

The role of moral leadership for sustainable production and consumption

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The role of moral leadership for sustainable production and consumption

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ABSTRACT

The principles, the actions and the vision that form the basis for sustainable production and consumption (SCP) are not unknown, but there is a considerable gap between knowledge and action, and behavioural incentives are not sufficient for system change. In this paper we explore a key missing ingredient in the work to promote SCP, leadership that is underpinned by ethical dimensions in its purpose, style and motivation. We show that current leadership styles are insufficient to generate the will and the human resources required for building SCP. The core of the paper is a comparative theoretical and ethical analysis of three leadership models designed to address complex adaptive challenges and with varying degrees of ethical dimensions incorporated. This enables us to evaluate the added value of incorporating ethical dimensions in leadership models and training. We analyse in more depth the most promising of the three models in this regard, the moral leadership framework developed by Eloy Anello and others at Nur University in Bolivia. We conclude that Anello's model provides a number of additional elements usually neglected in leadership models but that appear essential in generating the necessary vision, understanding and motivation to work for SCP. The evaluation of trainings in the moral leadership framework made so far indicate its potential for supporting transformational change, individual and collective, change that is essential in the promotion of sustainable production and consumption.

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1. Introduction

The need to transform the prevailing patterns of consumption and production, as they have been developed in the industrialised world and now adopted across the globe, towards more sustainable ones that respect the planetary limits and the entitlements of future generations is an often repeated claim and does not need much elaboration. It is supported by scientists from the Limits to Growth reports in the early 1970s and onwards (Meadows et al., 2004), to the recent effort to estimate (despite the methodological difficulties) how far humanity already has transgressed certain 'planetary boundaries' (Rockström et al., 2009). It has been estimated that as many as 60 per cent of the ecosystem services are degraded (Millennium Ecosystem Assessment, 2005).

The knowledge linking consumer choices with environmental degradation is mature. It is known, for example that 70—80 per cent of the life-cycle environmental impacts in society are accounted for

0959-6526/\$ — see front matter © 2013 Elsevier Ltd. All rights reserved. http://dx.doi.org/10.1016/j.jclepro.2013.06.045 by mobility, food, energy use in the home and house building and demolition, various sources quoted in Tukker et al. (2008). However, much remains to be learned about *how* to forge sustainable consumption and production (Tukker et al., 2010). Much work remains to elaborate the pathways on which societies can reach the required transformations in consumption and production, two activities that are closely linked in "a complex co-evolving relationship" therefore requiring systemic change at both individual and societal level (UNEP, 2012:11). This all amounts to system change (Tukker and Butter, 2007).

The limited progress we made so far indicates how challenging such transformations are. One major challenge in transforming our societies towards sustainability lies in adopting a systemic perspective and translating that into responsible and sustainable consumption and production patterns, worldwide, including the physical, social and institutional structures involved. The pioneers who take action towards this objective will exercise *de facto* leadership. Their leadership can empower individuals to transform themselves and the structures of society. Solutions that will help establishing SCP "need leadership that makes a difference" (Tukker et al., 2008:1220). Many questions can be raised around the role of such leaders. How important are they for driving change?

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What attitudes, skills and capabilities do they need to be effective? What patterns or styles of leadership are best able to enable deep societal change? In this paper we touch on these questions that have to some extent also been addressed in literature on sustainability leadership and complexity leadership, see for example Redekop (2010) and Uhl-Bien et al. (2007). However, our main research question concerns the possible added value of explicitly incorporating normative dimensions in leadership models, an aspect that is a relatively new topic in mainstream leadership studies (Palmer, 2009). These dimensions, that we can also refer to as ethical or moral dimensions, can be linked to at least three aspects of leadership: the objective of leadership, the style of leadership and not the least the motivational drive that is needed for those who decide to take up a leadership role for societal change. We approach our research question through a theoretical rather than empirical inquiry by comparing three leadership models (theories or frameworks) that to different degrees incorporate ethical and moral dimensions within them. In so doing we analyse in more depth the one of these models that is integrating ethical dimensions most deeply. Based on this analysis we conclude that adopting such a model that has ethical aspects at its core could speed up the transition to more sustainable patterns of production and consumption considerably if it were more widely adopted.

The paper proceeds as follows. The following section elaborates on the relationship between leadership and societal change. First we discuss the concept of leadership and its general role in societal change, then we elaborate on the normative characteristics of leadership that seem to be required for SCP and their ethical dimensions. In section three we describe the objective, methodology and normative starting points of the paper and in section four we move to the actual analysis of three leadership models that should have some potential to meet the requirements of leading for SCP. We first analyse two models, the adaptive and ecology models, somewhat briefly and then we look at the moral leadership model in considerably more detail. We conclude the analysis with a systematic comparison of the three models, particularly the way they address ethical issues and the related implications for their potential to promote SCP. Finally in section six we summarize our conclusions and suggest further research directions.

2. Leadership and societal change

Any type of fundamental change in a social system at whichever scale — populations, communities, firms, etc. — depends both on individual actions and on the ability to channel individual action into collective enterprises that change the basic structures of the system that in turn further empower individuals to act responsibly. This is definitely also the case for efforts to promote SCP. We argue that leadership is an important element in system change.

2.1. Leadership

The literature that has explored pathways to system change for sustainability is characterised by something of a mismatch. There is considerable emphasis on the role of sustainable consumption to drive change, thus emphasizing the role of individual behavioural choices and neglecting the potentially larger influential role that governments could have on driving both production and consumption in more sustainable direction through e.g. regulation and taxes (Stevens, 2010). But also the literature that does include a strong emphasis on production and innovation, such as the sociotechnical transitions literature, neglects the role of leadership. For example, in the book synthesizing a six-year research project on transitions, there is no reference to leadership (Grin et al., 2010). Similarly, in a volume summarising the result of a major

EU project on SCP, leadership is only mentioned once as crucial to establish at all levels within business and beyond in governments and NGOs and thus not systematically analysed (Charter et al., 2008).

These examples show how the role of individuals and individuals as leaders can be obscured in analysis of large scale societal change. At the same time it is clear that individuals can only have a limited influence on e.g. consumption. Changing consumer behaviour towards sustainability is only likely if motivation/intent, ability and opportunity are simultaneously addressed, Sto et al. quoted in Tukker et al. (2008). For example, the interest of individual consumers to use renewable energy for their house and transport is not possible until there is enough pressure in society to create the supporting structures for the increased production of e.g. solar and wind energy. The ability and opportunity often has to be created by larger governance structures around people. However, also in these structures we find individuals within organisations, within networks, and within communities. In all these contexts individuals can exercise influence and thus potentially perform the role of being leaders.

Leaders are people who have a larger than average influence on their environment and thus have higher potential to change it or prevent it from changing depending on the pattern of leadership they adopt. It is only in groups that the concept of leadership emerges and the role of leaders becomes visible, leadership "always occurs within the context of others" (Gini, 1997:325). Palmer (2009) refers to the core of leadership as being the motivation of others to act in light of a common aim. While change can start with individuals, change at a larger scale is needed to accomplish SCP. People may make every effort to do their share to create a better world, they need the back-up of some informal group where they meet likeminded people and find support and inspiration. What the leader is in his or her own environment, this informal group may become in society, especially when the group starts activities of its own. It is in a collective context, in groups of individuals working together in partnerships that the seeds for change are usually born and can take off, see for example Toynbee's (1939) discussion of creative minorities or the role of robust networks of actors in the niches where innovation takes place in socio-technical transitions (Smith et al., 2005).

Brundtland (1994:245), the chair of the commission that broadly launched the concept of sustainable development, argued that the challenge of moving to sustainable consumption will "test our ability to lead". This undoubtedly is true also for the challenge of moving to sustainable production.

2.2. Normative leadership characteristics required for sustainable consumption and production and their ethical dimensions

Exercising leadership for SCP, and for addressing many other challenges of a mature society (see discussion below), requires different qualities of leaders than what has been sufficient in societies before. Change towards sustainability involves dealing with high degrees of, for example; complexity, uncertainty and interdependence. The challenges of change for SCP are complex in the deep system changes that need to be accomplished. They are uncertain in, for example how environmental degradation (like climate change) and social and economic changes will play out in reality, what policies are more effective and/or legitimate and what various actors will be willing to do. The challenges display interdependence over space and time between all inhabitants of the globe including future generations. Furthermore, working for SCP requires a long-term horizon and persistent action over that horizon considering that a full transition can take several decades (Tukker and Butter, 2007).

The leadership characteristics that these challenges call for all have implications for the normative dimensions of leadership and the ethical components therein.¹ The need for what can be called good leadership can be viewed from two perspectives; one for pragmatic reasons where good leadership means "instrumentally effective leadership" as has been the dominating approach in social scientific research on leadership (Palmer, 2009). However, it can also imply ethically responsible leadership (Palmer, 2009). In our paper it becomes clear how interrelated the two perspectives are, that ethical leadership indeed is a prerequisite also for effective leadership for SCP. Following in part the work of Palmer (2009) who applied a three-level ethical analysis of leadership, we analyse three ethical dimensions of leadership: the purpose of leadership, the style of leadership and finally the individual motivation for taking on such leadership.² We introduce each of these three dimensions in the following three sub-sections.

2.2.1. The purpose of leadership

Firstly, and most fundamentally, the purpose of leadership relates to the question what we are asking leadership for? What is the leadership mission? For example, is it for a collective social good thus benefitting many, or for a more narrow good for a limited number of persons? This basic aspect of leadership relates to the "leadership vision itself", the "ideal for which the efforts of both the leaders and those who follow him or her are to be directed" (Palmer, 2009:528). Naturally the ethical evaluation of the larger mission of a leadership can vary considerably among groups and individuals. The purpose of leadership should not be confused with the personal motivation of leaders (see Section 2.2.3 below). It relates rather to having both a common mission and a vision of how to achieve it. The latter aspect – the how question – is then closely linked to the styles of leadership (see 2.2.2). It is clear that the objective of establishing a system of SCP is very much a social good that would benefit not only current but primarily future generations and the ecosystems they rely on. It requires long-term horizons beyond any single election period or even lifetime and it requires a global outlook beyond the borders of any one state. Since both production and consumption of goods are involved, it involves a very broad area of human life and touches on many aspects of human behaviour. Therefore, the ethical development of whole populations may be part of the purpose.

2.2.2. The style of leadership

The style of leadership concerns how, through which means, the goal of leadership is achieved. The means of leadership can be judged on both effectiveness and ethical grounds (Palmer, 2009). An ethical analysis of leadership styles centres much on the disposition towards and the patterns of relationships that a leader builds up with his/her group. This can entail, for example, whether they are based on mutual respect or dominance. Such a disposition is often manifested in the way a leader interacts with and seeks to motivate those he works with (Palmer, 2009). As for all ethical issues there are of course diverse views on what are good leadership styles in this regard, views that can be related to culture and societal background. Palmer (2009) argues that a minimum of ethical means of leadership involves the respect for people, thus considering as unethical styles of leadership that display e.g. deception,

threats, coercion or blackmail as they would not display respect for individuals but rather use them as means to an end.

The characteristics of the SCP challenge seem to require to move away from some old leadership styles that can be seen as less ethical. Such styles involve, for example, leading through: the power of position or authority; wrapping leadership in a veil of paternalistic or overprotective "love"; wiping out all knowledge of possible other contributors by claiming "superior" knowledge; or by plain manipulation to influence the outcome. These leadership styles – authoritarian, paternalistic, know-it-all, or manipulative leadership - all share the feature that they seek to dominate decision-making, serve an egoistic need for power, and completely neglect to develop the potentialities of the members of the group (Anello, 1997). Few would consider any of these styles as based on any ethical grounds and they are unlikely to be able to support ethical objectives such as SCP. One reason for the latter is that many of these 'old' leadership theories revolve around formal leaders and top-down hierarchical leadership. The new challenges linked to sustainability, however, "far exceed the capacity of any positional leader to comprehend or manage" (Allen et al., 1998:79-80). It is quite reasonable to assume that societal and indeed transformational change such as is needed to achieve SCP will require contributions from large numbers of individuals and groups and not only formal or positional leaders. Furthermore, the new type of challenges needs new elements of leadership styles that have the capacity to address complexity, uncertainty and interdependence. This involves leadership that, among other things, "increases our capacity to learn new ways of understanding, defining, and solving" problems but even more so leadership that develops "the capacity of organizations and people to respond" (Allen et al., 1998:63). Concepts such as complexity leadership, shared, collective and distributed leadership, see Avolio et al. (2009) for an overview, seek to capture leadership processes in this direction. The three leadership models we analyse below all belong to leadership styles that contain some of these elements.

2.2.3. Motivation behind leadership

Some individuals are explicitly motivated to take on a leadership role. Others may only be motivated to take action without thinking that people may be inspired and influenced by such actions and thus consider them to be leaders. In such cases, one cannot really say that such a person is motivated to take on leadership. So, when we talk about motivation behind leadership, we really mean the motivation for the actions that make up leadership. Such motivation concerns the personal values of the leader; most fundamentally whether they are driven primarily by self-interest or (also) by ethical (here understood as selfless) considerations.

As discussed above, the ability to lead for SCP will have to be shared by many people at different levels of society. This means that many individuals will need to have not only the ability but also the motivation to lead for this transformation. This aspect raises two fundamental questions. First, where can this motivation come from? Second, can this motivation be nurtured? Many leadership models do not address these questions and perhaps one reason is that they apply to positional leadership and are based on the assumption that there are sufficient material, reputational etc. rewards for being a successful leader. However, leadership for SCP will not always be rewarded in the same way. On the one hand such leadership can be exercised by individuals at any level in society, devoid of formal positions, quietly taking up the task, often without recognition from others. On the other hand, even if in some cases there are profits to be made around new 'sustainable' business models, there will be countless cases where there is no material reward for the transition, indeed it will involve short-term sacrifices for longer term gains. This implies that motivation cannot be solely based on self-interest.

¹ We here use the simple dictionary definition of ethical as morally correct or honourable behaviour (Allen, 1990).

² Palmer (2009) referred to these three levels as: the leadership mission, the means of leadership and individual morality of leaders. In particular for the third category we have narrowed the focus and do not consider all aspects of individual morality but focus on what motivates the leader to act.

Thus, the potential to find leadership for SCP would be much higher if one assumes that human beings have an innate ability to rise above the utilitarian rational self-interest model of behaviour that underpins much of current economic and political analysis and express altruism, see e.g. Mansbridge (1990) and Monroe (2003). Monroe's (2003) study shows that there is a scale of perspectives from rational actors to true altruists. This means that humans have the ability to move away from the culture of contest where egos strive for themselves or their own group to a culture of cooperation for the benefit of themselves and others, others not being limited to anything short of the rest of humankind (Karlberg, 2004). Howell's (2012) study on the motivational factors for individuals in England who had taken radical action towards adopting a low-carbon lifestyle – and indeed acted as leaders in this regard – showed that the strongest driver was concern for other people suffering the consequences of climate change, and the concern for the community in general.

Assumptions about what drives individual behaviour is an important aspect of how one looks at human nature. In Cultural Theory it is argued that one can distinguish four types of groups in society that vary in their capacity to accomplish change. Each of these have at its core a different concept of human nature: the egalitarian look at humans as born good and malleable, the individualists see humans as self-seeking, the hierarchist as sinful and the fatalist look at humans as determined by fate (Tukker and Butter, 2007). In these four concepts it becomes clear that assumptions about human nature not only influence perceptions of the potential for altruistic behaviour, but also the very much related question whether humans can change. Can the degree of responsibility and even altruistic concern be consciously cultivated and expanded through education in general or for example, leadership training? This is a crucial question when it comes to considering the potential of leadership frameworks that are based on assumptions of less self-interested behaviour. If humans are malleable then their motivations can also change for the better, for example through education and cultural influences. If human behaviour is determined by fate, then not much can be done. There is evidence that it is possible to nurture a culture of global solidarity through for example education or processes of cooperative interaction (Jäger et al., 2007). Research on training in the moral leadership framework from Bolivia analysed below indicates that it has considerable potential to change people's motivation to serve their communities (Anello, 1997).

3. Objective, methodology and normative starting points

The main objective of our paper is to evaluate the possible added value of explicitly incorporating ethical dimensions in leadership models in support of SCP. We approach this objective through a theoretical comparison of three leadership models³ each of which has been developed explicitly to deal with complex challenges: the adaptive leadership model (ALM) of Heifez et al. (2009), the ecological leadership theory (ELT) of Allen et al. (1998) and the moral leadership framework (MLF) of Anello (1997). We apply a theoretical analysis of each of these frameworks both in terms of the elements they include to address complex challenges, and an ethical analysis of the three levels described above; the purpose of leadership, style of leadership and motivation behind leadership. We make a more extended analysis of MLF as this is one of the most comprehensive leadership

frameworks we have found in terms of attention to ethical dimensions. Furthermore, it requires more detailed description as it has not yet been elaborated in scientific publications in English. The ALM and ELT were selected for comparison with the MLF for two reasons. Firstly because of their similarities in the sense of being developed to deal with complex challenges. Secondly because of their differences in how they approach ethical dimensions. Furthermore, the ELT was developed with explicit reference to Heifetz' work on adaptive challenges. These two models will serve as representatives of types of leadership models that have been developed in recent years aiming to address new complex challenges, a number of others could have been chosen to stand as comparison with the MLF.

Gini (1997:325) argues that, "[a]ll leadership is value laden" and driven by a certain philosophical perspective. As we are explicitly analysing ethical dimensions of leadership, which of course can be looked at very differently, we should also clarify the underlying values that underpin our approach to the analysis. The authors' own starting point for approaching this objective is an explicitly normative principle: the essential interconnectedness of life and the essential oneness of the human family. This means that each individual can be looked at as a cell of the same body for using a not uncommon metaphor. The feeling of concern for and responsibility towards humanity as a whole can be described as a matter of the maturity of society. Childhood is characterised by dependence, human beings live the way they are told to, adolescence by independence, where people keep themselves busy proving that they can think for themselves and exploring new avenues without considering consequences too much and maturity is characterized by interdependence, people have learned the limits of their independence and understand their interdependence and that they have to cooperate in order for life to develop and flourish (Covey, 1990). The condition of a mature and interdependent society means that impacts of decisions by individuals, groups or organizations have consequences far beyond its 'borders' on other communities and indeed the world and beyond the lifetime of individual leaders. It thus becomes clear that the "responsibility to consider implications of actions that extend beyond one's lifetime brings a spiritual, ethical or philosophical dimension to leadership processes" (Allen et al., 1998:76).

4. Three leadership models — with more or less ethical dimensions

In this section we will examine three leadership models that reflect recent efforts in leadership development and that all seek to address some of the challenges characteristic of the efforts associated with promoting SCP; complexity, uncertainty, interdependence and long-term horizons. We analyse how the models address these challenges and how they incorporate ethical dimensions on the three levels we outlined above; purpose, style and individual motivation.

4.1. The adaptive leadership model

Heifetz et al. (2009:62) present a theoretical model of adaptive leadership that examines a set of skills that positional leaders need to master in a sustained crises and a new reality characterised by an environment of "urgency, high stakes and uncertainty" as the authors expect most businesses and organizations to be in after the on-going financial crises. The reasons for this situation they find within the business sector itself and the economy, but also from other factors such as climate change. The authors suggest that leaders in this situation have to develop new skills in three areas;

³ The authors of these three models use different terms for them, Heifetz et al. (2009) refer to their 'model', Allen et al. (1998) to their 'theory' and Anello and Hernández (1996) to their leadership framework.

- a) Foster adaptation. For this leaders need to learn to: improvise and experiment; help the organization to confront loyalty to legacy practices; distinguish the essential from the expendable.
- b) Embrace disequilibrium. For this leaders need to: enable conflict, chaos and confusion to yield productive rather than destructive disturbance; keep their hands on the thermostat (letting the pressure on people in the organization not get too high); depersonalize conflict; and create a culture of courageous conversations (listening to everyone including dissenters of the majority views).
- c) Generate leadership. For this leaders need to: distribute leadership responsibility so going from formal hierarchy to organizational bandwidth and collective intelligence; mobilise everyone to generate solutions and leverage diversity.

The challenge of leading for SCP shares all three characteristics of the situation the ALM refers to. It is extremely urgent to achieve it or irreversible losses for example in vital ecosystem-services will take place. It has very high stakes because many of the current powerful unsustainable producers of products and infrastructures will have to lose ground (or reinvent themselves) and many powerful people who build their reputation and power on unsustainable consumption can (need to) loose influence. It is also characterized by uncertainty both in terms of fundamental questions such as 'how much' sustainable consumption is possible and in terms of what technologies will emerge in coming years.

Heifetz et al. (2009) define the purpose of ALM as the ability to tackle current challenges and build adaptability (to future challenges) and this in a context of a company/organization being in a situation of (permanent) crisis. It is a largely inward looking and reactive purpose. It is not focused on taking responsibility for the impact of the organization on the environment outside it.

Although the ALM speaks of distributing leadership responsibilities, its focus is still on the role of the positional leader, the CEO at the top of the organization. The leadership style is about involving as many as possible in the organization in addressing the challenges through frank discussions, managing conflict and thriving on diversity. Leadership is envisioned to need to 'orchestrate losses', and there is no goal of creating harmony (see ELT below).

There are hardly any references to the inner motivations of the individual leader in the ALM. It talks about the leader needing to express empathy for those he leads but this seems to be mostly for instrumental reasons (of getting people on board) and not ethically motivated.

4.2. The ecological theory of leadership

Allen et al. (1998) examine the character of the adaptive challenges (building on earlier work of Heifetz) the world is facing and develop an ecological theory of leadership (ELT) designed to be effective at addressing these. This leadership theory is explicitly developed to address, among others, the environmental challenges that SCP is supposed to address. The ELT looks at leadership as a process that "emerges from individual actions and interactions which influence systems both inside and outside an organization" (Allen et al., 1998:72). They summarize ELT in the following way (Allen et al., 1998:73):

- a) Effective leadership processes are characterized by a sharing of responsibility among all participants.
- b) Effective leadership requires a continuous emphasis on human development.
- c) Human development needs to ensure that there are sufficient skills present within the organization to recognize, analyse, and adapt to emerging adaptive challenges.

d) An organization's adaptive capacity is strengthened by greater diversity, in terms of skills, cultures, interests, and passions.

Based on this they develop a list of characteristics of open leadership processes in organizations where "any member of the organization may contribute to leadership processes" (Allen et al., 1998:74).

The elements of leadership that are part of the ELT in order to address adaptive challenges have some clear overlap with the ALM's list of skills that leaders need. Both models identify the need to disperse leadership on many individuals and stress the importance that diversity plays in developing skills to adapt to new situations. However, there are also differences. The ELT highlights the focus on continuous human development in a broad sense while the ALM does so in a more narrow and specific context of, for example, mobilizing everyone to generate solutions.

Regarding the three ethical levels of analysis, the purpose of ELT should be to "create a community of reciprocal care and shared responsibility and promote harmony with nature thereby providing sustainability for future generations" (Allen et al., 1998:76). This is a clear ethical goal with its underlying values of concern for those who may suffer the impact of leadership in a particular organization, impact that may "affect not just the corporation, but the community, and the world" (Allen et al., 1998:65).

The style of leadership the model prescribes is one where responsibility is shared, human development is a strong element and diversity is seen as an asset. The ELT also contains ecological principles that put an emphasis on leadership as relational, as a process that involves a whole web of interactions and should involve as many feedback loops as possible. The ELT, and the model we will describe below, imply a different concept of power than in many traditional styles of leadership where a leader's power comes in the category power *over* and thus implies the power to dominate. These two models rather envision a leader who has power *to*, the capacity to accomplish something, usually in consultation and cooperation with others which gives them power *with*: "People who are acting in a cooperative or mutualistic manner in the pursuit of a common goal are exercising 'power with' one another rather than 'power over' one another" (Karlberg, 2004:28).

The elements of ELT can certainly be seen as reflecting non-hierarchical relationships based on respect between leaders and group members and particularly respect for differences. However, the reasons for this style of leadership are primarily cast as conducive to effectiveness in the sense of learning to live together and with the environment and not explicitly linked to ethical considerations.

Allen et al. (1998) argue that in an organization that applies the ELT, everyone can contribute to leadership processes, that the mission of the organization is clear and all members are committed to its core values, and that all members of the organization share a standard of ethical conduct. However, the authors do not address how this can come about, what the motivation for individuals can be to take up leadership. They only make broad references to a general need for new values, attitudes and behaviours. There is a stark contrast between their emphasis on personal growth of individuals within an organisation and the silence on the 'inner' dimensions of leaders.

4.3. The moral leadership framework

If it is indeed necessary to "develop a critical mass of individuals who view leadership as a process that both develops others and moves us toward real meaningful change" (Allen et al., 1998:77) then the development of leadership models has to go hand in hand with training programs that aim to build this critical mass. This is

something that the developers of the moral leadership framework (MLF) have done from the beginning. The development of this leadership model did not primarily grow out of macro analysis of global changes as was the case with the ALM and ELT, it was the result of a "systematisation of the characteristics of individuals who have exercised moral leadership in world history" (Anello, 2001).

The MLF was developed over a series of years by educators at Universidad Núr in Bolivia and others who were engaged in development and education projects around the world. They identified the lack of leadership based on ethical values as a root cause of the challenges that such projects, and society at large, faced. According to the developers of the MLF each of the elements and capabilities are also supported by the writings of the Bahá'í Faith, in particular the work The Secret of Divine Civilization (Anello, 2001) Box 1.

The conceptual framework of moral leadership as developed at Núr University is in line with modern leadership theory, and it also gives a workable model that is striving for real hands-on practical results (Menking, 2003). The methodologies that are used in the training activities developed from the framework are diverse, but at the level of concepts there are four elements, Núr (1999) quoted in Menking (2003):

- questioning mental models, our traditional, often unconscious way of interpreting the world;
- constructing conceptual frameworks, replacing mental models with conscious patterns of belief and understanding;
- developing of capabilities, also called 'empowering for action', there are eighteen capabilities identified that are part of this framework;
- utilization of participatory techniques, practicing more horizontal and less vertical power structures

The developers of the MLF summarize the core rationale and elements of the framework in the following way:

"The world needs a new model of leadership dedicated to personal and collective transformation, totally committed to moral values and principles, based on the unfettered search after truth, inspired by a sense of transcendence, and guided by the exercise of capabilities in service to the common good." (Anello and Hernández, 1996:51).

In more detail the MLF is built up of six elements. The *first* element concerns the style of leadership: it should have a

Box 1General description of moral leadership.

Moral leadership must:

- Be a leadership that is fully aware of the dynamics of the processes of disintegration-integration which characterize our age, and consciously align itself with the processes of integration;
- Have a clear vision of the society it wants to create and some of the strategies that will help bring it into being, and on the basis of this vision and these strategies, actively strive to construct a better society;
- Entail a deep personal commitment to strive for individual transformation through the development and exemplification of a life based on ethical and moral principles, characterized by qualities of both uprightness and kindliness, and to strive for collective transformation through actions which promote unity and justice. Source: Anello and Hernández (Unpublished translation: 17).

"consistent orientation of service to the common good" (Anello, 1997:89). The MLF team argues that what "the world needs at this point in time is to transfer power from the individual leader and give it to the group. Leadership must be accessible to all, not just a privileged few" (Anello and Hernández, 1996:50). They further stress that a true service oriented leader is not motivated by a desire for personal gain, but by love, love for the community or for the persons whom she serves, love for mankind, love for the best results for the job she is working on, unselfish love as one can find in mothers and in many so called indigenous cultures in the world (Anello and Hernández, 1996).

The second element of the MLF is that the purpose of leadership is a "commitment to the purpose of promoting individual transformation and collective transformation" (Anello, 1997:89). Without transformation nothing substantial really happens. That also means that leadership needs a comprehensive systemic vision of the desired future. Even if someone is organising only a small detail for that future, she must still have the vision in order to make the right choices. Personal and social transformation support each other at different levels. The flaws of the system are in the end brought into it by the people working in it, and without personal transformation, they will bring in the same flaws again. On the other hand everyone needs the support of a group for her personal transformation.

The *third element* of the MLF is the "fulfilment of moral responsibility to search for and apply truth in all aspects of one's life" (Anello, 1997:89). Truth is of course a challenging and much contested concept, particularly in postmodern and critical discourses. Anello and Hernandez (1996:69) refer to contingent truth and ideal truth, or the facts as they are in the current situation or reality, and the desired future situation to be established, respectively. When they talk about the need to understand truth, it is a relative, but ever deepening understanding, and not an absolute one, that they refer to (Anello and Hernández, 1996). Ideal truth is normative and is based on principles. For the MLF team the goal is to transform the contingent truth, the way things presently are, in a way that is in harmony with the ideal truth, that is, based on principles.

The fourth element of the MLF is the "attainment of transcendence through vision" (Anello, 1997:89). With this term the MLF team argues that as a leader, it is necessary to have a certain distance from operational problems in order to keep the focus, the vision and the goal. In practical terms, they stress that transcendence can help people persevere when they encounter obstacles in their path of personal or social transformation. Transcendence is about the ability to see problems under all circumstances in a broader perspective and not get lost in details. When people make decisions and take action guided by values and principles based on their understanding of truth, this gives them a sense of connection with the eternal and generates an experience of transcendence. Therefore, a working definition of transcendence is the capacity to detach oneself from "current reality" and to connect with those values and principles which one believes to be of eternal worth and which form part of one's vision (Anello and Hernández, 1996:85).

The fifth element of the framework is very much related to the mental models that people have of the human being, it is the belief in the essential nobility and the potential goodness of the human being (Anello, 1997). Anello and Hernández (1996) discuss different assumptions about human nature and how it influences our social interactions (their discussion partly overlap with the categories outlined in cultural theory discussed in Section 2.2.3). They favour the view that humans are essentially noble, like mines rich in gems that have to be developed, cultivated, polished, etc.

The *sixth and last element* of the conceptual framework for moral leadership is the development of a number of capabilities. They have included eighteen such capabilities which all require knowledge about the concepts, and development of skills, attitudes

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and qualities that go with them. It is widely recognized that there is considerable need for capacity building in order to support a sustainable society. The capabilities that the MLF team considers vital are less technical or issue-specific than most current programs of leadership training or general capacity building. These capabilities are more fundamental for the ability of individuals to contribute to the common good by acting as moral leaders in a variety of collective arenas and thus contribute to social transformation.

These capabilities are, in their view, both necessary and within reach to develop by people of diverse educational and cultural backgrounds, whether they work in positions of formal leadership or not. They divide these capabilities into three categories: those that contribute to personal transformation; those that contribute to better interpersonal relationships; and those that contribute to social transformation. In this paper we cannot explore the eighteen capabilities, however, they are listed in Table 1. The MLT team stresses that the list is only indicative and not final, and that assigning individual capabilities to one of the three categories is often ambiguous.

For the first level of ethical analysis, the purpose of leadership, the MLF connects this very much to what is seen as the purpose of any group in which leadership occurs. The MLF identifies three generic functions of a group (Anello and Hernández, 1996:23)⁴:

- conserving and strengthening the unity of the group
- carrying out those tasks for which the group was created
- developing the potentialities of the members of the group

These functions thus become part of the core purpose of leadership, it includes and goes beyond the tasks the group or organization was created for. The first function is focused on building unity. This is a foreign concept in much societal discourse dominated by adversarialism and contest. Unity comes close in meaning to social cohesion that is seen as a requirement for the peaceful development of societies. Unity, however, is for the MLF team reaching deeper than the mere feeling of togetherness of people in a group; it represents a strong sense of common purpose and is based on genuine concern and love for the group members. The second function, carrying out those tasks for which the group was created, may seem obvious yet is sometimes neglected if the group's existence (e.g. in a bureaucracy) becomes focused more on survival for its own sake. The third function of developing the potentialities of the members of the group makes the group an arena where the potential of individual members are expanded, thus contributing both to their personal transformation, and indirectly to collective transformation, as group members in this way will exert influence in much wider contexts with which they interact. Finally, the overarching purpose of the leadership envisioned in the MLF is, as outlined above, serving the common good.

The style of leadership that the MLF encapsulates is one where leadership is dispersed among the many just as in the ELT and partly in the ALM. Furthermore they stress that leadership needs to be characterised by service to the common good, service is therefore a key characteristic of the leadership style. Several of the capabilities that are part of the MLF (see Table 1) also reveal further characteristics of the style of leadership that is envisioned; they ask for leadership that is selfless, humble, listening, reflective and persevering.

Table 1 Capabilities for moral leadership.

Capabilities that contribute to personal transformation Table 16 Capabilities that contribute to personal transformation Table 16 Table 17 Table 18 Table 18 Table 18 Table 18 Table 19 Ta
to personal transformation b) Learn from systematic reflection on action within a consistent evolutionary conceptual framework 1c) Take initiative in a creative and disciplined wa 1d) Endeavour, persevere, and overcome obstacles in the achievement of goals 1e) Oppose ones lower passions and egocentric tendencies by turning towards higher purpose and capabilities: self-discipline 1f) Think systemically in the search for solutions Capabilities that 2a) Imbue ones thoughts and actions with love
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1f) Think systemically in the search for solutions Capabilities that 2a) Imbue ones thoughts and actions with love
Capabilities that 2a) Imbue ones thoughts and actions with love
contribute to 2b) Encourage others and to bring joy to their hear
better interpersonal 2c) Participate effectively in the process of
relationships consultation in group decision-making
2d) Be a loving and responsible member of a famil
2e) Create and promote unity in diversity
Capabilities that 3a) Create a vision of a desired future based on
contribute to social shared values and principles and to articulate
transformation it clearly and simply so that it inspires in other
a sense of commitment towards its fulfilment
3b) Understand relationships of domination and to
contribute towards their transformation into
relationships based on reciprocity, sharing and mutual service
3c) Contribute to the establishment of justice
3d) Commit oneself to the process of empowering
educational activities
3e) Serve in institutions of society in ways that
assist their members to develop and utilize
their talents and capabilities in service
to mankind
3f) Perceive and interpret the meaning of
present-day social processes and events in the
light of an appropriate historical perspective

Source: Anello and Hernández (Unpublished translation:95-97).

The MLF is built on justice, unity and love. Regarding the motivation behind leadership the authors of the MLF make it clear that the primary driving force for a true service oriented leader is love and not a desire for personal gain. This is linked to one of the basic elements of the framework, the consideration of humans as essentially noble and potentially good. Without this perspective it would be difficult to imagine leadership motivated by love

5. A comparative analysis of three potential leadership frameworks for SCP

The three leadership models outlined above, the ALM, the ELT and the MLF share several features but also differ significantly. Our theoretical comparison focuses on the elements of the three leadership models that are intended to enable society to deal with the complex challenges that issues such as SCP are characterised by. Tables 2 and 3 summarise the theoretical comparison between the MLF and the ALM and ELT respectively. The key elements of each of the two latter models have been extracted in the left column and for each element we discuss how the key elements of the MLF converge and contribute to that element. The tables clearly show the comprehensiveness of the MLF model, there is no element of the template models that it does not 'cover' and converge with. For each of the key elements the ALM and ELT identified as necessary for leadership in the context of complex adaptive challenges, the MLF contains elements that contribute to these. The tables also show that for some elements in the template models, such as 'embracing disequilibrium' or 'a continuous emphasis on human

⁴ We quote here from an unpublished English translation of the basic course book of the MLF. The translation has been in the process of being published, but it never went into print. We received a copy from the authors. The original however is in Spanish and its fourth edition has been published (Anello and Hernández, 2010). The translation we refer to corresponds to an earlier edition.

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Table 2Theoretical comparison of key elements of the moral leadership framework and the adaptive leadership model.

Theoretical comparison of key elements of the moral leadership framework and the adaptive leadership model.							
The ALM Key model elements	The MLF Service based leadership style.	Personal and social trans- formation as leadership objective (requiring a vision of desired future).	The moral responsibility to investigate and apply contingent truth (current reality) and ideal truth (principles).	Viewing humans as essentially noble.	Transcendence, the ability to detach from current reality and connect with the values and principles of one's vision.	Development of capabilities that contribute to: Personal transformation Better interpersonal relationships Social transformation (see Table 1).	
Foster adaptation: improvise and experiment help the organization to confront loyalty to legacy practices distinguish the essential from the expendable.		Transformation is the goal, both personal and as a group. Regular self reflection, questioning one's mental models and learning from experimenting and results are basic methods.	Truth seeking includes experimentation. Incorporating new "truths" results in transformation/ adaptation.		Transcendence is related to the ability to distinguish the essential from the expendable but is focused on the essential values and principles.	The capabilities to take initiative (1c) and to endeavour and persevere (1d) will contribute to helping to change old ways of doing things. The capability to learn from systematic reflection (1b) and to think systemically (1f) helps to evaluate the outcome of experiments and to distinguish the essential.	
Embrace disequilibrium: enable conflict, chaos and confusion to yield productive rather than destructive disturbance keep their hands on the thermostat depersonalize conflict and create a culture of courageous conversations.	Service based leadership will be conducive to address conflict, it shows by example that the ego is less important and it helps develop the individual, which will in first instance certainly clash with the development of other individuals.	The ability to enable productive outcomes of conflict requires a vision of a desired future and the MLF makes this a key element that a leader needs to develop.		The fundamental view of human beings as noble creates a foundation for developing a feeling of justice and respect, and through this depersonalize conflict and encourage dialogue.	Detachment from details and focussing on essential values by leaders contributes to a culture where courageous conversations are possible.	Capabilities to improve interpersonal relationships including acting with love (2a) and encouraging others and give them joy (2b) are essential to turn conflict into unity; the capability to consult in group-decision making (2c) is a key resource for depersonalizing conflicts and create courageous conversations. The latter also depends on ones ability to turn towards higher purposes (1e).	
Generate leadership: distribute leadership responsibility mobilise everyone to generate solutions and leverage diversity.	A service based leadership implies sharing responsibility.		Searching for knowledge about what is and what should be is essential for finding solutions.	If every human is noble then respect for diversity is a follow-on.		The capability to create relationships based on reciprocity (3b) supports the distribution of respnsibility, the capability to engage in empowering educational activities (3d) helps to mobilise everyone to contribute to find solutions as does the capability to serve in institutions (3e). The capability to create and promote unity in diversity (2e) is directly supporting the ability to leverage diversity.	

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Table 3Theoretical comparison of key elements of the moral leadership framework and the ecological leadership theory

ELT	MLF					
Key model elements	Service based leadership style.	Personal and social trans- formation as leadership objective (requiring a vision of desired future).	The moral responsibility to investigate and apply contingent (current reality) and ideal (principles) truth.	Viewing humans as essentially noble.	Transcendence, the ability to detach from current reality and connect with the values and principles of one's vision.	Development of capabilities that contribute to: Personal transformation Better interpersonal relationships Social transformation (see Table 1).
Sharing of responsibility among all participants.	A service based leadership implies sharing responsibility.					The capability to create relationships based on reciprocity (3b) supports the distribution of responsibility, while the capability to engage in empowering educational activities (3d) helps to create the human resources that can take up that responsibility.
A continuous emphasis on human development.	focuses on the	Personal and social transformation as objective is a far-reaching form of human development.	A searching attitude into all things is a key element of human development, it manifests independent critical thinking.	The view of humans as essential noble includes a perspective of their potential for continuously developing e.g. their potential.	The ability to transcend daily challenges and focus on core values can be seen as a key element of being human.	All capabilities imply significant human development both for the individual and for the groups he or she relates to. The capabilities to engage in empowering activities (3d) and to serve in institutions in ways that use everyone's talents (3e) are particularly relevant to contribute to human development. The capabilities to imbue ones thoughts and actions with love and encourage others and bring joy to their hearts (2b) clearly stimulates personal and group development straight away.
Ensuring skills to: recognize, analyze, and adapt to emerging adaptive challenges.			The ability to recognize and analyze implications of changes in the surrounding environment is part of truth (knowledge) seeking, and the ability to adapt is part of applying the acquired knowledge.			The capabilities to learn from systematic reflection (1b) and the capability to interpret on-going social processes in the light of a historical perspective (3f) will contribute to the skills to recognize and analyze challenges. The capability to take initiative (3c), to endeavour and perservere (1d), to think systemically (1f), to take part in group decision-making (2c) will strengthen the ability to adapt. For the latter the capability to creative a vision and inspire a sense of commitment (3a) is also essential as are most of the capabilities contributing to social transformation.
Strengthen greater diversity in skills, cultures, interests, and passions.	Service to others helps them to develop their own potential and thus diversity.		Search for truth invites people to think for themselves and thus stimulates diversity.	The image of humans being essentially noble creates respect and thereby space for others to be who they are.	Transcendence makes people return to their core values and reflect on who they are and what they are doing. This strengthens the individual and thus diversity.	The capability to create relationships based on reciprocity (3b) and the capability to create and promote unity in diversity (2e) directly strengthens diversity.

development' all elements of the MLF contribute. This indicates the comprehensive approach of the MLF that is much more than the training of capabilities. For other elements of the ALM and ELT it is the number and diversity of capabilities in the MLF that would contribute to the realization of their objectives that stand out. Examples include to 'generate leadership' or ensure there are 'skills to recognize, analyse, and adapt to emerging challenges'. In the latter case MLF capabilities from all three categories have the potential to contribute.

Based on this theoretical comparison it looks like the MLF if it was widely applied would result in leadership that is better apt to address the challenges of 'urgency, high stakes and uncertainty' and more general adaptive challenges surrounding the promotion of SCP.

Our ethical comparison is summarised in Table 4 and focuses on three levels; the purpose of leadership, the style of leadership and finally the individual motivation behind leadership.

It shows how very different the purposes of the three models are with the ALM focussing on the survival or the organisation, the ELT having broader social goods as sustainability, harmony with nature and a caring community, and the MLF incorporating both the production of social goods as the overarching purpose as well as the unity of the leader's group and the personal development of each of its members. The MLF's combination of micro and macro objectives seems warranted in the pursuit of transformative goals as SCP.

All three models seek to distribute leadership on more than one leader in a group, even if to different degrees; ALM still relies on a strong positional leader, the ELT and MLF are much less focused on that. Both the ALM and ELT stress the need to nurture and benefit from diversity of people to be able to solve problems and adapt. Only the MLF explicitly lays out some key personal characteristics of leaders such as humility and selflessness.

Finally, two of the models, the ALM and ELT are virtually silent on the question of what inner motives can drive the development of a leader; the 'inner' processes of leaders, their values and thought processes. The MLF on the other hand gives considerable attention to this aspect and emphasizes the need for leaders to be driven by love. Furthermore, the MLF also considers the change in thought processes, in mental models and conceptual frameworks that are necessary for becoming a moral leader.

Finally, the most important question is what this comparative theoretical and ethical analysis of the three leadership models tell us about their suitability to promote SCP? We have already argued that the nature of the challenges for which these models were developed are inherent in the challenge of promoting SCP; the uncertainty, complexity, long-term perspective etc. All of the models contain elements that clearly address such challenges, and most likely better so than 'traditional' leadership styles. However, it is in the ethical challenges of SCP that the models differ significantly and where the MLF stands out as the most interesting one.

As argued above the SCP challenge is one of creating a common good, it will require partly self-less choices of various degrees by different actors in society. The strongest beneficiaries of our current actions and, indeed, sacrifices, will be future generations. The ALM does not say anything about these kind of issues, while the authors of the ELT repeatedly refer to the need for new values, attitudes and behaviour in society yet they do not elaborate on how these can be nurtured through leadership. The MLF is the model that is explicitly developed for promoting the service to the common good. One can turn the question around and ask whether it is possible to promote SCP without leaders that share to some degree the perspectives of the six core elements of the MLF. Can SCP be established without:

- Viewing human beings as essentially noble and potentially good? How else can anyone have faith in the ability of humanity to address the dire ecological and social challenges humanity is facing? If people do not believe that it is possible for each human being to raise up for the common good they lose hope and can then give up the enterprise of promoting SCP before they even start.
- Viewing the need for leadership to be dispersed and engage many requiring the training of a number of capabilities? How else can leadership emerge on all the levels of society where it is required for creating SCP?
- Viewing the style of leadership as service oriented, rather than power oriented? How else can the contribution of every individual with her/his talents be stimulated and benefit the transformation of production and consumption systems?
- Viewing the objective of leadership as being personal and social transformation? How else can a person begin a trajectory of transition to SCP? How else could the potential goodness of human beings and thus their willingness to take on responsibility for the common good move from being a potential to a manifested reality? How else could deeply engrained structures of individual consumption habits and societal culture and an infrastructure promoting such habits change?

Table 4Comparative ethical analysis of three leadership models.

Level of ethical analysis	Adaptive leadership model	Ecological leadership theory	Moral leadership framework
Purpose of leadership	 Tackle current and future challenges Adaptability in facing crises 	 Create a community of reciprocal care and shared responsibility Promote harmony with nature Provide sustainability for future generations 	 Serving the common good Promoting personal and collective transformation Conserving and strengthening the unity of the group Carrying out those tasks for which the group was created Developing the potentialities of the members of the group
Style of leadership	 Distributed leadership responsibilities yet centred on one positional leader Addressing challenges through frank discussions Managing conflict Thriving on diversity. 	 Responsibility is shared Human development is a strong element Diversity is seen as an asset 	Dispersed on many Characterised by service not domination Self-less Humble Listening Reflective Persevering
Motivation behind leadership	Not elaborated.	General references to need for new values, attitudes and behaviours but no elaboration on where the motivation for this comes from.	The framework is based on justice, unity and love, this must also be the primary drive of the leader. Justice, unity and love in relation to the group, to mankind, and to the task to be accomplished.

Source: Anello and Hernández (Unpublished translation:17).

- Viewing the responsibility to investigate and apply truth as an essential part of the path of change? How else can humanity develop a clear vision of a sustainable system of production and consumption and investigate all the multiple pathways that can take her there?
- Viewing the ability for transcendence, to connect with the values and principles of one's vision as an inherent part of being human and moral leaders? How else can people hope to overcome the many obstacles they daily encounter in their work for societal change, such as SCP? How else can people charge their batteries and stay committed to the vision that not they but their children or grandchildren may see realized?

6. Conclusions – moral leadership from theory to practice

Our objective for this paper was to examine the added value of including analysis of different ethical dimensions of leadership models in order to evaluate their potential contribution to promote SCP. A comparative analysis of three leadership models does show that the ethical analysis adds information of important dimensions for the potential of leadership to promote the production of a common good such as SCP. Regarding the three specific models examined, a comparison makes clear that the ALM comes closest to traditional positional based leadership models yet takes considerable steps towards enabling an organization to become adaptive to new challenges. The ELT takes this approach a bit further and deeper in how it envisions open learning organisations as core to dealing with sustainability challenges. The MLF finally aims to create groups which are united, can reach their goals and empower their members to develop capabilities to serve their communities. The comparative analysis demonstrates the comprehensiveness of the MLF.

The final test of the MLF, and any other theoretical and normative leadership model indeed, is in the application of the model, and indeed if it is possible to develop leaders that adopt its key elements and through this become change agents for SCP. Trainings in the MLF have not been carried out for the particular context of promoting SCP yet research on such training in other contexts still give a basis for future application and research in that direction.

The MLF has been used as basis for education and trainings in three continents for over twenty years (Anello, 2001). It has been analysed and evaluated in several PhD theses.⁵ In his own PhD thesis, Anello evaluated the impact of an experimental threesemester distance training of 365 rural teachers in Bolivia graduating in 1995 that had the MLF as the most essential ingredient. The teachers were trained to facilitate "adult learning processes that empower community leadership and organizations with the essential capabilities required for sustained development" (Anello, 1997:vi). A large majority of the participants and tutors considered the course to be of value for their individual and collective lives and that the moral leadership component was largely responsible for generating a strong motivation to persistently work for personal and collective transformation. A first indication of the impact on communities in which the trained teachers resided was the initiation of 117 community projects based on local resources and in some cases attracting additional resources from outside (Anello, 1997).

Menking (2003) in his PhD thesis analysed the impact on individuals in the educational system in Ecuador who received extensive training in the MLF during 18 months between May 1998 and September 1999. This was the first stage of a thirty month

program for educational reform throughout Ecuador. Two and a half years after the program concluded Menking (2003) made deep interviews with some participants to see what could be learned about the role that transformational leaders might play in promoting sustainable community development. He concluded that the program had a deep influence on the participants' own lives, but the main objective of being socially active and setting up community projects in the place where they live, had not occurred to them.

In Kosovo the Value-based Leadership Program, a program based on MLF, was implemented in 2003–2004 as a joint program between the Global Perspectives Development Centre and the United Nations Development Programme in direct response to the request from the Ministry of Culture, Youth and Sport of Kosovo. It was a training in ethical and technical aspects of effective leadership, as well as for team, confidence, and unity building tools among the staff members in the government and the civil society youth sector, from different ethnic communities. The result was trained youth leaders and activists from Albanian, Serb, Roma and Ashkali background and established patterns of communication and collaboration between civil society and governmental youth workers. The whole project was evaluated by a third party, a consultancy firm using a structured interview methodology. The report concluded that "the participants and the colleagues reported clear and convincing positive effects of the VBL training" both on the personal level and on the organisational or application level, especially in the fields of collaboration/communication, leadership, gained/improved knowledge, listening (especially how to listen), tolerance, application of what was learned, encouragement of others, and decision-making (Powers et al., 2004). Other improvements were the realisation of the importance of values among the participants, their understanding and development of new conceptual frameworks and the strengthening of self-confidence, self-concept and self-esteem (Powers et al., 2004).

These studies are a good beginning but here is room for considerable more work to show whether training in MLF has possible impacts in society and thereby its potential to have positive impacts on SCP if it were integrated into leadership training for this field. Avolio et al. (2009) conclude, based on a meta-analysis, that there are only around 70 studies that have analysed whether leadership can be developed through interventions (such as training) and there is thus a lot of work to do not only in relation to the MLF model but also to other leadership models of potential benefit for SCP.

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⁵ Hulshult (2005) in her PhD thesis did not test the impact of training in the MLF but rather to what degree the elements of the MLF could be identified in leaders of alternative education programs in USA.

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