

Abstract

The motivational factors behind this thesis are based on the rhetoric of the international development community to induce an increased focus on aid effectiveness, which called for more integrated cohesive methods adhering to concepts of cooperation and consensus regarding a harmonization of agendas set forth by respective development governments and agencies. This approach ascended in accordance to the ideologies constituted by the Paris Declaration, an agenda presupposing an overall re-structuring of strategies and policies in coherence with recipient countries. This presumed novel worldview of closer cooperation and alignment towards inducing more efficient aid policies can initially be understood as a promising approach also in terms of strengthening and establishing trust-relationships. As Denmark is one of the most prominent and relatively consistent contributing countries of development aid, it is the task of this thesis to examine the contemporary development policies in order to interpret to what extent integrated aid strategies are adhering to potentially more effective methods of aid-giving that essentially will provide more promising conditions and circumstances for developing countries. The research inquiry is thus; *'To what extent has Danish development policy ascended into a new paradigm? And why may the present policy prove more adequate than the former paradigm in the light of Complex Dynamical Systems perspective?'* A historical account of Danish development aid and the tendencies thereof are empirically introduced and interpreted as constituting a paradigm of linearity provided by orderly and predictive cause and effect solutions, which produced seemingly insufficient outcomes in relation to dealing with complex social phenomena as is the case of development aid. Thus a paradigm of complexity and non-linearity is a more promising interpretive approach that specifically deals with the dynamics and changes of interconnected systems over time and adheres to a greater degree to the systems involved in development aid cycles. The approach selected to answer and interpret the inquiry of the research question is conducted through two analyses, by which the respective theoretical foundations of Thomas Kuhn and Complex Dynamical Systems theory are applied to interpret the secondary empirical data. The concluding remarks and results pronounce that there has indeed been a transitional phase which has seemingly resulted in a paradigm shift towards complexity compared to the previous paradigm that adhered to a paradigm of linearity. The contention is hereby that development-policy must be executed to operate in a manner coherent with complex phenomena in order to produce sound outcomes on the terms of recipient countries. The current development policy displays much of the complexity rhetoric in terms of flexibility,

adaptability, evolving, dynamics and adjustment as well as creating initiatives, such as the Civil Society Strategy, that are cohesive with *assisting* developing countries with capacity building in order for them to become self-organizing, self-preserving resilient evolving societies (systems). However, the Danish government continues to promote imposing frameworks adhering to linear procedures such as; economic globalization, democracy and security issues which may be deemed damaging rather than constructive for developing countries.

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Thesis Introduction

'You may never know what results come from your action, but if you do nothing, there will be no result.' - Mahatma Gandhi.

Aid effectiveness has become a pivotal theme both in international debates on aid assistance and in Danish development policy, the prevailing motive to entail the enhancing of aid effectiveness and avoiding overlapping actions through greater cooperation with partner countries. In the light of the relatively novel initiative of the Paris Declaration (2005) on harmonizing aid strategies the Danish government has produced a proclaimed innovative strategy for Danish support to civil society in developing countries, the Civil Society Strategy (CSS). This seemingly pertains to an extended call for cooperation from e.g. other Danish development organizations in terms of knowledge sharing in the devoted attempt and pursuance of obtaining the Millennium Development Goals 2015 (MDG's). One of the core principles is to promote and create strong partnerships with the development community while integrating a new mode of thinking. Within the proposed Paris Declaration it has been recognized that in order for aid to become ever more effective it is essential for donor countries to incorporate the voices of the recipient countries. Countries that invite development must have a say in concern with their own development process and needs as well as the various terms of which they are able to contribute. Donor and recipient countries are therefore to work together through means of mutual accountability towards creating better living standards for that of developing countries. This necessitates a new framework towards cooperation which in turn should be beneficial of all parties involved and indicates to a high degree that there has been a change in development thinking namely; for development to be effective the development community must work together in agreement at all levels in developing policies and strategies. Through the interpretation of the Danish foreign & development policy specifically, it is the task of this thesis to analyze the possibility of development having reached a new paradigm in Kuhnian sense, the pivotal conundrum centered on the extent of which the principles and ideologies of e.g. the Paris Declaration have been acknowledged and integrated throughout the development strategy in a non-contradictory manner in order provide a more sensible framework for obtaining more efficient aid. Furthermore to establish the framework of why a presumed paradigm shift has occurred and how it may be deemed more promising with reference to Complex Dynamical Systems theory. In short, is DK living up to the call from the international development community concerning a higher level of cooperation and drawing in developing countries as valuable actors in the pursuance of enabling them to form their own development programmes? Thus if we have reached a new paradigm, than considerations

regarding the constitution of the former must be interpreted in order to present a sensible comparison and understanding of why e.g. development cooperation is seemingly a more plausible approach in reducing poverty. To analyze what framework of thought development is currently advocating the relatively novel theory within social sciences Complex Dynamical Systems theory will be utilized as having the greatest significance.

The necessity of justification within scientific venture in terms of certainty about our beliefs and theories in world view has dominated science for much of the twentieth century. The concept of certainty is conducive with that of linearity in science and is found in various positivist and empiricist epistemologies with the common assumption that through consistent application of scientific methodology, concrete certainty in knowledge can be achieved. It is my contestation that the field of development and international relations should be construed as a non-linear process with uncertain unpredictable outcomes with the introduction of Complex Systems theory. There is seemingly a prevailing call for integration of Complex Dynamical Systems theory in the world of science on various accounts, this is a task I will attempt to pursue and integrate into development science. We cannot speak of a new paradigm without establishing the framework of thought that we wish to work in or determine what practices are best without building upon common or mutual understanding of the ground-rules and basic concepts of change, development and adaption. Thus, the aim is to show that development and change processes can be perceived as a crucial framework from a dynamical systems perspective that allows us to incorporate non-linearity and mutuality. When viewing the ongoing process of the emergence of change as self-organizing or self-adapting organic systems that react and transform through interaction with other systems or subsystems enables us to conceptualize and analyze various aspects and several components involved in different change processes. Through the acknowledgement of complex systems it can be recognized how several components and subsystems act, react, transform and develop as systems striving for self-attainment (survival), through ongoing interaction with other systems which should enable us to obtain more efficient explanations and predictions of various outcomes. This approach seems promising in delivering answers to the problem formulation; which leads to the specific guiding research inquiry of the thesis;

Problem formulation: *To what extent has Danish development policy ascended into a new paradigm? And why may the present policy prove more adequate than the former paradigm in the light of Complex Dynamical Systems perspective?*

1. Methodology

In the following an overview of the content of this thesis will be introduced and the underlying reasoning of the chosen approach to address the research formulation will furthermore be elaborated. Moreover the philosophy of science and theoretical framework and their role in the paper will be discussed and justified.

Relevance: There has been an increased focus on the debate of aid effectiveness which presupposes that the aid already provided for decades has not been sufficient enough. Developing countries have been proclaimed as getting poorer thus the development community, hereby meaning all parties encompassing the decision-making process, have decided to somewhat merge their efforts for creating a more promising approach e.g. in obtaining the Millennium Development Goals. The proposal set forth in the Paris Declaration provides an ascending and extended challenge for re-organizing this call for collaboration of development community. Initially the proposal of collaborating with development partners sounds promising, though it may also hint to yet another dominant ideological representation of donor countries. The motivational factor of this thesis is therefore based on the skeptic presumption or hypothesis that Denmark may not yet have incorporated initiatives to accelerate the progress of developing countries in a manner that provides presumed successful outcomes thus consequently replicating unsuccessful programmes, despite focusing on fewer countries and having restructured through the targeting of specific sector-programmes. Denmark is despite various fluctuations, one of countries that provide the highest percentage of aid and she is therefore a valuable partner in the pursuit of reducing poverty, thus Denmark and the development policy of the government will be the basis of this project. Though DK assists with a relatively high percentage of aid, does not necessarily denote that initiatives in regards to overcoming the complex situation, of which developing countries are in, is being allocated appropriately and in a manner that *assists* developing countries rather than persuasion exuded solely by her own self interests. However, if the Danish government has indeed incorporated aspects relational to the various and much differing needs of developing countries that adhere to the ascending paradigm through e.g. knowledge-sharing then it is hereby interesting to explore the framework by which DK is working in and why it presumes a more valid and relevant framework than before. Thus the complexity terminology will be introduced in order to facilitate and reveal continued inadequacies or contrarily contemporary competencies. The relevance moreover adheres to

revealing the present development approach and to what extent it seems promising in obtaining more prosperous conditions for the selected developing countries.

The aim of the thesis is to provide a plausible explanation of why Danish development policy has seemingly reached a new paradigm with emphasis on the prevailing attention, at least rhetorically, on sustaining better or more effective aid through means of inducing an increased focus on the cooperation of the various participating levels of the development community. As development aid is perceived as playing a vital role in assisting developing countries with means and knowledge for creating more progressive and sustainable societies it is therefore essential to examine how the development community endeavors to obtain these results in their pursuit of promoting the vision of a more effective path for aid-giving. As development aid has previously been criticized for not obtaining results that were set forth within specific time-frames it is therefore the conundrum of this thesis as to how the aims have been modified and to examine how and why DK has chosen to indulge on this presumed novel path. This thesis is constructed mainly as a theoretical project based on secondary empirical data, a method that has been chosen in that it is the specific contemporary policy of Danish development that I seek to interpret upon in regards to having achieved a shift in mind set that implies a differing of how development was perhaps professed to have been in before. The empirical data in general, therefore, derives from the contemporary statements, policies and strategies administered by the Foreign Ministry of Affairs of Denmark which will provide an insight into the rhetoric and methods of how development aid is being proposed to provide for more effective aid-giving, of which can thereafter be interpreted upon through linkage to theoretical constructions that are considered application-worthy in dealing with the changes in development aid processes. The theoretical foundations for analyzing the empirical data are based on Thomas Kuhn's account of paradigms in *'The structure of scientific revolutions'* (Kuhn 1962). Kuhn provides valuable tools in order to establish the conceptualization of what constitutes a paradigm or a consensual framework at a given time, which is essential for understanding 'the mood of the time'. Furthermore and pertinently Complex Dynamical Systems theory will be introduced as an analytical tool to derive a plausible explanation of why and which paradigm Danish development policy has seemingly ascended into -one that neither constitutes an orderly or disorderly perspective but of something in between that is necessary for understanding complex processes in social phenomena. Complex systems accounts for the limitations there are to certainty or prediction as it based on a *open-systems* perspective conclusive with non-linearity or complexity, a notion that makes sense when

studying complex phenomena and systems such as relationships between somewhat traditional societies and modern societies, thus arguing that development science should be perceived as a non-linear process where specific causes do not necessarily result in expected outcomes. Furthermore Complex systems theory is included in order to aid the process of interpretation when exploring why specific initiatives have been chosen and to which degree this framework seems more promising in delivering results on the development scene in relation to treating development science as the complex phenomena it is. As Complex Dynamical Systems deals with development and change over time through interactions and dynamics of social systems it provides explanatory potential as the objective of development policy-making is precisely sought to analyze and understand these circumstances.

The Epistemology and philosophy of science of the thesis is based on functionalism in a somewhat weaker form substituted by a systems perspective in that this provides a plausible explanatory framework of how various components of systems all exude a functional status in studying social phenomena characteristic of changing dynamics and evolving systems or societies. The functionalist philosophy of science has been critiqued for assuming that all functions of the system have beneficial actions, this however is not my contention when expanding functionalism with a systems perspective. Rather the systems perspective adheres and accounts for more complex societies and is based on the notion that systems are interconnected and have purposeful roles in their interaction with one-another, though not necessarily creating positive outcomes but to comprehend the balance between them (Bitsch Olsen et al. 2003: 139). The functionalist tradition has a long history by which Auguste Comte (1798-1857) can be determined as one of the modern founders in social sciences as he recognized science as the study of society and humans, though based on methods from the natural sciences hereby a positivist approach seeking objective truth and predictions emphasizing relational aspects from biology into social sciences. The functionalist paradigm was furthermore elaborated upon by e.g. Herbert Spencer (1820-1903) and Emile Durkheim (1858-1917) following inspirations of Darwin's theory of evolution, whereby Spencer advocates the organism analogy and universalized premise understanding society in terms of social structure and social function (Fast 2008: 7) -A holistic perception by which the systems components should be understood in relation to the interpreting the systems whole in creating a synergy effect, thus this can be acknowledged as the preliminary formation of systems theory as Mead expresses in relation to Spencer that;

'The influence of environment is exercised over the form, and the adaptation of the form results from the influences of the environment on it. Spencer conceived of the central nervous system as being continually played upon by stimuli which set up certain paths, so that it was the environment which was fashioning the form' (Mead 1962 in Fast 2008: 6).

Durkheim elaborates moreover that society should be viewed based on a form of solidarity and collectiveness where society's structure, institutions, norms etc. have an enormous influence and presuppose our actions as a moral authority. Society's institutions provide a pattern of the actions and expectations of society's members which is explained in a functionalistic manner conditioned by the societal needs. A. R. Radcliff-Brown (1881-1955) provides an additional account of challenges within the functionalist tradition in that it perceives society as various functional entities that work together with a sufficient degree of harmony; *'without producing persistent conflicts which can neither be resolved nor regulated'* (Radcliff Brown 1968 in Fast 2008: 16). This pertains to the notion that the functionalist tradition does not fully account for internal conflicts that may emerge -A notion that the systems perspective attempts to recognize. Furthermore the functionalist method and perception of reality is based on the assumption that reality can be described from the aggregation of the components in order to understand the context totality or whole system. The functions of the entities should therefore be interpreted in order to perceive the contexts whole. This is where systems theory ascended and expanded the functionalist perception that was based on interpreting society's or a systems holistic venture through its constituent parts, of which systems theory (however with various degrees of perception) brings a somewhat differing worldview as it induces a holistic approach in order to study development and change of the systems or society's holistic nature (Fast 2008: 31). However in the context of this thesis the application of systems theory adheres to conceiving these as *open systems* rather than of closed systems -A perception that proposes the importance of viewing the interdependence and relations between the internal interactions of a system with its external environment (system) and that these should not be separated. Denmark in this context is a system of internal systems, such as developmental organizations that are highly relative to their external environment, the global system. Thus these functional systems provide benevolent explanatory potential as to how these systems are interconnected, developed and changeable. Thus the systems, because they are mutually connected, are not to be regarded as either being in a state of either the analogy of equilibrium or the opposite imbalance or chaos, as all components provide the dynamics that are conducive with the response

level for a system to survive through both negative and positive feedbacks and thus self-organize when met with perturbations or anomalies that may change the overall structure of the system (Fast 2008: 32).

The structure of the thesis mirrors the inquiry of the research question in an interpretive manner that seeks firstly, to establish principles of which the former paradigm or development process was premised upon with an empirical account of the history of Danish development aid. Secondly, it introduces the Danish development policy in its present form in order to understand what has changed and to interpret what paradigm or 'frame of thought' we have entered into and additionally how it is being demonstrated in the strategies set forth. These are structured in a manner that provides the sound comparison needed in order to analyze what has constituted the former paradigm and what has been established in the current paradigm and additionally why it seems more promising in pursuing reduction of poverty.

Chapter 3) Accounts for development tendencies in Danish development policy considerably linked to that of the international development community, in order to facilitate the understanding and historical background of contemporary policies of Danish development. Chapter 4) Will outline the current foreign and development policy of Denmark as well as the ideological implications of the Paris Declaration in order to provide the empirical basis for the following analyses (chapter 5 & 6) Chapter 5) Analyses Danish development aid in the light of an initial paradigm shift in Kuhnian and complex systems conceptualization. Chapter 6) Will provide a second analysis incorporating the concepts of complex systems theory as an explanatory framework in the case of the prevailing paradigm of complexity that development is currently facing and essentially the consequences of development in its present form in relation to complexity. The analyses are guided by the inquiry of the research question, in that the first accounts for a paradigm shift in development in a Kuhnian perspective linked with complex systems theory. The second analysis accounts for the paradigm of complexity in development and essentially the consequences.

2.Theory

This chapter will provide an account of Thomas Kuhn's theoretical framework as well as introduce the theoretical framework of Complex Dynamical Systems Theory in the subsequent section. The aim is to introduce the respective theories for the intended purpose of utilizing these in the analyses in connection with the empirical data. Kuhn's conceptualizations and complex dynamical theory have relevance in regard to determining the inquiries of the problem-formulation.

Thomas Kuhn -The Structure of Scientific Revolutions

In the following I will provide an account on Thomas Kuhn's theoretical framework of '*the structure of scientific revolutions*' (Kuhn 1996). The aim is to form the basis for comprehension of the concept of *normal* and *revolutionary science* as well as Kuhn's perception of the constitution of a *world view* within the framework of paradigm will be dealt with in the following. Thus in order to examine the Danish development policy as a perceived new paradigm shift in development community the conceptualization of what a paradigm entails must first be discussed.

The concept of paradigm

Thomas Kuhn, in *The Structure of Scientific Revolutions (1970)*, questioned the classic view of scientific knowledge. Kuhn's theory partly emerged and reacted to the traditional view of science which assumed that there was a 'right' method and conduct of scientific inquiry in order to reach an inevitable 'truth' i.e. obtaining certainty, a critique of positivism, particularly in the natural sciences. Thomas Kuhn's paradigm theory is essentially concerned with the growth and acceptance of knowledge and what he perceives to be the realities of scientific practice. In contrast to the principle of falsification Kuhn works with puzzle-solving of unexamined assumptions shared by communities of scientists within the boundaries of the internal unity of a paradigm (Giddens 1976: 142). Kuhn's departure from the traditional view of science is to be understood as science evolved and developed through a cumulative process adhering to specific methodological and theoretical practices and adding to already existing knowledge. Kuhn argues that rather than providing a steady accumulation of knowledge, scientific progress is achieved through a series of revolutions punctuated by peaceful eras (Dietze 2001: 31). These peaceful eras are defined as 'normal science'.

Thomas Kuhn's central notion of understanding the dynamics of science is the concept of paradigm. Kuhn posits the definition of a paradigm as; '*universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners*' (Dietze 2001: 33). A paradigm encompasses a network of conceptual, methodological, theoretical and instrumental

commitments that therein require an accepted model or pattern. According to Kuhn there are three key features of which define a paradigm; they are *scientific achievements*, have *universal status* and *give a model to guide scientific empirical endeavor*.

Prior to a paradigm essentially constituting a paradigm, Kuhn construes a *pre-paradigm* period as initially disorganized and diverse activity before it becomes structured and directed to that of a paradigm (Ibid.). The pre-paradigm period presupposes a time where fundamental issues of a subject matter, its problems and procedures have little or no direction or agreement. Once a number of 'schools of thought' begin to form into one particular 'thought', based on increasing acceptance by the scientific community, an epistemological and methodological approach to a certain field will gain dominance. When acceptance has been attained and is adopted into a scientific community setting standards, directions and methods for the field also defining problems in which require research attention, a paradigm is per se formed. However a paradigm change must acquire and offer a better explanatory framework than the former or than its competitors in order to gain full conformity. As the main function of a paradigm is to achieve conformity of the paradigm community to the basic world view it must essentially seek to suppress competing views to be accepted as *the overall guiding view* (Dietze 2001: 33).

Normal science

The notion of normal science is, according to Kuhn; '*what produces the bricks that scientific research is forever adding to the growing stockpile of scientific knowledge*' (Kuhn 1996: 7). In other words normal science is the research that is based on scientific achievements within a particular scientific community that has acknowledged it for a period of time, within the framework of a paradigm. Paradigms and normal science are hereby intertwined, meaning normal science is the paradigm and the paradigm is normal science. Normal science is therefore the research that is carried out within the accepted paradigm. Kuhn posits that this is where most scientists engage their time, within the accepted paradigm by which the aim is not to deal with unsuspected anomalies, phenomena or novelties (Dietze 2001: 36). Contrarily normal science seeks to suppress competing worldviews so as to secure the dominant paradigm, which according to Kuhn provides the boundaries for investigation. This, however, does not imply that science is unable to evolve it simply must extend or grow by terms of the paradigm. Kuhn's conjecture is that normal science consists of an actualization; '*achieved by extending the knowledge of those facts that the paradigm displays as particularly revealing, by increasing the extent of the match between those facts and the paradigm's predictions, and by*

further articulation of the paradigm itself' (Kuhn 1996: 24). Kuhn defines a paradigm as restricted and inflexible and persists to explain that this is what constitutes normal science with the term he notes as a *'mop-up operation'*, an operation that scientists are confined to in order to fulfill the potential of the paradigm. This mopping-up, however undignified the term may sound, is essential to the development of science as Kuhn indicates by stating that; *'by focusing attention upon a small range of relatively esoteric problems, the paradigm forces scientists to investigate some part of nature in a detail and depth that would otherwise be unimaginable'* (Kuhn 1996: 24). Furthermore Kuhn emphasizes on numerous accounts that normal science and research aims not to produce major novelties, conceptual or phenomenal but rather proceeds to associate normal science with the concept of *puzzle-solving* rather than problem-solving. Puzzle-solving is characterized as the task of the paradigm community to solve the puzzles that are set by the paradigm –the problems of the paradigm are the puzzles that need clear solutions. Puzzle-solving can to some extent be said to be what maintains the dominant paradigm, a source of self-attainment. As pronounced by Dietze in his account of Kuhn's take on normal science and puzzle-solving; *'the normal scientist endeavors to solve the puzzles that emerge out of the paradigm, the central quest being to exploit the dominant paradigm to its fullest advantage (..) any unresolved puzzles and apparent falsifications tend to be set aside or given ad hoc explanations or modifications in order for the paradigm to be protected (..) the paradigm determines how evidence is collected and what is relevant, it remains well protected'* (Dietze 2001: 37-38).

Puzzles that are elaborated, extended, resolved and increasingly refined only serve to further safeguarding of the paradigm. To ensure that a paradigm is successful and stable presupposes universal acceptance and herein the loyalty of commitment of its members to adequately explain puzzles, solutions and data which will then enable the normal scientific enterprise to flourish.

Though a paradigm of this significantly well-entrenched sort is almost impossible to overturn Kuhn proclaims conversely that no paradigm is permanently fixed in that normal science will eventually reach a point of difficulty and accumulated anomalies that threaten the status of the paradigm. When a paradigm no longer is efficient in explanatory attempts, predictions or accurate interpretations it meets a period of crisis and disintegration to what Kuhn conceptualizes as a *scientific revolution* –which will be dealt with in the following.

Revolutionary Change (development)

Normal science as aforementioned reaches a state of crisis that can either be prolonged or occur suddenly, nevertheless it results in a breakdown of the current model or theory which in turn provides the foundation for a new paradigm to arise. Kuhn expresses that; *'Revolutionary change is defined in part by its difference from normal change, and normal change is the sort that results in growth, accretion, cumulative addition to what was known before (..) revolutionary changes are different and far more problematic, they involve discoveries that cannot be accommodated within the concepts in use before they were made'* (Kuhn 1981: 7-8). In addition it is pertinent to note that a paradigm does not simply breakdown whereby another completely novel paradigm is replaced, there is a phase of transition. During the breakdown or crisis of the paradigm, which are results from accumulated anomalies questioning the inadequacies of the framework at large the emergence of alternate frameworks are then proposed. Science is still dependent on a framework to guide its procedures and the breakdown of the paradigm is therefore not renounced all at once (Dietze 2001: 41). Once the failures or unresolved anomalies of that paradigm have been recognized as irreconcilable, members of the paradigm community persist to establish new grounds and ideas for a competing framework that may issues a new paradigm. In short one paradigm eventually emerges with majority support and the paradigm shift than constitutes renewed and reconstructed fundamentals of a particular field including elementary theoretical generalizations as well as many of the paradigms methods and applications (Kuhn 1996: 85). The shift of a paradigm is in Kuhnian terms equated with that of a *gestalt switch* that illuminates a solution to the puzzle that occurs all at once, an unveiling if you will. This pertains to a perception of a new world view and will be presented below.

World View

Kuhn claims that in accordance to a switch to a new paradigm, the world itself changes with it. He proceeds to add that; *'it is rather as if the professional community had been suddenly transported to another planet where familiar objects are seen in a different light and are joined by unfamiliar ones as well (..) of course nothing of the sort does occur (..) nevertheless paradigm changes do cause scientists to see the world of their research engagement differently'* (Kuhn 1996: 111).

As the world view is *switched* entirely and simultaneously to something new it is therefore also irreversible. However, Kuhn acknowledges that these paradigms have emerged out of the milieu of their predecessors, hence much of the same elements and vocabulary have consequently been

incorporated though they may ascribe to entirely new meanings, thus referring to different and presumably better things than the previous paradigm could offer. Finally if a sufficient number of scientists accept and adhere to the novel theory, it then becomes the 'new' normal science (Dietze 2001: 43).

Complex Dynamical Systems Theory

Complex systems derive from natural/physical sciences and have since begun to gain influence social sciences across areas such as; psychology, organization science, sociology, anthropology, economics, geography, linguistics and education. Scientists have for years been occupied and engaged in working with cause and effect viewing the world as linear and deterministic phenomena that assumes cause and effects are linked and that future events can therefore be predicted accurately. However this is not the premise of discussion I wish to contradict, it lies within the ability to predict the future based on linear causality chains in order to achieve an infinite degree of accuracy –thus social sciences have been concerned with the notion of non-linearity and indeterminism concluding that the future cannot be fully and accurately predicted when assessing behavior within social phenomena spectrum. Contrarily determination of the cause does not essentially produce the accurate assessment of the effect i.e. there are limits to the extent of knowledge we can have when numerous components are in play and the outcomes can therefore only be determined as far as being *probabilistic*. In addition, science has, to a great extent, recognized that, in fields that involve a bewildering array of actors and influences, the search and attainment of definite truth or predictability can only proceed on the basis of probabilistic findings. Science recognizes the concept of uncertainty and must therefore integrate and confront it scientifically. Societies have often been interpreted in systems perspective and have furthermore been compared to complex systems -this is not a novel approach, though the systems have been dealt with in a manner of studying the behavior of a whole system simply by studying its constituent parts. This implies that there clear beginnings and ends, similar to that of linear processes and a reductionist method of analysis. Complex systems theory moves away from this perspective in that it accounts for unexpected emergent properties that appear in systems that cannot be deduced by observing the system's components. Moreover non-linearity has been accepted into parts of mainstream science, as it has been established that a given cause may result in different outcomes. Events and initial conditions may exhibit extreme sensitivity to variations within a system whereby trivial events could either result in major upheavals or contrarily appear and disappear without a trace (Rihani 2002: 7).

The conceptual basis of complex systems can reflect a change in perspective about the world through modeling its interdependence which in turn may contribute to higher degree of understanding the limits of predictability and the indirect consequences of our actions both positive and negative, a notion remarkably imperative of development, and its various underlying components social, political and economical –multi-dimensional and highly complex system(s). When expanding formal sciences with the addition of nonlinear phenomena these entities are described as being *complex* because; *they have numerous internal elements; dynamic, because their global behavior is governed by local interactions between the elements; and dissipative because they have to consume energy to maintain stable global patterns'* (Rihani 2002: 69).

Complex dynamical systems theory is made up of various systemic properties, for the purpose of understanding Danish development policy and its framework the pertinent properties that adhere to it will therefore be explained and clarified in the following. The properties introduced below consist of *complexity, co-evolution, attractors, landscapes, self-organizing, stability and resilience, order and chaos*. These are all concepts that can potentially become tools for qualitative reasoning about real complex systems not to mention quantitative modeling and simulation in the contexts of synthetic systems.

Complexity: The theory of complexity is based on relationships and interdependence. It maintains that the universe is full of systems which are complex and constantly adapting to their environment. The terms complex and complexity are necessary to define first and foremost as these can in everyday usage be understood as something complicated or obscure. This however, is not the case *Complex* and *Complexity*, in this context, refer to certain systems that have a significant number of internal elements that interact locally to produce stable, though evolving global patterns. An example provided to underline that complex systems are indeed not complicated but do in fact follow simple rules can be specified with the usage of a metaphor of the water in a bathtub;

'When tap and plug-hole are closed the water is in a state of unchanging order, but when the tap is fully open the movement of the water assumes a regime of chaos that is almost impossible to specify (..) however with the water running at a controlled rate and the plug removed, the water self-organizes itself into a complex regime represented by the familiar vortex (..) A state of chaos might exist at detailed level, with constant flow of new particles of water but globally the system exhibits

and orderly pattern (..) chaos and order combine to produce a state of self-organized complexity and that will persist as long as there is a constant flow of water through a system' (Rihani 2002: 7).

This metaphorical description also includes other imperative properties of complex theory; chaos, order and self-organizing which will be dealt with more clearly in the following. In more simple terms is the example of all the water systems in the world; streams, waterfalls, rivers, oceans etc. with all their variety are also governed by the simple principle; that water finds its own level.

However, in this context it must be stressed that time is a key feature for a complex adaptive systems survival the internal elements must be able to interact at an appropriate level of connectivity dictated by local rules in order for a system to exist in a state of organized complexity. As complex systems are evolving systems they are dependent of copious internal variety in order to be able to change and adapt in response to shifting conditions, which in turn should enable them to survive long enough for the next cycle to begin (Rihani 2002: 8).

Dynamical/adaptive: I have consciously chosen to introduce the theory as complex systems theory integrating the concepts of both complex dynamical and adaptive systems theory, in that the definitions between them are fuzzy or essentially similar in current literature. Some have proposed a distinction between adaptive systems and evolving systems by proclaiming that adaptive systems continuously adapt to the changes around them but do not learn from the process, contrarily the latter evolves and learns from changes enabling them to influence their environment and better predict and prepare them for changes in the future (Fryer 2011: 1). However, it is my contention that whether systems are conceptualized as adaptive, dynamic or evolving, they are all systems in and of a learning process. If a system adapts or evolves in terms of a better 'fit' of environment is this not in itself the mere definition of learning systems? In terms of complex systems theory systems both dynamics and adaption are essential concepts. Complex systems are non-linear systems variously defined as being complex; *'..because they have numerous internal elements, they are dynamic because their global behavior is governed by local interactions between the elements (..) additionally when the stable patterns are capable of evolution the systems are depicted as being adaptive'* (Rihani 2002: 69). Thus adaptive or dynamic systems are always in movement by which the concept of *emergence* in complex theory is also crucial to its understanding. Samir Rihani notes in metaphorical terms that a system that is closed is analogous of; *'A deserted building that eventually turns into a pile of rubble (..) after a few centuries even the rubble disappears without a trace* (Rihani 2002: 69).

The point being, that any system that is cut off from the outside world will eventually reach a *deathly* state of equilibrium of which he equates linear systems. The fundamental notion of non-linearity, by contrast, is imperative to the understanding of self-organized complexity, which is far from equilibrium. In order for systems to avoid the destructive manner of equilibrium, they must exchange energy with other (co-evolving) systems to acquire and maintain self-organized stable patterns. Complexity hereby emerges from a mix of chaos and order.

Emergence: emergence is, as mentioned, essential in complex theory as it refers to patterns that *emerge* from interaction. There is no grand plan or control of the agents in the system, they seemingly interact in random ways, though from all these interactions patterns emerge and help inform us of the behavior of the agents or systems. *Connectivity* and interaction are necessary conditions for the emergence of complexity. Thus, development can be perceived as emergence rather than growth or construction (Lewis 2000: 38). Dynamic systems model growth profiles that emerge from recursion rather than construction.

Self-organizing systems: as mentioned there is no hierarchy of command or control in complex systems, but there is a constant re-organizing to find the best fit with the environment. The systems continually self-organize themselves through emergence and feedback processes. Order and chaos are integrated in the process of self-organization, as complexity theory exists somewhere in between –systems exist on a spectrum ranging from equilibrium to chaos. Chaos is not to be understood as derived from chaos theory that also studies behavior of dynamical systems, the difference being determinism. These systems are essentially deterministic in that the essence of determining their future behavior is dependent on the systems internal conditions which do not involve any random elements –hence it is deterministic chaos, an example hereof being the determination/prognosis of weather conditions. For further elaboration this sensitivity to initial conditions is also popularly known as Edward Lorenz’s *butterfly effect*, where the flapping wing of a butterfly represents a small change in initial conditions which causes a chain of events leading to large-scale phenomena, had it not flapped its wings the trajectory of the system might have been immensely dissimilar (Geyer 2010: 16). The consequence hereof being that prediction of a finite (in an otherwise infinite number of different states in a chaotic regime) amount of information of initial conditions can only predict a systems behavior beyond a certain time-frame. Complex theory is on the contrary on the edge of chaos, the most productive state where there is a maximum of variety and creativity, leading to new possibilities. Thus a system of pure equilibrium or chaos do not have internal dynamics that enables

the system to respond to its environment and thereby adapt, rather they will phase out or die. Chaos, order and self-organization are hereby the three regimes that constitute the principles of how new emergent properties occur spontaneously within a system, through internal organization of interactions between the systems elements. This allows a system to scroll through different *states* (a large but finite number of similar, but not identical states) as interactions between the elements proceed. As Rihani describes; *the near-identical states differ but they do so within specific limits (..) in complexity parlance they are said to fall into one basin of attraction or attractor (..) the attractor in force at any time gives a complex system its global pattern, which remains stable while the states are in the grip of that attractor* (Rihani 2002: 8). Some global patterns may therefore be predictable, though interactions must be able to proceed in a manner that produces self-organized stable patterns rather than being either in the grip of order or chaos. This presupposes that a system moves towards desirable ends (not end-states) through internal dynamics with *local freedom of action, learning, flexibility and variety* (Ibid.).

Co-evolution: is an expression of how systems exist within their own environment as they are part of that environment. There is a constant process of change, as the environment changes they need to change with the environment and hereby changing the environment itself and so on. The environment changes as to ensure the best fit for the time.

Attractors: Within the definition of attractors are the concepts of; point/periodic attractor, basin of attraction, strange/chaotic and complex attractors of which will be elaborated upon below. Attractors are typical patterns of dynamical and interdependent behavior and interaction tendencies which describe the long-term behavior of a system.

The classic example and that of traditional economic models (equilibrium models) of an attractor state, is that of the dynamics of a grandfather clock's pendulum which describes a *point attractor* that draws the 'bob' single point in *phase space* regardless of its original position. The point attractor is seen as the vertical resting point of the pendulum of which the different states can be determined - those of which the pendulum swings through when in motion (Rihani 2002: 78). The periodic attractor is, unlike point attractors, a continuous repetitive process, a cycle or a loop if you will; *a few simple facts, such as the initial position from which the pendulum is released, allow us to predict accurately the state of the system at any point in the future'* (Ibid.). Attractors of this form pertain to

linear systems of near-equilibrium where few simple facts of this space or time, as mentioned above, allow for accurate prediction of future states of the system.

Contrarily, non-linear (complex/strange) attractors are more complex as defined in complex systems. Strange attractors or basins of attraction, to which they are referred in complex theory, were discovered in the last quarter of the twentieth century which were patterns so complicated that it was difficult to discern any order as they present more than just one set of limits. Though complex attractors were at first seemingly complicated, they were however discovered as being far from chaotic rather they are characterized by a high-dimensional degree of order in that the trajectories are traced within certain bounds, though they never exactly repeat themselves (Juarrero 2010: 5). Strange attractors or basins of attraction fundamentally portray; *'the space of all possible states traced by the system but here it defines a domain of uncertainty (..) they present more than just one set of limits as seen in the butterfly shape of the Lorenz attractor (..) insignificant perturbations could push the system from one wing of the butterfly to the other, resulting in radically different limits and hence new global patterns'* (Rihani 2002: 79). With reference to development, politics and economics, minor events can shift these into new and unexpected directions within the particular basin of attraction that is in command at that time i.e. variations that occur between the different states cause change but are consequently contained within the attractor.

Attractor/fitness landscapes:

A way of modeling or imaging complex systems is by means of fitness landscapes. Fitness landscapes were originally designed by biologists (Sewall Wright 1932) intended to capture the processes of natural selection by visualizing the 'switch and trigger' mechanisms that precipitate a change in a systems' evolutionary trajectory. Recent developments of computer simulation models have enabled dependencies and constraints embodied by attractors to be visualized as three dimensional adaptive landscapes, this however is beyond my range of expertise though the notion may be rather imperative for that of policy-makers as they could assist in the process of mapping out convoluted relationships as accurately as possible which would essentially be quite valuable with phenomena of complex systems. A fitness landscape encompasses flatlands, valleys and mountains whereby the valleys can be seen to represent zones of poor performance, the mountains as zones of good performance and the flatlands as areas of neutral performance (Geyer et al. 2010: 63). The element of time is imperative in fitness landscapes, as landscape features can capture the impact of context-sensitive constraints over time. Complex systems such as; countries, institutions, individual actors

etc. can for instance be seen as moving through evolving landscapes where numerous other factors combine to influence their chances of survival –thus the complex systems and fitness landscapes must adapt and change continuously. Rihani exemplifies a reasonable complex strategy where a zone may have many mountains of good fitness; an evolving general framework, significant degree of local autonomy, high level of local connectivity etc. however these may produce a balance for the time-being they are also prone to unforeseen challenges or shock events. Survival on a fitness landscape therefore entails basic rules of adaptability, flexibility, learning and balance (Ibid.). Stability and resilience are hereby important concepts of a complex dynamical system, in that one may presume that stability of a system was the optimal state, nevertheless this is not the case, as stable systems are often brittle and disintegrate if highly stressed. The system must therefore be resilient, understood as being robust and having the ability to evolve –as co-evolving systems they may fluctuate extensively, within the basin of attractors, though their structure has the capacity to be modified and thus adapt and evolve (Juarrero 2010: 8).

As described above, complex systems are not predictable in the Newtonian sense, as it is difficult to account for unforeseen emergent properties and random perturbations, nonetheless a greater understanding of what causes resilience and the conditions that allow for a system to evolve (in response to their internal dynamics and their environment) may help instigate effective interventions. Furthermore once it has been recognized that when regarding social phenomena – which *are* complex systems, mistakes and failures will undoubtedly be made and random conditions will occur despite intentions of ‘the best laid plan’, strategies of resilience -thus perhaps by incorporating and accounting for this can aid optimizing the ‘cost of failure’.

In summary, complex systems share common traits in that; *‘They have active internal elements that furnish sufficient local variety to enable the system to survive as it adapts to unforeseen circumstances. The systems’ elements are lightly but not sparsely connected. The elements interact locally according to simple rules to provide the energy needed to maintain stable global patterns, as opposed to rigid order or chaos. Variations in prevailing conditions result in minor changes and few large mutations, but it is not possible to predict the outcome in advance (Rihani 2002: 80-81).*

3. Danish Development Aid – A brief historical account

The origin of Danish development aid will be introduced briefly herein for the subsequent purpose of proposing answers to the inquiry of the hypothesis regarding Danish development having reached a new paradigm through viewing the paradigm of which development has constituted previously. This empirical account of the history of Danish development aid will therefore be presented herein for the purpose of later analysis (Chapter 5) in relation to the problem-formulation.

Danish development aid can be traced back to post WWII, where development aid in general started on a much larger scale than before with the creation of an new international system. The devastation of which the war had generated lead to the consideration of how the world economy should be structured in the future whereby allied leaders met at the Bretton Woods conference that provided the blueprint for the post-war capitalist economy (Rapley 2002: 5). This gave rise to the establishment of various major institutions such as the International Monetary fund (IMF) and the World Bank (WB). The initiation of the Marshall Plan for reconstruction of Europe also signaled this new determination for development to be seen as a worldwide priority simultaneously seeking to avoid future global conflict (Kingsbury 2008: 54).

Development can be said to be a historical progress that refers to, in the words of Kingsbury, *the unfolding of human history, over a long period of time, in a manner that is thought to be progressive* (Kingsbury 2008: 23). Development thought and process has been through a series of debates, trends, fashions that include and depend on influences from the mix of social, economic and political considerations, of which Denmark is no exception in this process. The primary underlying concern of Danish aid then, and as we shall see later still is, was to contribute to development, reduction of poverty and to address inequality and injustice based on the premise of which Denmark as a rich country with a well established welfare state should naturally contribute to less prosperous countries in need (Engberg-Pedersen 2009: 109). Denmark cooperated closely and exclusively with the United Nations (UN) through the 1950's and later the Bretton Woods institutions. In the early period of Danish development assistance (1950-70's) Denmark's overall bilateral development assistance programme was established as well as DANIDA (Danish International Development Agency) in 1963. The Danish and international development community began focusing efforts specifically directed towards poverty reduction orientation by which Denmark launched her organizational framework in 1971, the Act on international development cooperation (DANIDA 2011c). The overall purpose, deriving from the Act, guiding Denmark's international development cooperation; *of Denmark's*

national assistance to developing countries should be, through cooperation with governments and authorities of these countries, to support their efforts to achieve economic growth and in this way to contribute to ensuring their social progress and political independence (Engberg-Pedersen 2009: 108). The emphasis on economic growth was a cause for discussion in relation to the extent of which it should depend on the trickle-down theory or on social progress, of which the wording remained the same, though eventually it was agreed that elements of growth, social progress and political independence should be seen as interdependent. Cooperation in regards to development is, as seen in the above statement, not a novel practice, though cooperation was highly linked to governments and authorities which relied on top-down management, a task of which required direction from; *'the top through the UN, the World Bank and IMF, world leaders and specialist governmental agencies in developed and developing countries'* (Rihani 2002: 4). A management style of which Samir Rihani refers to as having been dictated by a linear paradigm¹ which correlates to concepts of order, predictability and knowable universal laws. Rihani introduces four golden rules of which the linear paradigm is founded upon, these entail; 1) **Order**; given causes lead to known effects at all time and places 2) **Reductionism**; the behavior of a system can be understood, clockwork fashion, by observing the behavior of its parts. There are no hidden surprises; the whole is the sum of the parts, no more and no less. 3) **Predictability**; once global behavior is defined, the future course of events can be predicted by application of the appropriate inputs to the model. 4) **Determinism**; processes flow along orderly and predictable paths that have clear beginnings and rational ends (Rahini 2002: 66). Much in line with Rihani's postulation of development relating to a paradigm of linearity, development can hereby be understood within this framework as development was to a great extent dictated by economic implications that would essentially determine a positive outcome for developing countries. The emergence of development in its 'modernization-phase' adheres quite obviously to this assumption. Development as modernization was a process whereby societies were seen as moving through fundamental, complete structural transitions from one condition to another, from a starting point (from traditional society) to an end point –to an advanced, modern society (Kingsbury 2008: 23). This dominant development perception, as we know it from modernization theory, surrendered to the idea of a whole world's, however poor, ability to copy the models of highly industrialized countries in order to achieve a modern standard of living, naturally presupposed

¹ The linear paradigm referring to the natural sciences associated to specific causes and effects applied at all times and places where the mode of behavior of the whole system can be determined by studying the constituent parts –deriving from scholars such as; Newton, Hobbes, Descartes and Locke (Rihani 2002: 3).

by the implementation of the 'correct' policies were induced. The assumption hereby arguably being in the rationalization that economic growth and prosperity would inevitably occur, in a linear manner, when developing countries transformed their internal components (social and cultural progress) by adapting to new technologies, through means of industrialization. An additional example of the ideology of this time appears in Rostow's *'stages of Economic Growth'* (1960) that proposed a series of stages for development to go through in order to achieve modernity, evidently reducing development to a linear process of determination and prediction. These stages involve the movement from; the traditional society→the pre-take-off society→take-off→the road to maturity→the mass consumption society (Kingsbury 2008: 57). A similar association can also be held of Karl Marx, in that behavior of a linear process inevitably moves towards a natural end-state of 'perfection', as seen in Marxists capitalist theory with the transition of one society to another (feudalism to capitalism and eventually 'socialism'). However, moving away from the discussion of linearity for the time-being, Denmark has basically maintained its high level of development aid from the early stages to date, relative to the standards set by the UN (rich countries should provide at least 0.7 % of their BNI to development aid) Denmark was and is continually one of the largest donor countries of development aid. An additional and pertinent feature of Danish development aid is that it is allocated both multilaterally and bilaterally which are generally noted as being equally distributed (give or take fifty –fifty division) half through international organizations (UN, WB etc.) the other half channeled to selected countries such as the major four recipients; Tanzania, Kenya, Bangladesh and India (Engberg-Pedersen 2009: 110). The countries selected were extended beyond the major four and from late 1960's to early 90's Denmark had engaged in projects in approximately 50 countries. The priority areas were broadened additionally to prioritizing development including environment, gender equality, human rights and democratization in the 1980's, a shift conducive with that of the introduction of structural adjustment programmes (SAPs) prevailing at the time promoting a higher degree of policy conditionality of Danish development assistance. Structural adjustment was a condition of loans granted by the WB and the IMF which obliged governments to; *reduce the role of the state in the running of the economy and the social sectors, to open up the economy to foreign investment and to reduce barriers to trade* (Lewis et al. 2009: 17). The fall of the Berlin wall (1989) and the end of the Cold War (1991) consequently raised the volume of Danish development assistance as it was expanded and supplemented to the classic development aid programmes with 'Eastern support' in order to assist the former communist countries. The international development community, contrarily, decreased their aid-volume as the end of the Cold

War meant that a significant purpose of aid linked to political-security had lapsed and thus aid was distributed amongst more countries, including East-European countries. The international donor community moreover began advocating 'good governance' in that the emergence of development outcomes were associated with a balanced relationship between government, market and third sector, alongside continuing economic liberalization (Ibid.). Furthermore the 1990's approach of Danish development focused its bilateral aid on so-called programme cooperation countries, with a renewed advancement of concentrating on sector-wide based approaches rather than the previous (though still relevant and utilized) that were essentially based on project-aid (Engberg-Pedersen 2009: 111). This development re-structuring has seemingly implications of the realization that sustainable development being implemented from the outside was not viable, thus promotion of institutions and sector-approaches adhere to a closer alignment with recipient countries strategies and systems. Though project based aid is considered sufficient in regards to donor-control, in that they encompass specific accountability ties and are relatively easy to monitor and evaluate, they have been criticized in their ability to create local ownership i.e. project aid targeted for specific purposes and areas (such as access to clean drinking water) in developing countries with weak capacity and institutions have positive effects, though they may pose risks of discontinued sustainability once foreign experts leave or funding ends. Program-based aid also referred to as sector-wide approach, therefore focuses upon donor coordination with local procedures which attempts to strengthen local capacity within the certain sectors of concern such as; health and gender equality etc. This approach adheres to the international tendency of emphasis on institutional development pronounced as a pertinent structure to define the 'rules of the game'. Institutional development was proclaimed necessary in that markets were unable to function properly without a variety of institutions to enable a sound environment for trade, production and commerce. Political processes were also deemed unsuccessful without institutions that hold decision-makers to account and to provide access to decision-making for significant political actors. Furthermore institutions are essential in the process of peace and stability promotion as they are considered valuable assets in regards to sanctioning of violence etc. (Engberg-Pedersen 2009: 110).

Moreover Danish development began moving towards an alternative to the structuralist approach of development theory, which initially emphasized macroeconomic change, to the pivotal goal of human development focusing on people's capacity to evoke change (Pieterse 2000: 351). The 1990's also witnessed increased attention upon the practice of Non-Governmental Organizations (NGO's),

which to a great extent are influenced by bottom-up approaches contraire to the lengthy period of top-down management and ideology. Though NGO profiles have been highly increased locally, nationally and internationally and become recognized as pertinent actors of development it is difficult to determine the how many there are worldwide, both formal and informal –an estimation of the UN is approx. 35.000 large established NGO's (Lewis et al. 2009: 2). NGO are structured in various forms, large or small, formal or informal, bureaucratic or flexible, funded externally or by locally mobilized resources. As they are difficult to define in precise structure the characteristics are generally considered as non-profit, voluntary, civil society organizations with specified areas of concern undertaking the role of implementer, catalysts and partners. NGO's have been increasingly 'contracted' by governments and donors, as will be presented in the following section, to carry out specific tasks in return for funding (Lewis et al. 2009: 13).

These apparent changes in perspectives gave rise to alternative methods of dealing with development, and a process of re-financing goals had and has seemingly become center stage for future development practice. The notion of alternative methods can to some degree be understood, as we know it from *Alternative Development Theory*, the pursuance and objectives of people-centered approaches with bottom-up perspectives alternate to state-led top-down levels of development. Alternative development rejects the concept that developing countries should strive to achieve the same development pattern as developed countries, thus advocating to a higher degree the processes of non-linearity. Alternative development tends to be practice-oriented rather than theoretically inclined, the logic being that actual development knowledge includes the 'people's knowledge' locally rather than determined by abstract expert knowledge (Pieterse 2000: 351). As argued by Jan Nederveen Pieterse; *'Alternative development has been fashionable because it came upon a crisis in development thinking, because it matched general doubts about the role of the state, both among neoliberals and from the point of view of human rights (..) a way of being progressive without being overly radical and without endorsing a clear ideology: it could be embraced by progressives and conservatives who both had axes to grind with the role of states* (Pieterse 2000: 348). The citation above implies that the rise of alternatives to development, though certainly attractive, were however not sufficient in providing what could be constituted as a shift in development paradigm. Hence a lack of concrete theoretical foundation is lacking as well as actual implementation of alternative development conceptualizations as perceived counterpoints to mainstream development, rather; alternatives to development can be said to have gained influence in reinventing and incorporating

elements within mainstream development such as promotion of and focus on ground-up alternatives; *participation, empowerment, grass-root movements, democratization, citizenship, human rights cultural diversity and NGO's* and so forth. Alternative development is an alternative way of achieving development, though it cannot be considered as a complete renewal of previous linear ideas and practices as it ultimately shares the same goals as mainstream development. It does and has however contributed to different means of achieving development goals –a contribution in considering the attributes of 'development from below' have to a greater extent recognized that there may be valuable lessons learned through partnership and mutual obligation of both donors and recipients. In addition *globalization* has become a relational aspect of influence aspiring to the notion of development success in Danish foreign and development policy integrating components hereof with complementing priorities such as; conflict prevention, HIV/AIDS, children and youth in addition to the implementation of the Millennium Development Goals (2000) in relation to eradicating extreme poverty.

The change of government (liberal-conservative) in 2001 brought about several modifications in development aid. Development aid was reduced in overall levels whereby the procedure of phasing out bilateral support began to countries such as; Eritrea, Malawi and Zimbabwe, the so-called 'regions of origin' was established, Danish development NGO's were treated with a tougher stance and general securitization of development assistance was instigated as well (e.g. as a result of 9/11 terrorist attacks). Danish development assistance was aimed to encompass four identified priority areas; 1) European development, Environment and Democracy 2) International stability, democratization, refugees and the fight against terror 3) social and economic development 4) the global environment (Engberg-Pedersen 2009: 113). In conjunction with these developments an international discussion took place in order to increase the effectiveness of aid, an endorsed declaration currently known as the Paris Declaration, which frames the terms of aid harmonization seeking to build trust between donor and recipient countries in their quest of development.

Development and its numerous actors has become an increasingly complex field in determining what works and what is no longer viable, with the combined ideologies of politics, economics and social implications that determine modes of development, as pronounced by Pieterse affirms it as; *'something beyond just another set of measuring standards (..) If conventional developmentalism (growth, modernization, neoclassical economics) is no longer acceptable because of its linear logic and universalist pretension, why would an alternative development paradigm hold (..) How could a*

single paradigm encompass such a diversity of development paths, needs and circumstances?' (Pieterse 2000: 356-357). Hence a focus on the emergence of complexity in development may prove to be exactly that, a paradigm of which proposes the unsuccessful manner of the previous linear tendencies of development methods, thus introducing non-linearity in regards to understanding the diversity of development as a process that cannot account for or predict all outcomes. A paradigm of which may essentially already have emerged as will be discussed subsequent to the depiction of Danish development policy in its present form.

4. Foreign Policy of Denmark

Denmark has, as presented in the above section, a long tradition of partaking in peacekeeping operations, whereby development policy is closely interlinked with that of foreign policy. The core values promoted within the foreign policy of Denmark are integrated interlinked with development policies, these values will therefore briefly be presented below. Moreover as the previous chapter accounted for the historical account of Danish development, it is the aim of this chapter to introduce Danish development in its present form, which will include subsequent sections regarding the Civil Society Strategy and additionally the Paris Declaration, as these are essential aspects concerning the overall framework of the Danish development policy. Furthermore Danish development policy in its current form is introduced as they provide an empirical account for later analysis (Chapter 5 & 6) of the paradigm that is seemingly prevailing at present.

Denmark participates actively through international engagement and multilateral cooperation such as; the European Union (EU), United Nations (UN), North Atlantic Treaty Organization (NATO) and the World Trade Organization (WTO) which are cornerstones of Denmark's participation in internationalized and open economy policy. Denmark construes the pertinence of cooperation in a globalized perspective as foreign policy challenges cannot be met by individual countries alone. The purpose of this engagement is connected to the promotion of Danish interests, voice and values which include democracy promotion, human rights and rule of law. As proclaimed by the Foreign Ministry of Affairs of Denmark, globalization is an inevitable explanatory factor of the construction of both foreign and development policies (MFA 2011b: 3).

Globalization has, as a term, been defined, interpreted and contested in various ways which will be dealt with shortly herein as the concept has definite explanatory potential in relation to discussing the Danish development strategy as a perceived rise of a new paradigm. Globalization has apparent implications relevant to the implementation of Denmark's relatively novel development policy of which cannot be disregarded and of which will be clarified in the following. The broadly prevailing and most generalized view of globalization is a proposed or actual situation where there is a process or series of linked processes that lead towards greater interaction or integration between states and within states (Kingsbury 2008: 129). The primary context for both the process and the outcome is economic, being manifested as an increasingly integrated or independent global market. The Economic definition of globalization entails an integrated market operating on the principles of

laissez faire or neo-liberal capitalism in which ‘*barriers between states, such as tariffs, should no longer exist and in which local economic unities (..) compete on the basis of comparative advantage*’ (Kingsbury 2008: 130). Many posits regarding globalization are linked to people and countries experiencing closer integration which is derived from reduction costs of transportation and communication hereby breaking down the barriers to the flow of goods, services and capital across borders. The more generalized notion of globalization concerns interdependence as well as the collapse of time and space, communications, culture, political institutions, global institutions, and level of global intervention (Kingsbury 2008: 131). Globalization can, in many respects such as; economic, political, environmental and socio-cultural matters, hereby be said to imply a ‘cross-pollination’ of influences or a tendency towards a common point. This undeniable interdependence is the basis of Denmark’s acknowledgement of globalization voiced as an essential element that frames the foreign policy recognizing an increasingly extensive and complex formation of international relations. Economically, Denmark strongly believes in obtaining prosperity and global growth through free trade where other challenges within the foreign policy frame of Denmark are complexly interrelated and involve *combating poverty, terrorism, climate and environmental problems and ensuring respect for human rights* (DANIDA 2009: 4). These issues all require multilateral global solutions. Collective solutions in an exceedingly globalized world are not novel to Denmark, though the concept of harmonizing decision-making through knowledge sharing and gaining solid framework of international cooperation in regards to aligning development aid programmes are prevailing and are pivotal concerns within foreign policy. In accordance to Danish development and foreign policy security and development go hand in hand i.e. promoting security and stability are intertwined with promotion of democracy, development, reconstruction and sustainable development. Denmark believes in the need to work together and reach common goals when dealing with these many concerns in order to, in an economic perspective, overcome the current financial crisis but also to prevent any in the future. By promoting trade liberalization with an effective rules-based international trading system, Denmark trusts that this will serve their best interests as well as the interests of developing countries. Denmark underlines the importance of adapting to the challenges of a changing world which implies definite explanatory potential when discussing a rise of a new paradigm in an increasingly complex and interconnected world. This matter is obvious within the implementation of harmonizing development policy and practice with that of the development community, which sets to create and integrate common ground herein as well, which will be presented in the following section.

Danish Development Policy

Denmark prides herself of being one of the largest donors in relation to development assistance with a GNP of 0.8 % (DANIDA 2009: 8). Though the level of aid has been both increased and decreased dependent of ruling political party in government at a given time, Denmark has maintained her characteristic of having significantly and continuously high levels of aid assistance, in comparison to other countries (Engberg-Pedersen 2009: 110).

The guideline for Danish development policy is essentially based on the Millennium Development Goals (MDGs) that were adopted by the UN in 2000, which constitute (briefly introduced) the joint effort of the international community to commit to reducing poverty and promoting sustainable development by 2015 in developing countries (Danida 2010: 7). The MDG's consist of eight prominent goals to; *eradicate extreme poverty and hunger in the world, achieve universal primary education, promote gender equality and empower women, reduce by two thirds the mortality rate of children under five, reduce by three quarters the maternal mortality ratio, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainability and develop a global partnership for development*. Denmark takes an active role in assisting to obtain these goals through identifying its own applicable resources and possibility of doing so. As needs are numerous and with a large range of variety and differences in developing countries, Denmark decidedly focuses upon specific areas of priority that are considered most efficient with that of their means i.e. focusing efforts on creating stronger engagement in fewer countries. These areas focus upon five political priorities incorporated in the Danish development policy and are set in long-term commitment perspective; *growth and employment, freedom, democracy and human rights, gender equality, stability and fragility, environment and climate* (DANIDA 2010: 7).

Denmark, as mentioned, acknowledges a globalized world whereby the possibility and opportunity of playing an active role in promoting own values and interests implies being actively involved internationally. Development is prominent in the value system of Denmark based on its own favorable situation there is therefore a particular responsibility to foster prosperity in other parts of the world, as well as promoting freedom and peace (DANIDA 2008: 3). Denmark is of the conviction that as citizens of one of the world's richest societies it is obligated to further freedom to others of less fortunate societies similar to that of the freedom the citizens of Denmark enjoy. The overall development policy is based on this fundamental reasoning and furthermore under the idea that all people are born free and equal positing that '*without freedom there will be no development*' (DANIDA

2010: 4). The notion of freedom is to be understood as freedom from; poverty, fear, degradation, powerlessness and abuse. Freedom principles should therefore be towards taking charge of one's own destiny and potential in order to live a life with dignity in just and open societies –which in turn will benefit the individual and community. The Danish International Development Agency (DANIDA) emphasizes in a report on Denmark's strategy for development cooperation that given the world is in the midst of undergoing change and globalization making countries ever more interdependent on each other, it is evident that there has arisen a global responsibility to promote universal values of freedom, thus simultaneously safeguarding one's own interests. This is an integral part of Danish foreign and security policy. With this recognition of change, Denmark not only sees the challenges herein but also opportunity. The opportunity to learn from past experiences is mentioned numerous times in the content of current foreign and development policy reports, this is essential for the framework of future practice in development. Denmark explicitly expresses this need to understand past failures as well as successes in order to create a sound foundation for future development practices, this entails acknowledgement of change that has occurred and will again without doubt continue to occur. This equates much to the perception of Nederveen Pieterse that after several development decades, development thinking and policy have become increasingly reflexive in relation to the crises and failures of development –what he refers to as reflexive development (Nederveen Pieterse 2000: 267).

As clearly and arguably voiced within the Danish development policy report; *'we cannot make demands for change if we ourselves are not prepared to change'* (DANIDA 2010: 5). Despite many years of aiding developing countries with massive development assistance it has been recognized that progress has been made, though not enough in relation to reaching the MDG's, in that some countries remain at a standstill while others have managed to be lifted out of poverty. Learning from past experiences Denmark continues the fight against poverty with a renewal of ideas, practices and rhetoric, emphasizing that;

'We must continue to evolve, adjust and advance our development policy to better meet current challenges and opportunities (..) we must ensure that development cooperation is structured to support change in the best possible way' (DANIDA 2010: 5).

In the pursuance of bettering development policies Denmark is prepared to create strong partnerships with the international development community, which is a key factor within the

perceived process of change in relation to establishing a new framework for development practice. In order to ensure better results in developing countries Denmark prioritizes and promotes strengthening partnerships with actors whom are willing to create change. The base of development engagement should therefore essentially be through collective decision-making and the realization of forming strong as well as long-term partnerships with governments, civil societies, media, actors in cultural life, education and research institutions as well as private business sectors in partner countries -The challenge of making a greater impact in the world include willingness to change and should be channeled through partnerships at all levels namely; locally, regionally and internationally. These long-term partnerships will create; *'credibility and provide best possibilities for ensuring results (..) Danish engagement in partnerships will be robust, flexible and dynamic (..) robust enough to handle pressure and setbacks, flexible enough to adjust to local conditions and changes and dynamic enough to respond under difficult conditions as well as to seize opportunities'* (DANIDA 2010: 8).

The citation above not only emphasizes the importance of integrating a higher degree of international cooperation in development policies and practices in order to meet and solve global and transnational challenges, but also the awareness of the complexity of this integration i.e. emphasizing the need to collectively be able to handle and deal with the challenges and opportunities of an ever changing world structure and system. As proclaimed by the Foreign Ministry of affairs; *'development and change are not created from one day to another and change is often difficult and time-consuming (..) Conflicting interests, values and determination both to promote and resist change may exist'* (DANIDA 2010: 6). The point being that the greater the global commitment and cooperation is the greater likelihood of managing conflicts and change will be. In line with Denmark's ambitious persistence towards achieving these many targets through partnerships it is not without the recognition that adaption to changing situations also presupposes a willingness to take risks. When committing to long-term development models within a system of pluralistic societies where issues and structures are many, Denmark accepts that implementing innovative strategies entails taking chances and will therefore adapt their engagement differently to that of each particular country. Denmark understands that; *'Possible risks will play a role in planning the engagement but not, as a rule, preclude potential engagement'* (DANIDA 2010: 11). Risks are defined through endeavoring to create consensus well-knowing that numerous economic, social and cultural components interplay and therefore create a framework based on acceptance of open-ended solutions and outcomes which may entail mistakes and setbacks.

An innovative branch of Danish development policy in relation to the thematic strategy of creating strong partnerships at all levels has been launched in late 2008. The Civil Society Strategy introduces a specific strategy in order to obtain close cooperation of civil society organizations and will be presented in the following.

The Civil Society Strategy

The Ministry of Foreign Affairs (MFA) of Denmark launched a strategy for Danish support to civil society in Developing Countries, the Civil Society Strategy (CSS) in late 2008. This strategy has been developed through dialogue with private Danish development organizations in order to place civil society even closer to Danish development policy with the long-term overarching objective for Danish civil society support to; *'contribute to the development of a strong, independent and diversified civil society in developing countries'* (DANIDA 2010:1).

The Civil Society Strategy (CSS) seeks to face the challenges of civil society in relation to development work through the creation of networks promoted both nationally, regionally and internationally with participation of civil society organizations from both donor and recipient countries. The MFA and Danish development organizations and movements involved in this relatively innovative framework have agreed that; *'focus must be maintained on supporting capacity building and advocacy to ensure that civil society organizations in developing countries take the lead and maximum responsibility for their own interests'* (Tørnæs in DANIDA 2008: 2).

The fundamental reasoning of developing a framework with emphasis on knowledge sharing of Danish organizations is explained in the context of the growing international attention, in recent years, on fragile states and situations. The CSS stresses the importance of incorporating civil society as a strategy based on the role of globalization whereby *'civil society no longer lies only in its relations to state and market but also in its relations to the international community'*. By means of coordinated efforts, joint planning and management as well as knowledge sharing within both donor and developing countries the CSS introduces a proclaimed opportunity to promote more effective assistance with higher impact nationally, regionally and locally. The above citation of the role of civil society in this context needs clarification as the concept of civil society has a long and complex history of perceived notions. The referral to *Civil Society* in this context should be perceived as constituting a *liberal view*, in that it is seemingly understood as an arena of organized citizens acting as a balance between state and market. The liberal view of civil society emerged into mainstream development policy in the 1990's linked to the policy agenda of 'good governance'. This perspective

presupposes civil society as; *a source of civic responsibility and public virtue, and a place where organized citizens can make a contribution to the public good* (Kingsbury 2009: 128). The specific definition of civil society in the CSS is established broadly as; *all types of informal and formal structures through which people organize themselves* (DANIDA 2011a: 27). The performance and vital role of civil society should be;

'..Through their efforts to ensure that marginalized population groups are given a voice and through their ability to monitor how resources are used to reduce poverty (..) A strong civil society creates a necessary balance in the development of society that would otherwise be dominated by the private sector's economic resources and the state's wish to uphold supervisory, control and authority (..) many organizations generate debate about democracy and rights in situations where legislation and authorities do not effectively guarantee law and order, it is such potential in civil society that Denmark particularly wishes to strengthen' (DANIDA 2011a: 7). Furthermore the essential function of initiating an effective civil society is mentioned as crucial for the purpose of building effective and democratic states (DANIDA 2011: 14).

The principles of which the CSS operates upon are moreover partly defined by the principles of the Paris Declaration which was adopted in March 2005 by more than 100 countries and international organizations. These countries and organizations were and still are committed to increasing the effectiveness of aid through national ownership and adaption to the recipient country's strategies as well as harmonization of donor cooperation. The principles and design of the Paris declaration will furthermore be addressed and specified in the subsequent section, as the PD constitutes the ideological basis of CSS's objective and incentive as well as the overall framework of Danish development policy.

The CSS presents and specifies overall nine strategic goals of which provide the basis for the future performance measurement of the Danish development interventions. These strategic goals are based on the overarching objective and goal of Danish development assistance, namely to reduce poverty by promoting; a) Sustainable development through broad-based, pro-poor economic growth with equal participation by men and women b) Human development through expansion of the social welfare sectors, including education and health c) Democratization and popular participation in the development process, the establishment of rule of law and good governance (DANIDA 2011a: 7). The strategic goals constitute and entail;

1. Promotion of a vibrant and open debate nationally and internationally
2. Promotion of a representative, legitimate and locally based civil society
3. Promotion of capacity development, advocacy work and networking opportunities
4. Promotion of focus on rights
5. Promotion of flexible and relevant interventions in fragile states and situations
6. Promotion of civil society support in Danish bilateral and multilateral assistance
7. Involvement of Danish civil society organizations in development assistance
8. Collaboration with stakeholders
9. Goals and results

What is novel to Danish development policy and clarified in the CSS is the inclusion of civil society organizations as recognized and invaluable participants in the pursuance of achieving development goals. The focus of integrating civil society to a higher degree into development frameworks are, as seen herein, increasingly important, in that donors seek to re-evaluate the perspective of civil society organizations as solely sub-suppliers to the government. Civil society is currently being drawn in as seemingly equal partners with the acknowledgement that they too are valuable contributors in the development process. Though it must however be stressed that the CSS assistance not solely applies to assistance channeled through Danish civil society organizations but also consists of official Danish bilateral civil society support as well as multilateral assistance.

Danish cooperation with civil society in developing countries within the framework of Danish bilateral development cooperation is essentially channeled by means of embassy representatives, in that they constitute the role of utilizing analyses of the respective civil society compositions in order to assess and plan the most appropriate civil society support, also in collaboration with other donors or national authorities. Sector programme support includes capacity building of government partners in order to incorporate popular participation as well as administrative transparency, simultaneously promoting inclusion of relevant civil society organizations in regards to planning, monitoring and evaluating these programmes. Denmark endeavors to include local civil society organizations within sector programmes on the basis of their long-standing experience in particular fields and are therefore considered particularly qualified as contributors in various sector policies and strategic development initiatives. Through on-going dialogue and consultations with local civil society organizations, local authorities as well as Danish organizations will be carried out in connection with selecting partners among civil society organizations and in regards to awareness of where Danish support can achieve best results.

In line with harmonizing development strategies the civil society strategy entails a close involvement and support of and to a variety of Danish civil society organizations and their partners. The organizations involved under so-called framework agreements include; CARE Denmark, the Danish Red Cross, DanChurchAid, IBIS, MS Danish Association of International Cooperation and Save the Children Denmark -All of which work within a specific framework to identify, plan, launch, implement, monitor and evaluate their own development activities. The funding of these framework agreements will be regulated in accordance to overall development policy principles and objectives of results achieved in this context (DANIDA 2011a: 39). In order for Danish development organizations to receive support they must contribute to a variety of areas deemed imperative by the Government, these involve main sectors of; poverty reduction, freedom, democracy, human rights, growth and employment, gender equality, stability and fragility, the environment and climate. Other areas are HIV and AIDS, conflict prevention, children and young people particularly vulnerable population groups (DANIDA 2011b: 5). The above-mentioned organizations within the framework agreements are valued in that they are organizations that have exuded professionalism and administrative capacity to implement and administer major programmes over a long period of time. However, the MFA recognizes a broad spectrum of Danish CSOs in development assistance and has therefore provided various types of support options that enable smaller and less experienced Danish organizations to apply for, if they fulfill the criteria.

With the aforementioned proposed incentives concerning development activities and the strong focus on results, monitoring and evaluation (M&E) tools and methods have become increasingly important, and will therefore be briefly presented herein. The World Bank has provided an overview of a sample of M&E tools, methods and approaches of which the advantages and disadvantages are illustrated. The purpose of M&E of development activities is first and foremost to offer better means *for learning from past experiences, improvement of service delivery, planning and allocating resources and demonstrating results as part of accountability to key stakeholders* which is of interest to government officials, development managers as well as civil society (WB 2004: 5). A key measure of M&E entails performance indicators of which key stakeholders must define these indicators with sound data collection in order to measure; inputs, processes, outputs and impacts of development strategies. Indicators to measure performances must be properly defined in order to create effective means of assessing progress towards achieving promising results. With accessible data sources performance indicators can assist in identifying problems and hereby allow for corrective action to be

obtained. *The Logical framework approach (LogFrame)* and *Theory-based evaluation* are provided to clarify objectives of various projects, programmes and policies. The LogFrame consists of identifying expected causal links in regards to a chain of inputs processes and outputs, whereby the theoretical evaluation proceeds to obtain a more in-depth understanding of a program or activity which need not assume simple linear cause-and-effect relationships. Data collection methods are varied in that the information needed is collected through different modes, to name a few; by means of formal quantitative surveys (obtaining comparable information of a relatively large number of people in particular target groups), Rapid Appraisal methods (low-cost and quick way of obtaining views and feedback of beneficiaries), Participatory Methods (active involvement in decision-making processes in certain projects, programmes or strategies) (WB 2004: 12-16). The requirement of initiating methods of Monitoring and Evaluation are pertinent in relation to achieving financing of Danish development assistance which must meet the principles set forth by Development Assistance Committee (DAC). Evaluation principles must meet at least three minimum requirements of which the first pertains to *Independence* i.e. Members or others involved in activities of a given organization are refrained from conducting evaluations, thus it must be conducted by an external person. The evaluations must include the relevance of the particular activity objectives, efficiency and effectiveness of meeting goals as well as the impact and sustainability of these activities. Furthermore the evaluations are to be distributed to the MFA and made publically available on the website of the respective organization. Monitoring activities pertain to the extent of which the objectives in the CSS have been promoted and contributed to change in civil society conditions in developing countries. Respective Danish organizations and their partners are to perform on-going monitoring of activities through regular, systematic observation and collection of data information for the purpose of improving and adjusting initial activities in progress. The monitoring initiatives are considered valuable for the organization itself, though also highly significant for the MFA in relation to knowledge upon the contributions made in order to reach the objectives of the CSS (DANIDA 2011a: 15-16).

Finally, with this renewed commitment of development cooperation it is acknowledged that in an attempt to create consensus across the various levels of engagement of the development community, there will be certain risks involved. Thus policy makers and experts from numerous member states as well as international development organizations met recently, November 2010, in Copenhagen to review issues in relation to inherent risks of development cooperation (DANIDA 2010: 1-4). The purpose of the conference was to consider the risks of aid coordination in both fragile and

transitional contexts, thereby not solely reflected upon urgent support but also on countries transitioning out of instability. Policy agendas and principles are often overlapping by multiple institutional actors in these contexts the purpose of which participants were endeavoring to identify practical options to minimize harm thus assessment of better management of (acceptable) risks were discussed. Participants agreed to pursue a more coherent and harmonized approach to risk management across and within the various policy spheres (Ibid.). The essence of the conclusions made were based solidly of the willingness to accept that certain risks must be taken, though greater honesty of the political challenges of aid engagement should be clearly communicated. Furthermore risk-analysis and management should be context-specific in that donors should be more realistic about the level of ownership and accountability possible of countries in transitional contexts. The best objective of risk management should initially be to prevent problems, in that it is emphasized that fixing problems when they arise is much more costly than essentially preventing problems. The terms of agreement concluded as a result of the conference; *'Risk and results Management in development Cooperation: Towards a Common Approach'*, indicate influences of the principles set forth of the Paris Declaration such as; information sharing, multilateral reforms, effective communication and coordination and shared understanding of risks through joint risk assessments, which are highly reflective of the concept of harmonization, which will be presented in further detail in the following section.

Paris Declaration

This section will provide an overview of the key concepts of the Paris Declaration in order to clarify the ideological influences incorporated into the Danish development policy and strategy, the Civil Society strategy.

Prior to the Paris Declaration, the so-called Rome Declaration was adopted at the High-Level Forum on Harmonization in February 2003 whereby heads of both multilateral and bilateral development institutions met in Rome, Italy. The commitments made in Rome to harmonize and align aid delivery were reaffirmed by more than one hundred head of ministers, head of agencies and other senior officials that adhered to the declaration in Paris on March 2nd 2005 (High Level Forum 2005). The case of ineffective development aid is, according to the Paris Declaration, associated with unproductive transaction costs of actually delivering aid. The Paris Declaration posits that donor priorities and practices are not conducive with the priorities and practices of recipient countries, this should therefore be counteracted by utilizing a country-based approach, whereby recipient countries gain

ownership, enable capacity building, recognize different patterns of aid-giving and include civil society and the private sector (OECD 2011a: 1-2).

In order to improve the effectiveness of development aid and to increase the impact aid may have in reducing poverty and inequality, increasing growth, building capacity and accelerating achievement of the Millennium Development Goals (MDGs), it was agreed to harmonize practices, policies and procedures of aid with that of aid delivered by other donors. In accordance with the Rome Declaration, the Paris Declaration commits to harmonize and align aid delivery. The Paris Declaration is organised around the five pertinent themes: *Ownership, Alignment, Harmonisation, managing for results and mutual accountability* (DANIDA 2008: 1). The definition of what these entail will be introduced in the following. The Paris Declaration underlines the pertinence of mutual accountability of both donor and partner countries. These partnership commitments are proclaimed to be based on lessons of experience recognizing that the commitments must be interpreted in the light of specific situations of each partner country.

Ownership

Ownership entails that donor countries commit to respecting partner countries leadership and help strengthen their capacity to exercise it. This presupposes that partner countries commit to exercising leadership in developing and implementing their national strategies through broad consultative processes. In order for partner countries to achieve a certain amount of *ownership* of the development process, it is imperative that donors respect recipients in the process of developing their own national development strategies and thereafter convert this strategy into a result-oriented programme. Within the framework of ownership, partner countries must also take the lead in coordinating aid at all levels through dialogue with donors and encourage participation of the private sector as well as civil society (OECD 2011a: 3).

Alignment

In congruence with the above mentioned donors base their support on aligning their strategies with that of the partner countries. The conditions of the donors are hereby set in *alignment* with that of the recipients' national development strategy, whenever possible. This indicates that donors should if possible utilize already existing institutions and systems to implement the aid that is if these allow for effective aid-giving. It is encouraged, however, that partner countries should undertake reforms of

the institutions and systems if these do not allow for effective aid-giving. Though, it is important to note that these reforms should not undermine the already existing institutions and systems, but rather look to strengthen them (OECD 2011a: 4-6).

Harmonization

Donors' actions are to be *harmonized*, transparent and collectively effective. According to the declaration, it is imperative that the donors engage in common arrangements and work together to share lessons learnt which should enable a community of practice to emerge. By working together to harmonize separate procedures donors' comparative advantages will be visible which in turn should enable the best development practice in a given context to be applicable. Donors and partners are to commit to creating incentives for collaborative behaviour concerning reforms of procedures and strengthening incentives working towards results through alignment and harmonization (DANIDA 2010: 5). Furthermore the Paris declaration states that in order for aid to be delivered effectively in fragile states, it is pertinent that the guiding principles are adapted to environment of weak ownership, hence partner countries must engage in dialogue with donors to enhance progress of building institutions and establishing governance structures (OECD 2011a: 6-7). Partners are encouraged to develop simple planning tools where national development strategies are not yet set.

Managing for results

Managing for results implies managing resources and improving decision-making for results. In this context development strategies should encompass uniformity with what the budget allows. The national and sector development strategies of partner countries are to obtain clear indicators and key dimensions so as to establish results-oriented reporting and monitoring of progress. Thus, donors are to commit to ensure that the programming and resources associated with the development aid is aligned and harmonized with the partner countries' assessment frameworks.

Mutual Accountability

Mutual accountability is set as a major priority for both donors and partner countries as public support for national policies and development aid assistance may be strengthened considerably. Transparency is moreover an important factor for providing comprehensive information on aid flows in order to enable partner countries to present equally transparent and comprehensive budget reports to legislatures and citizens (OECD 2001a: 7-8).

To accelerate the implementation of the Paris Declaration, representatives of developing and donor countries, heads of multilateral and bilateral development institutions met in Accra, Ghana on 4th of September 2008 (the Third High Level Forum) to endorse these principles further. The so-called Accra Agenda for Action (AAA) did not add to the original principles set forth of the PD they were however elaborated upon additionally proposing alignment with parliaments, civil society and local communities in respect to their national development strategies. Donors pledged to deepen their engagement with civil society organizations and to strengthen their efforts to align their programmes with partner country systems. Development countries pledged to strengthen their public systems for accountability and to facilitate greater parliamentary oversight of revenues.

This chapter has presented an account of Danish development in its current form, of which will be analysed upon in the following analyses incorporating pertinent concepts of both theoretical accounts of Kuhn and Complex Dynamical Systems theory.

5. Analysis (1): The rise of a new paradigm in development –a Kuhnian account in complex systems perspective.

In order to shed light upon a prevailing view of non-linearity or complexity within social sciences, specifically that of development and its presumed transmissibility of complex systems this analysis will interpret Danish development policy within a Kuhnian conceptualization. Moreover to answer the first inquiry of the research formulation, as to what extent development has reached a new paradigm, the empirical data will be interpreted within the framework of complex dynamical systems theory, taking into account the Kuhnian theoretical perspective of what constitutes a paradigm transition and elaboration of Kuhn's conceptualizations.

Normal science and the paradigm of linearity

Presented in Kuhn's theoretical conceptualization is his perceived notion of normal science, which entails the scientific discipline progresses in a period of relative calm, before and after a paradigm shift has occurred. This period of calm is arguably conducive with the history of development practice and ideology in that development has been viewed within the lines of what constitutes order, predictability and knowable universal laws, a paradigm that adheres much to the natural sciences regarding science as a linear process. Thus development practice in its early stages will be argued as period that translates to Kuhn's normal science where procedures were based on linear notions of how underdeveloped countries should proceed in order to become developed countries.

The systematic practice of development has been based on the assumption that by identifying specific causes and effects of the constituent parts of a system, could give clear results of beginnings and ends. An example hereof is the central view of industrial development, which pertains to the previous universal view of developing countries beginning as underdeveloped but if given the ability, through industrialization, they would develop into modern societies much alike western societies. Developing countries were underdeveloped in relation to that of industrial countries the mode of industrialization therefore seemed the rational choice of procedure for them to develop into modern societies as developed countries had. This notion has a clear universal perception of 'what worked for us will naturally work for you', thus taking for granted that all nations are similar and alike. Thus copying the model of highly industrialized countries became a method of reductionism and deterministic ideas, which are typical linear methods of analysis. Moreover the concept of economic growth also provided a framework of linearity, as this was a way of measuring success in developing countries through what was conceived as the 'correct' manner of economic conduct following the

implementations of structural transitions and internal transformation that would inevitably lead to growth. These early assumptions of the cause of development were hereby led by the four golden rules of linearity in that it could be induced in an orderly manner where causes would lead to known effects at all times in all places (Rihani 2002: 3). This implies to a great extent that development processes and progress could be predicted if these models of economic growth were appropriately applied and that these processes furthermore would follow an orderly path with no hidden surprises, therefore determined as having rational ends –becoming developed. The manner of implementing policies was also to a great extent conducted and constructed in a top-down management manner, which provides additional argument of the linear tendency in the practice of development i.e. as development became a global priority following WWII the institutions UN, WB and IMF clearly understood development policy-making and decision-making as their task, not to mention world leaders, governmental agencies in both developed and developing countries. This bird's eye view has specific implications of a linear view of development practice in that policies were initiated as unified packages to countries with a high degree of diversity, thus predicting that universal laws of development would be able to be obtained is in essence quite irrational. In this context Kuhn's notion of normal science can be extended to the premise of a paradigm of linearity of development, meaning that the behavior of the scientific community, herein the perceived experts of the time, were practicing development within the boundaries of linear phenomena. Normal science is, according to Kuhn, the research that is carried out within the accepted and dominant paradigm of a certain time, development practice and policy in this sense was concerned with puzzle-solving development issues within the paradigm of linear thinking (Kuhn 1996: 24). If this is an accepted notion then Kuhn's explanation of the research performed within the normal science framework stays within a relatively inflexible box of what the paradigm supplied, development practice can hereby easily be transmitted to a paradigm recognized as a framework of linear thought that was carried out in this manner, with few contesting ideas. The paradigm is inflexible hereby understood as limited to the structure, methods and theoretical foundations of what the paradigm constitutes (Ibid.). If one views this purely in Kuhnian terms, then it would be clear as to why development practitioners and policy-makers resided within a paradigm of linearity at a given time. Once theoretical and methodological development practices founded on the basis of universal laws of perceived successful development then this became a 'correct' and consensual way of conduct. Furthermore Kuhn expresses that one of the fact-gathering activities within normal science relates to empirical work undertaken to articulate the paradigm theory (Kuhn 1996: 27). As discussed above in

the case of 'modernization theory' that advocates different stages for a underdeveloped country to transition through in order to obtain a state of modern society, it is evident in relation to Kuhn's proposed normal science, that once the development community has accepted this mode of conduct, research and empirical findings will stay within the boundaries and limits of this accepted framework. Only when contradicting ideas accumulate will normal science enter a state of crisis. Kuhn provides a reasonable account of how the dominating ideas at a given time are accepted into scientific procedure by emphasizing these as; '*universally recognized achievements that provide model problems and solutions to a community of practitioners*' (Kuhn in Dietze 2001: 33). This has definite implications of one pivotal property of complex systems namely, an attractor tendency. The dominating ideas of development practitioners can hereby be said to have been in the grip of an attractor, a behavioral pattern, at that certain time. Similarly to complex systems conception of the internal dynamics of a system that are in the grip of an attractor at a given time can be viewed as a global stable pattern, hereby relative to Kuhn's inference is that normal science *can* evolve and be extended, however growing solely within the terms provided of the paradigm. However strong an attractor is it is continually in a state of evolving and adapting to a variety of conditions thus it can only stay within the tendency of an attractor for a period of time before shifting into another. This perceived paradigm of linearity can hereby be seen as the dominant model and behavioral pattern of the development community which proceeded to evolve in terms of prevailing conditions that were distinct at that time. Contraire to Kuhn's normal science, which pronounces to some degree the rigidity of confinement within the parameters the paradigm, in that novelties would be repressed and anomalies disregarded for a certain extent of time, until overthrown by contradicting and better explanatory frameworks that, would then eventually constitute the new constructed paradigm, complex systems perspective would account for novelties and anomalies as these are essential to adapting and evolving processes rather than view them in a closed-systems perspective that must be completely overthrown. Complex dynamical systems can hereby elaborate upon Kuhn's normal science as an open-ended flexible process, open to new sorts of phenomena and ever-changing conditions which are not fixed stable constructions. However, Kuhn presupposes a period of time where fundamental issues concerning the attainment of a paradigm comes into question, of which he refers to as a pre-paradigm period, which relates to the complex systems notion of perturbations. Where complex systems have exuded stability for a period of time they are inevitably confronted by expected as well as unexpected perturbations that may display chaotic symptoms as systems are co-evolving thus influenced by their environment, adapt to their environment which in turn changes the

environment and so on. In Kuhnian terms a pre-paradigm period exhibits diverse and disorganized activities lacking direction and agreement in relation to problems of procedural conduct of certain subject matters. This can be viewed to a great extent as the criticisms of which the development paradigm of linearity was met with such as reflections upon the impact of the modernization phase. The prediction of how development should have progressed in a clockwork orderly manner determined through measurement of GNP per capita was falling short, in that the prevailing argument of developing countries getting poorer and the richer were getting richer began. The measured rates of growth in countries that were categorized as either high, middle or low-income countries displayed differential growth rates between 1960 and 1970, where high-income countries exceeded middle and low-income countries. Though there were growth rates in all three categories; *'These differential growth rates, combined with the fact that initial incomes in high-income countries are by definition higher than those of the low- and middle-income countries, meant that international inequalities in per capita incomes grew over time (..) the rich countries were getting richer and the poor countries, while also getting richer on average, were falling further and further behind (..) the poor countries were becoming relatively poorer over time'* (Kingsbury 2008: 27).

The goals of which were set forth by the so-called modernization phase were apparently falling short in their prediction of the developing countries ability to follow and replicate a homogeneous development path as the industrialized western world had advocated. The relational concept of trickle-down began to be contested in that it was recognized that despite high rates of growth were to be seen in a majority of developing countries, there were however large sections of the population that were essentially remaining untouched by the growth (Kingsbury 2008: 28). An example of further debate opposing the dominant tendency at the time that was gaining prominence were theoretical perspectives regarding concerns in this field such as; Dependency theory and World Systems theory, which argued against proponents of modernization-led growth, the structure of stages theory presented for instance by Rostow (1960). The abovementioned theories were founded as reactions to the dominant phase of modernization theory in essence objecting to the western-based system by pointing to the increasing division of powerful *core* regions (high-income countries), the impoverished *periphery* (low-income countries) and additionally *semi-periphery* middle-income countries (Kingsbury 2008: 60). The overall critique was that underdeveloped countries were to be viewed as unique in their structure and not as primitive versions of developed countries that could therefore be pushed into the world market economy system on the premise of this, as they were

weaker in comparison and hereby lacking the capacity to adapt in the way predicted by the more powerful countries. The contention was hereby essentially that the impoverished countries function in the world system was only accelerating the growth of rich countries by the exploitation of the former (Ibid.). Thus it was argued that periphery countries should reduce the connectivity of the world market of free-trade ideology and be left to attend to their own development needs and priorities. In terms of Kuhn, this adheres to a state of crisis of the dominating paradigm, whereby prevailing contradictions were 'threatening' the status of the paradigms structure. As a paradigm can only continue to be successful and stable if it maintains universal acceptance, explanations and predictions it is evident that the skepticism towards the inadequacies of development practice were resisting further accommodation of this paradigm resulting in a paradigm breakdown (Kuhn 1981: 7).

The Transitional phase of Development to a Paradigm of Complexity

The section above has argued development seen in a paradigm of linearity and discussed examples hereof. This section will account for a phase of transition in development tendencies towards a higher degree of complexity and non-linearity.

The aforementioned examples of failure or inadequacy of the development model formerly applied is interpreted as having reached and resulted in a breakdown of the paradigm of linearity and hereby in Kuhnian conceptualization, currently in a state of transition. Various discoveries of which begin to criticize the paradigm cause both destructive and constructive outcomes, destructive because previously standard beliefs and procedures must be discarded, constructive because these are then able to be replaced with other components (Kuhn 1996: 66). The accumulative countering positions related to growth and continued inequality in developing countries became necessary for the developed world to reflect upon. Though major transitions had been achieved by some far too many were continually falling behind and furthermore countries of the latter were increasingly opposing the whole concept of rules governing world trade. The model of 'one fits all' was no longer evident and proposed a reevaluation in a setting of or a call for more context-specific policies whereby the paradigm encompassing certainties can be said to have reached a point of no return with too many anomalies emerging and counteracting the previous paradigm (Kingsbury 2008: 127). This transitional phase or pre-paradigm period can be identified as the process of which development has undergone the past 20+ years where human development, social capital and a more people-centered approach gained influence on the development scene. Fundamental issues concerning the results of development process to this point were highly questioned and construed as having been inefficient

or simply not *good enough* result-wise. Thus a re-organizing of priorities became essential not only in the pursuit of poverty reduction in developing countries but for self-attainment of development aid in order for it to 'survive' as a system -would be pronounced in a complex dynamical system perspective. For the system to evolve donor countries were obliged to learn from past experiences in that it had been recognized that development could not be implemented successfully from the 'outside' but contrarily must re-organize themselves to adapt with considerations of alternative methods and strategies. Alternative methods can to some extent be acknowledged as implied in alternative theory as being alternative to state-led, top-down management emphasizing bottom-up approaches centered on the people's capacity to evoke change (Pieterse 2000: 348). As put forth in the Danish development policy; *'We will use all lessons learned, both positive and negative (...) We will need a different type of thinking if, despite massive development assistance over a number of years, a country remains at a standstill while other countries have managed to lift large numbers of people out of poverty in a relatively short time'* (DANIDA 2010: 5). Denmark recognizes that developing countries are wide-ranging and many and are therefore wide-ranging in their various needs. Furthermore acknowledgement that change will require long-term persistent engagement as their may emerge conflicting interests and values that resists change, therefore Denmark needs to be flexible and will concentrate their efforts on specific areas where it is possible to evoke change (DANIDA 2010: 6-7). It is hereby safe to say that there has been a shift in mind-set of how to provide a better and more promising framework for development aid, especially through the notion of creating strong partnerships also through the strengthening of civil society, though as far as arguing that a paradigm shift has occurred by terms of Kuhn, the claim will be based as a definite shift of mind-set. Much in line with Pieterse's assertion, the notion of introducing a paradigm shift to development as alternative development is questionable, as his stand-point presupposes that alternative development is already integrated into mainstream (Pieterse 2000: 347). Moreover he provides a compelling point in regards to Kuhn's notion of social science in that it could only be classified as pre-paradigmatic as relational consensus regarding the natural sciences such as biology and physics are simply not available in social sciences (Pieterse 2000: 355). This is undoubtedly true, as positivism, of which Kuhn was critiquing particularly in the natural sciences, is to a great extent something of the past and social sciences have accepted numerous interpretative philosophies of science such as; phenomenology, hermeneutics, functionalism etc. Social sciences, herein Development and International relations, are hereby interpreted through means of various and to some extent overlapping frameworks and, as argued by Pieterse, paradigms and paradigm shifts are

already built-in (Ibid.). This is not an assertion I strive to contest, however Kuhn's notion of paradigms provide an account for what is perceived as the dominant tendency at a given time no matter how rigid or incommensurable he proposes paradigms to be. Pinpointing dominant ideas of a particular time are imperative and highly relevant in choosing analytical tools to match or interpret the tendency and to analyze relational probable outcomes. As Kuhn has specified, a paradigm shift can only occur if it fulfills conditions of majority support in a particular field and provides both meta-theory as well as defined procedures, this makes sense if it is viewed as having gained sufficient knowledge in a particular area and having then reached a point where this knowledge can no longer account for previous evaluated outcomes (Kuhn 1996: 85). Critics have proclaimed, that Kuhn's account of paradigms are self-defining independent knowledge systems, this is not the case perceived in a dynamical systems framework. A paradigm shift is hereby acknowledged as dependent knowledge systems that because of their internal dynamics learn to adapt and evolve into better systems providing more reasonable explanatory elements than the previous could. This is an ongoing self-organizing process of complex social phenomena. In this context elaborating upon Kuhn's concepts within complex systems perspective the process of obtaining a paradigm shift in relation to alternative development has been successful in that alternative development components have been integrated widely into mainstream development policy, but simply interpreted through means of Kuhn's notion of revolutionary change it has not occurred. For this occurrence to have happened alternative development would have had to been recognized as the dominating development programme of various actors in the development community and furthermore have applied and implemented all elements into recognized institutions, governments and agencies. Alternative development can then be seen in Kuhnian terms as not having had sufficient novel grounds for creating and establishing a competing framework to that of the former paradigm. The Danish government has however, as mentioned integrated many components of alternative methods of conduct and has re-organized relative to principles recognized as being more people-centered as well as developed a more complex notion of understanding how development should work. The failure to predict accurate outcomes of how developing countries would obtain prosperity has left policy and decision-makers with numerous alternative perceptions that to a great extent coincide with the assumption of a development process involving numerous components and therefore highly complex with uncertain outcomes and hereby something that cannot be measured without the consideration of non-linearity. As the system adds on more components it becomes increasingly more complex and interdependent thus increasingly difficult to foresee what results may be accomplished. Danish

development policies and strategies are built upon a variety of areas following the MDG's, relational aspects concerning globalization, ideologies of the Paris Declaration and the CSS which encompass multi-dimensional and highly complex systems.

In this context it is relevant to discuss what Pieterse so interestingly inquired, namely; *'how could a single paradigm encompass such diversity of development paths, needs and circumstances?'* (Pieterse 2000: 357). A paradigm shift or new world view in Kuhnian terms, takes into account that it has emerged out of the milieu of its predecessors and therefore provides similar elements and vocabulary of the former, however offering new meanings with presumably better explanatory factors. This shift is irreversible, according to Kuhn, because it causes scientists to view the world and thereby their engagement in research differently and in turn the world changes with it. Conceived in a complex dynamical systems perspective, this notion can be elaborated upon to be coincidentally conducive with Kuhn's explanation as the movement and dynamics of complex systems are continual in their process of evolving and adapting to emergent and novel conditions of which it is prepared to self-organize. Danish development institutions are behaving in a manner that is equivalent to complex dynamical systems in that they are adapting to both internal and external conditions of their co-evolving environments, however based on the premise of the ruling party at the time and ideologies included therein. Two elements of adaption in particular are globalization principles and the fight against terror. The 9/11 terrorist attacks on the US had a huge impact on the world view and policies were structured in accordance to security issues where DK was no exception. The reform entails a new organizational structure and allocation of development funds in that a stabilization department was created in 2009, combining security issues with development, in that it was proclaimed that development and security goes hand in hand, particularly in the case of Afghanistan (DANIDA 2009: 2). This re-structuring has resulted in much critique, mainly from the opposing parties but also Danish NGO's, towards the present government (Liberal/Conservative) in that they have been accused of utilizing means of development to promote what is perceived as Danish interests and security politics in order to safeguard own interest, rather than focusing exceptionally on poverty issues (Esbensen 2011). This can be said to stand in contrast to a paradigm of complexity as it adheres more to linearity in that specific causes lead to known effects i.e. weaker societies pose a threat to Danish security thus re-building these societies will ultimately allow for positive recognition and in turn safeguard DK. Moreover the principles of globalization, herein the liberal open market view, poses another contrast in that it emphasizes a universalized economic ideology of 'only way'

perspective for developing countries to obtain prosperity, a notion remnant of the paradigm of linearity. This is not a plausible approach, in line with complex dynamical systems, when we are dealing with systems of great diversity it must be the task of the developing countries to provide their own essential systems that coincide with their own constructed values rather than have them imposed.

Furthermore the framework of Danish development strategies at present are displaying the rhetoric of complex systems in that they advocate terms of; *flexibility, dynamics, complexity, mutuality, interdependence, change, adjustment and evolvment* which is exemplified clearly in the following citation; *'The Danish engagement in partnerships will be robust, flexible and dynamic, robust enough to handle pressure and setbacks, flexible enough to adjust to local conditions and changes, and dynamic enough to respond under difficult conditions as well as seize opportunities (..) This requires perseverance and willingness to take risks'* (DANIDA 2009: 8).

Therefore, to answer the inquiry above, a paradigm; understood as the prevailing idea at the time which encompasses theoretical and methodological foundations for interpreting a new world view, that takes these notions into consideration and all of its diversity can then be claimed to contain the ability to encompass development paths and circumstances. A complete paradigm shift must however be based on consensus of the development community in order to become the guiding principle for future framework policies to come into effect. It is ample to conclude that there is basis for complex dynamical systems to be integrated as a guiding framework for development, and much of the rhetoric has already proved to be utilized in this framework. The extent of which Danish development practice and policy can be noted as a new paradigm can be concluded as having reached a fairly high degree of transition in that it has definite implications of integrated complex dynamical systems, with the exceptions of global universalized principles and security issues. A shift in mind-set has occurred and is being utilized in rhetoric in the Danish development policies and strategies thus the remaining incentives that are needed in order to claim a complete transition entails a process of recognition and adaption. To speak of and 'all at once' transition would be unrealistic when systems of complexity on various levels of local, regional and international are in play. The pivotal component in Danish development as well as the international development community is the promotion of consensus and cooperation among all parties in order to ensure best possible outcomes of aid effectiveness which can be argued as containing universal laws once more, though the shift in mind set, that is seemingly in a framework of complex dynamical systems, is based

on mutuality, participation and accountability of all involved parties (co-evolving systems) which broadens and deepens the perception. Developing countries, NGO's and other civil society organizations are being viewed as valuable partners in the process which breaks down much of the earlier perceived top-down initiatives that were critiqued as being out of touch with realities on ground level.

In order to understand how Danish development policy can be perceived in terms of complex dynamical systems and as the new paradigm adhering to complexity, the subsequent analysis will provide an overview of the advantages of integrating this as a sound and plausible theoretical foundation. Furthermore point to the areas that may contradict the exact conception of what a well-functioning complex dynamical systems ideal entails.

6. Analysis (2): A new paradigm of complexity in Danish development policy

The main focus of this thesis is to provide an account of the extent to which Danish development has reached a new paradigm, one that encompasses the notion of complexity and furthermore and most importantly to introduce complex dynamical systems theory as an already obtained rhetoric within the constructed strategies though not directed by a framework of complexity. As discussed development is in the midst of a phase transition, re-organizing globally and nationally as it has been confronted with turbulence and instability, thus old patterns are breaking down and new ones have emerged indicating new configurations that require co-operations of all system components. The paradigm we are transitioning into is one of uncertainty and complexity, a world view where the recognition that past development initiatives were not sufficient prevails, and other methods are therefore being considered collectively. This analysis will provide an account of why complex dynamical systems theory is palpable when regarding development-policy making and additionally to which extent Danish development policy has already reached a paradigm or a mind-shift of and to complexity, the focus hereby being on the visibility derived of its utilization.

Why Complex Dynamical Systems?

The inquiry of why and how complex dynamical systems theory is an essential and application-worthy foundation in the context of the current development policy will be discussed in the following.

The agreed goals in the Danish development policy, herein the CSS, are results of interaction of various social systems of society with an already built-in and integrated systems perspective, at least in the rhetoric. Dynamical systems deal with development and change over time, which is precisely the objective of what development policy-making seeks to analyze and understand. The progress, development and advancement of societies relate to various changes in social systems and organizations over time and it is the interactions and dynamics of social systems or societies that create the content and change in societies. The interactions between recipient and donor countries should result in satisfactory and beneficial outcomes for both systems. When perceiving societies, nations, institutions, organizations and individuals as complex dynamical systems it becomes possible to form and create objectives and goals by incorporating various components of specific local, community and society needs and moreover to work towards increasing the capability of adjustment and re-organization as concrete aims of a dynamical systems adaption and development process with continually changing systems. As it is difficult to distinguish developing countries and their respective needs from each other their diverse conditions and behavior must be understood as context-specific.

Working with the structure and organizing in living changeable social systems adequate explanations cannot be obtained within the explanatory and causality linear models, thus they should be regarded as non-linearity or complexity in that it is difficult to link a specific effect to a given cause. Complex social phenomena, of which development is, should therefore not be treated as an orderly system where the assumption of linearity would be inappropriate and erroneous. Societies are not closed systems, and neither donor nor recipient countries are stable over time. A great challenge for pinpointing specific processes of conduct in development work is that everything is connected and interdependent, a notion we are seemingly aware of though lacking a theoretical framework that emphasizes this fact, where the application of complexity would be highly appropriate.

Complex dynamical systems relate to movements, development, dynamics and interactions primarily in living organic *open* systems. Open systems indicate that one works with a cycle of causality rather than towards linear causality thus the basic assumption of all systems is characteristically consistent of mutual interactions and co-creation/evolving. Thus the connectivity of systems is pertinent in understanding how activities and behaviors inevitably affect one another, both negatively and positively. Lorenz's butterfly effect and the prognosis of weather are clear indicators of this, in that they are studied as complex systems where initial conditions can emerge and cause a shift in the entire movement of a system, resulting in unforeseen effects. This equates to dynamical systems studied as social phenomena, where the dynamics and interactions of a systems many components are so intricate, accurate predictions cannot be achieved, however it can be predicted that when these parts or components are assembled random occurrences or unexpected properties will emerge and these must therefore be accounted for, in building robust and resilient dynamical systems. In the case of predictability Danish development policy notes that; *'there should be predictability in our priorities and assistance funds, and there should be transparency in our decisions, requirements and consequences'* (DANIDA 2010: 12). This pursuance of predictability can be understood as determining the goals that are incorporated collectively of all parties at all levels of participation i.e. the potential of achieving goals that are set forth are based on the harmonizing and alignment of the members of the development community forming strategies that are transparent in the sense of what is expected of both donors and recipients. As the development community advocates collectively decided goals, they are reducing risks of counteracting each-other, thereby enabling prediction of probable outcomes in that all parties are working towards the same developed goals.

Within the framework of complex systems there are various properties of which assist to understand and analyze interaction and change. A system is composed with a variety of agents, components, individuals that altogether represents a given structure, movement, organization via numerous key activities -self-attaining activities. These all constitute the components of the overall structure that each and everyone mutually influence and affect each other which in turn represents the systems general organization. A property of complex systems is that of attractors which are defined as behavioral patterns i.e. the tendency of a system to behave in a certain way at a given time. In development context an attractor can be understood as a given procedure of for instance society, ideologies and/or values, much alike Kuhn's notion of a paradigm and normal science, whereby change and variations can occur thus remaining within the paradigm framework, the same is noted of an attractor tendency. Despite a systems outwardly unchanging manner, frantic internal activity can be occurring and occasionally minor variations trigger a major shift that shunts a system into a new pattern (Rihani 2002: 8). A societal attractor tendency can hereby be explained as society's organization, whether it is a local community, small nation or global society. Attractor states are results of shared procedures, norms and/or interaction tendencies of a given group of people at a given time and under given circumstances and conditions. An attractor or behavioral pattern of the development community at present can hereby be interpreted as being in the grip of overall consensual and cooperative behavior, as e.g. noted by influences of the Paris Declarations ideologies concerning alignment and harmonization concepts, which emphasize a unified pursuit of tackling aid effectiveness issues in the best possible way with the involvement of both donor and recipients determining the mode of conduct (DANIDA 2011: 5). In regards to unexpected emergent properties or perturbations of the overall global stability of the system, the impact of 9/11 can be said to indicate precisely this, as the systems were necessitated to re-organize in order to adapt to the increased attention on security in the war on terror, much alike the US policy. A perspective that has nonetheless been criticized as it resulted in a re-structuring of development aid that included principles of security, rather than solely focusing on poverty reduction, as these security issues became an integrated part of the budget set forth for development. A large sum is being allocated to governments and organizations that commit to fighting extremism and radicalism promoting the political agenda of democracy and freedom to areas such as the Middle East and Northern Africa (Sørensen 2011). Thus it has been voiced that Danish development aid is increasingly being provided to areas of security for fragile states rather than towards poverty reduction (Engberg-Pedersen in Sørensen 2011). Moreover the aid budget also entails allocating funds to cover increasing expenses

regarding asylum issues, set forth in the so-called Regions of Origin (ROI), also an indication of providing means to other areas than poverty reduction –a notion also being critiqued by NGO's. However as pronounced by the Minister of development, Søren Pind, foreign and development policy should not and cannot be separated as they are interconnected and there is therefore no divergence between poverty reduction and Danish national interests (Pind in Sørensen 2011). In terms of complexity the interconnectedness of the systems is certainly true, though when understanding this perspective linear methods are not viable if one assumes that the cause of extremism is explained by poverty, thus poverty reduction will erase any radical behavior. This does simply not coincide with complex phenomena and can therefore not be reduced to this oversimplified approach. Once again it must be stressed that nations must enter the development process under their own steam.

Collective action, interpretation and strategizing has clearly been put on the agenda as a means of obtaining a higher degree of prosperity in developing countries with a mind-shift that currently advocates that; *'there are, in truth, two different perspectives in most circumstances (...) life experienced by people at large, and life envisioned by the experts'* (Rihani 2002: 238). Development progress is hereby no longer promoted or envisioned as the sole responsibility or fault of donor's in that strategies are constructed and influenced by recipients as well, though in relation to the aforementioned it can be questioned as to what extent the influence of Danish NGO's and Civil society organizations are being included into the process. For development to evolve progressively; *'it is necessary to put the people affected by decisions taken firmly in the driving seat in order to avoid going up blind alleys (...) complexity is founded on the principle that meaningful action takes place primarily at the level of the fundamental unit, the egoistic individual (...) the means, therefore, have to be found to enable ordinary people to determine which problems they wish to address, how the problems should be tackled and by whom'* (Ibid.). This is essentially the essence of what Danish development programmes are promoting in close relation to the international development community based on international principles for effective assistance, that supposedly entail close dialogue with partner countries and non-governmental actors in pursuing individual assessments of the specific needs of various involved countries. There are undoubtedly many advantages of involving various actors in the development process as perspectives of partner countries, donor's and other agencies such as NGO's all contribute with a wide-range of priorities, needs and modes of conduct which in turn can be beneficial when various conditions and experiences are taken into account. Compromise does however become a factor in regards to harmonizing and aligning in a consensual

manner as some perspectives may be lost in the process, a fact that some Danish NGO's for instance may recognize. Dependency on government funding also comes with certain conditionality's, which can imply negative consequences as well as be viewed as unavoidable in that systems must adapt to initial conditions in order to sustain their own self-preservation.

Furthermore regarding the increased focus on interdependence that has become a prevailing agenda, an open-ended system with co-evolving systems interdependent of each other's activities in complex dynamical system terms, the foreign policy of Denmark acknowledges the concept of open systems as maintaining an internationalized and open economy, which is construed as highly pertinent when regarding an interdependent and connected globalized world. The policy framework concludes that; *The world is under-going tremendous change and globalization has made us more interdependent (..) Sustainable development and long-term poverty reduction assume democracy, free trade and well-functioning markets alongside a state with good institutions, good governance and a strong civil society'* (DANIDA 2009: 4).

Thus globalization is asserted as an undeniable interconnectedness of the systems of the world where all parties should stand to benefit appropriately. In complex dynamical systems the greatest complexity represented has a tendency to grow larger with time, where systems with the highest complexity stand to gain the most. Denmark (as well as other developed nations) can be said to consist of a highly complex dynamical system as its internal elements are capable of interacting on an appropriate level of connectivity and in accordance with suitable local rules (Rihani 2002: 9). In this context a highly complex system can be understood as those whom have gained extensive knowledge and experience over time. Denmark is a well-established system based on connectivity of institutions and rules in accordance, which have grown increasingly complex over time assuming a position where evolving and self-organizing through small but effective modifications have been able to be exhibited. The stable common pattern of Denmark can hereby be argued to be typified by a liberal democracy, welfare state and market economy which have provided stability in that it has overcome many unexpected as well as expected challenges for several decades. It should however be stressed that in the context of dynamical systems that are adapting and evolving systems, Denmark has not reached an end-state as would be proclaimed in a linear perception but is contrarily continually adapting to new emerging conditions and perturbations and can therefore be understood as something more of a *developing* country –whereby developing countries would then be noted as

underdeveloped –just a point to be made thus for clarification reasons developed and developing countries will be continued to be utilized as before.

The extensive experience of Denmark is in this regard, radically different from the conditions of many developing countries, which is a position donor strategies seek to redirect through disseminating experiences of their own based on the conception of their ability to provide the most prominent way to achieve complexity in order to self-organize them-selves seen in a dynamical systems perspective. This is a competency that Denmark proclaims clearly to contain as it is pronounced that; *'Danish competencies stem from both the way we have organized our society and our more specific experience within various sectors (...) Danish values, and our own work in these areas provides us with experience we can share with others'* (DANIDA 2010: 14). Denmark is, hereby, a well-functioning complex dynamical system with years of experience that has resulted in a developed resilient system that has proven to be robust enough to be able to adapt to various conditions by modifying and improving upon activities and procedures over time –Valuable lessons of which Denmark wishes to communicate and assist developing countries with in order to enable them to interact dynamically and become capable of re-organizing their societies into resilient, self-organizing and self-preserving societies. This adheres to the essence of complex dynamical systems, in that useful interventions can only be restricted to enabling interactions to proceed in a manner that produces self-organized stable patterns. For a complex dynamical system to evolve successfully it must be able to survive long enough for the next cycle of adaption to begin, this is obtained by gaining knowledge about its environment which must contain local freedom of action, learning, flexibility and variety in order to obtain the ability to change and adapt in response to shifting conditions (Rihani 2002: 8-9). This can be translated to the focus of Danish development policy as it advocates highly and purposefully in the CSS that civil society is to be strengthened and aided in order to achieve the capability of engaging freely within their environment, a task that may be difficult in some developing countries that rarely meet the freedom criteria as they are affected by damaging conditions such as; state repression, malnutrition, disease, illiteracy and war. The Civil Society Strategy furthermore strives to promote; *'..People's right to organize, express views and formulate demands and expectations to public authorities and other actors (...) important prerequisite for long-term poverty reduction and promotion of democratization and also creates both inclusiveness and cohesion in society'* (DANIDA 2011a: 7). Moreover it seeks to contribute to organizational and capacity development of civil society organizations in order to enable and enhance their ability to interact and participate in public debate

as well as strengthen their popular foundation to increase their relevance and legitimacy. In this context, complex systems can only be managed by observing outputs and through encouragement of desirable interactions, which is seemingly the rhetoric that is being lead in the CSS and additionally through means of utilizing the integrated tools of monitoring and evaluation. As Complex adaptive systems are not based on the assumption of certainty and prediction which refers to reductionist scientific methods by which when applied to complex systems would be largely spurious. Rather than studying the constituent parts of a system in order to detect and predict the behavior of the whole system, complex systems recognizes the limits of predictability in that it refrains from studying the details 'inside' the system and finds explanations and predictions centered on the stable global properties. Command-and-control methods applied to complex phenomena may succeed temporarily but are useless and unsustainable as long-term policies, contrarily they respond well to sensible small-scale gradual adjustments coupled with management based on constant monitoring of overall patterns of performance, much alike the method promoted and utilized in development contexts, performance indicators, monitoring and evaluation (Geyer 2010: 51).

Furthermore, civil society organizations are viewed as containing decisive strengths in the diversity represented within as well as through their broad knowledge of the cultural, social and political realities of their respective countries or communities. The freedom criteria mentioned above is imperative in order for developing countries to become societies that are self-preserving a point Rihani expresses clearly; *'The only evolutionarily stable strategy open to a nation is to exercise flexibility and pragmatism in order to survive, learn and adapt over and over again in accordance with its ever changing fitness landscape (..) there is no evolution or progress without interactions; members of the population have to be free and able to interact (participate) for anything to happen'* (Rihani 2002: 235).

An additional priority and pivotal tool of which Denmark and the international development community seek to assist developing countries with in the process of obtaining societies that are self-preserving and sustainable is through *ownership*. Ownership encompasses a commitment of donor's to respect respective partner countries and their leadership in achieving ownership of their own development processes and to help them strengthen their capacity to utilize it (OECD 2011a: 3). Partner countries hereby take the lead in coordinating and developing their own national development strategies though through close dialogue with donor's in order to ensure that these allow for effective aid-giving. The overall assessment of Danish development policy has clear

indicators of working towards asserting developing countries with capabilities to become independent countries within their own means, in a sense that they become *independent* of development aid and become sustainable and robust societies capable of self-organizing. For the sake of argument let us dwell upon this for a moment, would this in fact be plausible in effect at present time for Denmark to not have an aid system altogether, viewed in terms of complex dynamical systems? As discussed previously Denmark prioritizes quite amicably to help developing countries help themselves through empowerment of for instance civil society in order for countries to establish their own system, based on principles of becoming self-preserving societies which is a notion Rihani amiably complies with in that; *'the worst act a state can commit is seek finance from abroad, but there are different levels of risk attached to that act (..) strategically, a state should minimize, or preferably eliminate, the need for loans and aid from external sources'* (Rihani 2002: 252). However, Denmark is also an integrated and interdependent player in this system and behaves accordingly as a complex dynamical system, where principles of self-attainment or preservation, in order to avoid self-destruction, are pertinent to her survival as well. Hence, if Denmark were to discontinue the involvement in providing development aid she would be threatening her own survival in that, as a relatively small country, the engagement onto the international scene is essential in terms of recognition and reputation. The economic balance of trade would be threatened in relation to alliances not to mention the core values embedded in the Danish population, it can hereby be posited that any pure form of altruism in this account is not viable despite postulating its form as; *the Danish conviction is that indifference to sufferings of others is unacceptable, and that action must be taken against human rights violations irrespective of where they take place* (DANIDA 2009: 11). Clearly, the notion of not attributing to the development of weaker countries would simply not be feasible or applicable in relation to the core values of DK nor as a small country seeking self-preservation through alliances and cooperation with the international community in her own pursuit of maintaining prosperity. Self-interest and altruism need not be in conflict as is also the case being advocated transparently in Danish development policy; *'Globalization creates opportunities to access new technology and pursue development through foreign investment and exports (..) contributing to stability and progress in societies far from Denmark can have a direct effect on us (..) A significant side-effect of long-term economic development and stability in the world's poorest countries is new markets for Denmark'* (DANIDA 2010: 4-5). Hence, global responsibility, universal promotion of values and development of developing countries naturally go hand in hand with safeguarding Denmark's own interests.

To furthermore reflect upon this re-organization and change in rhetoric and methodology concerning the current development policy, that overall seems promising of the recognition of the complexity approach, there are however two central areas of which point to a continued notion of linearity these are promotions of liberal democracy and globalization. These initially be interpreted as a reoccurrence of enforcing our own values in gaining motives of self-interest that pertain to open markets and globalization noting that the development policy implies promotion of 'become like us, but in your own way'. This is not a novel notion in that development and foreign policy go hand in hand plus the way of which Danish development is promoting open markets is constrained within the initiative to assist developing countries in obtaining capacity to become stronger players in the world system. Though speculations that pertain to complexity methods regarding aid effectiveness models based on universalized values of liberal democracy and globalization principles through means of consensus may however be deemed inadequate.

The following section will therefore deal with an associated inquiry of potentially universalizing yet another framework or is a paradigm shift in this regard deemed utopian.

Can universalized aims in Danish Development policy be obtained in complex systems perspective?

Initiating universalized systems such as globalization and liberal democracy are still pivotal goals promoted in development a tendency of linearity in that it promotes a way of prospering in the same manner as developed countries. This section of the analysis will therefore interpret the development policy in the light of complex systems to aid the understanding of what is essentially being advocated.

Universalized refers to humans being fundamentally alike, which is accurate from a genetic and physiological point of view in that we are relatively homogeneous creatures, yet our enhanced conscious abilities give us the capacity to diversify our actions and interpretations of ourselves and our environment in a multitude of ways, this makes us conscious complex systems. As we are equipped with the capability of storage of information, communicative and interpretive behavior it allows us to adapt and respond to new threats and opportunities. However autonomous and diversified, human experiences are interpreted in a similar fashion that allows for collective understanding with some level of commonality or boundaries (Geyer 2010: 49). My point in this regard is that, however diverse we are as humans, there have always been established common grounds for rules and norms of various societies that adhere to our survival. These established commonalities are however understood and perceived immensely different in one context or

another, and frameworks that are rigid or disregard diversity and creativity of complexity may propose negative outcomes. Therefore universal frameworks or models should be regarded in a flexible manner that provides room for adaptation and adjustment, thus recognize that though some models may be feasible implementations in one context they may simply not be so in others.

Economic development is undoubtedly a pivotal interest of Denmark associated with the terms of globalization as an explanatory incentive of the practice of development as an inevitable and integrated part of foreign policy that creates inclusion into the international scene, by which Rihani posits that; *'Obsessive pursuit of globalization is the most damaging consequence (..) the WTO, the World Bank and the IMF behave as the worst kind of 'market fundamentalists' preaching the gospel of free trade and globalization with missionary zeal is not only unnecessary but poses a serious threat to the ability of struggling nations to evolve optimally'* (Rihani 2002: 242). This contention is not novel, as it is based on the assumption of globalization values being transferred and demanded of developing countries to integrate as part of their own free-trade ideologies in uniformity with developed countries – though it establishes universal principles to fit all nations. In terms of complexity this contradicts the notion of necessary variety needed in the world systems in order to evolve successfully, moreover the leading countries (powers) that promote this have themselves produced a set of core ideologies that are sets of flexible and changing beliefs and adopt policies from this blend in order to suit ever-changing conditions and circumstances. Additionally Rihani argues that; *'in practice, the leading powers, using formidable resources available to them and their global agencies have set out to force all nations to compete on one fitness landscape on which these powers thrive'* (Rihani 2002: 241-243) -Hereby though proved beneficial for the leading developed countries, it may well prevent developing nations the possibility of adopting evolutionarily stable strategies themselves as has also been the critique adhering to developing countries getting poorer while developed are getting richer. The argument being that most developed countries are capable of interacting in a manner that is beneficial for them as they are already developed as dynamical systems which implies in-built resilient strategies that are robust and well-established systems, weaker countries contrarily struggle much more a notion of which the IMF has recognized to some degree:

'The IMF has recognized that economic globalization has not been an unmitigated success in that a large part of the world's population, especially in sub-Saharan Africa, has been left behind in the economic process, as a result the disparities between the world's richest and the poorest countries,

are now wider than ever with increasing incidences of poverty within countries' (IMF in Kingsbury et al. 2008: 130).

These are valid affirmations of the effects economic globalization has had on weaker societies. Thus in complex systems terms which are learning systems, we must adapt to the knowledge we have gained and redefine better modes of conduct. Danish development aid advocates through sector programmes the areas of which are deemed imperative in regards to improving developing countries capacity to better deal with and adapt to the globalized world, effects of which are only speculative at this point as enhancing capabilities of sensible adapting and evolving are time-consuming matters that cannot be rushed through coercion. The process of defining and designing initiatives to best fit the respective developing countries has however been put into action and promotes clearly the notion of obtaining societies that are capable of achieving their own development in future respects. Should economic globalization be utilized and universalized as another 'best fit for all people'? Consequently no, as DK seemingly promotes free markets in order to aid developing countries prosperity though masked to some degree by their own market interests.

When interpreting the aim of Denmark, that sets highly the value of selecting partner countries that are willing to change and ensure sustainability, it is evident that DK intentions are to provide the help they need in order for them to establish themselves as more robust societies. Moreover through close dialogue with partner countries Denmark seeks to engage involvement in partner countries on terms of the individual needs of the countries with sound flexible strategies instrumented to encompass their respective structures and systems. In the long run, as evolutionary patterns are, this procedural idea and construct sounds promising as it pertains to initiatives set forth to assist developing countries face various challenges in a manner that simultaneously advocates responsibility of their own development. In complex systems rigid plans and policies would be highly inappropriate as they would not obtain the predicted outcomes in that their structure must entail numerous components when working with social phenomena and therefore be flexible to change thus adapt and adjust accordingly to changeable conditions –An indicator that DK is seemingly aware of and acting in accordance to this perception, for it is as and so rightly claimed by the UN; *'The United Nations Development Programme (UNDP) recommends that faith should be put into the powers of globalization to breathe new life into development efforts (..) however the UNDP (1999: 2) makes one proviso: globalization should be regulated to ensure that it works for people and not just for profits'* (Rihani 2002: 19). As it also the proclamation of DK in that she maintains that it is crucial

for developing countries to break out of poverty by reaping the benefits of globalization. However, in relation to the rhetoric, the means for building the capacities of developing countries systems should perhaps obtain a sensible level of strength before they are able to respond and apply global market forces in a manner that best suits them.

In addition to the notion of ‘transplanting’ an intricate system that has evolved over centuries into other diverse cultures can be found in the case of DK’s promotion of democracy. A fundamental part of Danish foreign policy and core value-system is promotion of democratic development. Promoting democracy or rather imposing democratic institutions on a country with expectance of a relatively rapid occurrence towards transformation would be absurd. Democracy within a complexity framework is an evolving process that requires time in order for the system to survive through continual adaption. It requires a delicate balance between variety of local interactions and global stability and does not lead to an end-state as it is an open-ended process. Pressure from external sources on a developing country to imitate any form of democratic society within a relatively short time-span, would be counter-productive in that it takes time for complexity to build up, no matter how promising democracy can be perceived it must be induced with patience and willingness of the people of who are assuming the proposed democratic position (Geyer 2010: 78). Complexity would additionally emphasize that;

‘Western-style liberal democracy might be superior in many ways, but it does not come with guarantees (..) as in all matters relating to complex adaptive systems an ultimate model does not exist; evolutionary change in democratic norms is continuous and requires a long time to unfold (..) learning from others is useful, but imitation is not a substitute for exploration of local constraints and possibilities’ (Rihani 2002: 171).

In this instance, the same principles stand for the system to evolve successfully, local freedom of action, learning and access to information, which are vitally important. Denmark promotes human rights and reforms such as access to education and health services as well as political institutions and voting rights which are some of the essential components of a democratic system. In developing countries both fundamental frameworks and as much local interaction and openness as possible are imperative for in their learning process to discover and adapt to a democratic system. Again it must be stressed that democracy as a single framework cannot be forced upon a country in a manner of ‘donor democracy’, but must through useful interventions that enable interactions to proceed in a

manner that produces self-organized stable patterns rather than disorder (Geyer 2010: 77) It is stated in the development policy that DK seeks to establish partnerships with like-minded organizations, this would certainly simplify the process, though it is difficult to herein gain insight into whether recipients are like-minded because they will then be provided with funding or if they are in fact genuinely determined to become democratic societies as the western societies.

It is safe to assume that Danish development policy has indeed obtained a shift in mind set compared to the former linear assumption of how aid should be administered and distributed. The Danish development policy stems to some degree in accordance to complexity theory, which is promising to a certain degree. It is my contention that if complexity frameworks were regarded in a consensual manner as an overall theoretical foundation that provides an acknowledged world view of how systems function and behave in relation to each other developing tools of mapping probable outcomes could be highly beneficial in the development field alongside monitoring and evaluation. It has been concluded transparently that the former steep hierarchy that separated stake-holders from decision-makers or experts from 'real people' evidently is not adequate for complex situations. The mode and manner that is proposed at present time is contrarily to reach decisions through close dialogue, consensus and cooperation, a method that could not have been undertaken sensibly within a top-down management model. As the management models of, for instance Danish corporations and institutions are distinctly flatter, or our democracy for that matter, why should development not be managed in a similar manner whereby elites embrace more individuals and most people are reasonably free to interact locally in a variety of ways. A shift in 'paradigm' or adaption to an alternative way of viewing changing situations is neither utopian nor unable to achieve universalized values, if in fact modes of conduct are consensual in that donors and recipients achieve an established amount of trust back into the relationships and provide each other with the necessary information regards specific conditions and needs in order for the developing countries to obtain a high level of capacity towards reaching goals of becoming self-organizing and sustainable societies. Framework strategies and policies must not be rigidly planned but rather emphasize flexibility and adaptability. DK does not sufficiently live up to these criteria in that they are seemingly inflexible in matters of economic globalization with the liberalizing of markets that are being imposed much alike the former paradigm of linearity, and furthermore the linearity concerning security issues does not provide sound methods in the case of a complexity paradigm (or worldview) or coincide with the overall consensual framework with emphasis on poverty reduction.

As complex systems are relatively new in the field of social sciences literature containing concrete methods of mapping complexity into public-policy are fairly scarce. One method that has been referred and accounted for is fitness landscaping which entails imaging a system that can move in varying and unpredictable ways over time. This illustrates the probability of a system to move in a multitude of ways within varying situations and circumstances through representation of poor, high and neutral fitness' or performance. These are viewed as valleys, mountains and flatlands where complex systems are constantly moving through an evolving fitness landscape, much alike a never-ending conveyer belt capturing the symbiotic relationships between multiple interacting actors or units (Geyer 2010: 61-63). A fitness landscape is hereby able to image how a certain strategy of complex systems with the multiple integrated components travels through the landscape and responds or reacts accordingly –adaptability, flexibility, learning and balance.

Finally, complexity as a theoretical foundation can be understood as complying with policy-making if it applies concepts of partial order, predictability and uncertainty, emergence, reductionism and holism, probabilistic and interpretation. Policy actors can, when viewing complexity as a framework only expect to understand systems as provided in complex dynamical systems theory where the systems they are observing do not stand still and are unpredictable within general boundaries as well as constantly evolving and re-interpreting themselves, though overall behavioral patterns (global stability/attractors) can be interpreted. Final orders cannot be known and policy actors must therefore be flexible and open-minded to the orderly and disorderly foundations of all phenomena and moreover that some policy methods are more appropriate than others for various phenomena (Geyer 2010: 30-34).

7. Conclusion

This section is included to present the concluding remarks in regards to answering the inquiry of the research formulation. The analysis was structured to answer firstly the question of to what extent development has reached a new paradigm. Secondly, the research inquiry involves why Danish development strategy can be understood as a paradigm of complexity through utilization of complex dynamical systems theory and why it proves more adequate than the former paradigm framework. Similarly this will be the structure of the conclusion.

The first analysis has dealt with Danish foreign and development policy in regards to having obtained a paradigm-shift, through theoretical constructions of both Kuhnian conceptualizations and Complex dynamical systems theory. The history and early stages of development practice and procedure have been concluded as having behaved in a linear manner relying on order, predictability and knowable universal laws in order to determine positive outcomes of economic growth in developing countries. The development process was therefore determined by reductionist methods that predicted how development would progress in an orderly manner with no hidden surprises and with rational ends. Furthermore development practice was accepted within the boundaries of a linear paradigm in that policies were initiated from a bird's eye view with unified packages to countries with a high degree of diversity, a method hereby concluding that developing countries could not live up to the replicated homogeneous development path as was advocated by the industrialized western world. Thus the so-called paradigm framework or attractor tendency began to be contested and met a state of crisis where the dominant model and behavioral pattern began to break down.

Development endured a transitional phase or a so-called pre-paradigmatic period pursuing alternatives to the latter where prevailing positions of human development and people-centered approaches were assimilated into mainstream development. Development was acknowledged as something that could not be induced from the outside and that developing countries were/are wide-ranging in regards to their various diverse conditions and that development must therefore be considered to a higher degree from the 'inside'. Thus development became understood as multi-dimensional complex phenomena.

In regards to the paradigm shift, from a linear paradigm to a paradigm of complexity, complex dynamical systems theory proposes a plausible account of how development processes can better become equipped in regarding the ever-changing conditions of a growing interdependent system. Thus it has been concluded that we have reached a new paradigm in regards to a mind shift, whereby

it has been the task of this thesis to examine why Danish development initiatives are regarded as more competent and useful than that of the previous paradigm thus how their strategies coincide with the sensible framework of complexity and thereby to what extent it is demonstrated and applied. The rhetoric in Danish development proposals have expressed numerous indicators equated to complexity, in that terms and formulations include flexibility, adaptability, adjustment, dynamics, complexity, mutuality, evolvement and interdependence all of which are essential concepts of complexity. The development process is currently established by principles of dialogue, cooperation and partnerships which include various levels of actors on the development scene. It has been established that via ideals of e.g. the Paris Declaration that it is imperative to include recipients into the development processes and to provide civil society with the capacity to voice their concerns in order to influence the procedures and to map them out on the premise of recipient countries self-proclaimed needs. Furthermore civil society organizations and NGO's are also seemingly being drawn in as valuable partners because of their extensive experience in the field that can contribute to strengthening civil society as well as mold the development processes. The pertinent agenda is to enable developing countries to determine which problems they wish to address and how in close cooperation with donor agencies. The strategy of Danish government is hereby to enhance the effectiveness of aid in fewer selected countries through emphasis on inclusion and cooperation with partner countries in order to determine how aid can be best distributed on their terms. Through both methods of bilateral and multilateral aid Denmark seeks to advance the capacity of recipient countries own institutions and organizations, in contraire to running parallel 'donor' institutions, and enhance actors in recipient countries abilities to manage and maintain various areas of concern. These initiatives are taken in order to strengthen partner countries own abilities and capabilities to become self-sufficient, self-organizing healthy resilient societies. In terms of complexity it is concluded that this is a reassuring vision for countries striving to become self-preserving and free of donor-driven forces, thus both donor and recipients are held mutually accountable in the process through means of monitoring progress or lack thereof where adjustments will then be induced. Danish development strategies and ideologies stem to some degree in accordance to a paradigm of complexity in that they are prepared to be flexible and create room for adaption and adjustment which can be considered an amicable way of engaging into relationships with partner countries through a reestablishment of trust rather than the previous paradigm that had fostered some resentment. However, Denmark continues to promote values of economic globalization, democracy and security issues that contradict working within a framework of a complexity paradigm in that,

imposing ideologies in a linear cause and effect approach are inappropriate thus deemed unsuccessful if not conducive with the wishes and needs of recipient countries and moreover do not provide an envisioned long-term engagement.

Finally, with the quote of Gandhi; You may never know what results come from your action, but if you do nothing, there will be no result, a notion Denmark is conducive with, as doing nothing is simply not an option and realizing that there are limits to our knowledge of outcomes, thus risk-taking becomes necessary however through appropriate consulted methods, naturally. However and conclusively, development-policy must be executed to operate in a manner coherent with complex phenomena in order to produce sound outcomes on the terms of recipient countries and not have development ideologies of developed countries forced upon them in an uncompromising manner, as this could result in more detrimental consequences than beneficiary. Thus it can be concluded that DK is lacking in fulfilling all the necessary components that are essential for obtaining a full transition to the promising framework of complexity.

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