Towards a New Perspective on Innovation
– With Empirical Inspiration from Creation of an Opera Scene

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Abstract
This study is about innovation in a non-technical context. The case deals with the transformation of a lime quarry into an opera scene. Innovators can break free from common thinking styles. However, rethinking something is not enough for making innovation happen. Innovation is not only about creativity. Transforming thinking to the act of physical creation is also needed. Innovation is a new thing or concept, which also enter society. In most cases this means success on the market. Therefore innovative processes are interwoven with marketing.

Keywords: Innovation, creativity, nature factors, culture, experience industry, Dalhalla

1 Introduction
Jensen (1999) argues that society is shifting from knowledge economy to experience economy. The theoretical domain in this study is innovative processes in cultural and idealistic contexts. The analysis concentrates on the early phase of innovative processes. The problem addressed is how to understand which factors that are most vital in the early formation of innovative processes. The theoretical purpose is to articulate an embryo of an innovation-oriented theoretical frame of reference. This should not have a bias towards technical context like widespread models such as Cooper (1971) or van de Ven (1986). The frame of reference should treat the time dimension explicit in contrast to, for example, the national system of innovation model (see Freeman, 1982). Moreover the proposed frame of reference should be based on other postulates than most economic theories regarding what external (related to focal innovators) factors are important for innovative processes. By traditional I refer to a focus on primary customers, competitors and suppliers (see Porter, 1980). It is, for some reason, often taken for granted, that these factors should be endogenous, and other factors exogenous in the models (Frankelius, 1999). An empirical delimitation in this project is to analyse the innovative process from the central innovator’s point of view.

2 Research method
The groundwork for this research was the extensive research project Innovative Processes, funded by the Swedish Government and published in Gidlund & Frankelius (2003). The study included an international literature survey on innovation theories. We conducted, over a two years period, about 50 case studies on innovation, and we focused not only on technical or business domains. One of the cases in the study was Dalhalla. My interpretation, derived from that study, was that the line of events in the Dalhalla case to a great extent was fuelled by one person at the early phase. Therefore the research after 2003 continued and focused on deepening the empirical data from the innovator’s point of view. Many semi-structured interviews were conducted by the author with Margareta Dellefors, not least to collect narratives of the process. This work was done during 2004–2006. The data collection method also included participation, photographing and archive-work. The comprehensive empirical material was then used as a source from which the extract presented here was derived. The condensation process of the fully empirical material became not finished until February 2007. Feedback on drafts, from anonymous reviewers were very helpful.
3 The Dalhalla story

Outside Rättvik in Sweden, there was a limestone quarry whose business ceased in 1991. A gigantic hole was left in the bedrock after centuries of digging. What would become of this monument from the heyday of mining? Could it perhaps be used as a municipal rubbish dump? Another idea was hatched on 18 May 1991, from an opera singer, later a radio producer, named Margareta Dellefors, then aged 65. The idea was to create a summer stage for opera in the enormous quarry. She had been responsible for the opera production department at the Swedish radio since 1980 and this job had included reportage-visits to different festivals round Europe, such as Verona, Bregenz, Glyndebourne and Savonlinna. Dellefors reconstructs that moment of imagination: “As soon as I saw it I knew: this is the place for the international opera festival place I had been looking for quite some time.”

But how, really, was Dellefors connected with the limestone quarry? Let her words speak: “I started trying finding a place for a similar festival in Sweden, but maybe something different. I have a summerhouse in Rättvik and knew that there, in the beginning of last century, was the limestone industry.” During some years she had asked different people for tip of a good place. In November 1990 she explored the woods around Rättvik searching for old quarries. She had a local map, but she did not find any of them. They were well hidden, partly because of safety reasons. One of the persons Dellefors asked was Rättvik’s cultural director, Åsa Nyman, in a phone-call around new years day 1990/91. On 18 May Dellefors got the strategically information about the site Draggångarna from Nyman. They went to the quarry the same day. When she came to the place, she sang and recited poetry. Let her memory speak: “Draggångarna was beautiful. The cliffs had different pastel colours because of different kinds of rocks in vertical lines … black, pink, bluish, white and brown. At the bottom of this emerald there was a coloured little lake, not ever ceasing, because it was under groundwater level. And the enormous size!”

Lots of activities started after the first impression. “I got a kick from the very first moment I set eyes on it. To be sure I invited lots of friends – conductors, musicians, singers – people whose judgement I could trust and started to work for my, as I thought, splendid idea.” Dellefors wanted second opinions – confirmation – from people she trusted. At the same time, she wanted to market the project to opinion leaders. How did she choose these opinion leaders? “As I had a long career behind me in the Swedish music world I knew persons or organisations I thought could be of value for my idea. And most of them knew who I was.” Not least one should remember Dellefors had been an opera singer for 15 years. Dellefors was aware of the fact that this coincidence was “very good timing for my project”. After having taken photos of the place, she magnified the best one and went to a bookshop to buy transparent paper. She wanted to visualize her vision by drawing on the photos taken. She drew a scene in the middle of the lake, and a grand stand opposite it. This pedagogical trick was to be used at a forthcoming meeting in September with a construction company, and in December with decision makers from the municipality of Rättvik.

Among the chosen opinion leaders there were some journalists. Did she communicate different with them? “No, everyone who was interested in Dalhalla was important for me, but – of course – those who had the opportunity to even write about it, got perhaps some written material, for instance the little brochure I soon wrote.” Besides herself and opinion leaders in the music sector, there were many more people to convince in this very early part of the process, not least the locals: “Everyone in the little country town of Rättvik considered me more or less crazy, but as I presented letters and documents from musical and well-known Swedish authorities I did manage to overcome the first scepticism.”

The period between the first visit in May 1991 and the first written project plan in July 1992 was about intense marketing, including hundreds of contacts and meetings. The project plan in the summer 1992 had many targets: It was addressed “to those who were able to make
this idea develop, and the key was the county community of Rättvik.” The county community was a very vital part of the social context of the innovative process.

Besides marketing, much work was devoted to investigating the conditions and practical problems in detail. The fascinating hole was found to be 400 metres long, 175 metres wide, and as deep as 60 metres. Its walls were nearly vertical and the acoustics were on a par with Greek amphitheatres. Moreover, it lay far from the noise of cities, roads and factories.

But a lot of money was needed, and the main problem was to find and persuade sponsors. In retrospect, about 50 million Swedish crowns should be needed to fulfil the dream. But Dellefors conforms: “The first 100,000 were the most difficult to get, as they were the key to the whole project.” She needed to convince a lot of people of her vision. The perfect marketing concept for that, she thought, was to arrange a test concert. Such event costs a lot of money. “After about two years I managed to raise the necessary money to make a test concert, which would prove among other things the extraordinary good acoustics Dalhalla had.” The fund-raising process, thus, was crucial. The problem was that many observers did not believe that Dellefors was serious. She reflects: “It always arises suspicions, when something new is initiated. ‘We cannot do this, it has never been done before’, ‘We must do this, because, that is what we always have done’, ‘Opera – that is something where people only shout and you can’t hear a word of what they are singing’, ‘And who is she, who wants to come here and tell us, what we shall do’.”

Others thought it was a nice idea, but would never have dreamt of investing money in such a project. Dellefors encountered resistance from sceptics including experts in engineering and economy. Articles in newspapers were also written about the impossibility: “I don’t know if that was because I was a woman with Stockholm as my home address, or my age. And as opera is something so out of nowhere for most – I would say particularly people in Dalarna, the landscape of Swedish folk music.” Yet she did arouse great enthusiasm from a few. In January 1993 the County Administrative Board, decided to support the project with 50,000 Swedish crowns. The Municipality then also decided to support it with the same amount.

In May 1993 it was time for a meeting: “I invited the local people to a meeting in the library hall in Rättvik on Tuesday 25th May, and showed a video taken by my brother. I talked about all possibilities and what it could mean also economically for little Rättvik.” She got unexpected support: “One person – totally ignorant of classical music or opera – was curious enough and asked some very important questions: Roland Pettersson.” He was a local automobile dealer and embraced the idea even though he himself had never set foot in an opera. He also helped her with the coming trial concert. How did the meeting come into place? The meeting was made known through advertising in Rättviksnytt and Leksandsbladet, two for free-papers for every household in this area. And the library hall was crowded.

The first years Dellefors mostly worked alone with the project. One helping hand arrived in December 1992; the architect Erik Ahnborg: “I remember one occasion, when Ahnborg was discussing with the NCC engineer at one end of the table and I at the other end was talking to Boverket [the Swedish state agency for living matters] in Karlskrona negotiating for more money. That was in the spring 1994, were 400,000 crowns were still missing.” Altogether, Dellefors was able to gradually awaken commitment by numerous people, both private individuals and foundations. But even so, very much money was needed.

A project group was appointed in the spring 1993. They managed to get more and more money from sponsors. The Barbro Osher Pro Suecia Foundation, situated in San Francisco, gave Dalhalla 2 millions for opera production. Later the Barney Osher foundation also gave money and a first class text machine. An important part of the financing process, was the ability of Dellefors to get idealistic help from professionals.

On 18 June 1993, a trial concert was held with a specially invited audience. How did they choose the persons to invite to this concert? “I and K-G Holmén, the chairman of the [County
Administrative Board], decided on whom we should invite. He on the local plane, I on the national level.” She adds: “And I choose people who were connected with music and opera in particular and music writers and critics and of course people connected with state organizations who supported culture with money.” In total there were 120 persons on the list. The trial concert was successful. To take the edge off the criticism that the idea did not suit Rättvik’s folk music, Dellefors spiced the programme with traditional fiddlers and birch-bark horn blowers. She will never forget this concert: “The local people ... had contributed with big bowls full of wonderful wild summer flowers and were all there in their national costumes. Birgit Nilsson sat there in her mink coat. I introduced the programme by singing the first lines of Elisabeth”’s area from Tannhäüser, ‘Dich teure Halle, grüss ich wieder...’ Big!” Eight young singers sang opera arias, folk music was played, and a choir of Latvian singers sang ‘Hallelujah’ from Messiah by Hendel.

The trial concert was a vital ingredient in the strategy: “The aim was to prove the substance in the project for everyone that mattered in Swedish music life.” That was not only musicians and opera managers, but also the head of the Royal Academy of Music and of course the press and television, both local and nationwide. In fact, part of the problem was also to convince the members of the project group that Dellefors really had the important contacts she talked about. The first fund raising phase has been to finance this concert. The second phase started on the next Monday, 21st June 1993. That Monday Dellefors applied safety for the name Dalhalla. And more things were done: “I do not know, how many applications I have written. It must be a couple of hundreds. But the initial money of only 100 000 crowns, were the most difficult.” Every success during the process was used to promote later steps to fulfil the vision. Dellefors continues: “After the important and successful test concert I invited people to become members in the Society of Friends of Dalhalla. It soon became a very big society with today more than 3000 members. Our world famous Wagner soprano Birgit Nilsson, my great friend, was our honorary chairman.”

The test concert was also followed by concrete construction. What, then, happened the following year? Dellefors tells: “For the summer 1994 we had got enough money to do the first real test, if Dalhalla would become an asset for the opera lovers of Sweden. They were invited to an opera concert on 23 July.” A provisory stage had been built on the sea. The canal between the stage and the audience was there and there were seats for 1620 people. The concert was sold out in no time. And the reason was, that now Dalhalla had got the recognition from the state, as the Ministry of culture had given Dalhalla 250 000 crowns. In their press release they had described Dalhalla as the future Verona of the north, an attribute that still is connected with Dalhalla.” But all this needed boosting marketing. Dellfors comment: “I advertised in the big national papers and of course in the local ones.”

In the summer of 1995 the audience capacity was expanded to 2 670 seats. Parking places were arranged and a protected path was laid down into the quarry. The stage, with an aesthetic roof of sailcloth, was placed on a peninsula in the emerald-coloured water, farthest down in the quarry. About 40 000 tons of limestone masses were exploded and used as material for the stage. The 11 metre broad canal between stage and audience was ready.

The official inauguration of Dalhalla took place on 21 June with a major opera concert that was broadcasted on Swedish Television. Unfortunately, that very day, the area suffered an awful storm and the concert had to be stopped halfway through. Dellefors comment: “But – as someone said – A dramatic place like Dalhalla must have a dramatic ouverture.” Despite (or partly because of?) the disaster Dalhalla soon became known throughout Sweden and its fame spread abroad like wildfire. The broadcast by the television was very important. Dellefors confirms: “The Swedish television did manage a whole planned programme, even if the total concert not took place. From the very beginning TV has shown a lot of Dalhalla, which of course has been of gold’s value, as you don’t exist, if you are not on the telly.”
The activities became more intense and more formalized. In May 1996 a company called Dalhalla Production was established, wholly owned of the Society of Friends. This company should take care of the productions. The workload was rising. The company got a CEO Håkan Ivarsson (employed half time), and Dellefors as responsible for art direction. All facilities were still owned directly by the society. The place was owned by the Rättvik municipality.

In the summer 1999 a tornado destroyed the expensive sail-roof. More money was needed to this and other needs. The fund-raising process was always in focus. Dellefors fills in: “11.4 million Swedish crowns were given by a rich couple.”

In June 2000 Dalhalla had become a well-planned opera arena. They had a big concert on June 7th with the Swedish king and queen invited. At this time Dalhalla had 4000 seats, heating for the orchestra pit from the depth of the mountain – and likewise in the house behind the stage for the artists. A steady roof was supported with pylons secured down deep in the ground 26 meters. They had a professional light system and a smaller stage going up and down using hydraulic power.

As mentioned only a few of the locals were positive in the very beginning of the project. But the attitudes changed. Dellefors reflects: “It has been a long struggle, but a good one. Most of the time I have felt an enormous sympathy and got encouragement from the local people, who have really been proud of their contribution to the Swedish summer festivals.” Since the start, numerous opera performances and concerts have been staged in Dalhalla.

4 Theoretical discussion

Most innovation literature focus on technology contexts, not cultural contexts (see Cooper, 1971 or van de Ven, 1986). In my perspective an innovation is something new but not necessarily technical. However, to be defined as an innovation the new thing also needs to enter society. In most cases that means succeeding on a market. A new innovative concept (product, service or piece of art) is not an innovation by definition. The new concept has to be adopted by investors or customers if someone will put in a claim for calling it an innovation. Adoption, however, is not something that happens automatically.

How it is happen when a person identifies opportunities in something, for example an old quarry, that other can see but not understands as opportunity? First of all strategic information about the opportunity is needed. Who are the persons that identify such opportunities? Part of the answer is that these people have power of imagination. They have the power to break free from what Fleck (1935) called thinking styles. One explanation to this ability can be that they come to a place from other social contexts, and thus other thinking collectives. But rethinking something is not enough for bringing innovation to reality. It is one thing to think of an opportunity and another to transform that thinking to the act of creation. The most important skill probably is marketing – to sell the vision so that work can be financed and therefore done. One can conclude that Dellefors did not use traditional marketing strategy in the sense trying to reach as many people as possible. Rather she used what in Sweden as been called surgical marketing: targeting a few but well chosen persons, and then addressing a lot of communication energy to each of them, including formation of tailored messages (Frankelius, 2002). Probably the best communication occurred when she persuaded some opinion leaders to visit the sight and see it with their own eyes – or hear it with their own ears.

External factors, in relation to the innovative process, included both social (humans) and non-social factors. Among the social factors there were many related to traditional economic factors (customers, suppliers and competitors). But there were also other kind of actors, like the media and donors. These are not common in main-stream economic theory. Moreover we identified non-social external factors that are miles away from the focus in traditional economic theory. An example was the weather, not least a tornado that passed the sail-roof away. Another quite important non-social factor was the limestone quarry. That factor was
external at the beginning, but became internal over time. External factors that are important for an innovative process, but at the same time not in focus in traditional economic theory, I call $X$ factors. Many modern researchers in innovation or entrepreneurship focus on only social factors (an example is Steyaert & Hjorth, 2006). This postulate regarding relevant external factors is different from my way of looking at the world. We can talk about two paradigms. One kind of $X$-factors, that were important in the Dalhalla case, is nature-related. An early theory on the interplay between innovation and nature factors was in fact developed by Carl Linnaeus in the 18th century (Frankelius, 2007).

Last but not least the Dalhalla case is an illustration of how processes develop over time. The time dimension has many shapes in the case. One aspect is the importance of timing, for example to start a project one specific year or arrange a test concert a specific day. Another aspect of time is that mental maps take time to form in the mind of interest groups. Still another time aspect is that events logically have to come in a specific order over time. Therefore the empirical study calls for a need of an explicit time dimension in theory.

5 Conclusion

A widespread paradigm is the innovation system framework (Fagerberg et al, 2004). Networks and clusters are central, but the time dimension is not obvious. One conclusion from the Dalhalla case is that time matters. Moreover the innovation system framework has a technology bias. This study pointed at cultural context. Innovation is defined here as new concepts in whatever area entering society. The entering processes do not happen automatically. Transforming thinking to the act of creation is needed, and thus creativity theory is not enough. One aspect of this entering process is marketing and another is sponsors or customer adoption. To understand the interplay between these two aspects we need to understand the external context that affects the line of events. In doing so new postulates is needed regarding the meaning of context. I question the old but still used economic model where the relevant external world, in relation to an enterprise, is assumed to consist mostly of sellers and buyers, and not for example the media or nature phenomena.

References


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