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The translation of an incubator: the case of the Lighthouse in Bubulo, Uganda

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This article reviews a social entrepreneurial initiative to set up a solar-powered incubator in Bubulo, Uganda, initiated by a group of Sweden-based entrepreneurship students. Using an Actor-Network Theoryinformed approach, it addresses the question of how the original aims of the initiative shifted as it moved from Sweden to Uganda, securing new allies and resources. In the tracing of this movement from northern Europe to central Africa, concepts from Actor-Network Theory, such as 'translation' and 'drift', are drawn upon. Thus, the text deals with spatial aspects of social entrepreneurial projects, heeding the call from Steyaert and Dey, who list 'spatializing' as one of 'nine verbs that can keep the social entrepreneurship research agenda "dangerous". The text thus engages in the debate on the merits of business incubation in low-income countries-a topic currently high on the international development policy agenda. The study, it is argued, prompts scholars and policy-makers to shift perspectives when evaluating what this type of initiatives achieve. Rather than 'creating' entrepreneurship, projects like the Lighthouse are better seen as efforts to 'mobilize' existing activities. Moreover, the article also raises the issue of whether the classic incubator-as-we-know-it is a suitable model for the generation of economic activity in low-income countries.

Keywords: social entrepreneurship; entrepreneurship development; nascent entrepreneurship; business incubation; solar power; actor-network theory; translation; spatiality

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he fostering of entrepreneurship is increasingly hailed as an effective means of helping low-income countries develop their economies. NGOs like Ashoka, as well as inter-governmental collaborations like the SEED initiative, are active proponents of this view. Moreover, actors from the university setting have joined this endeavor, coming up with various approaches to promote entrepreneurial activity in low-income countries. The paper will study one such example, namely the Lighthouse project.

The Lighthouse project was instigated by students at the Chalmers School of Entrepreneurship (CSE), which is an action-based master-level educational program, integrating entrepreneurial education with venture creation within the university (Lundqvist & Williams-Middleton, 2008; Ollila & Williams-Middleton, 2011). Aside from the creation of new ventures, in which the students work in groups, a full-class entrepreneurial project is a part of the curriculum. The overall aim of this initiative is to stimulate creativity, project management and entrepreneurial learning. Another aim is to create strong ties and motivation among the members of the class, drawing inspiration from other entrepreneurs in the world. The project is initiated by the faculty, but the ultimate responsibility for driving the project forward rests in the students who receive support from the faculty when needed.

During the initial years of the project, it resulted in several interesting study trips to various sites that are famous for their entrepreneurial spirit: Shanghai; Silicon Valley; the Boston Metropolitan area. However, in 2006, the class of 2007 decided to add a social entrepreneurship element to the project, and this has later become one of the major purposes with the project. This decision led the students towards the endeavor of building a solar panel-equipped house in Uganda, called the Lighthouse. Situated in the village of Bubulo, close to the Kenyan border, this house was meant to be a space for the cultivation of nascent entrepreneurship (Williams-Middleton, 2010), along the lines of the 'incubator' model. (Hackett & Dilts, 2004; Scaramuzzi, 2002) In his study of business incubation in Uganda, Joshua Mutambi states that:z

Incubators can promote innovation and accelerate industrialization through encouraging business start-ups, information and technology transfer, commercialization of research results, and implementation of science, technology, innovation and industrial development policies. (Mutambi, 2011, p. 20)

However, while incubation grows across the world, Africa is 'lagging behind' (p. 108). Therefore, Mutambi writes, 'governments should pay attention with strong support' (p. 97) for the establishment of more incubators. Moreover, he concludes, the need further research on business incubation in 'countries like Uganda cannot be understated' (p. 108).

This article heeds this call for more empirical studies of such business incubation. More specifically, it aims to interrogate three research questions. First, how are the objectives and interests, as exhibited by actors related to a social entrepreneurial venture, translated, as the initiative travels over space and time? Second, what roles do different conceptions of entrepreneurship play, as the venture moves from high-income countries to lowincome countries? Third, if it can be shown that objectives and activities of business incubation start to drift as it moves from the high-income countries to low-income countries, what does this mean for the policymaking community wishing to make business incubation the new panacea for the promotion of innovation and start-up activity?

As we shall see in the case study, the aims and outcomes of this initiative shifted significantly as it moved from Gothenburg to Bubulo. Understanding how such shifts occur may prove crucial for the wider agenda of making social entrepreneurial initiatives deliver on some of the developmental promises mentioned above. However, before delving into the details of the case of the Lighthouse, let us review some theoretical and method-related tools for capturing these developments (section two). The case study (section three) is followed by a discussion and a conclusion (sections four and five).

Literature review

A case like that of the Lighthouse can be subjected to a wide range of queries. Following previous work on social entrepreneurship, a number of themes could potentially be raised-the entrepreneurial motivations of the students, issues of project management, the social entrepreneurial role of the university, and so on. However, in this paper, we wish to add a spatial component to the understanding of social entrepreneurial ventures. More specifically, we want to explore how a project may 'drift' in terms of goals and outcomes, especially as it travels from the university setting in Gothenburg, Sweden, to the village of Bubulo, Uganda. Moreover, there are other, more 'local' spatial aspects of the project. As the Lighthouse was based on the idea of creating 'room for' entrepreneurial action, the notion of space is key to the analysis of how the project progressed.

Spatializing social entrepreneurship

In this attempt to spatialize research on social entrepreneurship, we are following Steyaert and Dey (2010), who list 'spatializing' as one of 'nine verbs that can keep the social entrepreneurship research agenda "dangerous"". For them, social entrepreneurial action invariably implies an enactment of new spaces for life, work and collaboration. Understanding entrepreneurship, they argue, is fundamentally a matter of understanding the geographical, discursive and social spaces that harbor entrepreneurial action. Moreover, social entrepreneurship is enacted collectively, 'through the formation of networks, communities, platforms and social arenas' (p. 247). Therefore:

Research into social entrepreneurship could be increasingly based on spatial theories or theories that are able to theorize socio-spatial processes.

In this proposed 'spatial turn' of entrepreneurship research, they draw upon Steyaert and Katz (2004), who state:

The geographical dimension seems to be a growing focal point that by itself can alter the kind of studies entrepreneurship is about. [...] However, there is no self-evident geography of entrepreneurship as it is not clear what constitutes our spatial preferences in entrepreneurship research [...] (pp. 184–185)

Nevertheless, Steyaert and Dey (2010) suggest that Actor-Network Theory (ANT):

Could offer an effective approach to studying social entrepreneurial projects which are often based on innovations and bricolage. Such theory is also useful for describing the translation processes that transform people's practices and relationships.

The ambition to link ANT and spatiality dovetails nicely with recent work from anthropology. (Indeed, ANT is sometimes referred to as an 'anthropology of science and techniques' (Callon, 1998, p. 28), and the theoretical and methodological toolbox developed within anthropology can prove highly useful when studying entrepreneurship in a non-rich world setting.) For instance, Oppenheim (2007) tries to tease out some of the 'forgotten' spatial aspects of ANT, arguing that:

A spatialized reading might be productive of new anthropological engagements with ANT, of which a recasting of questions of space and place is only the most glaring. (p. 473)

This paper endeavors to follow the suggestion of Steyaert and Dey (2010), and deploy some concepts from the 'sociology of translation' developed by Michel Callon, Bruno Latour and others, in order to capture the spatial aspects of a social entrepreneurial venture. The aim is not so much to provide a study of the Lighthouse project that can be labeled 'ANT proper'. Indeed, towards the end of the 1990s, the 'inventors' of the perspective seemed uneasy with such a label (Latour, 1999a; Law, 1999) Rather, this paper hopes to deploy these concepts in the way that Steyaert and Dey suggest - as a means to say something about the spatial aspects of social entrepreneurial initiatives.

Translation

Within the ANT literature, there are number of case studies that explore how the social world is made and unmade through the process of translation. One early example is Michel Callon's (1986) work on the 'domestication' of scallops. In this text, we get to follow three researchers who take on the project of uniting scallops, fishermen, and the scientific community in the exploration of what it is that makes scallops attach themselves to the seabed. In doing so, they present their research program as an obligatory passage point for all the actors involved: Understanding the fixating process of scallops will serve everybody's interests.

Another case is that of physicist Frédéric Joliot, which explicates the 'goal translations' that he had to engage in when conducting his research on nuclear fission. (Latour, 1999b) For instance, Frédéric Joliot had to engage in a series of alliance-building measures. When he did so, the overall aims of the alliance being built were constantly re-negotiated. Thus, not only did the physicist have to deal with the enrollment of non-human actors (such as neutrons, paraffin, and deuterium) in his laboratory experiments-he also had to manage political processes enrolling human actors. These included nationalistic officials within the French Ministry of War, scientist colleagues within the Centre National de la Recherche Scientifique, corporate executives within Belgian Union Minière du Haut-Katanga and Norwegian Norsk Hydro, and so on. These entanglements were held together by translations that forged common goals among the allies. Though Joliot's original goal was to be 'first to master chain reaction', and the Minister's original goal was 'national independence', a goal translation joined the actors around the common goal of 'a laboratory for chain reaction and future national independence'. (Latour, 1999b, pp. 80–112).

The study of translations, then, is also a study of how the interests of actors change over time, being subject to constant re-negotiations. As Michel Callon and John Law wrote in an early article, interests are simply 'temporarily stabilized outcomes of previous processes of enrollment'. (Law & Callon, 1982, p. 622) The agency of a certain actor-be it a person or a collective of agencies-is constructed by past alliances, and is therefore at the mercy of constant Machiavellian power games. Or, as Latour, states:

One should be careful not to fix interests a priori; interests are 'translated'. That is, when their goals are frustrated, actors take detours through the goals of others, resulting in a general drift, the language of one actor being substituted for the language of another. (Latour, 1999b, p. 89)

Along with 'translation' and 'obligatory passage point', this notion of 'drift' is of key interest for the purposes of this paper, as it captures the shifting aims and outcomes of the project. Thus, these three concepts will re-emerge in the case study.

In terms of methodology, the sociology of translation has traditionally been conducted through ethnographic or historical studies of scientific practice, thus bringing out how scientists make and unmake worlds by amassing allies. (Latour, 1987) Apart from the examples mentioned above, Latour builds his arguments from studies scientists like of Louis Pasteur (Latour, 1988) and Robert Boyle, originally studied by Shapin and Schaffer (1985) but further analyzed by Latour (1993), Haraway (1997) and Potter (2001). The original 'angle' of Science and Technology Studies (STS) was to construe 'science as culture', anthropologically studying the cultural and material practices of scientists and engineers in their laboratories. More recently, ANT has been deployed in the context of organization theory (cf. Czarniawska & Hernes, 2005).

In these stories of techno-scientific practice, the scientists and engineers are seen as the 'primus movens' that breathe life into the ongoing process of translation. (Callon, 1986) Applying this framework to the study of social entrepreneurial action implies a shift towards the loci of entrepreneurial action - the actor to be followed is the entrepreneurial agency (be it individual or collective). In the discussion that follows, we will get to follow the CSE team, as they 'make and unmake worlds' on their way from Gothenburg to Bubulo.

Methodology

The present article is, like much other work that is more or less associated with the ANT and STS traditions, based on a case study. Moreover, in line with these traditions, it is closer aligned to ethnographic renderings of economic and organizational life (cf. van Maanen, 2011), than more management-oriented case studies (cf. Yin, 2009). The empirical material has thus been gathered over the course of a four-year period, during which one of the co-authors intermittently spent time with the various actors involved over extended time periods, participating in their activities. During this time period, the co-author participated in the project as a representative from Chalmers University of Technology.

As such, this methodological approach is not likely to produce an 'objective' evaluation of the project-it is, very much, an insider perspective on the process.

The project was initiated in 2007, and the most recent interviews were made in the fall of 2010. While the bulk of the empirical data was collected in August 2010, it is to be understood against the backdrop of empirical data gathered during previous stays in Bubulo. (In total, the village has been visited three times, of which one by both authors, adding up to a month's fieldwork.) Along with the participative observation data, sixteen formal interviews with key actors have been conducted in Uganda and Sweden. Additional data has come from secondary sources, such as reports, films and project descriptions produced by entrepreneurial agencies.

The story of the Lighthouse

As the class of CSE07 was about to choose a suitable project for their social entrepreneurship activities, one student had received an idea by a friend of his parents; a Red Cross (RC) volunteer who would later end up becoming an important person in the development of this project. The RC volunteer had a vast experience of working in African countries, and was a member of the RC in a small town called Åmål in Sweden. Åmål, in turn, had started a community friendship with the village Bubulo, Uganda, in 2001.

In Uganda, the story of the Lighthouse starts in the board meetings of RC Bubulo. There had been discussions for quite some time about what activities should be prioritized in the area, and one of the things discussed was the development of clean water facilities. Another was the development of electric power through solar energy in the village: at the time, electricity was only available three to four days a week, about three hours at a time. Serving as a link between the citizens of Bubulo and the Swedish students, the RC volunteer thus suggested that the students ought focus on either of these two areas; solar energy or clean water supply.

Going for solar

Drawing upon the experience of the RC volunteer, the students identified a need for different social services, such as a place to charge mobile phones. Starting with an idea from the student to have a place for mobile charging under a simple roof, the alternatives boiled down to a bus or a separate house, both of which were found to be reasonable in terms of finances. Finally, it was decided, through voting, that a house would be the better alternative. This house was equipped with five solar panels and baptized the Lighthouse.

These moments of decision-when the protagonists decide on which endeavor to embark upon-can be understood as instances when a 'radical openness' of the project closes down somewhat. The class' interest in doing something related to social entrepreneurship gathers pace and direction through the alliances forged with the RC volunteer, the Åmål municipality, and the RC.

In essence, this alliance provided the students with an entry point to a site for their social entrepreneurial project. In the process, the original goal is translated into something more specific. The project thus narrows down into being based in Uganda, setting up with either solar energy or water-related projects. Here, one can deploy Callon's concept of 'obligatory passage point': The collaboration with the RC volunteer was tied to the program of delivering solar power solutions to the village. Already at this point, we can note how the project starts to 'drift', through the process of translation.

There was, one concept that guided the development of the project-that of 'entrepreneurship'. Entrepreneurship was something which connected what the students were studying and what could also be shared with the people in the village in a way that could support local businesses. Based on their educational background, the students worked on the idea of starting an incubator with the same construction as their own incubator in Sweden. This incubator is a large open space divided into smaller offices, one for each innovation project, and the same structure was to be implemented in Uganda. Entrepreneurs from the region around Bubulo would have the opportunity to apply for a small office where they could start their business. Due to the support from the solar panels, brought by the Swedish students, it would increase the opportunities for the local entrepreneurs to have access to electricity, as well as work later hours, after sunset.

Conceptions of entrepreneurship and creativity, and how to foster it, thus play a crucial part in this story. The idea that there was to be a house, in which entrepreneurship is to prosper, is closely tied to the idea of the incubator-a notion that the students were very familiar with. As such, it seemed natural for them to replicate this idea in Bubulo. If interests are, as we saw above, 'temporarily stabilized outcomes of previous processes of enrollment', we can see how the experience from CSE acted through the students, leading them to work along the lines of 'incubation-as-weknow-it'. (More about this in the discussion section.)

Interviews were conducted in Uganda, in order to find entrepreneurship-interested people that could act as board members of the Lighthouse. A group of seven people met with the students when they arrived in Uganda, introducing themselves as potential candidates for the management of the Lighthouse. The group comprised of an expert in solar energy, a teacher, members of the RC and individuals with important positions in the village of Bubulo. Together, the students thought, they seemed to be a suitable mix of skilled people which would be perfect for the management of the incubator. A few days later, this group was about to take some time to decide their different roles within the management group-a discussion which, instead of the estimated thirty minutes, took about twenty seconds. Later on, this moment would be understood as one crucial point in the story, where the project once again changed direction. At this moment, a pre-existing structure, inherited from the village hierarchy, was installed within the management group. The composition of this group had important subsequent implications for the development of the Lighthouse.

Here, we see another drift in the goals of the project. Just as the previous forms of drift, it is to be understood as something sacrificed, on the basis of the new life generated into the project. However, in this case, we see how the previous processes of enrollment also feed in from the Bubulo locale. Both geographies—Sweden and Uganda—are to be understood as never-ending processes of translation. This also implies that power structures act from both sides: In order to keep this alliance intact, openness and non-hierarchical ideals may have to be sacrificed. Whether you view it from the Gothenburg or the Bubulo perspective, access to this collaboration is restricted.

Incubator or not?

Surprisingly, the locals immediately rejected the original incubator concept, based on their experiences of business in the village. According to them, the Lighthouse would not work as a shared-space incubator. It was believed that the local entrepreneurs would steal ideas from each other, and act as competitors instead of helping each other with the start-up businesses. Moreover, a good idea in the incubator would most likely be copied without any major changes, which consequently would lead to a house with similar businesses run by different people. In other words, entrepreneurship did not necessarily mean the same thing for the local village people and the Swedish students.

On the back of these discussions, the idea narrowed down. The Lighthouse was to become a common facility where people would be welcome to rent space, either during the dark hours, or at times when there is a power cut and therefore impossible to work. From hereon, the development of a sustainable business model was high on the agenda; the Lighthouse needed a solid foundation from which to develop and sustain by itself in the future. Finally, the Swedish group decided to implement mobile charging for a small fee as one of the facilities that the house would offer. Together with secretary services, such as typing and printing, this became the basis of the business model for the Lighthouse.

Again, we see how different notions of entrepreneurship and creativity feed into the story: In the minds of the Swedes, but not the Ugandans, entrepreneurship emerges if you put a number of able individuals into a room together, and let them share ideas. Trying to

replicate this model, the Swedish group was eager to find ways of transforming the Lighthouse into a sustainable, stand-alone entity. Interestingly, the notion of secretarial services was probably not the type of entrepreneurship envisioned by the CSE students at the outset of the project. As we shall see, it may however prove to be one of the main ways in which project has impacted the local economy.

The view from the local entrepreneur

In order to explore how an initiative like the Lighthouse can impact the local economy, let us briefly focus on one specific local entrepreneur. At the time of the project launch, the local entrepreneur was a youth leader, involved in the RC. He subsequently became one of the members of the management board, responsible for the education division in the Lighthouse-indeed, the idea of secretary services came from this entrepreneur. This entrepreneur participated in the above-mentioned workshops, and became interested in exploring new routes of enterprise. With a background as a teacher with a major in economics and a great interest in computers, he identified a potential to create his own business. While participating in the workshops, he tried to learn as much as possible, reading the business books brought by the Swedish students. Conditions changed when he was excluded from the management board in the Lighthouse. Inspired by what he learnt from the Lighthouse, and adding knowledge he picked up during its establishment, he tried various entrepreneurial ideas.

His first initiative was to sell popcorn to people watching movies in the RC building. Another initiative revolved around administrative services. One of the things he had done in the Lighthouse was to give computer training together with a friend, which he felt he had to finish even though he was no longer welcome to utilize the Lighthouse for that activity. With the help from a friend he managed to continue the course he had initiated. Then, he opened his own small shop, in a shed at the main street of Bubulo, selling mobile phone accessories and offering phone charging when there was power. When his friend, who was in charge of the computer training, moved from Bubulo, he also included that as an activity in his shop. In addition, he has also added a video library where you can rent a video for three days to watch in your home. He identified this idea when he was in Kampala and realized that 'nobody is doing it here', in Bubulo.

Going forward, the entrepreneur hopes to supply secretarial services, after having taken a bank loan to buy a photocopy machine. He also plans to expand the business by buying a duplicator for videos, which will make it possible to make copies of the videos to sell them instead of renting. In relation to the video endeavor,

he has helped and supported two boys who have started their own video library up the street. Moreover, he plans to collaborate with a shop across the street where another friend is an expert on phone repairs. Thus, interestingly, the activity that may have been generated by the project has ended up elsewhere than expected. Rather than enshrined within the incubator, the impacts of the initiative may be found dispersed in the village. This theme will be discussed further in the next section.

Epilogue

After the official opening of the Lighthouse, and the completion of workshops in entrepreneurship, the Swedish students left Bubulo. Upon leaving, they had an agreement with the management of reporting every half a year about the continuing activities in the Lighthouse. A small fund was left on a bank account for some small salaries, unforeseeable events, and to help the management during the start up phase.

About four years since the first group of students visited Bubulo, the Lighthouse is still in operation. The facilities offered today are the same as before; mobile phone charging and some secretary services. Due to the constant and reliable supply of electricity from the solar panels there are always customers asking for the services. On a market with many small shops offering secretarial services in Bubulo, it is the solar panels that create the competitive advantage. The business of mobile phone charging is important and widely spread in the region and, as one informant explains, 'when power is off, you can find hundreds of phones' in the Lighthouse. There are, of course, not hundreds of sockets installed in the house. Instead, mobile phones are arranged in queues, as they await the charging session.

Prior to the establishment of the house, phone charging constituted a problem: At times, the power grid can be switched off for two weeks. This means that today, people are traveling from far distances to charge their phones at the Lighthouse. Thus, since the students left, neither the business model nor the activities have been altered. However, management has been changed once, and a library has been established in the house by three Swedish volunteers. Consequently, the main activities based on what happened four years ago are not necessarily taking place in the physical house today.

When surveying the people who participated in the entrepreneurship workshops-as mentioned above, some left the workshop-one can discern one thing. The knowledge in entrepreneurship has spread through certain individuals, who picked up the message and then translated it into improvements of their own businesses, or into new start-ups. The local entrepreneur introduced

above states that 'the intention of Lighthouse was knowledge' and not to provide equipment like computers to the village. The key to success of the initiative, he says, was its ability to 'expand the entrepreneurs' knowledge to the community so that people can be empowered'. On a similar note, the local contact who brought together the people for the workshops states: 'The main contribution is that people has been encouraged to do something and to do it well.' Thus, respondents from the village seem to cite inspiration as their main take-away from the Lighthouse initiative.

Discussion and analysis

In the case study sketched above, we can see numerous examples of goal translations, which has caused the project to 'drift' in terms of aims and outcomes. The original idea of setting up an incubator has been substituted for something altogether different-but that is not to say that no activity has been generated. As we shall see in this discussion, this drift can be understood in spatial terms: First, in the ways in which the great distance traveled 'did things' to the original idea; and secondly, in the ways in which the project came to operate in a different space than the one originally imagined.

As we have seen, the project set out to create an 'incubator-as-we-know-it' in Bubulo. What does this notion entail? As discussed by Scaramuzzi (2002), the concept of an incubator is relatively new and therefore not consistently defined. Not only the definition but also the approach can change depending on the mandate of the incubator (for-profit or not for-profit), type of sponsorship they have (public-private-mixed) and their focus (mixed or niche). An incubator often works as a company although it does not need to have the aim for profit. The process for the incubated company usually last for two to five years before the company can move on to its own place.

The notion of place and space is picked up upon by Hackett and Dilts (2004), who define the concept of incubator-incubation as:

A business incubator is a shared office space facility that seeks to provide its incubatees with a strategic, value-adding intervention system of monitoring and business assistance. (p. 57)

In the case of the Lighthouse, this original notion of an incubator was supplemented with the 'added extra' component of solar power. This was initially construed as something that would secure the smooth operation of the incubator. However, as we have seen, the notion of a 'shared office space'-four walls and a roof-within which businesses could emerge did not materialize in a fruitful way. No firms have been incubated within this space, and capital has not accumulated within the structure.

Still, the Lighthouse may indeed have generated activity. This activity is however not to be found inside the house itself. For instance, as we have seen, the secretarial services are now dispersed in sheds on the main street, rather than inside the Lighthouse. (This is connected to the inspirational aspects of the initiative that the local entrepreneur points to.) More interestingly, though, it is the solar energy component that has turned out to be the key feature of the house. Given the fundamental role played by mobile phones in countries like Uganda, and the fact that people come from far away to charge their phones (especially during power cuts), we may venture to suggest that the Lighthouse has done something to breathe new life into the economy. Indeed, the project - i.e. the building of solar panels-has had effects, it has 'made and unmade the world', but those effects cannot be detected by studying the business done inside the would-be incubator. Effects on economic life are more likely to be geographically dispersed, and difficult to captured through traditional incubation metrics. To capture it, researchers would have to follow mobile phones, as they travel to Bubulo, get charged, and then facilitate a host of activities as they move around the in the area. If there is an entrepreneurship that has emerged from the incubator, it is a highly dispersed one.

One key finding in the case is how the differing conceptions about entrepreneurship and the sharing of ideas affected the project. For instance, the Ugandans did not believe in the shared space/shared ideas approach of the Swedes. Similarly, there were differing conceptions about what entrepreneurial action entails; incubator-like businesses, or selling secretarial services? Indeed, these differing conceptions of entrepreneurship seem to have been one of the key reasons for the drift of the initiative.

Finally, the case study also points to the tension between the highly immaterial impact of 'inspiration', on the one hand, and the highly material aspect of solar powers generating raw power to fuel mobile phones, on the other. Whereas the local entrepreneur points to the importance of inspiration, most Bubulo residents seem to be using the sheer power of the solar panels to take part in economic life. The account of the local entrepreneur seems close to that of the original aims of the CSE class-to exchange ideas, in order to promote creativity. However, at the same time, the success of the solar panels and telephone charging facilities suggest that the RC was correct in its original recommendation, pointing to the fundamental need for sheer electric power.

Conclusions

Business incubation is increasingly construed as an effective way of promoting innovation, industrialization and start-up activity in low-income countries. Among policy-makers and academics, there is now a considerable interest in empirical studies that highlight success factors as well as pitfalls when attempting to set up business incubators in such economies.

This article feeds into this discussion, presenting a case study on a social entrepreneurial initiative to set up an incubator in Bubulo, Uganda. Based on qualitative material gathered over a four-year period, the study recounts the origins of the initiative, and traces its development over space and time. It thus also heeds the intra-academic call for more spatial studies of social entrepreneurship.

The stories and arguments presented lead us towards four main conclusions. First, the story of the Lighthouse points to how space matters when investigating social entrepreneurial efforts to establish business incubators in low-income countries. As we have seen, the geographical distance that such projects travel can cause the original aims to drift, as a result of constant processes of translation. Moreover, as these original aims shift, a project may come to operate in a different space than the one originally imagined.

Secondly, the case study highlights how one of the key reasons for the project drift is different conceptions of entrepreneurship. Thus, social entrepreneurs wishing to promote 'entrepreneurship' in low-income countries may be well served by a great amount of sensibility towards such differences.

Thirdly, on a more policy-oriented note, the case study of the Lighthouse prompts us to shift perspectives somewhat when it comes to understanding what such initiatives achieve. Rather than 'creating' entrepreneurship, projects like the Lighthouse are better seen as efforts to 'mobilize' existing activities. This holds particularly true when it comes to efforts to foster entrepreneurship in low-income countries, which observers from high-income countries may tend to construe as lacking in economic activity.

Fourthly, in terms of policy recommendations, the case presented above leads us to imagine new ways of thinking about incubation in low-income economies. In countries like Uganda, incubators are a recent phenomenonsomething that has emerged during the past decade or so. Most of those incubators are not-for-profit and funded by public resources or by different donors. Following from the argument above, the notion of 'an incubator without walls' (Szogs, 2010) seems to be a fruitful way of imagining how entrepreneurship is to be fostered in these settings.

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References

- Callon, M., & Law, J. (1982). On interests and their transformation: Enrolment and counter-enrolment. Social Studies of Science, 12(4), 615-625.
- Callon, M. (1986). Some elements of a sociology of translation: Domestication of scallops of the scallops and the fishermen of St Brieux Bay. In J. Law (Ed.), Power, action and belief: A new sociology of knowledge? (pp. 196-223). London: Routledge & Kegan Paul.
- Callon, M. (1998). Introduction: The embeddedness of economic markets in economics. In M. Callon (Ed.), The Laws of the Markets (pp. 1-57). Oxford, England: Blackwell.
- Czarniawska, B., & Hernes, T. (2005). Actor-network theory and organizing. Copenhagen: Cophenhagen Business School Press.
- Hackett, S. M., & Dilts, D. M. (2004). A systematic review of business incubation research. Journal of Technology Transfer, 29(1), 55-82.
- Haraway, D. J. (1997). Modest_witness@second_millenium.female_ $man(\bigcirc_meets_oncomouse^{TM}: feminism and technoscience.$ London:
- Latour, B. (1987). Science in Action: How to follow scientists and engineers through society. Cambridge, MA: Harvard University Press.
- Latour, B. (1988). The pasteurisation of France. Cambridge, MA: Harvard University Press.
- Latour, B. (1993). We have never been modern. Hemel Hempstead, England: Harvester Wheatsheaf.
- Latour, B. (1999a). On recalling ANT. In J. Law, & J. Hassard (Eds), ANT and after (pp. 15-25). Oxford, England: Blackwell.
- Latour, B. (1999b). Pandora's Hope: Essays on the reality of science studies. Cambridge, MA: Harvard University Press.
- Law, J. (1999). After ANT: complexity, naming and topology. In J. Law, & J. Hassard (Eds), ANT and after (pp. 1-14). Oxford, England: Blackwell.
- Lundqvist, M. A., & Williams-Middleton, K. L. (2008). Sustainable wealth creation beyond shareholder value. In C. Wankel, & J. Stoner (Eds), Innovative approaches to global sustainability (pp. 39-62). New York, NY: Palgrave MacMillan.

- van Maanen, J. (2011). Tales of the field: On writing ethnography (2nd ed). Chicago, IL: Chicago University Press.
- Mutambi, J. (2011). Stimulating industrial development in Uganda through open innovation business incubators. (Published licentiate dissertation, Blekinge Institute of Technology, 2011).
- Ollila, S., & Williams-Middleton, K. (2011). The venture creation approach: integrating entrepreneurial education and incubation at the university. International Journal of Entrepreneurship and Innovation Management, 13(2), 161-178.
- Oppenheim, R. (2007). Actor-network theory and anthropology after science, technology, and society. Anthropological Theory, 7(4), 471–493.
- Potter, E. (2001). Gender and Boyle's law of gases. Bloomington, IN: Indiana University Press.
- Scaramuzzi, E. (2002). Incubators in developing countries: Status and development perspectives. Washington, DC: The World Bank.
- Shapin, S., & Schaffer, S. (1985). Leviathan and the air-pump: Hobbes, Boyle and the experimental life. Princeton, NJ: Princeton University Press.
- Steyaert, C., & Katz, J. (2004). Reclaiming the space of entrepreneurship in society: Geographical, discursive and social dimensions. Entrepreneurship and Regional Development, 16(3), 179–196.
- Steyaert, C., & Dey, P. (2010). Nine verbs to keep the social entrepreneurship research agenda 'dangerous'. Journal of Social Entrepreneurship, 1(2), 231-254.
- Szogs, A. (2010). Technology transfer and technological capability building in informal firms in Tanzania. (Doctoral dissertation, Lund University, 2010).
- Williams-Middleton, K. (2010). Developing entrepreneurial behavior: Facilitating nascent entrepreneurship at the university. (Published doctoral dissertation, Chalmers University of Technology, 2010).
- Yin, R. K. (2009). Case study research: Design and methods (4th ed). London: Sage.

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