

2

Healing Nature, Transforming Culture: A Story of Social Innovation in Egypt

Kyriaki Papageorgiou kyriaki.papageorgiou@gmail.com

The paper tells the story of Sekem, an initiative that started in a small plot of desert land in Egypt that has transformed its surrounding natural and societal landscape. In addition to establishing a successful organic farming enterprises, Sekem has created a holistic development model that encompasses different aspects of life, from education to architecture, health and the arts. Focusing on Sekem, this paper presents empirical material on how social innovation can happen, how it addresses major societal challenges and how it can bring forth change in a complex setting such as Egypt. The paper employs anthropological theory and methods, and is based on extended periods of ethnographic fieldwork conducted over a decade in Egypt. Drawing on prominent definitions and processes of social innovation, this study demonstrates that Sekem is an example of social innovation that blends agricultural and educational activities, as well as Western and Eastern paradigms, particularly anthroposophy and Islam. Sekem's explicit goal is to bring forth systemic change through a comprehensive program that envelops economic, social, and cultural life, and the environment. The paper concludes by opening up the current theoretical and epistemological discussions on social innovation to the work of anthropologists studying cultural change and the contemporary.

1. The Journey to Egypt

I carry a vision deep within myself: in the midst of sand and desert I see myself standing at a well drawing water... For me this idea of an oasis in the middle of a hostile environment is like an image of the resurrection at dawn after a long journey through the night desert. I saw it in from of me like a model before the actual work in Egypt started. And yet in reality I desired even more: I wanted the whole world to develop. I thought long and hard about what to call this project which I wanted to implement following this vision. Because of my interest in ancient Egypt I knew that at the time of the pharaohs there were two different words for the light and the warmth of the sun. The sun also had a third element attributed to it: Sekem, the life-giving force of the sun, with which she enlivens and permeates the earth's entire being. I chose this name for the initiative I planned to start at the edge of the desert.

Ibrahim Abouleish, Sekem's founder (2005: 13)

In 1977 Ibrahim Abouleish returned to Egypt after 21 years of living in Austria with a strong and ambitious vision. During a journey to his homeland with his family two years earlier, Abouleish noticed the high rates of poverty and illiteracy, the country's deteriorating natural landscape and food quality. Believing that by healing the earth you also heal its people, Abouleish bought 70 hectares of desert land, 60 kilometers north-east of Cairo, and created Sekem. With the guidance of a German agronomist he started employing organic agricultural methods and a few years later he began producing medicinal herbs and food ingredients. A medical pharmacologist by training, Abouleish launched, in 1983, his first product line of herbal remedies under the name Sekem Herbs, followed by ISIS for foodstuff for local consumption, LIBRA for packing and exporting fresh fruits and vegetables to Europe, CONYTEX for manufacturing organic cotton textiles and others. In parallel to establishing specialized commercial companies, Abouleish created the Sekem Development Foundation to lead a wide array of social programs and initiatives, from education to health care.

I arrived in Egypt the year Sekem's international fame and recognition began. In 2003, Sekem received the Schwab Foundation Award for Outstanding Social Entrepreneurship and the Right Livelihood Award (or Alternative Nobel Prize) for its successful corporate and socioeconomic model. I was in Cairo to conduct field research for my PhD in Cultural Anthropology. Sekem drew my attention because its successful organic practices were an interesting twist to the debates over agricultural biotechnology and genetically modified organisms that were the original focus of my dissertation. The more I learned about Sekem, the more intrigued I became about things that were

seemingly unrelated to its agricultural practices. I discovered that Sekem followed a specific and somewhat peculiar method of organic farming called biodynamic agriculture, which was developed by Rudolf Steiner, the founder of anthroposophy: a philosophical and spiritual movement with practical applications in many fields including architecture, medicine and education. I realized that Ibrahim Abouleish had been inspired by anthroposophy and that beyond a successful organic enterprise, he had been building a multi-faceted initiative with the goal to contribute to the holistic development of the individual, society and the earth.

Since 2003, Sekem and Ibrahim Abouleish have received numerous honors and awards, and have been featured in many books as exemplars of sustainable development, alternative agriculture (Halweil, 2004), extraordinary environmentalism (Desmond and Prance, 2008), leadership development (Mimouni and Metcalfe, 2011), humanistic management (Kimakowitz, 2011), social change (Golden-Biddle and Dutton, 2012), transforming the global economy (Auerswald, 2012), integral economics (Lessem and Schieffer, 2010), spiritual capital (Rima, 2013), and successful social entrepreneurship (Perrini, 2006; Ellis, 2010; Elkington and Hartigan, 2008). This paper provides a description of some of the key elements of the Sekem initiative and juxtaposes these with relevant literature in anthropology in order to inform the theoretical, empirical and policy discussions on social innovation.

2. "Goodness of the Heart, Light of Truth, Love of People": Sekem's Holistic Model

The desert land that Ibrahim Abouleish bought in 1977 is today covered with fruit trees, jasmine bushes, vegetable fields and herb gardens. At the Sekem mother-farm, the greenery gives way to several angular white buildings that are occupied by companies that specialize in different products, from fresh organic produce to phyto-pharmaceuticals. The farm also hosts a kindergarten and elementary school, a medical center, several workshops and vocational organizations, a big amphitheater and a residence complex that houses the Abouleish family and some of Sekem's employees. The unusual design of the buildings and vibrant colors enveloping the farm are accentuated at the company's headquarters located approximately an hour from the farm towards Cairo. Rooms, windows, and furniture alike are designed against the standard lineal rectangular forms and are playfully decorated with assorted colors. Every morning all of Sekem's employees, including researchers, farmers and administrators, come together in a circle and talk about their accomplishments of the previous day and their goals for today. The circle dissolves after thanking God and reciting the mantra "Goodness of the heart, light of truth, love of the people."

Reporters describing Sekem have compared it to a 1970s hippie community in the middle of the European countryside (Pierandrei, 2005), "an eclectic mix of German precision and Egyptian insouciance [that] baffles visitors but it works" (Elworthy, 2013). Sekem's uniqueness and particularities are rooted in its founder's background, beliefs and personal quests. The morning circle, for example, is one of the ways Abouleish hopes to foster the sense of equality among the members of the community, facilitate communication and make known each employee's tasks and successes. When receiving the Schwab Foundation Award for Outstanding Social Entrepreneurship, Abouleish presented the concept "economics of love" to describe Sekem's business approach that entwines profit-making and an integrated socioeconomic model. In his acceptance speech for the Right Livelihood Award, Abouleish explained that Sekem's comprehensive and compassionate model begins "on a practical level by healing the soil through the applications of biodynamic farming methods" and on the cultural level through educating the Egyptian people, "consolidating both their cognitive and practical skills while enhancing their command of free will." To understand the breadth of Sekem's entrepreneurial and social activities, a summary of its companies and the work of its development foundation is provided below.

2.1 Sekem Companies

ISIS: Produce & Foodstuff - Founded in 1997, ISIS produces food from raw materials, free of any artificial additives or preservatives. ISIS markets natural biodynamic food products in both local and global markets with the goal to satisfy its customers' need for better human health, while also maintaining a balanced environment.

ATOS: Herbal Medicine - Founded in 1986, ATOS manufactures and markets an array of natural medicines and health care products. The products are developed for different ailments, from cancer to gastro-intestinal conditions.

NATURETEX: Textiles - Founded originally under the name of CONYTEX in 1998, NATURE-TEX is a producer of fabrics, home textiles, dolls and baby wear using only organic cotton. The design and development of the products is done in-house in its own studio, and produced and marketed under its own brand Cotton People Organic (CPO), NatureTex, Organic Baby, or under private labels such as "People Wear Organic" (PWO).

LOTUS: Herbs & Spices - Originally founded in 1977, it was Ibrahim Abouleish's first company and started with the name of SEKEM. The company processes all kinds of organic herbs and spices from biodynamically cultivated plants. It produces, imports and exports organic and biodynamic and thus natural and chemical free, herbs, spices and seeds for its sister companies ISIS and ATOS, as well as for the export market according to International Demeter Processing Guidelines.

LIBRA: Cattle & Compost - Founded in 1988, and since 2010, LIBRA concentrates its operations on cattle management and produces milk, eggs, meat, fodder, as well as compost under the name of Soil & More compost in May 2007.

MIZAN: Seedlings - El-MIZAN is a plant raising company that aims to provide Egypt's vegetable producers and SEKEM for Land Reclamation with healthy, profitable in- and outdoor grafted seedlings. The company was founded in 2006 as a joint venture company between Grow Group Holland and Sekem Group Egypt.

PREDATORS: Biocontrol - Started in 2010 SEKEM in partnership with Danish companies EWH Bio Production and Envision with mass production of beneficial microorganisms. It specializes in breeding and the production of a number of natural enemies that resist many pests in vegetable and fruit crops.

SEKEM for Land Reclamation - Founded in 2008 for agricultural crop production, reclaiming and cultivating new land according to biodynamic principles. It has enlarged the cultivation area within four years from 263 to 1628 feddans in the new desert lands in the regions of Sinai, Bahareya and Minya.

2.2 Sekem Development Foundation

Sekem School - Founded in 1989. It includes a kindergarden, primary, preparatory, and secondary school for 300 students (boys and girls) from Sekem's surrounding communities. Although the the SEKEM School is approved by the Egyptian Ministry of Education and is based on the Egyptian State Curriculum, it also integrates elements of Waldorf education, such as courses in eurhythmy, crafts, drama, dance or music. Sekem has also developed an educational program for children with special needs and another one for children that have been forced to drop out of school in order to work.

SEKEM Vocational Training Center - Started operating in 1997. It has a three-year program that aims to offer young people useful professional skills that are in demand in the local labour market. The program stresses "learning by doing and doing while learning", as well as on-the job training, practices, and preparation.

Arts Department and Training - SEKEM provides every employee with the opportunity to discover the artist in himself by giving them access to artistic exercises and training in drama, eurythmy, fine arts and music.

SEKEM Medical Center - Established in 1997, it now has inpatient and over 15 specialty clinics and offers state-or-the-art diagnostic, therapeutic and intensive care facilities. It serves over 35000 patients annually, regardless of their capability to pay for the treatment.

SEKEM Environmental Science Center - It offers interactive science classes on environmental topics to pupils from the surrounding community, as well as from other local and international schools.

Heliopolis Academy - It was established to improve Egypt's capacity to conduct, publish and disseminate relevant social and scientific research in the areas of medicine, pharmacy, biodynamic agriculture, the arts and social sciences. It provides a training courses and lectures, and hosts a variety of academic, scientific and cultural events.

3. Cotton, Pesticides, Sun Worshipers, Mozart and Islam

Establishing a successful agricultural and social enterprise in Egypt was not an easy task. In the early years of Sekem, Abouleish faced serious hurdles, from land acquisition and reclamation, to securing financing and tackling his employees' work ethic. One of his toughest challenge emerged soon after one of his first major achievements. Concerned by Egyptians' habitual heavy pesticide use, particularly the aerial spraying of cotton fields, Sekem launched in 1991 an experiment cultivating organic cotton using biodynamic methods. After a few years of experimentation, Sekem gathered data that showed that organic cotton had better yields than non-organic and high-pesticide cultivation. Sekem's successful tests were subsequently replicated by scientists from the Ministry of Agriculture, and as a result, crop dusting was eventually banned all over Egypt, reducing the use of synthetic pesticides on cotton by over 90%, while increasing the average yield by almost 30%. Soon after this ban was announced, a report appeared in the media claiming that Sekem was a sun worshiping cult.

This accusation alarmed the neighboring sheikhs, the Egyptian secret state security police and members of the Egyptian public at large. Sekem workers started being harassed and stones were thrown at them because of their engagement in presumably non-Islamic activities. After filing a court case against the paper that published the article, Abouleish decided to invite everyone mentioned in the article, the mayor and the most influential local sheiks to Sekem. The meeting was particularly insightful and is described below by Ibrahim Abouleish himself. His vivid narrative conveys his character and approach, illustrating Sekem's equivocal position within Egypt's complex sociocultural landscape.

They entered, a large group of men in long flowing gowns. I welcomed them, offering my hand to shake, which they did unwillingly. But I stayed calm. Once everyone was seated, I asked a sheik to read a verse from the Koran, which he did with his beautiful voice. Once he had finished, I beckoned Sekem musicians into the room to play a Mozart serenade. Suddenly a man jumped up furiously, banged his fist on the back of the chair, and shouted, "We will not listen to this work of the devil!" While the musicians bravely continued playing, I walked up to him and said, "Calm down and listen." After that episode all the visitors let these "terrible" sounds wash over them.

Once the musicians had left the room I invited the men to express themselves. One stood up and shouted, "Music and art are forbidden in Islam. The Prophet said so!" I calmly asked, "Does it say so in the Koran?" "No," he replied, "the Prophet said it!" I answered, "I believe every word in the Koran, and also those of the Prophet. I only need to see it first!" He said, I'll bring it to you." I replied, "Good, I'll wait until you bring it!" This is how the meeting started. The atmosphere was terribly strained and threatened to escalate out of control at any moment.

Because of the questions, I started telling them that Allah had chosen human beings out of all of his creations to be his successor. Some of them nodded, because I verified everything I said with verses from the Koran, quoting them by heart...

Now I experienced the difficulty I had already frequently met when training the farmers. These people were used to understanding the words from the Koran in an abstract sense and tended not to think of concrete examples when listening to them. I now showed them, using appropriate examples, what these verses full of images could mean for their practical life. I explained about the mil-

lions of micro-organisms and their work in the earth and told them that the living earth was connected to the heavens. Then I quoted the Koran again...

Then I spoke about biodynamic farming, about the composting process and preparations for it. I described exactly how this process enlivens the soil. I explained how we wait for specific starting constellations before we plant; thus we are inspired by Allah to act correctly. Then I led the discussion toward the arrogance of science, which states that it is only physical substances that allow plants to grow, and not Allah. Because of this people use artificial fertilizers and chemical poisons, ignoring their effects on people's health and the consequences of insect infestation.

Suddenly one of the men stood up, came to me and hugged and kissed me. I noticed that another one had tears in his eyes. What had touched these conventional men? Many were shaken by the concreteness by which one could understand the verses of the Koran. They obviously felt that my explanations had deeply acknowledged their religion.

Over the course of the day, the grim bearded men who had arrived in the morning became my guests. They said their farewells heartily and with deep feeling. I knew they would meet again on Friday in the mosques and would spread the word about the mistake they had made. I let them go with words from the Koran, "If someone comes to you and tells a rumor, then do not believe them, but verify it yourself." They passed this message on exactly. They explained that Islam lives deeply in Sekem, as nowhere else in the country. And to commemorate their visit they gave us a plaque, written in beautiful calligraphy in golden letters: "That the community of sheiks verifies that Sekem is an Islamic initiative. The plaque now hangs in the entrance area of the school.

Ibrahim Abouleish (2008, 21-48)

3. Creating Awareness and Raising Consciousness: Culture, Education and the Heliopolis University Social Innovation Lab

In the last year, I have had many discussions with Dr. Abouleish regarding Sekem, his work and vision within the context of his latest undertaking: the establishment of the Heliopolis University for Sustainable Development. The University epitomizes the Sekem founder's efforts to improve the quality of people's lives by "creating awareness and raising consciousness." These words are repeatedly mentioned by Ibrahim Abouleish and in the Sekem official documents. As the story presented above renders clear, Abouleish places great emphasis in pedagogy, in the education and subsequent transformation of individuals intellectually and spiritually. According to Abouleish, it is only through enhanced self-awareness that societies can change.

The Heliopolis University was officially inaugurated in November 2013 with the goal to contribute to the sustainable development of individuals, communities, and nature in Egypt and the world. It currently offers three undergraduate degrees in Pharmacy, Engineering and Business. The University's key mission is to empower students, awaken their creativity, build capacities for innovation, develop a sense of social responsibility and the desire to contribute to sustainable development in different spheres of life. The University has a Core Program that includes classes in the arts, innovation and enterprise and is in the process of establishing a Social Innovation Lab that is to be the catalyst in realizing the University's mission.

During its first academic year of its operation, I was recruited to assist in the development of the Heliopolis University's Core Program and Social Innovation Lab. I interviewed faculty, students and staff, and attended numerous meetings and workshops focusing on how to entwine (and compromise) the ambitious goals of an unconventional holistic education program with the realities and challenges facing the University. Most academic faculty emphasize the immense disciplinary requirements and specialized courses student have to take to meet the Egyptian university authorities' standards. Others were skeptical about the value of the arts and expressed doubts about social innovation, from the concept to the lab.

"Sekem is social innovation," Dr. Ibrahim said to me emphatically during a conversation on what he hoped to achieve by the Social Innovation Lab. The Heliopolis University was not established to produce graduates who possess conventional technical knowledge, Abouleish reiterated; it aims to provide a comprehensive education program that trains students innovative and sustainable ways

of addressing Egypt's social and economic needs. According to Abouleish, the role of the Social Innovation Lab would be to support the university achieve this mission. A working definition of this laboratory is to be "a catalytic hub and a creative space for students, faculty, entrepreneurs and members of the broader community to collaborate on some of the toughest challenges facing the university, Egypt and world." Its specific goals include the following:

- Increase awareness and implementation of sustainable solutions and social innovation;
- Create and promote new or improved tools, concepts and ideas for social change and sustainable development;
- Influence policy on innovative practices, methodologies and solutions;
- Build new partnerships for social innovation, by working with communities to foster team-based research, education and entrepreneurial activities, and deepening interactions between the HU community, the public and private sectors, and civil society; and
- Critically reflect and co-produce knowledge on transformative pedagogies, research methods and curriculum design, review and development.

4. Sekem and Social Innovation

My involvement in Ibrahim Aboulesh's efforts to create a Social Innovation Lab in Egypt has fostered an anthropological curiosity on innovation in general, and social innovation in particular. Regardless of which definition of social innovation one adopts, "a novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions" (Phills, Deiglmeier and Miller, 2008), or "new ideas (products, services and models) that simultaneously meet social needs and create new social relationships or collaborations" (Murray, Caulier-Grice and Mulgan, 2010: 3), Sekem can undoubtedly be labeled as a social innovation initiative. Sekem creatively combines anthroposophy and Islam, agricultural and educational activities that have had an positive impact in improving the well-being of the Egyptian local communities and their surrounding natural land-scape. The vision of Ibrahim Abouleish of an oasis in the middle of the desert has been realized on the Sekem farm, but is only one element of his comprehensive and ambitious aim to bring forth holistic development in Egypt and the world.

Dr. Abouleish frequently emphasizes that when he started Sekem he had estimated that it will take approximately 200-250 years to meet its stated goals. A lot that has been accomplished, but there is a lot yet to be done, Dr. Abouleish recently told me when I asked him to reflect on his work with Sekem over the past forty years. Even though in his mid-seventies now, he continues to go to his office and be actively involved in Sekem's daily affairs. Educating young Egyptians how to become responsible and active citizens amidst the country's current heated and uncertain socio-political landscape is admittedly his greatest challenge. Sekem's founder wants to change the mindset and behavior of young students so that they have the desire and skills to become social innovators themselves. His hope is that Sekem will serve as a model through which social innovation and sustainable development can be taught and practiced to generate positive social transformation.

Although Sekem, like the field of social innovation itself, does not have fixed boundaries, the typology and methods proposed in The Open Book of Social Innovation (Murray, Caulier-Grice and Mulgan, 2010) offer a useful framework with which to analyze and present this multifaceted initiative. The story of Sekem, as it is partially told in this paper, can also be narrated using the six stages of social innovation presented in the above study, namely: (1) prompts, inspirations and diagnoses, (2) proposals and ideas, (3) prototypes and pilots, (4) sustaining, (5) scaling and diffusion, (6) systematic change. Ibrahim Abouleish's observations of the state of Egypt's social and natural landscape during a trip with his family (1), led him to buy desert land in Egypt a few years later (2), where he started experimenting with biodynamic agricultural methods (3). As these methods proved to be successful, they were streamlined with the creation of standards, associations and new legislations (4). Sekem gradually expanded its agricultural enterprise and diffused biodynamic farming methods across Egypt (5), while establishing several parallel research and educational initiatives in order to achieve systemic change (6). Sekem's comprehensive approach to target systemic change is summarized in its "Sustainability Flower" (Figure 1), a graphic representation of the initiative's mission and activities enveloping economic, social and cultural life, and the environment.



Figure 1

Systemic change is considered to be "the ultimate goal of social innovation" (ibid.: 13). It involves a variety of interconnected elements, sectors and fields that lead to changing mindsets, behavior, power, and economic flows. Systemic innovation (Mulgan, 2013; Leadbeater, 2013) is a concept that is gaining growing attention among scholars and policy makers interested in innovation partly because it reflects the complex and interconnected nature of contemporary societies, and partly because of the widespread realization that the established socio-economic system is failing to meet the current demands and challenges. In the final section of the paper, I briefly present the work of anthropologists on cultural change and the contemporary to open up and contribute to the current theoretical and epistemological discussions on social innovation.

5. Innovation, Anthropology and Theories of Change: A Research Agenda

Anthropological studies of the contemporary provide a valuable framework for tackling large-scale cultural transformations, modern institutions and practices, while at the same time remaining committed to empirically-based research and long-term fieldwork. Within this vast and varied body of work, ethnographies of modernity (Appadurai, 1996; Fischer, 2003; Ong and Collier 2005), development (Escobar, 2012; Ferguson, 2006; Mitchell, 2002) and science (Greenhalgh, 2008; Latour and Woolgar, 1979; Rabinow, 1996, Traweek, 1988) offer important insights into the concept on innovation, which is frequently coined with development and growth and is usually considered to be the successful adoption and application of science and technology (European Commission, 2013a; OECD, 2012; STEPS, 2010). More specifically, anthropologists have been particularly critical of the evolutionary paradigms that underlie the discourses and practices of modernization and development, highlighting questions of power, history and culture that tend to be overlooked. Anthropologists have also aptly illustrated that science is produced in historically and culturally specific contexts, and practiced amidst constant negotiation.

Although the first theory of innovation is usually credited to the French sociologist Gabriel Tarde, who regarded imitation and innovation as the fundamental forces of social change (Tarde,1890; Rogers 1962), equally important, but largely neglected, are the nineteenth-century writings of anthropologists who were concerned with cultural complexity and evolution. From Edward B. Tylor (1871) and Henry Lewis Morgan (1877), to Julian Steward (1955) and Leslie White (1959), anthropologists have paid special attention to the production of novelties and studied how and under what conditions innovation is transmitted and how it contributes to tackling the challenges of the physical and social environment within which it emerged. A recent edited volume entitled Innovation in Cultural Systems (O'Brien and Shennan, 2010) presents contemporary multidisciplinary approaches that examine new technical knowledge and human behavior change side by side. Bringing this anthropological body of work into innovation studies can help forward our historical and theoretical understandings of innovation, as well as the current debates about technological versus social innovation.

I am currently developing a research project that tries to understand the different meanings, discourses, and values used by different actors when referencing innovation, and how exactly it contributes to the current complex societal challenges. Drawing on recent social studies on finance and the financial crisis (Knorr-Cetina and Preda 2005, Kripper 2011, Maurer 2012, Zaloom 2006), my project probes the widely unquestioned quest for innovation as a solution to the current economic crisis. "The concept of innovation itself," as one anthropologist has pointed out, "tracks rather closely the field of finance, which has consciously built itself on and propelled itself by innovation" (Maurer 2005:190). Anthropologists studying stock markets, investment banks, futures, derivatives, pricing models and risk formula have demonstrated that finance is characterized by a

never-ending quest for innovative ways of managing credit and debt to generate profit. One well-known study in this area has illustrated how an innovative product created by a small group of brilliant, but short-sighted, bankers (securitization) contributed to a worldwide crisis (Tett 2010).

In my forthcoming work I also explore how innovation arose historically to its present prominence and the extent to which the current discussions among academics and policy makers are epistemologically different from those in the 19th century. Papers produced by the "Project of the Intellectual History of Innovation" at INRS University in Canada (see Godin, 2008) have pointed out that innovation has historically been a contested idea, and was for centuries considered to be pejorative and negative (Godin and Lucier, 2012; Spanos 2010). Publications such as Social Innovators and Their Schemes (Sargant, 1858) label figures like French Henri de St-Simon, Richard Owen and Charles Fourier social innovators and accuse them for being ignorant about political economy and economic laws. Social innovation was regarded radical, revolutionary, a sect, and a threat to capitalism and private property. An entry in Encyclopedia Britannica dated to 1888 stated that "communism is the name given to the schemes of social innovation which have for their starting point the attempted overthrow of the institution of private property" (Encyclopedia Britannica, 1888: 211, quoted in Godin, 2012: 14).

Contrary to the 19th century articulations, many social innovators today, like Ibrahim Abouleish, are successful entrepreneurs. Situating the concept of innovation historically and against the anthropological literature on cultural change and the contemporary, could help pave the way towards a more nuanced and productive engagement with innovation. Innovation has immense positive potential solely by the fact that it has created a space where meaningful collaborations can develop between traditionally unconnected actors and shareholders, across and within academia, industry, public policy and society. Although it is valuable to label and distinguish among different uses and applications of innovation, it is perhaps more important to develop a comprehensive approach that opens up existing intellectual and disciplinary polarizations and focuses on the unmet challenges and missed opportunities, the design of future policies and actions that can make a positive difference to society as a whole.

References Cited

Abouleish, I. (2005) Sekem: A sustainable community in the Egyptian desert. Edinburgh: Floris.

Abouleish, I. and Abouleish, H. (2008) "Garden in the Desert: Sekem Makes Comprehensive Sustainable Development a Reality in Egypt," Innovations, 3(3): 21-48.

Appadurai, A. (1996) Modernity at Large: Cultural Dimensions of Globalization. Minneapolis, MN: University of Minnesota Press.

Auerswald, P. (2012). The coming prosperity: How entrepreneurs are transforming the global economy. Oxford: Oxford University Press.

Desmond, K. and Prance, G. T. (2008) Planet savers: 301 extraordinary environmentalists. Sheffield, UK: Greenleaf.

Elkington, J. and Hartigan, P. (2008) The power of unreasonable people: How social entrepreneurs create markets that change the world. Boston, MA: Harvard Business School Press.

Ellis, T. (2010) The new pioneers: Sustainable business success through social innovation and social entrepreneurship. Cichester, West Sussex: Wiley.

Elworthy, C. (2013) Egypt: small oases of transformation. Open Democracy. Available online: http://www.opendemocracy.net/5050/scilla-elworthy/egypt-small-oases-of-transformation

Escobar, A. (2012) Encountering Development: The Making and Unmaking of the Third World.

Princeton, NJ: Princeton University Press.

Fischer, M. M. (2003) Emergent Forms of Life and the Anthropological Voice. Durham, NC: Duke University Press.

Ferguson, J. (2006) Global Shadows: Africa in the Neoliberal World Order. Durham: Duke University Press.

Franklin, S. (1995) Science as Culture, Culture of Science. Annual Review of Anthropology, 24:163-184.

Godin, B. (2008) Innovation: The History of a Category. Working Paper No. 1. Project on the Intellectual History of Innovation. Montreal, INRS.

Godin, B. and P. Lucier (2012). Innovation and Conceptual Innovation in Ancient Greece. Working Paper No. 12. Project on the Intellectual History of Innovation, Montréal: INRS

Golden-Biddle, K. and Dutton, J. E. (2012) Using a positive lens to explore social change and organizations: Building a theoretical and research foundation. New York, NY: Routledge.

Halweil, B. (2004) Eat here: Reclaiming homegrown pleasures in a global supermarket. New York: W.W. Norton.

Kimakowitz, E. V. (2011) Humanistic management in practice. Basingstoke: Palgrave Macmillan.

Knorr-Cetina, K. and A. Preda (2005) The Sociology of Financial Markets. Oxford: Oxford University Press.

Latour, B. (1987). Science in Action: How to Follow Scientists and Engineers Through Society.

Cambridge, MA: Harvard University Press.

Latour, B. and S. Woolgar (1979) Laboratory Life: The Social Construction of Scientific Facts. Beverly Hills: Sage Publications.

Lessem, R. and Schieffer, A. (2010) Integral economics: Releasing the economic genius of your society. Farnham, Surrey, England: Gower Pub.

Leadbeater, C. (2013) The systems innovator: Why successful innovation goes beyond products. Systems innovation. Discussion paper. London: Nesta.

Linderman, A. (2012) Why the world around you isn't as it appears: A study of Owen Barfield. Great Barrington, MA: Lindisfarne Books.

Maurer, B. (2005) Finance. In Handbook of Economic Anthropology, ed. J Carrier, pp. 176–93. Cheltenham, UK: Edward Elgar.

Maurer, B. (2012) Introduction. Theorizing the Contemporary: Finance. Edited by B. Maurer. Special online collection, Cultural Anthropology website, May, 2012.

Mimouni, F. and Metcalfe, B. D. (2011) Leadership development in the Middle East. Cheltenham, UK.: Edward Elgar.

Mitchell, T. (2002) Rule of Experts: Egypt, Techno-politics, Modernity. Berkeley: University of California Press

Morgan, H. (1877) Ancient Society. New York: Henry Holt and Company.

Mulgan, G. (2013) Joined–Up innovation: what is systemic innovation and how can it be done effectively? Systems innovation. Discussion paper. London: Nesta.

Murray, R., Caulier-Grice, J. and Mulgan, G. (2010) The open book of social innovation. Social Innovation Series: Ways to Design, develop and grow social innovation. London: The Young Foundation.

O'Brien, M. J. And S. Shennan (2010). Innovation in Cultural Systems: Contributions from Evolutionary Anthropology. Cambridge, MA: MIT Press.

Ong, A. and S.J. Collier (2005). Global assemblages: Technology, Politics, and Ethics as Anthropological Problems. Malden, MA: Blackwell Pub.

Perrini, F. (2006) The new social entrepreneurship: What awaits social entrepreneurship ventures? Cheltenham: Edward Elgar.

Phills, J., Deiglmeier, K. and Miller, D. (2008) Rediscovering Social Innovation. Stanford Social Innovation Review. Available online: http://www.ssireview.org/articles/entry/rediscovering_social_innovation

Pierandrei, E. (2005) Vitality from the sun. Travel-Watch. Available online: http://www.travel-watch.com/vitality.htm

Rima, S. D. (2013) Spiritual capital: A moral core for social and economic justice. Farnham, Surrey, England: Gower Pub.

Rogers, E. M. (1962) Diffusion of Innovations. Glencoe: Free Press.

Sargant, W. (1858) Social innovators and their schemes. London: Smith, Elder and Co.

STEPS Centre (2010) Innovation, Sustainability, Development: A New Manifesto, Brighton: STEPS Centre.

Steward, J. H. (1955) Theory of Culture Change. Urbana: University of Illinois Press.

Sveiby, K. E., P. Gripenberg, B. Segercrantz (2012). Challenging the innovation paradigm. New York: Routledge.

Tarde, G. (1890) Les Lois de l'Imitation. Paris: Seuil, 2001.

Tett, G. (2009) Fool's Gold: How Unrestrained Greed Corrupted a Dream, Shattered Global Markets and Unleashed a Catastrophe. London: Little Brown.

Traweek, S. (1988) Beamtimes and Lifetimes: The World of High Energy Physicists. Cambridge, MA: Harvard University Press.

Tylor, E.B. (1871) Primitive Culture. London: J. Murray.

White, L. A. (1959) The Evolution of Culture: The Development of Civilization to the Fall of Rome. New York: McGraw-Hill.

Zaloom, C. (2006) Out of the Pits: Traders and Technology from Chicago to London. Chicago: University of Chicago Press.