Corporate Social Entrepreneurship: Shaping Identities in Private-led Solar Technology Dissemination

A qualitative study of how identities are shaped in private led solar technology dissemination to local communities in Arusha, Tanzania
Abstract

UN's 2030 Agenda for Sustainable Development sets the agenda for global development in the near future and aims to end poverty through the involvement of the private sector in global development issues and the promotion of entrepreneurial practices and environmentally sound technologies.

Tanzania is a country where the government encourages private-led distribution of public services to battle problems related to poverty. Multinational corporations are involved in the country's energy sector where some offer solar home systems to low-income customers and distribute them through locally trained and employed solar technicians.

The purpose of this thesis was to contribute with better understanding of local solar technicians as social actors and how their identities are shaped by contemporary global development discourses. This was achieved through a text study and interviews with local solar technicians trained and employed by a Berlin-based company in Arusha, Tanzania. The research problem was addressed through a discourse analysis encompassing theories of materiality. Subject positions offered to the local solar technicians were identified and analyzed against the respondents articulations to investigate how corporate social entrepreneurship discourse plays out in the way local solar technicians understand themselves.

This study has found that local solar technicians are offered to identify themselves as community members and employees, subject positions that bring both limitations and possibilities for them as individuals. As employees, the local solar technicians are constructed as independent social entrepreneurs that on behalf of their employer are expected to influence and educate their communities. The articulations of the respondents show that they all relate differently to corporate social entrepreneurship discourse and solar technology and let it play different roles in their lives.

This study draws the conclusions that the constitution of local solar technicians as a group of social actors can be problematic for them as individuals and can lead to unpredictable social outcomes, since it does not reflect their own subjective understanding of themselves. The role of local solar technicians as social actors promoting specific world views and lifestyles further leads to that whole communities understand themselves through the words and believes of a few. The structures of representations and articulations of corporate social entrepreneurship discourse will thus have long term consequences in society and effect the lives of many.

Keywords: Tanzania, sustainable technology, private-led development, participatory development
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1. Introduction

On September 25th 2015, the 193 countries of the UN General Assembly, adopted the 2030 Agenda for Sustainable Development, consisting of 17 Sustainable Development Goals and 169 targets. This broad intergovernmental agreement not only sets the agenda for global development in the near future, but also effects the views of and the way one speaks about poverty and development. With the aim to end poverty and shift the world onto a sustainable and resilient path, the agenda points out the importance of building resilience among the poor through promotion of entrepreneurial practices, sustainable development and sustainable lifestyles. Measures that need to be taken by the global society to reach the goals include; increased access to scientific innovations, environmentally sound technologies and modern energy services (SDG, 2015).

This thesis aims to contribute with better understanding of how identities are shaped by contemporary global development discourses. More specifically the aim is to understand entrepreneurial solar technicians as a group of social actors in global development and how they are shaped by discourse. This study will focus on corporate social entrepreneurship discourse, which expresses a dominant language in global development today and that is articulated throughout the 2030 Agenda for Sustainable Development. The centrality of corporate social entrepreneurship discourse in the intergovernmental agenda indicates a hegemonic position among contemporary global development discourses, from which it gives meaning to how global development issues are addressed today.

Private sector actors, including multinational corporations, have increasingly become involved in global development issues where they use market-based solutions to address the socioeconomic problems of poverty. Through so called inclusive business and social enterprise strategies, corporations focus on delivering goods and social services where public alternatives are unavailable or inadequate, engaging with people living in poverty, both as customers and as distributors and employees (UNDP, 2014). Proponents of these business strategies, suggest that corporations can find new business opportunities in low-income communities, while they at the same time can address the problems of global poverty and contribute to global development (Prahalad & Hart, 2002)(Prahalad, 2006)(Hart, 2010).

Distribution of energy services to communities in developing countries is central in the contemporary global development agenda where Sustainable Development Goal 7 states that the
global community should “Ensure access to affordable reliable, sustainable and modern energy for all” (SDG, 2015). Commercialization and liberalization of the energy sector (TDV, 2014) and encouragements from the Tanzanian government for the participation of the private sector in provision of public services (NSGRP, 2005) (NSGRP, 2010) has opened up for the involvement of multinational corporations in rural electrification. Due to a slow extension of the national power grids in Tanzania, off-grid\(^1\) electrification through small-scale renewable energy technologies like solar home systems have increasingly become an important complement in rural electrification (Ahlborg, 2012). Tanzania is a specifically interesting country to study, since it, even though receiving extensive external aid for decades, still battles many problems related to poverty and has a dominantly rural population of which only about 5-6% have access to electricity (Ahlborg & Hammar, 2011) (Ahlborg, 2012).

Multinational corporations that offer small-scale solar home systems to low-income customers have, as a part of their business strategies, started to train individuals from the local communities to become solar technicians that then distribute and install solar home systems in their communities. In their training and work the solar technicians are constantly exposed to contemporary global development discourses, that say something about who they are, who they can become, and the objects they can know something about. It is important to study discourse and identity since it contributes to an increased understanding of specific social actors and in turn specific social actions and their consequences in society. Local solar technicians are especially interesting to study since they not only are actors involved in global development but also work in close relation to material objects like new solar technologies that have a central role in how the identities of the local solar technicians are shaped by discourse.

There has been an extensive amount of research on implementations of business strategies in low-income markets (e.g., London et al. 2010, Schrader et al. 2012, Schuster & Holtbrügge 2012, Van den waeyenberg & Hens 2012). There is further great amount of research on rural electrification in developing countries, mostly of technical nature, however with a growing amount of multidisciplinary research that address social implications of new modes of rural electrification (e.g., Ahlborg 2012, Ahlborg & Hammar 2011, Ondraczek 2013, Van der Vleuten et al. 2007). A growing amount of researchers position themselves critically against the ideological premises of profit-oriented business strategies in socioeconomic development (e.g., Bonsu & Polsa 2011, Karnani 2007, Walsh et al. 2005). There is further diverse research on how subjects and identities

\(^1\) Stand-alone power systems not connected to the national power grid
are shaped by discourses (e.g., Glynos 2000, Griggs & Howarth 2000, Ho & Tsang 2000). There is however a lack of research on identities emerging with contemporary development discourses and the private sectors involvement in global development issues. The aspiration of this thesis is to contribute with knowledge about identities of specific social actors in a research area where focus has been elsewhere.

1.1 Purpose and research questions

Against this background, the purpose of this thesis is to better understand local solar technicians as social actors, and how their identities are shaped by corporate social entrepreneurship discourse.

This will be achieved by focusing on local solar technicians involved in private sector-led solar technology dissemination to rural communities in Arusha, Tanzania and will be based on a literature review and interviews with locally employed solar technicians working for the Berlin-based company Mobisol. To understand how the identities of the local solar technicians are shaped by discourse, this thesis asks the questions:

- What subject positions are the local solar technicians offered by corporate social entrepreneurship discourse?
- How does corporate social entrepreneurship discourse play out in the way the local solar technicians understand themselves?

Together, these research questions say something about local solar technicians as a specific group of social actors and how their identities are shaped by corporate entrepreneurship discourse in the context of private-led solar technology dissemination to rural communities in Tanzania. This can in turn contribute with knowledge about how identities are shaped by contemporary global development discourses and the private sectors involvement in global development issues. The way solar technicians understand themselves is further important to study since it effects how solar technology is disseminated to, and received by communities in developing countries like Tanzania.

1.2 Demarcations

The choice to study local solar technicians as a specific group of social actors is motivated by the researchers own technical background as a engineering student. The researchers background is important in understanding the scientific innovations and modern solar technologies, and in turn also, how the identities of locals solar technicians are shaped by small-scale renewable energy technologies like solar home systems. Since the researcher does not have access to all discourses in
the social context of the local solar technicians, the analysis will only focus on corporate social entrepreneurship discourse. Due to a limited time frame, this study further focuses on local solar technicians that are trained and employed by Mobisol in Arusha. The study will contribute with valuable knowledge of the specific case but provides a more limited amount of general knowledge of how identities are shaped by contemporary global development discourses. A broader study that analyzes several discourses or includes interviews with local solar technicians employed by different companies and/or in different regions would result in more knowledge and wider understanding of how contemporary global development discourses shape the identities of individuals.

1.3 Outline
Chapter two presents the delimitation of corporate social entrepreneurship discourse and sets the background against which the identities of local solar technicians will be analyzed. In chapter three the research problem is connected with theory and dressed in relevant concepts. Chapter four outlines how theory will be used to address the research problem and ends with a discussion of the methodological choices done by the researcher. The analysis and results are then thematically presented in chapter five. Finally chapter six discusses all parts of the thesis, from research problem to analysis and ends with concluding reflections and suggestions for further research.
2. Background

This chapter presents the delimitation of corporate social entrepreneurship discourse, gives an overview of its' language and sets the background against which the identities of local solar technicians will be studied and analyzed. Corporate social entrepreneurship discourse has been delimited through an extensive and reflective literature review.

Global development discourses have during the years shifted in nature, from traditional discourses that conceptualized development around a strong state, through the more liberal discourses of the 80's and 90's, to contemporary discourses like corporate social entrepreneurship discourse that center around a participatory and private-led global development (Desai & Potter, 2008)(Odén, 2006). In his book *Capitalism at the Crossroads*, Hart (2007) writes that “Business-more than either government or civil society-is uniquely equipped at this point in history to lead us toward a sustainable world in the years ahead” (pp. 3). A view which resonates well with the Agenda for Sustainable Development and that is central for how global development issues are addressed today. Non the least in Tanzania, which has undergone a transformation from African socialism to a liberal economy and where the participation of the private sector in provision of public services is broadly encouraged (Thomson, 2010)(Gould, 2005).

Simanis & Hart (2008) write that “…corporations have increasingly stepped up to the plate to tackle thorny global challenges ranging from climate change to poverty… in a quest to reach the “Base of the pyramid”” (pp. 1). Here, Base of the pyramid (BoP) refers to the four billion people who live on less than $2 a day and is a widely used term in corporate social entrepreneurship discourse in describing strategies where corporations through market-based solutions are said to address socioeconomic problems of poverty and contribute to global development (Prahalad, 2006) (Prahalad & Hart, 2002)(Simanis & Hart, 2008). The private sectors involvement in global development issues centers around how corporations can find new business opportunities in low-income markets and builds on the premises of capitalism which promote consumerism, freedom of choice and individual empowerment. These premises are central in corporate social entrepreneurship discourse and are expressed through a business language based on a participatory philosophy where corporations enter in to so called close business partnerships with BoP communities.
Hart (2010) writes in a revised edition of his book, that what he calls sustainable enterprises represent the potential of a new private sector-based approach to development that creates profitable businesses that simultaneously raise the quality of life for the world's poor, respect cultural diversity, inspire employees, build communities, and conserve the ecological integrity of the planet for future generations (pp.17)

Corporate social entrepreneurship discourse builds on a view of people living in poverty as potential business partners. In his book Prahalad (2006) writes that “If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value-conscious consumers, a whole new world of opportunity will open up” (pp. 1). It is claimed that corporations through so called inclusive capitalism, can incorporate previously excluded voices and become a catalyst for a truly sustainable global development while prospering in the process (Prahalad, 2006) (Hart, 2010). Business markets in poor communities are developed through social inclusion where the private sector empowers local entrepreneurs by giving them appropriate resources to “take development into their own hands” (UNDP, 2014) (Prahalad & Hart, 2002). Corporate social entrepreneurship discourse further promotes the facilitation of training and skill development activities in the business projects of the corporations, as a way to “enhance the capacity of marginalized groups” (UNDP, 2014). Workplace training, traineeship and knowledge exchange are seen as good ways to overcome “gaps” between the skills that exist in the community and the skills that are needed in the partnership with the corporation. UNDP (2014) write that corporations can “inspire others to achieve more than they though was possible...[and] help people develop skills needed to succeed themselves” (pp.12).

Corporate social entrepreneurship discourse further builds on a language where research and technology are central in how poverty issues should be addressed. Poor communities are seen as a real time “R&D site” where new products and clean technologies can be tested, incubated and improved. Prahalad & Hart (2002) write that “Countries that still don’t have the modern infrastructure or products to meet basic human needs are an ideal testing ground for developing environmentally sustainable technologies and products for the entire world” (pp. 3). The language centers around a sustainable development where sustainability is incorporated in many different forms. Simanis & Hart (2008) write that corporations can “sustainably serve the diverse needs and values of people across the globe” (pp. 5) through social and inclusive business strategies that are environmentally sustainable and that incubate sustainable technologies.
Mobisol (2015a) write that they aspire to “to reach millions of households in low-income communities - stimulating economic and social development in the project countries while simultaneously contributing to global environmental protection”. In this thesis, Mobisol represent how corporate social entrepreneurship discourse is reproduced in practice in the specific case of the local solar technicians. Using the language of corporate social entrepreneurship discourse, Mobisol presents itself as a provider of clean power, as a social service, for thousands of insufficiently served rural communities where other energy services are unavailable or inadequate. They further point out that their solar technology services need to be cheap so that the base of the economic pyramid can afford to buy them (Mobisol, 2015a, 2015d).
3. Theory

This thesis departs from a social constructionist view on language and reality, where ideas about the world are seen as products of our own subjective way of categorizing the world through the use of language (Bergström & Boréus, 2013) (Winther Jørgensen & Philips, 2000). This study examines the relationship between individuals and discourse and how their identities are shaped by discursive practice. Discourse can be seen as specific ways to speak and understand the world that contribute to the construction of world-views, people and, in turn, ourselves. Discourse can further be seen as a structure through which language and reality construct each other (Paltridge, 2012) (Winther Jørgensen & Philips, 2000). This thesis will use a wide definition of discourse; as a historically, socially and institutionally specific structure of representations or articulations through which meanings are constructed and social practices organized (Eriksson Baaz, 2005, pp.11).

3.1 Discourse analysis

The research problem in this thesis will be addressed through a discourse analysis. The point of departure is that the way we speak does not reflect the world, our identities and social relations in a neutral way, but plays an active role in the construction of and reconstruction of them (Winther Jørgensen & Philips, 2000) (Bergström & Boréus, 2013). This thesis aims to understand local solar technicians as a specific group of social actors constructed through discourse in the contexts of private led solar technology dissemination. Winther Jørgensen & Philips (2000) present the key premises that can be found in most discourse analysis approaches and that will be used as a point of departure in the reasoning in this thesis. The first of the key premises is a critical understanding of obvious knowledge, where our knowledge about the world can't be seen as a objective truth or as a reflection of reality “out there” but as a product of our own way of categorizing the world. The second is a historical and cultural specificity in the way we understand the world. Our knowledge and world views only obtain meaning through a historical and cultural context and the way we understand and represent the world always is contingent i.e. our world views and identities could have been different, and can be changed over time. Further, our understanding of the world is seen as constructed and maintained through social processes. Here, knowledge is seen as a product of social interactions and where certain world views makes certain actions natural and other unthinkable. That is, particular world views lead to particular social actions and where social construction of knowledge and truth has concrete social consequences.
3.2 Discourse and identity

Identity, as it is understood in this thesis, is something that one negotiates in discursive processes. Hall (1996) writes identities are constructed within discourse and must be understood as part of specific discursive formations and practices. Continuing on this reasoning identity is to identify oneself with “something”, where “something” are the subject positions the subject is offered by discourses. Identification is described by Hall as a double process where “identity” is a temporary attachment or meeting point between discourses which speaks us as social subjects, and the psychological or psychical processes which produce us as subjects which can be spoken. This double process is never complete. Identities are in a constant process of change and transformation where they are constructed across different practices and discourses. In this study the identities of the local solar technicians are seen as incomplete and in a process of becoming something new and not predetermined. Discourse theory understands identities as relative, incomplete and unstable since they are constructed by shifting discursive resources. Each individual has several, flexible identities that are products of different discourses. As explained by Hall (cited in Winther Jørgensen & Philips, 2000), the process of understanding oneself is done through choosing one version of self before all other available versions of self. This is just a temporary closure through which one shapes ones identity.

Discourse theory uses the concept of *interpellation* to capture the process through which language “hails” an individual to identify to temporally attach to a subject position. Further, the subject is fragmented; that is, it is not positioned in one place by one discourse, but in several places by different discourses. If opposing discourses try to organize the same social sphere, the subject is interpellated in to multiple positions at the same time and is said to be over determined. Since, discourses always are contingent, the subject is always over determined, that is, there is no single specific subject position for the subject, a certain identity is possible but not necessary (Winther Jørgensen & Philips, 2000). The growing involvement of multinational corporations in global development issues has led to the emergence of new subject positions for people to identify with, which makes the question of “what one can become” even more interesting to study. Nonetheless in the case of local solar technicians. Discourse theory uses the concept of *myth* to capture the dynamics of identification as a constant process and describes the “true whole self” as a fiction, which the subject strives to reach but never reaches (Laclau & Mouffe, 1985). In this sense, the subject not only is over determined, but also never fully determined and always strives to “find itself” in the discourses. Another, for this thesis, relevant concept is *antagonism*, which describes conflicts between different identities. Antagonistic relations between different identities are not
there by default but arise when different identities place conflicting demands on ones actions in the same sphere, that is, antagonisms can be found where different discursive resources clash (Winther Jørgensen & Philips, 2000). In the studied case of this thesis there is a possible clash between traditional global development discourses and contemporary discourses like corporate social entrepreneurship discourse concerning the role people living in poverty have in changing their own socioeconomic situation.

For a subject to be attached to a subject-position effectively, it is required that the subject not only is “hailed” but also actively invests in the subject position. Identities are about how one uses the resources of history, language and culture in the process of becoming rather than being and can always be “won” or “lost”, sustained or abandoned (Hall, 1989, 1991, 1996). In this thesis the understanding is that the local solar technicians not only are placed in specific subject position by discourse, but also actively invest in forming their own identities. The subjects active investment in its own identification can be described in the terms of agency. Agency refers to an individuals ability to act in any given environment, including the subjects ability to escape from discourses that initially constructed it (Lilja & Vinthagen, 2009). The subjects constant process of change and transformation encompasses agency in form of the individuals active and reflecting relationship to the constitution of the own subject. Each individual has agency, or the capacity, to take and renegotiate different subject positions and believe in different discursive truths. At the same time, discourses make certain ways “to be” more attractive than other and effects how we choose characteristics and subject positions as our own (Lilja & Vinthagen, 2009). Amartya Amartya Sen, quoted in (Lilja & Vinthagen, 2009) argues that since agency includes the individuals interest and active involvement in the improvement of ones life situation, it also is an important factor in poverty alleviation. In the case of the local solar technicians, it is interesting to study their understanding and ability to improve their own and others life situation in terms of agency.

Discourse theory understands group identity, or collective identity, through the same principles as individual identity. People are constituted as a group when individuals are equated with each other by certain characteristics and where certain identities are possible, while other are not. In this sense, group formation is understood as a limitation of possibilities. An important part of the process of group formation is representation. Since the group, just as the individual, is not predetermined in the social context, it starts to exist when expressed through words. It is in the moment when someone speaks about, to, or on behalf of the group, that the group is constituted (Winther Jørgensen & Philips, 2000). In the case of this thesis, the local solar technicians are represented
through the language of corporate social entrepreneurship discourse that speaks about them as a group with certain characteristics and possibilities in life.

3.3 Discourse and material objects
Material objects increasingly makes us who we are and play a significant role in constituting the world and the relations we have to others (Braun & Whatmore, 2010). In the case of the local solar technicians, solar technology plays a central role how their identities are shaped and can be seen as a medium, through which they can express themselves and relate to others. To analyze how the identities of local solar technicians are shaped by both discourse and material objects, this thesis will understand material objects in terms of *materiality* which embodies the matter out of which the world is composed, the nonhuman things that are part of our everyday life. Further, there relation between discourse and materiality plays an important role in identification and will be a central part in the analysis of how the identities of solar technicians are shaped in the context of solar technology dissemination.

In order to avoid privileging either discourse or materiality, this thesis will use *relationality* as a methodological principle to critically analyze the relation between them. Relationality understands subjects and objects, discourse and materiality as co-constitutive and not pre-existing their relations. The indivisibility of subject and object will in this thesis be understood through *performativity*, a conceptualization of subjects and objects and their relations as produced and embodied, fixed and categorized through repetition of particular discursive/material relations. That is, matter and meaning are articulated together and at the same time through repetitive representations and articulations that construct a social phenomena (Aradau, Huysmans, Neal & Voelkers, 2015)(Barad, 2003).

Based on the principles of relationality and performativity, material objects are studied as phenomena and not as “things”. Here, matter is an active factor that shapes how subjects and objects are constructed, regulated and materialized in discourse. The dynamic of material things will be understood through what Aradau et al. (2015) call *material agency*. In the case of this thesis “material agency” implies that there are some active and powerful nonhumans like solar technology, electrons, the sun etc. that play an important role in how corporate social entrepreneurship discourse interpellates subject positions for the solar technicians to attach to and how the solar technicians understand themselves in the context of solar technology dissemination to the local community. Further, human action in relation to material objects can never be fully anticipated, that is, there are
constant so called *intra-actions* between individuals and phenomena that (re)configure and (re)articulate the phenomena so that it becomes meaningful for the individual (Barad, 2003). Subjective observation and understanding of solar technology by local solar technicians can be seen as specific intra-actions that express agency, or the local solar technicians' active involvement in shaping their identities.

### 3.4 Addressing the research problem through theory

When examining which subject potions that are offered to the local solar technicians by corporate social entrepreneurship discourse, the term *representation* will be used to study how corporate social entrepreneurship discourse equates local solar technicians by certain characteristics and constitute them as a specific social group. This thesis will use *interpellation* as a concept that describes how the local solar technicians are “hailed” to temporarily identify with subject positions offered to them by corporate social entrepreneurship discourse. To examine how corporate social entrepreneurship discourse plays out in the way the local solar technicians understand themselves, this thesis uses the concept of *myth* to capture identification as a constant process and the subject as a fiction the never will be fully determined. The local solar technicians ability to actively invest in the subject positions offered by discourse will be understood through *agency*. The role of solar technology in the local solar technicians identification through discourse will be approached in terms of *material agency* and *intra-action* and understood through *relationality* and *performativity*. To capture the complexity and dynamic nature of identification and identity, this thesis will understand subjects as *fragmentet*, and *over determined*, that is, interpellated in to multiple places by different discourses at the same time. The term *antagonism* will be used to address conflicts that arise when different identities, that are products of different discourses, place conflicting demands on the actions of the local solar technicians.
4. Methodology
This chapter presents how the data has been collected and interpreted through the theory and concepts that were presented in chapter three, and discusses the methodological choices done during the project.

4.1 Understanding discourse and identity
Discourse theory understands the use of language, or discourse, as a social phenomena that can be described as a web-like structure of meaning which is in a constant process of changed. This web-like structure is built up of different elements like words and concepts, or what discourse theory calls signs that are linked to and get their meaning in relation to each other, centered around a number central or privileged sings, called nodal points (Laclau & Mouffe, 1985) (Winther Jørgensen & Philips, 2000). A discourse is established when each sign in the structure gets a unambiguous meaning in relation to the other signs. Due to the contingency in our understanding and representation of the world, a discourse only is a temporary closure of meaning that is in constant conflict with other discourses and thus never totally established. This means that the signs in a discourse never are locked to their positions and can acquire different meanings in different contexts. Specific discourses can at specific times in history, gain a privileged or hegemonic position from which they can construct meaning of the world (Winther Jørgensen & Philips, 2000). This thesis makes the assumption that corporate social entrepreneurship discourse, presented in chapter two, has gained a hegemonic position in the context of rural electrification in Tanzania and through social processes brings meaning to solar technology dissemination and poverty-reduction.

Discourse theory understands identities (or subject positions) as organized and established in a similar way as discourses. This study will conceptualize subject positions that corporate social entrepreneurship discourse offers the local solar technicians to temporally identify with as web-like structures of discursive and material elements. The signs of subject potions are called signifiers and get their meaning in relation to other signifiers centered around master signifiers, which are nodal points of identities. It is when one allows to be represented by a group of signifiers, centered around master signifiers, that one gets an identity. To capture the dynamics of identification, discourse theory conceptualizes the notion of the subjects as fragmented and over determined in terms of floating signifiers, that is, signifiers that are particularly prone to the attribution of different meanings. Studying floating signifiers can give a better picture of how different discourses try to give meaning to a social phenomena in their own specific way (Winther Jørgensen & Philips, 2000).
Discourse theory captures the temporal dimension of discourse and identity through the concept of *articulation*. Laclau & Mouffe (1985) define “articulation” as every practice that creates a relation between different signs so that the meaning of these signs is changed. Articulations constantly intervene with structures of meaning and thereby reproduce, or question discourses and identities. If discourse is the more abstract attachment of meaning, then articulations are specific actions through which meaning is expressed, and that further build or transform discourse. All forms of social expressions can produce articulations that place signs in relation to each other, and in turn give meaning and constitute certain discourse or identity.

Based on the methodological principle of relationality and the indivisibility of subject and object, material objects will be embodied in to the analysis through expanding the web-like structure of the subject positions offered by corporate social entrepreneurship discourse to include material objects as elements. Aradau et al. (2015) write that the constituting significance of a given discursive or material phenomena should be understood by the extent to which it is important as a point of reference, as a “node”, in a set of elements. In this sense, meaning is constituted through, a heterogeneous set of elements, that is, both discursive and material that through different forms of articulations are connected to each other in particular arrangements. These arrangements constitute subjects, objects and their relations through the principles of performativity, that is, as produced and embodied, fixed and categorized through repetition of particular discursive/ material relations.

### 4.2 Subject positions offered by discourse

Chapter two briefly presented the language of corporate social entrepreneurship discourse. However, a more detailed text study is required to be able to say something about what subject positions that are offered to the local solar technicians by corporate social entrepreneurship discourse. A number of texts have been chosen to represent corporate social entrepreneurship discourse and the language that interpellates subject positions for the solar technicians to attach to. The texts further represent the social processes that construct and bring meaning to the local solar technicians as social actors in the specific social context of solar technology dissemination in Tanzania. The first two texts are *The Base of the Pyramid Protocol: Toward Next Generation BoP Strategy* (Simanis & Hart, 2008) and *The fortune at the bottom of the pyramid* (Prahalad & Hart, 2002) written by pioneers and very visible proponents of market based strategies for global development and poverty alleviation and have been chosen to represent what I argue is the core language of corporate social entrepreneurship discourse. The UNDP report *Barriers and Opportunities at the Base of the Pyramid – The Role of the Private Sector in Inclusive Development*
(UNDP, 2014) extensively uses the language found in the first two texts and has been chosen to represents the use of corporate social entrepreneurship discourse in the contemporary global development agenda. Finally, four pages from Mobisol's web-page have been chosen to represents how corporate social entrepreneurship discourse reproduced in practice and are further specifically relevant for the case of the local solar technicians interviewed in this study. The pages are “Impact” (Mobisol, 2015a), “Akademie” (Mobisol, 2015b), “The Challenge” (Mobisol, 2015c) and “Products” (Mobisol, 2015d). Together, these texts depict the language of corporate social entrepreneurship discourse from the more general contemporary development agenda to the specific case of private led solar technology dissemination by Mobisol.

To find subject positions that the discursive structures indicate as relevant for the local solar technicians, this thesis will study how articulations in the texts presented above construct social positions for them to temporally attach to. Local solar technicians as a group of social actors only start to exist when equated by certain characteristics that constitute them in the social context. The emergence of an identity first has to pass through a name (Ho & Tsang, 2000) and the analysis of subject positions offered to local solar technicians will start with finding articulations of floating signifiers that set headlines for the subject positions. This is followed by an analysis of how the subject positions are organized and established as web-like structures of signifiers and master signifiers that get meaning through equivalence with each other. This will be done through close reading of the texts presented above. Understanding matter and meaning as articulated together and at the same time, solar technology and the local solar technicians relation to it will continuously be addressed in the analysis. That is, the researcher will simultaneously search for articulations of social positions, material objects and the relations between them.

Floating signifiers are further prone to the attribution of different meanings and become good indicators of how different discourses try to give meaning to a given subject position. This thesis focuses on analyzing corporate social entrepreneurship discourse while other discourses only will be mentioned as circumstances against which the analysis will be made.

### 4.3 How solar technicians understand themselves

The question of how local solar technicians understand themselves will be addressed through interviews with solar technicians involved in private sector-led solar technology dissemination to rural communities in Arusha, Tanzania. Based on the subject positions discussed in the first research question, spoken articulations produced during the interviews will be studied and analyzed through
discourse theory to get a picture of how local solar technicians understand themselves and their role in society through corporate social entrepreneurship discourse and other discursive resources. Ho & Tsang (2000) describe identification as a creative process where different forms of self-narration enables individuals to actively invest and be part of the constitution of the subject positions offered to them by discourse. In this thesis the solar technicians active relation to different subject positions will be understood as renegotiation and reorganization of equivalences between signifiers and master signifiers in subject positions offered to them by discourse. The solar technicians active investment and use of these subject positions as their own will be seen as acts of agency in the constant strive to find the “true whole self”. The ambition is to get an understanding of how the solar technicians use discourse in the process of forming their own identities and choose versions of themselves before other available versions when telling their narratives. The analysis includes indications of antagonisms between subject positions that place conflicting demands on the solar technicians actions. Continuously keeping in mind the identities of the local solar technicians as myths and never fully determined.

Studying how the interviewed solar technicians speak about material objects and how their articulations repeat or rearrange particular discursive/material relations will give a picture of how different material objects, as meaningful phenomena, play an active role in the identification of the solar technicians. Articulations of material objects will be understood as intra-actions between the solar technicians and material objects, that express material agency and the active role of solar technology in the identification of the solar technicians through discursive resources. Subjective observations and understanding of solar technology by the solar technicians express agency, or the local solar technicians active involvement in shaping their identities. The analysis will focus on how agency manifests itself in the specific set of elements, both discursive and material, and how these elements intra-related by the solar technicians in a way that gives them meaning. This thesis will use what Aradau et al. (2015) call *distributive agency*, to trace connections and relations between elements and analyze how agency is mobilized when the solar technicians use material objects like solar technology in their identification. The study of distributive agency focuses on the locations in the web-like structure where a set of connections between both discursive and material elements has the effect of generating particular actions or the engagement of the solar technicians in a particular form of activity. The question for the specific case in this thesis is how agency among the human/non human elements is part of the establishment of local solar technicians as social actors in the micro-environment that is private led solar technology dissemination to the local community in Arusha, Tanzania.
4.4 Interviews with local solar technicians

Articulations of how discourse plays out in how solar technicians understand themselves has been collected through open-ended semi-structured interviews with solar technicians locally trained and employed by Mobisol in Arusha. Semi-structured interviews depart in the individuals everyday experiences and allow the researcher to seek understanding of how the respondents conceive their world (Esaiasson et al., 2012)(McCracken, 1988). The interviews were conducted between December 2 and December 6, 2014 at Mobisol Academy, a training institution established by Mobisol in Arusha. The solar technicians were contacted through a local deputy technician coordinator for Mobisol and were selected based on their availability and willingness to participate in the interviews. At the time of the interviews, Mobisol had about 120 trained and employed local solar technicians in Arusha of which two were female (local deputy technician coordinator, personal communication, December 1, 2014). Four male solar technicians, ages 22-25, were interviewed in the study and will be presented as respondents A through D. The interviews were conducted in English and Swahili with the help of an interpreter. The interpreter was a 23 year old male engineering student hired by the researcher from Arusha Technical College and was chosen based on his comprehension of technical language, interest to the research topic and availability during the time frame for interviews.

Each interview started with a presentation of the research topic and the respondents were read and asked to sign a Standard Ethics Protocol (see appendix A) to protect their rights. Before the actual interviews the respondents were asked for permission for the recording of the interviews and if they had any questions. The interviews were further conducted with the help of interview questionnaires with thematic open ended questions (see appendix B) that ensured that the interviews were conducted in the same order with each respondent. The interviews opened with a set of simple biographical questions that gave an overview of the respondents background. The biographical questions were followed by two thematic sets of interview questions named “technology” and “community”. The first set of interview questions encouraged the respondents to talk about material objects and their relation to them and focused the interview on the respondents role as locally employed solar technicians. The introduction of technology related questions at an early stage of the interview made it possible to study how discursive and material elements manifested themselves in the narratives of the respondents through the whole interviews. The second set of questions encouraged the respondents to express their views on their role in the community. All interview questions were formulated in a non-directive manner that allowed the respondents to tell their stories in their own terms. The objective of these so called “grand-tour” questions was to “spring”
the respondents to talk without overspecializing the substance or the perspective of the conversation. The respondents were given plenty of room to talk and the investigator listened to key terms like; poverty, socio-economic opportunities, development and sustainability in the articulations of the respondents and pursued them with the help of so called “floating prompts”. Planned prompts were used to give the respondents something “to push off against” when the investigator wanted to pursue and discuss phenomena that did not emerge spontaneously in the course of the interviews (McCracken, 1988). The use of different prompts was a valuable tool to recover beliefs and actions that are seen as taken-for-granted by the respondent and to keep the focus through the whole interview. The interviews ended with a set of concluding questions focusing on temporal dimensions in the lives of the respondents with the objective to spring a conversation about their future.

Each interview was transcribed together with the interpreter directly after each interview session. The structuring and analysis of the data collected through the interviews was done from the particular to the general, beginning in the finest details of the interview transcripts and moving upward to more general observations (McCracken, 1988). First, each articulation in the interview transcript was observed on its own terms and it was investigated if it could be treated as entryway for a specific discussion. These observations were then expanded and developed in relation to the literature review and findings from the first research question. Different analytic categories were determined, while the attention shifted from the transcript to the observations themselves, and each observation was developed and analyzed through its interconnection to other observations in the same category. Patterns and themes from all interviews were then analyzed together, to say something about how the identities of local solar technicians are shaped by corporate social entrepreneurship discourse.

4.5 Methodological discussion
Discourse analysis does not follow any specific set of methods (Bergström & Boréus, 2005), which has allowed the researcher to build his own template for the analysis. The premises, theories and methods have been chosen so that they do not conflict each other and are consistent with the social constructionist view on language and reality and the key premises of discourse analysis approaches. The researcher has from the initial stages of a study engage in a two sided processes (McCracken, 1988) where he has acquired knowledge about the topic through a literature and cultural review while at the same time establishing a critical distance to his own visions of the world and where he has made an attempt to detach from his own categories and assumptions of the world. With an
extensive and reflective literature review the researcher further hopes that his preconceptions have had greater benefits than costs and created more distance than they have collapsed during the research process.

Since reality is constructed at the same moment that it is depicted and since there is no neutral language for observation, science discourse just as any other discourse produces knowledge, social relations and identities. That is, the researchers work is constructed by discourse and only provides on of many versions of the world. Through the whole research process, the researcher has reflected around how his own philosophical and theoretical framework has contributed to the construction of the discourses and subject positions that are analyzed in the thesis. There also lies a difficulty in studying discourses that the researcher himself, has a relation to or given view of. To keep his own “knowledge” and values out of the analysis, the researcher has actively applied reflexivity (Winther Jørgensen & Philips, 2000) in his research and taken in account his own position in relation to corporate social entrepreneurship discourse and the consequences his own contributions to the discursive production of the world can have on the results. The researcher does not explicitly add his voice to authors that position themselves critically against the ideological premises of profit-oriented business strategies in socioeconomic development but aims to analyze what has been said and written to understand what social consequences different discursive representations of reality can have.

The original aim of this thesis was to focus on the life stories in the narratives of the interviewed local solar technicians where the researcher intended to use a narrative analysis (Hinchman & Hinchman, 1994) to say something about the specific stories of the respondents. Due to language barriers and limited time for data the analysis was made more concrete and the aim shifted to investigating how discourse plays out in the identification of the local solar technicians. The methodological shift from a narrative analysis to discourse analysis does not effect the results of this study in a negative way since narratives are rich data sources filled with articulations where the respondents speak about themselves using discursive resources. The interviews were conducted before the research problem was reformulated and the limits of corporate social entrepreneurship discourse were set. This has only increased the validity of the collected data since the researcher did not have a delimited discourse in mind during the interviews which lowered the risk of leading questions and exposure to the investigators own preconceptions of the world.
The aim of a discourse analysis is to understand the specific and not to generalize. The fact that the respondents were selected based on their availability does not effect the research since they are not chosen to represent a group, but to be a sample that generates understanding of a social phenomena. On the other hand, only four of about 120 Mobisol solar technicians were interview. Even though four respondents can say something about how corporate social entrepreneurship discourse plays out in the way the local solar technicians understand themselves, more respondents would have provide the researcher with a greater amount of articulations that would have contributed to greater understanding of how identities are shaped in private led solar technology dissemination in Tanzania.

The interviewer effect (Esaiasson et al., 2012) or that the respondents may have judge the investigator by his gender, age, ethnicity, appearance and education etc. can have led to alterations in the answers of the respondents. The investigator being an educated white male from Sweden can have led to that the respondents, due to courtesy and respect to the investigator, may not have expressed their toughs and feelings in their full extent and can have been more positive in their answers. There is also a risk that the respondents have adapted their answers to what they think has been expected of them. Through the use of open ended questions during the interviews and plenty of room to speak, the researcher hopes to have minimized these effects. The interviews were further conducted at the facilities of Mobisol Academy which can have led to the respondents holding back on their answers due to Mobisol representatives in the vicinity. On the other side, the proximity to Mobisol's solar technology can have encouraged the respondents to talk about material objects and their relation to them in a greater extent.

Language barriers between the investigator and the respondents have further effected the reliability and validity of the data collected through the interviews. The interpreters English skills were lower than anticipated and effected the translation and transcription. Inaccurate and abbreviated translations during the interviews made it harder to follow interesting statements, ask follow up questions and look for key terms for planed prompts. Due to a limited vocabulary the interpreter could use words and expressions that altered the meaning of the respondents articulations or lead to misunderstandings and side tracks in the interview. Further, the interpreter altered his translations during the transcription of the interview material and words were replaced word and added details. Due to language barriers, the interviews can have resulted in narratives that are less rich in articulations that can say something about how corporate social entrepreneurship discourse plays out in how the respondents understand themselves.
5. Analysis

5.1 Subject positions offered by corporate social entrepreneurship discourse

Through close reading of the texts presented in section 4.2 the researcher investigates how corporate social entrepreneurship discourse constructs subject positions for the local solar technicians to temporally identify with. The construction of these subject positions is in this thesis understood as attribution of characteristics through articulations in the texts. These characteristics form the signifiers and master signifiers that organize and establish the subject positions as web-like structures.

The first step is to find the floating signifiers that name the subject positions are offered to the solar technicians. After close reading of the texts it appears that articulations in the texts simultaneously construct two subject positions that are central for how local solar technicians are shaped by corporate entrepreneurship discourse. The local solar technicians are offered to identify themselves as members of the local community or/and as employees for the company they work for. The solar technicians can choose to temporally identify themselves with one or both of the subject positions at any given time. While it is important to remember that there are many subject positions that a individual can identify with, this study will focus on the two subject positions presented above. These subject positions are not only constantly constructed and reconstructed by discourses but are also deposits of previous discursive practices (Wetherell & Potter, 1992) and include elements that can be found in more traditional global development discourses. The further analysis will show how recurring articulations in the texts construct community members and employees as two subject positions and how corporate social entrepreneurship discourse interpellates the local solar technicians to temporally identify with them.

5.1.1 Community member as a subject position

Corporate social entrepreneurship discourse equates community members with each other through certain characteristics or signifiers that make certain identities possible and other not. The literature review in chapter two showed that corporate social entrepreneurship discourse represents local community members in a way that puts their socioeconomic position at the center of who they are. Close reading of the texts representing corporate social entrepreneurship discourse clearly shows that the subject position is constituted in a way where poverty or being “poor” becomes a master signifier that other signifiers equate to and that gives to who the local solar technicians can be as community members. Since identities are constructed across different practices and by shifting
discursive resources acting in the same social sphere, subject positions constantly get new meaning. Global development discourses have during the years articulated people living in poverty in different ways and the meaning of being a community member has been structured through shifting structures of signifiers and equivalences between them. Poverty, or what it means to be poor, is particularly prone to the attribution of different meanings. Discourses that traditionally have held hegemonic positions in global development articulate people living in poverty in terms of material poverty and as passive receivers of development aid (Desai & Potter, 2008) (Odén, 2006).

Corporate social entrepreneurship discourse, just as more traditional global development discourses represents community members in terms of material poverty. The studied texts articulate people living in poverty as economic actors that are characterized by signifiers that say something about their ability to make good economic decisions. Community members are due to their economic situation characterized by vulnerability, limited opportunity and the feeling powerlessness that is said to lead to behaviors that undermine the individuals ability to succeed. UNDP (2014) write that “The pervasiveness with which poverty penetrates everyday lives affects decisions not only by narrowing the set of options from which one can choose but also by altering the mindset of the decision-maker” (pp. 112). Here, the economic situation of community members is not only equivilated with a narrow set of options but also with a altered mindset that leads to bad decisions which keeps them in poverty.

Corporate social entrepreneurship discourse further articulates community members self governing individuals and potential business partners. Prahalad (2006) writes that... the typical pictures of poverty mask the fact that the very poor represent resilient entrepreneurs and value-conscious consumers. What is needed is a better approach to help the poor, an approach that involves partnering with them to innovate and achieve sustainable win-win scenarios where the poor are actively engaged... (pp.3-4)

Corporate social entrepreneurship discourse attributes community member with an ability and potential to be actively involved in changing their economic situation. UNDP (2014) write that the individuals ability to act is one of the primary tools in defeating poverty and should be developed through skill development, goal-setting and empowerment. The potential of becoming empowered among people living in poverty is central in how corporate social entrepreneurship discourse constructs community members. Mobisol (2015b) write that “By providing training for young people in rural areas of sub-Saharan Africa... [Mobisol] contributes to the empowerment of rural communities... [and] provides local actors with appropriate resources to take “development” into
their own hands”. Being trained and employed by Mobisol, local solar technicians are articulated as empowered and are attributed a capacity to actively change their own economic situation. Corporate social entrepreneurship discourse articulates a dichotomy between being active and being passive, between being empowered and having a potential of becoming empowered that can lead to antagonistic relations between different subject positions that are offered to people in developing countries like Tanzania. Since the local solar technicians can identify themselves as both employees and community members at the same time, there can arise possible antagonisms that place conflicting demands on their actions. As community members they are still seen as poor, passive and with a limited ability to succeed, while as employees the solar technicians are empowered and actively involved in changing their own and others economic situation. The local solar technician that is interpellated by corporate social entrepreneurship discourse as a community member, temporally attaches to a subject position structured with both limitations and possibilities.

5.1.2 Employee as a subject position

The text study shows that corporate social entrepreneurship interpellates the local solar technicians to temporally identify themselves as Mobisol employees. Recurring articulations in the texts construct employees as a specific group of entrepreneurs. This study identifies entrepreneurship as a master signifier which other signifiers get their meaning in relation to and that is central in who the local solar technicians are expected to be as employees. Mobisol (2015b) write on their web-page that Mobisol Akademie was created “in order to train and equip entrepreneurs working as Mobisol technicians... with the optimal amount of knowledge to effectively service customers and to represent Mobisol as a leader in the sustainable energy industry in East Africa”. They further state that individuals that are planning to work as solar technicians for Mobisol are thought to be independent and self-employed entrepreneurs. Entrepreneurship is traditionally understood in terms of independence and as an alternative to employment. While corporate social entrepreneurship discourse still articulates entrepreneurship in terms of independence. It also equivalates entrepreneurship, or what it means to be an entrepreneurial employee, with characteristics that I argue place conflicting demands on the local solar technicians. When the local solar technicians are interpellated as employees they become both independent and self-employed entrepreneurs, and employees that depend on Mobisol for their income. This means that corporate social entrepreneurship discourse constructs local solar technicians through signifiers that expect them to behave in certain ways and limits the control they have on their economic decisions. This in turn limits the possibilities of who local solar technicians can become as employees.
Characteristics attributed to employees and signifiers equivalated to entrepreneurship will be presented in four different themes that together organize the subject position. The grouping of signifiers in different themes gives a better overview in the analysis and does not exclude that there are equivalences between signifiers in different themes. The four themes that will be analyzed are; personal traits and training, relation to the company, relation to the community, and relation material objects and technology.

5.1.3 Personal traits and training
The first theme centers around personal traits and skills that corporate social entrepreneurship discourse expects company employees to posses or acquire during training and work. Simanis & Hart (2008) write that corporate team members should be “selected on the basis of their entrepreneurial experience and passion for engaging issues of sustainable development through enterprise” (pp. 11). Mobisol (2015b) further express that “only a motivated, dedicated and well-trained team... can guarantee an efficient workflow, strong costumer services and ultimately, a sustainable electrification model”. Employees are expected to be passionate, motivated and dedicated to their work as entrepreneurs and are given meaning through signifiers based on the individuals independence from others. UNDP (2014) write that “Building self-efficacy and increasing empowerment are core components of the self-sustaining business models that define social entrepreneurship”(pp. 12). The local solar technicians are as employees expected to be; self-employed, self-controlled, self-efficient, self-determined, etc. where self-determination is understood as the individuals willingness or motivation to pursue and attain challenging goals that are important to ones life and future. This means that corporate social entrepreneurship discourse constructs employees in a way where they as entrepreneurs are expected to be in charge of shaping their own lives and to independently change their own economic situation.

Entrepreneurial employees are further represented through signifiers that relate to their knowledge and skills. To be certified as solar technicians and be employed as independent subcontractors of Mobisol the local solar technicians first have to complete a training at Mobisol akademie where they acquire basic knowledge of the companies sustainable electrification model (Mobisol 2015b). Trainees are expected to be young and talented and as Simanis & Hart (2008) express it “represent a pool of local and “field-tested” talent” (pp. 11). Already before starting their training and employment the local solar technicians are expected to posses talent which doesn't represent the community. UNDP (2014) further write that the training of employees “should build on the individuals natural striving for mastery and self-determination” and include the development of
knowledge and skills that “motivates entrepreneurial success...”. Through their workplace training, the local solar technicians become well-trained and educated entrepreneurs and acquire higher levels of knowledge compared to other community members. They further become bearers of modernity, a modernity that has been constructed by corporate social entrepreneurship discourse and further separates them other community members and put them in new social situations. By applying their knowledge and skills in their daily work, the local solar technicians are then expected to become specialists and develop job-specific skills that they can use to achieve long-term goals.

5.1.4 Relation to the company
The second theme centers around employees' relation to the company. Corporate social entrepreneurship discourse articulates this relationship as a “partnership” and constructs equivalences between entrepreneurship and partnership. Partnership is central in how corporate social entrepreneurship discourse gives meaning to the local solar technicians as employees. Simanis & Hart (2008) write that, when the foundation of a new partnership is established, it is “united by trust, mutual commitment, and a shared vision for a new business enterprise” (pp. 19). They further write that the relation between the two partners builds on “equal responsibility” and a “deep inter-dependency” that should develop in to a “shared organizational identity” (pp. 29). The texts articulate the business partnership as very close and personal where employees as team members are strategically involved and share business responsibility with the corporation. Corporate social entrepreneurship discourse constructs a dependency between the employee and the company that creates a internal duality in what it means to be an employee. The local solar technicians are at one side expected to independently shape their own lives while they at the same time are inter-dependent with the company they work for which can lead to conflicting demands on their actions.

Corporate social entrepreneurship discourse further constructs employees as representatives for the company they work for. Simanis & Hart (2008) write, that the training team members receive, should “instill a shared ethic and build a common base of skills... [and] develop and rehearses a shared representation of the corporation using a language appropriate to the local community” (pp. 11). They further write that to succeed, an enterprise-based approach to poverty alleviation needs “an embedded process of co-invention and business co-creation that brings corporations into close, personal business partnership with BoP communities” (pp. 2). Employees are not only expected to have a shared ethic with the company and an appropriate language to represent them but are also placed in a social role where they become an important link between the company and community.
5.1.5 Relation to the community

The third theme centers around employees relation to the local community. The business strategies promoted by corporate social entrepreneurship discourse do not only build on an inter-dependency between the corporation and its local employees but also on an inter-dependency between the company and the local community. Simanis & Hart (2008) write that the established business should be “locally embedded... [and] founded in trust and shared commitment between the corporation and the community” (pp. 41). The company is articulated as “socially embedded” in the community and the relationship between the company and the community is constructed to build on a mutual trust that is achieved through locally employed team members like the local solar technicians as “business ambassadors”. The studied texts articulate a bridging role for local employees that is crucial for the success of the corporations business projects in the community. Simanis & Hart (2008) express that “The strategic involvement of key community members can create powerful word-of-mouth “buzz” for the new business” (pp. 31). On their web-page Mobisol (2015b) further write that the local solar technicians “are entrepreneurs working within their own respective rural or semi-urban regions...[that] are already deeply rooted in their region and can thus effortlessly carry their newly acquired knowledge of modern solar technology... directly to their communities”. This shows how Mobisol articulates itself as “socially embedded” in the community, in a way that constructs local solar technicians as key actors for how solar technology is disseminated to the local community. The social role of the local solar technicians constructs equivalence between social and entrepreneur that is central in how corporate social entrepreneurship discourse gives meaning to the local solar technicians in their relation to the community. As social entrepreneurs the local solar technicians are at the center of Mobisol's social business strategies where they as entrepreneurial employees distribute solar home systems and are expected to positively influence the community through informing and educating about issues related to solar technology. The social role places them in new social situations where they are expected to act in ways that they are not used to, which in turn can effect how they understand themselves.

5.1.6 Relation to material objects and technology

The fourth and final theme centers around the local solar technicians relation to solar technology and other material objects. In the distribution, installment and maintenance of solar home systems, the local solar technicians develop a relation to a wide range of material objects that as phenomena play an active role in how corporate social entrepreneurship discourse constructs subject positions for the solar technicians to attach to.
Mobisol (2015a) present their solar technology service as a low-cost, high-tech solution [that] affords customers the opportunity to own a superior solar unit with high quality components resulting in a long-life system and a more sustainable electrification option. Harvesting the sun’s energy promises clear health benefits to people and the planet. Essentially solar energy is a sustainable, affordable alternative to fossil fuels... (Mobisol, 2015a) Recurring articulations like this construct solar technology as a modern, affordable, reliable and clean energy source that is beneficial for the health of both people and the environment and leads to a fixed understanding of it as a phenomena. The text study further shows that corporate social entrepreneurship discourse repetitively articulates material objects like solar technology in a way that gives them meaning through sustainability. UNDP(2014) write that “The role of the private sector in promoting a sustainable model of production and consumption will be key in terms of access and advancement of clean energy sources.” (pp. 106) and Mobisol (2015d) further point out that “It is of paramount importance that the energy solutions for developing nations are sustainable...”

As Mobisol employees the local solar technicians are distributors of solar technology to the local community and are actively involved in what corporate social entrepreneurship discourse calls sustainable electrification. Since discourse produces and embodies subjects, material objects and their relations at the same time, corporate social entrepreneurship discourse organizes and establishes subject positions, that the local solar technicians can identify with, at the same time as it gives meaning to material objects like solar technology. The literature review clearly shows that sustainability is central in how corporate social entrepreneurship constructs employees and their relation to material object. Sustainability is a master signifier that corporate social entrepreneurship discourse constructs equivalences to and that gives meaning to both material objects and the local solar technicians themselves.

In their work the local solar technicians develop a relationship to different material objects that co-constitute them as employees. First of all the solar technology they distribute.

Mobisol solar home systems come complete with several LED light bulbs, portable lantern, mobile phone charger and balance-of-system components including wiring and switches. The plug’n play Mobisol systems are quickly installed by locally trained and certified Mobisol technicians...

(Mobisol, 2015d)

These systems are further monitored via so called solar controllers with GSM modems and are paid
through mobile phones and mobile banking services like M-Pesa. The solar home systems are in turn capable of giving energy to other material objects like, radios, mobile phones, TVs and refrigerators, that the local solar technicians have to develop a relation to. Solar technology is further presented as a sustainable, healthier and affordable alternative other technologies and energy sources. Mobisol (2015d) write that fossil energy sources are “leading to health problems and further worsening poverty effects...[and are] of great burden to the environment and global climate.” This means that the local solar technicians also develop a relation to material objects like car batteries, diesel generators, candles, kerosene lamps, and fires, that corporate social entrepreneurship discourse articulates as inefficient, unhealthy and harmful to the environment. All these material objects get their meaning through sustainability and co-constitute local solar technicians as bearers modernity and sustainability and play an important role in who the local solar technicians can become.

5.2 How local solar technicians understand themselves through discourse
Observations in the collected interview material, of how corporate social entrepreneurship discourse plays out in the way local solar technicians understand themselves, will be thematically presented in three sections; identification with subject positions offered by discourse, intra-actions with material objects, and renegotiation of subject positions to “find one self” in discourse.

5.2.1 Identification with subject positions offered by discourse
During the interviews the respondents are temporally interpellated to and actively invest in subject positions offered to them by corporate social entrepreneurship discourse. Expanded observations in the interview material clearly show that the respondents articulate themselves as community members and employees in different ways. One of the respondents articulates his work as a solar technician in terms of a increased self-reliance

At the moment I am working with Mobisol company so I can get the tuition fees... I can now rely on my self instead of being dependent of my parents. But also the time for study has increased as I can take a lot of time studying using solar energy technology... (respondent A)

The respondent not only describes himself as a Mobisol employee with a increased capacity to change his own economic situation but also as a community member and receiver of Mobisols solar technology. When asked to described the community that receives solar energy technology from Mobisol, the same respondent answers. “For us living in the rural areas we can now afford a source of power at our low income... Also for the technicians installing the solar energy technology it has brought opportunities in form of employment and money for future studies” (respondent A).

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2 Mobile phone-based money transfer, financing and and micro-financing service launched in Tanzania in 2008
He further articulates his socioeconomic position and empowerment of community members that is central incorporate social entrepreneurship discourse. This indicates a strong identification as a community member. Another respondent articulates himself as both an employee and a community member in the same answer. “People are happy of the technology especially those living in rural areas... for instance I installed the solar panels at my family's house and now all the family members are happy...”(respondent C). Both respondent A and C articulate a close connection between being a Mobisol employee and a community member which indicates that corporate social entrepreneurship discourse interpellates local solar technicians as both employees and community members at the same time.

When encouraged to express their views on their role in the community the respondents articulate themselves as employees that are service providers and educators in the community.

I have two roles in my community as related to solar energy technology. First it is serving my community as related to solar energy technology. Second is to educate the community on the advantages of using solar energy technology power as compared to other sources of power.

(respondent C)

The respondents further articulated themselves as experts in solar technology and as knowledge bearers in the community. One respondent put it as “...after becoming an expert of it I was allowed to work with the company for different installments of solar panels “(respondent A). Articulations like this indicate that the respondents identify themselves as well-trained entrepreneurs and differentiate themselves from other community members. The educating role of the respondents as solar technicians is further central in all four narratives and three of the four respondents explicitly articulated themselves as educators. One respondent puts it in the following way: I educate people... tell them about the benefits of using solar energy technology compared to other sources of power... I educate the society about the maintenance of the solar panels... [and] proper use of solar energy technology in relation to weather changes (respondent A). This means that the respondents are interpellated as social entrepreneurs, a social role that is key for how solar technology is disseminated to the local community. With their specialist knowledge in solar technology they are expected to positively influence the community through informing and educating about issues related to solar technology. When asked about how solar technology is presented to the community one of the respondents answers

I advertise the technology to the community through marketing. We often go to social gatherings like markets and we display some equipment samples of the solar energy technology and tell people how those equipments work... but also we have got advertisements of which we provide to different
Articulating himself in this way indicates that corporate social entrepreneurship discourse not only interpellates him as an educator in solar technology but also as a representative for Mobisol that is expected to spread the companies business ideas through a “word-of-mouth buzz” in the community.

Early in one of the interviews it became apparent that the interpellation of the respondent as both a employee and a community member places conflicting demands on his actions.

At the moment I am working with Mobisol company so I can get the tuition fees since my parents can't afford my studies. I am a bachelor and I still live with my parents... I studied a little bit about electronics in 2007 but I postponed it due to the economic status of my family” (respondent A)

While the respondent at one side is interpellated as an independent employee and entrepreneur capable of changing his own life situation, he and his family are still economically dependent of the company. This indicates that the interpellation of local solar technicians as both community members and employees can lead to conflicting demands on their actions in life. The respondents articulated situations where these conflicting demands become apparent in their role as Mobisol representatives. “At the beginning when I introduced this technology to my local community, many people took it in a positive way but some people who took it in a negative way thought that I was lying and probably thought that it was trick to steal their money.” (respondent C). Here the respondent was placed in a situation where he as an employee and representative of the company is mistrusted by the community he himself is a member of. Corporate social entrepreneurship discourse constructs him as a good ambassador for solar technology while the community sees him as a lair, a situation that can complicate how he sees himself as an employee.

5.2.2 Intra-actions with material objects

Early in the interviews the respondents were shown a photo of one of Mobisol's solar home systems and were asked to describe it to the investigator. This was done to trigger the respondents to articulate intra-actions with solar technology. In their answers the respondents chose to focus on different components and articulated both brief descriptions of the whole system and systematic reviews of all components and their functions. The different articulations indicate that the respondents relate to and intra-act with Mobisol's solar technology in different ways and that it has different meaning for them in their lives.
When asked to describe solar technology with three sentences the respondents mainly re-articulated solar technology in the way it is embodied by corporate social entrepreneurship discourse.

First of all it is environmentally friendly technology because it does not pollute the environment. It prevents diseases which are results of fumes produced by fuel when given light. It is possible for people with low income to get the technology since it is cheap. (respondent C)

A description that could have been taken from the web-page of Mobisol. This re-articulation of solar technology as it has been constructed by corporate social entrepreneurship discourse and Mobisol shows that corporate social entrepreneurship discourse plays an active role in the constitution of the local solar technicians relations to solar technology. This becomes especially apparent when another respondent describes solar technology through almost the same three sentences.

Solar energy is environmentally friendly since it does not pollute the environment. It also has little defects of using it because it can't bring fire outbreak in the house. This solar energy is affordable in the local areas where the supply of power from other sources is scarce. (respondent A)

Both respondents started their articulations by describing solar technology as environmentally friendly which, even though the articulations did not include the word sustainability, indicates that sustainability is central in how the respondents understand and relate to solar technology. This expresses the local solar technicians as bearers of sustainability and indicates that they understand solar technology in relation to other material objects that are seen as inefficient, unhealthy and harmful to the environment. All four respondents further describe the technology as affordable and/or as a source of income for the community that receives it and once again repeating the discursive/material relations that have been constructed by corporate social entrepreneurship discourse. One of the respondent develops his answer.

...also people with high income can install the technology if they wish because the technology is environmentally friendly and is highly sustainable...This technology can be used with all classes of people in the community of low income, middle income and high income. (respondent D)

In his articulation, he widens the understanding of the community that receives solar technology and rearranges the discursive relations constructed by corporate social entrepreneurship discourse. By intra-acting with solar technology in his own way he places it in a bigger contexts and relates it to all social classes in the community.

When talking about his work in the community one of the respondents articulates more negative and antagonistic relations to the technology he works with.

We can be sent by our company to make maintenance for a single problem within the system but later on the are other problems within the same system and according to the condition of the
customer we are forced to combat those problems but the company accounts only for a single problem which was expected to prevail. There is no any added payments done for the problems which were not expected by the company. So far the lack of motivation for the work I do as the company's technician brings heart breaking. (Respondent B)

Instead of articulating solar technology in terms of sustainability or affordability, the respondent understands it as part of an unsustainable life situation. His intra-actions with solar technology have re-arranged the understanding of it provided by Mobisol and constructed equivalences with maintenance problems and poor working conditions.

The respondents were further asked about their experiences with solar technology. When asked about why he started working with solar technology, on respondent answers “Solar technology is something I admire to work with and because it is something that gives me income. But I also admire the technology.” (respondent A). An articulation that expresses a dual relation to solar technology. Corporate social entrepreneurship discourse has constructed his relation to solar technology as an instrument to generate income and obtain a better life situation, but the respondent understands solar technology as something more. This indicates that solar technology not only is central role in how local solar technicians identify themselves but also can lead to conflicting demands on their actions, today and in the future.

I hope that one day I will be able to study more about the technology and become a professional as an engineer in solar energy technology. Also I hope to make necessary discoveries that can improve the solar energy technology.(respondent C)

Not articulating Mobisol's solar technology as something flawless but something that he can improve, the respondent re-arranges the material/discursive relationship that corporate social entrepreneurship discourse has constructed for him which indicates that solar technology is more than a way to get income for him.

When asked about how solar technology was received in the community the respondents expressed a change of attitude in the community. “At the beginning people had a poor attitude to solar energy technology but as I installed solar energy technology to some of them, it was a demonstration to others and later the attitudes changed.” (respondent A). “People who acknowledged the technology and installed it became good ambassadors for the technology and could convince the people who thought it was trick to steal their money.” (respondent C). By re-articulating solar technology as constructed by corporate social entrepreneurship the respondent re-arrange other community members relationship to it and provides them with new discursive resources that will be part of their
lives and identities. Through its' material agency solar technology plays an active and powerful role in how whole communities understand themselves.

5.2.3 Renegotiation of subject positions to “find oneself” in discourse

The local solar technicians also actively renegotiate different subject positions offered to them by discourse. During the interviews, the respondents narrated brief life stories that all in unique way expressed their identities in a constant process of change and transformation. Observations in the respondents articulations indicate acts of agency where they actively reflect around and are part of the constitution of their own subjects and choose to believe in different discursive truths. When asked how his life has changed since he started working with solar technology dissemination, one of the respondents expresses a mutual exchange between him and people he meets in his work. “I have been meeting with different people who I have shared knowledge of different things and not only about solar energy technology.” (respondent C). The respondent renegotiates corporate social entrepreneurship discourse's understanding of him as a Mobisol technician and constitutes himself not only as a knowledge bearer but also a knowledge receiver. Through his interactions with the community he gains new perspectives in life that change the way he understands himself and the world.

In his narrative one of the respondents articulates his work as a Mobisol technician in terms of poor working conditions and cumbersome situations.

My life has changed a little bit... This is due to poor payments made by the company to its technicians in installation and maintenance of the system to the costumers. The life situation for technicians working with this company is not in the same level with people employed by the same company in other sectors. (respondent B)

The respondents negative articulations about his employment indicates that he actively reflects around the constitution of his own subject. He does not choose to believe in the discursive truth that corporate social entrepreneurship discourse has constructed for him, where his employment is described in terms of empowerment and the entrepreneurial employee's possibility to change his own economic situation. Instead he escapes the discourse that initially constructed him as an employee and articulates his and other technician's situation with totally different words. The respondent is given plenty of room to talk and continues with his life story about the poor working conditions for Mobisol technicians.

At the beginning people have got interest to do what I do. But by my experience people are interested in this because the don't know about the working conditions provided by the company...

Many of the technicians joined here with a big interest in working with solar energy system but at the
current time many technician have run away from this task due to the working conditions provided by the company. (respondent B)

When asked what he wishes for himself in his future work as a solar technician, the respondent once again returned to the perceived poor working conditions at Mobisol “I want to see improvements in the working conditions. I like what I do but the challenges make me heart broken” (respondent B).

Respondent B renegotiates himself as an employee and constructs equivalences between his entrepreneurial employment and powerlessness and sadness. This further indicates that the interpellation of him as a Mobisol employee is antagonistic since he does not experience the increased ability to make changes in and improving his life situation that corporate social entrepreneurship discourse attributes employees.

Concluding questions in the interviews were used to spring a conversation about life changes and expectations for the future. When asked how their life have changed since they started working with solar technology, the respondents expressed different feelings and thoughts.

One day I will do my businesses on electronics instead of working for Mobisol company all the time... I have planed to start my own company dealing with electronics especially solar energy technology. I will try my out-most to make improvements on the solar technology... (respondent D)

The respondents' answer indicates that in the process of becoming his true self he only temporarily identifies himself as a Mobisol technician and wishes himself something else in the future. When asked about who would do their work in the community if they wouldn't the respondents articulated different feelings to their role and attribute it with different importance. One of the respondents answers that “There is no one who can do it in my local community. But if it happens that someone else does it I will still do it since I admire my work.” (respondent A) while another expresses his role in the community ass less important “In my absence people who have already installed the solar energy technology do my work and educate their friends about the technology and can make simple connections of the technology equipment.” (respondent C). Diverse articulations like these indicate that the interviewed solar technicians understand their role as Mobisol employees in different ways and attribute it with different importance. Respondents A, C and D all share the desire become professionals in solar technology and to work with it in the future. But only respondent A explicitly articulates a future where he installs solar home systems in the community.

Respondent B is further the only of the four respondents who expressed a largely negative understanding of his work as a solar technician. The diverse articulations of their life situations indicate that corporate social entrepreneurship discourse plays out in different ways in how the respondents understand themselves and that they make active investments in and let subject
positions offered to them play different roles in their lives.

Expanded observations in the interview material further show that entrepreneurship, that is central in how corporate social entrepreneurship discourse constructs the local solar technicians as employees, is not explicitly articulated by any of the respondents. Instead of expressing themselves as independent entrepreneurs, the respondents articulate their employment in terms of dependence to the company. The interviewed local solar technicians reconfigure themselves as Mobisol employees by replacing signifiers of entrepreneurship and independence with signifiers of dependence and a insecure working situation. This indicates that they don't perceive themselves as empowered in the way that is promoted by corporate social entrepreneurship discourse and perhaps don't see it as a way out of their socioeconomic situation.
6. Discussion

The purpose of this thesis has been to contribute with better understanding of local solar technicians as social actors and how their identities are shaped by contemporary global development discourses. This has been achieved through a text study and interviews with four local solar technicians trained and employed by the Berlin-based company Mobisol in Arusha. The focus has been on corporate social entrepreneurship discourse and how it plays out in the narratives of the interviewed local solar technicians. The research problem was addressed through a discourse analysis where theories and concepts from discourse theory were used to answer two research questions. First a text study was carried out to analyze what subject positions that the local solar technicians are offered by corporate social entrepreneurship discourse. Then the narratives of the four respondents were then analyzed to investigate how corporate social entrepreneurship discourse plays out in the way the local solar technicians understand themselves.

Discourse theory has been applied on a wide range of empirical case studies of how subjects and identities are shaped by discourses (e.g., Glynos 2000, Griggs & Howarth 2000, Ho & Tsang 2000) and there is further a growing amount of critical research on the private sectors involvement in global development issues (e.g., Bonsu & Polsa 2011, Karnani 2007, Walsh et al. 2005). This thesis has applied discourse theory in a contexts where previous research hasn't focused on discourse and identity. By applying discourse theory on the case of the local solar technicians the aspiration of the researcher has been to address this knowledge gap and contribute with knowledge about how identities of specific actors are constructed and shaped by contemporary development discourses and private-led solar technology dissemination in developing countries like Tanzania.

6.1 Discussion of analysis and results

This study has shown that corporate social entrepreneurship discourse interpellates local solar technicians to identify themselves as community members and employees, subject positions that bring both limitations and possibilities for them as individuals. The socioeconomic position of the respondents is central through their narratives. Indicating that the construction of them based on their economic abilities plays a crucial role in their lives. Their ability to act as empowered employees, as constructed by corporate social entrepreneurship discourse, is not explicitly expressed in the narratives of the respondents. Instead they express a more dual relationship to their employment by Mobisol and articulate themselves as employees that depend on the company for their income. Their limited ability to succeed as community members clashes with how corporate
social entrepreneurship discourse constructs them as employees and can be problematic when they negotiate their identities and can have social consequences for them as individuals.

Based on the articulations of the four respondents this study has further shown how local solar technicians re-articulate and re-arrange discursive and material resources provided to them by corporate social entrepreneurship discourse. The local solar technicians use these resources to actively invest and reflect around the constitution of their own subjects. Some of the respondents extensively re-articulate themselves and material/discursive relationships in a way that corporate social entrepreneurship discourse has constructed for them. Other respondents make active re-arrangements and articulate themselves and solar technology in new ways. The local solar technicians' subjective negotiations of their identities in relation to the labels constructed by corporate social entrepreneurship discourse leads to different and unpredictable social outcomes in their own and other community members lives.

Solar technology is central in how the interviewed local solar technicians identify themselves. Intra-actions with solar technology during the interviews show that it has different meaning and relevance in their lives. The respondents only temporarily identify themselves as Mobisol employees on their way to achieve something else in life, which shows that they through acts of agency re-configure and try to escape from the discourses that construct them. The respondents' intra-actions with solar technology further show how local solar technicians re-articulate solar technology and other material objects in the way they are constructed by discourse. The interpellation of local solar technicians as social entrepreneurs leads to that the material objects that they are in contact with in their work, not only co-constitute their own and other community members identities but also become material and discursive resources for how whole communities understand the world.

Since the interviewed local solar technicians understand themselves as well-trained experts in solar technology and as educators in the community, they further differentiate themselves from other community member. This will effect their future lives and can have long term social consequences in the community. The material agency of solar technology will play an active and powerful role in how identities are shaped in the communities that receive it, and will have impact on how they understand themselves and the world. This in turn will be central for how the lives of people living in poverty are effected by the promotion of sustainable lifestyles and sustainable technology in contemporary global development.
6.2 Concluding reflections

The discourse analysis presented in this thesis has contributed with knowledge about how corporate social entrepreneurship discourse plays out in the way specific local solar technicians understand themselves. By analyzing what has been said and written, the researcher has gained knowledge about specific individuals and found interconnections that point out specific social consequences that are results from how they are represented by corporate social entrepreneurship discourse. This study has found how corporate social entrepreneurship discourse constitutes local solar technicians as a group of social actors and how it shapes their identities through specific labels and characteristics. Based on the extensive literature review and articulations of the four respondents, this study draws the conclusions that the constitution of local solar technicians as a group can be problematic for them as individuals and can lead to unpredictable social outcomes, since it does not reflect their own subjective understanding of themselves. This in turn effects how solar technology is disseminated to, and received by the local communities. The role of local solar technicians as social actors that promote specific world views and lifestyles further leads to that whole communities understand themselves through the words and believes of a few. The structures of representations and articulations of corporate social entrepreneurship discourse will thus have long term consequences in society and effect the lives of many.

Through the formulation of corporate social entrepreneurship discourse as a normative perspective in global development this thesis has attempted to make the views and language of the contemporary development agenda more available to the research community. The researcher further hopes that this study can contribute to positive change in society and a global development agenda that does not impose world views of a few, on communities around the world.

6.3 Further research

Since this study is based on a small amount of interviews with local solar technicians trained and employed by Mobisol in Arusha, the researcher can't make any conclusions on how corporate social entrepreneurship discourse plays out in the way local solar technicians as a group of social actors understand themselves. Other Mobisol technicians or solar technicians employed by another company and/or in other regions can articulate themselves differently and contribute with other insights in how identities are shaped by contemporary global development discourses.

To gain better understanding of how corporate social entrepreneurship discourse shapes identities of local solar technicians, further research can take different directions. It can include an extensive
analysis of corporate social entrepreneurship discourse, where an expanded literature and cultural review can result in a deeper understanding of how it constructs the world and identities and/or include an analysis of how other discourses clash with corporate social entrepreneurship discourse in the strive to represent the world. This will in turn result in a wider understanding of how contemporary global development discourses shape identities of different individuals. Another direction for future research is to encompass a larger amount of interviews and an analysis based on articulations of local solar technicians employed by different companies in different regions and countries. An analysis like this would contribute with a broad understanding of local solar technicians as social actors and how their identities are shaped by private led solar technology dissemination globally. Future research can also focus on the specific life stories of respondents where a narrative analysis can contribute with deeper understanding of different identities and say more about how the lives of specific individuals are shaped by discourses and material objects. An analysis based on a wide set of rich narratives and nuanced articulations can contribute with broad understanding of local solar technicians as social actors and deep insight in how discourses and material objects play out in the way they understand themselves and how their identities are shaped in private led solar technology dissemination.
7. References


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Appendix A – Standard Ethics Protocol

Hi,

My name is Lukasz Szychlinski. I am a student at the University of Gothenburg, Sweden and I am currently writing my Bachelors thesis at the School of Global Studies.

Thank you for your willingness to participate in this research project. Your participation is very much appreciated.

Just before we start the interview, I would like to reassure you that as a participant in this project you have several very definite rights.

• First, your participation in this interview is entirely voluntary.
• You are free to refuse to answer any questions at any time.
• You are free to withdraw from the interview at any time.
• This interview will be kept strictly confidential and will be available only to members of the research team.

Excerpts of this interview may be made part of the final research report.

I would be grateful if you would sign this form to show that I have read you its contents.

Signature: ________________________________

Name: _________________________________

Date: ________________________________

Please send me a report on the results of this research project. (circle one)

YES

NO

e-mail for those requesting research report:

___________________________________

___________________________________
Appendix B – Interview questionnaire

Biographical questions

What is your age?

Where do you live?
   - how long have you lived there?

Can you tell me a little about how you live?

What was your occupation before you were working with solar power?
   - do you have any other occupation today

Theme 1 – technology

Can you tell me about the first time you came in contact with solar technology?
   - can you recall your thoughts from that moment?
   - can you describe this first solar technology?

When did you start working with solar technology?
   - what made you start working with it?

Can you tell me something about the solar systems you work with? (show picture)
   - how does it work?
   - how is it installed?
   - can you describe the technology with only three words?

What do you think about the technology?
   - is there something you would like to change with the technology?

Theme 2 – responsibility

Can you describe the community receiving your services?
   - when was the community first introduced with solar technology?
   - what are the traditionally used energy sources in the community?
   - how are the attitudes towards solar technology in the community?
   - how has people’s attitudes to solar technology changed since you first started?

Can you describe a typical customer?
   - how do you find them?
   - how do you present the solar technology to them?
   - what do they usually know about solar technology?

How would you describe your role in the community? (What do you provide to the community?)

Who would do your work in the community if you were not involved?

Concluding questions

In what way has your life changed since you started working with solar technology?
   - what does solar technology mean to you today?

That do you wish for yourself in this occupation in the future?