arise - then we can trust each other and get help quickly.

There is also a small, dedicated group of people that I regularly meet, and in order to make that group you have to qualify. To do this, you must be really, really good at something, well informed and knowledgeable, but that alone will not do. You also have to be curious. Additionally, if you also have many exciting contacts and are known to be in interesting places where novelties arise, well then, you’re someone I’d love to talk to.

When I feel there is something there that could be developed to an idea for the company, I start to talk internally with people that I know have the skills and contacts for helping me out, and we form an informal group. In this group, we begin to exchange information with each other. Together, we are building knowledge and with that knowledge we keep developing the idea. The idea is thus nothing stable. On the contrary, what we have to do is to change it, adopt it so it will work within our organization, technically and politically. The best ideas are those attuned with the internal motion of the company, why you have to scout inwards in order to know where to take the idea and how to introduce it. This will

of course not work if you haven't done your homework on how to make money from the idea. Hence, in the group we must also gain information on raw materials, production, marketing, etc. not to speak about patents and if the company will be able to procure the necessary rights if it comes to that.

Anyway, when the idea starts to resemble something, when we see that it has the potential of a business case, or when we need some sort of more substantial financing for moving forward; at that point, and not before, we cannot keep the idea isolated to the small and informal group anymore. Then it's time to turn this informal idea to a formal organizational idea, to make it official, introducing the idea internally.

As a first step, I usually present the idea for my section chief or head of department. It's at that level - our management team. The presentation will trigger new discussions, involving new perspectives on the idea, and with that comes new questions, additions to the idea, but maybe most important – a discussion on where to take the idea next.

At this point, when we take the idea from the small group to the larger group, we usually lose momentum. The clarity of the idea, which we could uphold in the small group, will be obscured by different interests and conflicting assessments of the idea. But, there is no way around it. In order to work, the idea must be adapted to the organization and the people responsible for that must have their say. It's seldom they are happy with the idea as it is. So, I usually get a new assignment, but this time it's formal, to complement the initial idea with additional information and analysis. I'll also get instructions for what to report, to whom, when, where and how.

Then I start to adjust the report, building on comments where to expand and who to involve in the process. The report and the idea thus continue to change with each presentation. The very idea might sometimes become obscured, but it is still there somewhere, and guides us in the process of making it work. One day, the idea will also leave me, and that's when I can't contribute any more, when my time is better spent scouting for the next novelty, and others are more capable of making the most of the idea that I helped introduce to the innovation processes of our company.

Thus, an organizational idea is an idea in constant transformation, from the first loose ends to the day when we have invested millions or billions in a production process. And constantly on this journey the idea must be both nurtured and adjusted. And so, it goes on. Sometimes an idea dies, sometimes it takes a leap aside, sometimes it's put on hold, but sometimes it also happens that an idea changes the whole business from the ground up, and then it is nice to feel that you have been involved in the process.

Unfortunately, an organization does not solely consist of fair and positive colleagues. There are those negative and regressive too; those who are not curious at all, and you do not want to include them in these processes. At least not in the beginning when an idea still is vulnerable. It astonishes me that so many people in my organization are so narrow minded, not interested in anything new, but also how good they are at postponing, counter-acting and killing new initiatives. I think many of them really are afraid, but perhaps they also feel challenged.

So, if you want to be successful in scouting, creating and introducing ideas you have to keep an eye out for those not interested, but also find ways to bypass them. Having stated this, you also ought to realize that among these critics there are a few sharp analysts. These people, handled in a careful way, are really good to use in later stages while assessing the robustness of an idea. Scouting inwards, keeping track on your own organization and the people there, might be much more important for making an idea work than formulating the idea in the first place.

In this narrative, an idea is described as something under constant development, that at each encounter appears as "so far" and change with the encounter. It is both vague and promising at the same time, seeking a match between a problem and a solution that will help the host organization to reach its objectives. We can also detect other actors complementing the efforts of the technology scout in the narrative, connecting and detaching ideas that they pursue. The nucleus though, is an instigating group that share, develop and protect a mutual candidate idea so that in time it will fit the formal host organization. The group though is informal and transcends formal boundaries, allowing for adaptable knowledge and development processes.

Introducing an idea into an organization is in respect of what has been described here not something being done haphazardly, but something quite systematic where the idea has to be moulded for fit at the rim of the organization before it is being passed over to more formal processes (cf. Börjesson et al., 2006; McAdam, 2004). Coming from the rim it will also have greater potential for more radical innovation (Kanter et al., 1997), where we might understand candidate ideas constructed in this manner as probably more challenging to the organization than ideas constructed within the boundaries of the host organization (cf. Argote et al., 2003).

SECOND STAGE OF PENETRATION: LAUNCH

To understand the idea process at launch what would be better as an example than the go back to the origin of light bulbs, that is the Edison's laboratory in Menlo Park, New Jersey. For each failure in creating a light bulb, Thomas Alva Edison is known to have said, "I have not failed. I have just found another way that won't

work”, indirectly emphasising the knowledge process of invention. Different constructions of incandescent light by different inventors succeeded each other around 1880. For each step incorporating knowledge gained in earlier stages. Although Edison was not first with experimenting with incandescent light, his team was the first to manage a construction that was perceived as both practical and affordable (Latson, 2014; Menanteau & Lefebvre, 2000).

From the introduction of the first commercially viable incandescent constructions, the invention and candidate innovation turned to innovation through the diffusion and spreading impact it had on society (cf. Schumpeter, 1934, 1942). It was a value-enforcing change that became a self-reinforcing movement that still, almost 150 years later, continuously gain wider effects on its context. Due to the new artificial lightning, all kinds of activities could be carried out 24 hours a day any day of the year, totally changing the logics of business and society. Still, as Cole and Driscoll (2014) note, changing society takes time, where it took almost 40 years until the first windowless factory was erected.

The quality and durability of light bulbs also became better along with the formation of an industry, successively moving from a multitude of smaller companies to a few major manufacturers, thus also decreasing competition. Already in 1903 leading manufacturers created the ‘Lamp Cartel’ to be replaced by the infamous ‘Phoebus cartel’ (1924 - 1939) in order to e.g. limit burn time and increase sales (Cole & Driscoll, 2014; Menanteau & Lefebvre, 2000). Although the cartels were broken up, a light bulb oligopoly with little competition was upheld until the beginning of 1970 (Menanteau & Lefebvre, 2000). What used to be an offensive entrepreneurial movement had become defensive management by industry stakeholders (cf. Schumpeter, 1934, 1942), using repressive means to halt the development of challenging technology and products, diminishing the innovation effects of the invention through organizing for regaining control that was lost with the launch.

From the 1970s and onwards, through energy shortages and environmental concerns, the low efficiency of traditional light bulbs had become a problem for modern society, spurring new ideas on how to create incandescent light, but also in approaching lighting problem in new ways. The power of existing technology trajectories though became a self-reinforcing movement that offset the development and introduction of alternative technology. Eventually, the compact fluorescent lamp (CFL) was introduced in the late 1980s and LED-technology at the beginning of 2000, both being part of an innovative program towards more energy efficient lamps (Cole & Driscoll, 2014; Menanteau & Lefebvre, 2000).

FROM IDEAS TO INNOVATION

In the two processes described above we can note how a candidate idea is (a) transformed into an organizational idea by the first penetration of the organizational boundary with the aim of making the organization seize control of the idea, and (b) a struggle to make it into a societal idea by the second penetration of the organizational boundary, where the organization (reluctantly) is giving up control. It is also a movement from an idea as something personal, moving the idea from micro over mesa to macro level of analysis, where we for each step move from individual cognition of an idea to spreading distributed cognition (cf. McAdam, 2004) in an expanding collective enactment and transformation of the idea (cf. Hutter et al., 2015); changing analytical level as the idea penetrates the organizational boundary moving in and moving out.

The sections above suggest that an organizational idea for innovation first have to be adapted to the context of the organization but also have a potential power of not just bringing prosperity to the organization but to be of value to society. In the introduction, the idea has to be protected from too much influence from the organization as it is being moulded for fit so it might be accepted. In the launch, it is also being moulded for fit, but at least in the description of Edison’s efforts it cannot be isolated from society, instead it seeks the acceptance through continuous development and testing.

Before the introduction the idea appears as alien to the organization, where the candidate idea has to be adapted to the organization by a champion (here the technology scout and the informal group) before it can pass the organizational boundary and be introduced. In the intermediary stage, after the introduction within the boundaries of the organization, the idea transforms into an organizational idea. In the launch stage the organizational idea is being adapted to a societal idea that initially appears as alien to society, where the organization in turn takes the role as champion. An innovation idea is in this respect under constant development and change, where the introduction, development and launch of the idea drives a constant reshaping of the host organization, industry and society with reciprocal impacts on one another. It is a complex process (Björk & Magnusson, 2009) that revolves around transformation in all three instances (Baregheh et al., 2009).

DISCUSSION

How to create ideas has long been a subject for innovation scholars, and is well covered in the subfields of creativity and ideation, often using an undeclared organizational perspective as primary reference point. This perspective is also present in the coming sections where I present and discuss how an alternative idea-symbol for innovation might help us enhance the innovation process by expanding our thinking.

FROM THE PERSPECTIVE OF THE IDEAS

In the launch stage, as described above, the control of the innovation as well as the idea leaves the company. Through different means, as the technology development and the cartels, the manufacturers struggle to keep some control, but the effect of the innovation on society is out of their hands. The evolution and expansion of the original idea follows the innovation, that is the effect it has on business and society. From the perspective of the organization (and many innovation scholars), innovation ideas concern the organization primarily, why we also can understand why they e.g. organize in order to limit the innovative effects on society through cartels. From the perspective of the idea, innovation takes a different form, where individuals and organizations function as catalysts for a spreading impact. Passing through an organization, between introduction and launch, an idea will be exposed to organizational control moulding it for organizational purposes. The cartels are just other examples of other types of organizations, limiting ideas in order to serve their own purposes. From the organizational perspective, this will appear natural and necessary, but from the perspective of an idea it can become more troublesome as the candidate innovation most likely will be geared for optimum organizational benefit and not societal benefit. Turning back to the definitions on innovation reviewed by Baregheh et al. (2009), it is obvious that current theories on innovation are constructed around organizations and not ideas, where we might ask ourselves if this does not unnecessarily limit our understanding of innovation?

Moving from the individual level to the societal level, innovation is a process of expansion, which in my view contrasts the funnel symbol often used in describing selection and development of ideas for innovation. This leads me to one of the mayor points with this paper, and that is that we need be more careful in how we depict the relationship between ideas and innovation. The funnel is created from the perspective of the organization, being a tool for concentrating recourses to those innovative ideas that look most promising to the organization. This dominating sorting logic leads us to think that ideas have to be limited to and controlled by organizations instead of something we want to expand and infiltrate society (as argued by Schumpeter, 1934, 1942)

In the latter case our challenge will be not to control ideas but to move with them as we loosen control, maybe already in the introduction stage. Thinking differently about ideas, concentrating on how they move and transform society instead of how they work inside our organizations, will challenge theories that claim that the so-called back-end of innovation could and should be controlled and orderly (cf. Börjesson et al., 2006; Sperry & Jetter, 2009; Van Lancker et al., 2015). At

least, this goes for those who would like an idea to become an innovation on the societal level¹.

ENCAGING OUR THINKING

As we at this time do not have working alternative for the light bulb as a symbol for ideas, it is impossible to give a fair account of how the symbol encages our thinking in innovation processes. What we do have is instead the physical light bulb, which we can use in analogy for discussing how preferred ways of thinking effects innovation.

When looking for a replacement for candles, kerosene and gas lamps you approach the problem in finding something else that gives light, hence a solution like the light bulb. But if you instead view it as a problem for not being able to see, you might find other solutions. Instead of putting a beam onto an object, maybe the object itself can be visible through other means?

Taking this problem to transport and the design of cars and roads, the light bulb made it possible to both create better head lights on cars and lamp posts enabling driving despite lack of day light. It worked and we still are quite happy for being able to use this technique. New forms of lighting (e.g. xenon arc lamps) have also been integrated into our transport systems, successively enhancing their performance. Still, I cannot stop wondering if our conventional way of thinking about this as a lighting problem hinders us from finding alternative solutions with greater innovation potential. If we instead frame the problem as a need for seeing the road, we could apply techniques for night vision or why not find ways of making roads visible without external light.

Present (2017), there are several experiments on building bike and pedestrian paths by using solar panels as foundation. The step between absorbing energy from light to giving it should not be that long, one might think. But we do not have to stop there. If we instead frame the problem as a need to travel safely from one point to another, we might not need light or roads at all. Current experiments on self-navigating and flying cars could in this perspective be an even better solution – a solution that would eliminate the need of light, favouring different sorts of sensors and new navigation techniques in finding flexible paths to the destination we desire. Self-directing personal pods compatible with e.g. the hyperloop-technique, now being developed through one of Elon Musks initiatives, might be an interesting moving target to aim for. A solution quite far away if you still frame this particular transportation problem as having to do with transmitting light.

¹ Elon Musk's decision to share Tesla's patents on electric cars is an interesting example of how to loosen control and opt for societal innovation over organizational innovation.

With these descriptions of different ways of framing the problem, I would like to point out that a problem also is part of an idea. Turning back to the introduction story, an innovative idea evolves through a continuous knowledge creation process in finding a match between a problem and a possible solution, where different associations on both problems and solutions successively are integrated into the idea. All these associations on both problems and solutions are combined into patterns that are continuously assessed in relation to a host organization and a market, and when this assessment is judged fit, the candidate idea moves from a mental exercise to an organizational idea with physical traces in artefacts like reports or suggestions. Here I would like to stress that if we just accept current use of symbols, as part of our knowledge structures and preferred ways of thinking, it might limit our chances of finding more novel solutions to problems; circumscribing ideas and innovations. If we are able to both find and make use of better symbols for ideas and innovations, we will instead be helped in thinking differently, and by that understand why and how new knowledge is necessary for our organizations to thrive, change our processes and (amongst other things) increase the innovativeness of our organizations and society. The light bulb symbolizes an idea, but that is possibly all it does. Another symbol, or several complementary symbols, for innovation ideas might help us become both more critical and more creative.

IN SEARCH OF NEW SYMBOLS

From what has been covered, a light bulb makes a poor symbol for an innovation idea or organizational idea, where ideas instead appear as “associative patterns around a theme” that needs to be shared and changed. These associative patterns are also visible in some of the depictions of organizational ideas in figure two, for example in the world clouds and the more dynamic clusters of divergent symbols. If we use these depictions as a provisional definition (ideas as associative patterns around a theme) it also offers us a new starting point for making a symbol. The symbol should in this case carry patterns (something quite distinct) that lead our thinking towards knowledge but where the symbol also refers to the more indistinct theme of the idea. I also envisage that there ought to be a movement in the symbol, reflecting the process of making it work and become an innovation. From this reasoning, I conjure up a depiction that could be described as “enlightened paths on a black orb”, where each part of the symbol contributes to the interpretation of the connotations and metaphors present through this specific choice of words.

Firstly, ‘enlightened’, refers to understanding and knowledge, but connects also to the historical philosophical movement of enlightenment with the aim of freeing individuals and society from the current dogmas, especially defined by religion and tradition. Enlightenment

will thus provide us with a possible philosophical depth of the symbol.

Secondly, ‘paths’, preferably interconnected, refers to a multitude of ways of approaching and handling an idea. It is a word that works well with a process view, where organizing and becoming are essential, challenging all conceptions of stability. Paths also invite us to tread on them in our search for better understanding, and even better theories (cf. Popper, [1959] 2005).

Thirdly, ‘black’, refers to the unknown, giving contrast to the enlightened but also adding a critical dimension to the symbol telling us there are other not yet recognized or oppressed aspects present in the idea.

Forth, ‘orb’, refers to a form where all positions on the surface connects to each other, but where one cannot overview everything from just one position. It is also a container for a possible theme, making the complete symbol adaptable to different idea contexts, such as innovation ideas and business ideas.

This gives us ‘enlightened paths on a black orb’, that represents any type of idea as we currently understand it by the connections of the positions that our enlightened paths cover. The black parts represent knowledge aspects we do not cover. The orb represents the theme (which e.g. could be about innovation or business), whereas our recognition of the other side of the orb opens up our knowledge constructs and ideas for influences not yet encountered. Finally, we can add motion. Ideas and knowledge constantly evolve, why we from a distance can envisage how different paths light up and connect while others become dark as our understanding, and thus also our idea, develops.

Expanding on the possibilities of this new symbol, we can let our envisaged orbs float out into the knowledge universe that our social connections supply us with, where we, just like the technological scout, make these orbs connect and evolve, but also with the chance of combining them into new constellations, representing distributed cognition and social ideas, e.g. for innovation purposes. The importance of organizational boundaries can be added to the picture, for example by viewing them as membranes that an idea has to move through in order to connect to other ideas but also have effect on the organization and on the surrounding society. A successful innovative idea penetrates the membranes and has spreading effects on society, but is also in change where the enlightened paths transforms as different orbs attach and detach one another, creating new constellations. Innovation will then not resemble a funnel; it will instead be about creating a universe. Hence the semiotic potential of the symbol “enlightened paths on a black orb” looks promising.

EXPANDING OUR THINKING

To me, a symbol like ‘enlightened paths on a dark orb’ for an idea would be most welcome, as it will support novel ways of thinking about ideas and knowledge not to say how we form processes and organizations for innovation. If we instead stick to the symbol of a light bulb appearing over our heads, ideas will appear as rare epiphanies where we most likely will envision ourselves as some kind of SIM (with glowing green crystals as light bulbs). The latter does not correspond well with the technology scouts story on the development and deployment of ideas in organizations. Instead, the technology scout speaks of an individual who by connections, expertise and vision take part in the constant social reconstruction of an organization. The idea is here a tool being shaped by meetings of different associations between problems and solutions around a theme, successively adapting the patterns for best fit before it is being introduced.

People do have epiphanies, but they are rare in the more structured processes for making organizational ideas work. Still, the suggested symbol for ideas might even function as a visual replacement for light bulbs popping and lighting up. According to legend, a falling orb (in the shape of an apple) hit Isaac Newton in the head and through this he got his idea on gravity. Maybe good ideas are not flashes of light but something that figuratively hits us in the head, bruises us and have a tendency to cause pain and keep us occupied until released, emphasizing new aspects of idea generation, maturation, selection, refinement, implementation and diffusion. This pain can e.g. be applied to Charles Darwin’s work on the origin of species and Ignaz Semmelweis work on the importance of hygiene in hospitals, but also both their quests for penetrating the membranes of the science communities. Eventually they did, and their ideas could become societal innovations. Ideas transform and that is a vital aspect of innovation. Looking back on the development and launch of incandescent light, figuratively speaking we can see how the idea bruised Edison and became a pain that occupied him long after he had found something that worked.

An idea as a thought is something quite simple to make into a symbol compared to innovation, at least in my understanding. Existing definitions are also quite organizational centred, neglecting the need to see innovation as something that expands from the individual, over the organization into society; making existing definitions less appropriate for the creation of a symbol. Instead, if we are to find a fitting symbol it should coincide with the visual description of innovation I ventured into above. At this time, my own phrasing for a definition of innovation reads as follows;

a value-enforcing change that goes beyond adaptation; a self-reinforcing movement that continuously gains wider effects on its context.

Even if it is too complicated for directly making an easy symbol out of it, and that is not the purpose of this article, it can be viewed as a stepping-stone into something else. It speaks of changes and effects that we can use in building a visual understanding of innovation, instead of definitions aimed at limiting a phenomenon for a specific research purpose (which is usually the case). One of the mayor point of my provisional definition above is to challenge the organization centred view on innovation, but also reconnect to Schumpeter (1934, 1942) whose original theory on innovation concerned society (and not companies). The launch case also contains a description of how cartels hampered innovation, where the cartels in relation to the definition of an idea can be envisaged as newly constructed membranes, limiting orbital movements in the knowledge universe, hampering societal value creation and the effects of innovation.

We probably need to constantly rethink these definitions in order to understand innovation better, and construct working symbols in constant change. My intention has mainly been to provoke reflection on how preferred symbols and definitions of ideas and innovation encages our thinking. Definitions are also just ideas (which makes them associative patterns around a theme) where we need to be innovative to increase the potential semiotic value in the different phrasings we chose. Thinking outside the box is a lot easier if you realize that all boxes are just figments of our imagination with membranes that can be penetrated. We should not look for anything that lures us into thinking the world is stable, and least of all our definitions. Instead we should embrace the constant change and indulge in treading different paths that will enlighten us, expanding our knowledge universes by penetrating and dismantling membranes.

I’ll end this discussion by stressing the importance of critically reflecting upon the words and symbols we tend to use when making sense of innovation. Our choices should be deliberate and not on a whim or bound to traditional dogmas, as these choices will influence how we perceive problems; possibly limiting our knowledge universe and hinder the development of more radical solutions but also, if we are willing to walk the extra mile and explore the dark side of the orb, might reveal new possibilities that are just waiting to be explored.

THROUGH THE MEMBRANES

The article aimed to start a research dialogue on current use of preferred symbols for organizational innovation by addressing the question: how would a communicative idea symbol fit for innovation look like?

The article answers this question by first suggesting the following alternative definition of an idea as “a mutable association pattern around a theme”. Adhering to this definition a new symbol for an idea, that would possibly

replace the commonly used light bulb as symbol in innovation processes, has been suggested consisting of “enlightened paths on a black orb”. Both the definition and the symbol allows for adaptations to different circumstances where the theme respectively the orb could be related to divergent innovation needs and then especially aspects that unnecessarily frame problems in certain ways and circumscribe solutions.

If we just start to think about problems in novel ways, new solutions and new symbols might present themselves as a consequence. In that respect, I am quite optimistic. My suggestions for new definitions and symbols of ideas and innovation should not be interpreted as final solutions (as there are no such things in innovation), but as stepping stones for critical reflections on how to develop our ways of presenting, discussing and driving innovation.

I have deliberately not attempted in making any visuals of my suggested symbols in order to allow for a variety of interpretations. The new metaphors and connotations of my descriptive texts can be viewed as candidate ideas for the visuals of a new symbol, where they now need to be moulded for fit in order to penetrate the membranes of the innovation community and from there might become semiotic innovation in themselves.

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