



Graduate School of Development Studies

**Facing Climate Change:  
Reflection on Taoism and Its Possible Contributions to  
Responses to Sea Level Rise**

A Research Paper presented by:

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in partial fulfillment of the requirements for obtaining the degree of  
**MASTERS OF ARTS IN DEVELOPMENT STUDIES**

Specialization:  
**Politics of Alternative Development**  
**(PAD)**

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The Hague, The Netherlands  
November, 2009

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## **Acknowledgements**

First of all, I would like to thank my supervisor Mohamed Salih and second reader Thanh-Dam Truong. They provide me with endless love, support and sharp insights for my paper, I would say that it has been as if they grasped clever ideas from the sky to help me with my research. Especially, they taught me how to apply my passion for Taoism and the experience of my spiritual journey to academic research. It has been really wonderful and enjoyable to share with them the process of writing my research paper. Special thanks to Lodewijk Stuyt from Wageningen UR – Alterra. I met him in Taiwan when I took break from my paper to visit my family in July, 2009. He gives me incredible support and shared rich material about water management policies in the Netherlands. He has been full of patience and really well organized. As an advisor, a teacher and a friend, he helped me to go through the last stage of my research.

The message I aim to share in this paper is about holistic thinking and action, based on Taoism. Taoist philosophy emphasizes harmony, co-existence and altruism. For me, it does not only relate to climate change and sea level rising, my research topics, but also to my real experience of life and my process of learning. I could not finish this research paper without the kind help of many lovely friends and my family and the inspiration that the beauty of nature and my spiritual father Swami Veda Bharati's teachings gave me.

My PAD ladies Stefi, Tania, Meghan and program convenor Rachael have been fantastic in supporting me in my academic studies and joyful life in the Netherlands. They show me high altruism during our study and life here. What we shared in these 15 months will be my best memory in ISS. Also, the friendship and the help received from two Taiwanese girls, Fang and Ling, always gave me comfort, especially when I was suffering for being away from home and family.

After working 15 years and then back to school to study, it has been important for me to be fully supported by my colleagues. like Li-Fung Chen in Public TV station in Taiwan. Also friends like Henk, Oesha, Atem, Hong-Yuan Lee who are working with me in CE-DESD encouraged me to explore my capacities and challenge myself. They open another window for me.

At the end, the humble result of the paper belongs to my beloved parents, brother and husband Alvin. They are the meaning for everything I do in my life.

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## **Abstract**

This research paper provides an innovative view of the responses to today's rising sea levels suggesting that we require holistic thinking and actions involving multiple paradigms of knowledge and addressing a variety of layers of practices in the social system. This research explores how a holistic approach such as Taoism can be applied to the field of water management as a response to the rising sea level. This will be addressed through a comparative analysis of the policies dealing with the crisis of rising sea levels in the Netherlands and Taiwan, respectively. In order to do so, I would suggest to create a new space for dialogue between the western and the eastern philosophies embedded in the policies in order to promote multi-culture learning.

## **Keywords**

Climate change, Sea level rise, Laozi, Tao, Taoism, Taiwan, The Netherlands, Water management, Sustainable development, Sustainability, Change within, Spirituality, Multi-culture learning, Eastern philosophy, Cognitive Justice, Post-development.

# Introduction

*The highest good is like that of water,*

*The goodness of water is that it benefits all creatures on earth*

*Itself does not scramble, but is content with the places that all men disdain.*

*It is this that makes water so near to the Way*

---- *Laozi, Tao Te Ching*

*(Zhuxi Jicheng 1986, vol. 3, 78.45.)*

## I. Statement of the research problem

Greenhouse effects and climate change have become serious global issues, although according to Paterson it was predicted a hundred years ago in 1829 (Salih 2008b: 1). Responses to the challenge posed by the greenhouse effect and climate change have been built on a mainstream approach to natural resource management, particularly in the USA and EU countries. An important point to note is that the debate on climate change and the promotion of global action through mechanisms like The Kyoto Protocol and Clean Development Mechanism (CDM)<sup>1</sup> have been dominated by ‘experts’ and modern technology without given attention to local and other knowledge and voices . The mainstream approach to climate change has embraced a market oriented focus, which is not only ineffective in solving the problem but also leading to a dangerous edge. At this critical moment, human beings are threatened by a global environmental crisis, which could be compounded by the unfolding financial crisis.

Historically crises of all kinds have been part of human civilisations, and in some instances a crisis can re-orient thinking about crucial relationships and provide an opportunity for transformative change.

This research paper is premised on the view that responses to today’s raising sea levels require holistic thinking and actions, involving multiple paradigms of knowledge and addressing a variety of layers of practices in the social system. This research explores

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<sup>1</sup> CDM means Clean Development Mechanism, according to the requirement of the [Kyoto Protocol](#) that countries should limit or reduce their greenhouse gas emissions. Three market-based mechanisms was proposed – Emissions Trading, the Clean Development Mechanism and [Joint Implementation](#). The CDM allows emission-reduction projects in developing countries to earn certified emission reduction (CER) credits, these CERs can be traded and sold, and used by industrialized countries to a meet a part of their emission reduction targets under the Kyoto Protocol. Web link: <http://cdm.unfccc.int/about/index.html>

how a holistic approach such as Taoism may be applied to the field of water management as a response to the consequences of rising sea levels. This will be addressed through a comparative analysis of the policies dealing with the crisis of rising sea levels in The Netherlands and Taiwan, respectively. In doing so, I am attempting to create a new space for dialogue including the philosophies behind the policies in order to promote co-learning.

## II. Relevance and justification

*“Sustainability is the principle and the set of practices which supports our spiritual quests and shows us how by loving nature alone we can love ourselves.”*

*By Swami Veda Bharati<sup>2</sup>*

According to the three Assessment Reports published by the Intergovernmental Panel on Climate Change (IPCC), it is confirmed that human activities have contributed to climate change and that the atmospheric carbon dioxide concentration has increased 31% since the 18th Century. IPCC projects that if this warming trend continues, in the coming future the global average surface temperature will increase 1.4 to 5.8°C and 9 to 88 cm rise in global sea level by the year 2100.(IPCC 2007)

Based on the report from IPCC, I would like to address implicitly three dimensions in this research paper, as follows: Social behaviour, Philosophy and Culture. Through interaction of these three dimensions, I will explore and try to figure out how Taoism, as a holistic approach, can contribute to the responses to sea level rise in Taiwan and in the Netherlands.

From a historical and geographical perspective, there are many similar elements between the Netherlands and Taiwan. The Netherlands used to colonize Taiwan and made some culture influence. Also both countries have a high population density and a small geographical area. The Netherland's land (41,526 km<sup>2</sup>) is 15 percent bigger than Taiwan (34,507 km<sup>2</sup>), the population of the Netherlands (16,493,156) is 25 percent less than the population of Taiwan (23,036,087). The Netherlands has 33 percent of its total land area below sea level, the challenge of rising sea levels caused by global warming and climate change is a primary concern. By contrast, Taiwan is a small island; and raising sea level means a reduction of its land area particularly in the plain. In addition, the country is also exposed to natural disasters like typhoons and earthquakes. Responding to raising

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<sup>2</sup> Interview by Tinyu Chen

sea level through water management policies will be the most important and urgent task for both countries. Based on my previous experience as journalist covering climate change issues and as part of the Foundation for China-Europe Dialogue and Exchange for Sustainable Development, I hold the view that water management to respond to raising sea level in Taiwan and Netherlands is a process of cultural exchange and mutual-learning between not only West and East, but also ancient wisdoms and modern technology.

In this research paper, I will draw on key concepts from the ancient wisdom from Asia, namely Taoism, and how they are used in teaching about awareness and altruism. Laozi (604?-531? B.C), who was a famous philosopher in ancient China and is the author of the “Tao Te Ching”. “Tao Te Ching”, a very important Chinese classical text and fundamental for the philosophy of Taoism, has influenced many schools, such as Neo-Confucianism. It is also my main inspiration and motivation for this research paper. In Taoism, solving problems, whether social or environmental, requires addressing the root causes in a holistic manner. The particular and the local cannot be separated from the universals. Likewise, dealing with global environmental needs for healing is a global issue requiring local action. The challenges from green house effects and climate change involve the struggle between North and South, global and local, the power structures among social, economic and political life, environment and technology. Also, the issue will affect individuals themselves and the way many of them see the world. In this way, overemphasizing the value of individualism encourages people to pursue maximum profits in the material world, while the result is loosing balance with nature in the form of climate change crisis. With no doubt climate change is one of the biggest challenge for human beings, and everyone should work together to solve the problem. In the holistic approach of Taoism, altruism and balance with the nature can be an alternative. However, altruism and harmony, which means achieving real balance with the nature, need real action and change within ourselves including awareness transformation. With climate change insight, the question is: can we change or will we change?

### ***My Motivation***

As a political journalist and a producer of a forum program in the public TV station in Taiwan, I witnessed many historical events and crises. Under the heavy pressure of environmental and economic crises, I also come to realize that everyone tries to find a way out. However, it is not easy to find a real solution unless we face our deepest intentions. Our behaviours are the result of our intentions; however, the real intentions are usually covered by many canny excuses. For example, many politicians promote particular policies by saying that they are for public welfare when in actuality it is for their own particular interests.

In 2004, I came to the Netherlands and made a series of documentaries about water management in the Netherlands and Taiwan. The program was nominated for Excellent Journalism Award in Taiwan. During the same time, I also met some spiritual teachers such as Swami Veda Bharati who let me know and experience that the world is the project of our minds, if we want to change the world, we need to change ourselves from within. That is why I would like to explore the consciousness transformation related to the environmental crisis in the particular field of water management policy.

In order to deal with the global environmental crisis, alternative and holistic thinking is necessary. Approaches such as People-centred and decentralized democracy empower people to create the spaces to prepare for and participant in global issues and local action. However, from my point of view, individual awareness and intention transformation are the most important actions. Recognizing the connection between humans and nature, begs for answering to what should we do under the climate change crisis? Taoism indicates one direction which is the “Tao”, follow the rule of the universe, than we can balance and harmonize with natural. As Laozi said: “Human beings should learn from the ground; the ground should learn from the sky; the sky should learn from the Tao; Tao should learn from Nature.” (Laozi, Tao Te Ching) Should we continue with “growth”, “development”, and endless capital expansion or should we purify our mind to redefine sustainable development in order to obtain other ‘joyful and balanced’ life styles?

### ***The Problems***

I argue that facing the global environmental crisis, as horrible as it is, offers an opportune moment for change. Real change does not come from an external force, technological improvement or worldwide consensus regulation. From a Taoist holistic perspective, change comes from within, a personal revolution or “self-enlightenment” at best; combined with collective awareness and connection with nature.

In this paper, I address Taoism as a holistic approach dealing with sea level rise and other not yet very well understood crises such as financial crisis. By using Post-development and cognitive justice concepts, I attempt to bridge the gap between ancient wisdom and modern science. Concomitantly, I emphasize that climate change and sea level rise are global issues that influence and make big impacts in different areas and different countries. I believe there are different places and people that have developed their own culture and ancient wisdom to deal with their own problems. These traditional value systems should be respected and acknowledged as important as modern science. Climate change and sea level rise are very complex with no apparent efficient solution at hand. Therefore, depending on Western modern science is not enough and we need the space where Taoism or other ancient philosophies can enter in and make

important contributions. Taoism's main principle is "harmony" and "Tao". Harmony is learnt through immersing with the way of nature and achieving "Tao" (which means solving the crisis together) through appreciating the beauty of diversity and coexist in the world.

### **III. Research Objectives**

The main objectives of the RP are:

1. To analyze the water management approach in response to raising sea level by comparing the practices adopted Taiwan and the Netherlands
2. To compare and contrast the motives behind these practices with the philosophy that underlies the mainstream approaches to water management in the context of climate change.
3. To explore ways in which Taoist philosophy can contribute to the responses to sea level rise due to climate change.

### **IV. Research Question:**

My research question revolves around holistic thinking and action and the encounters between Western and Eastern water management approaches and how they can help to deal with the local impact of global warming and climate change.

#### ***Main question:***

- Has there been a cognitive shift in water management in the context of climate change and rising sea level to offer the optimism that the crisis can be averted? If so, what are the specific features of this comparative shift in The Netherlands and Taiwan and what lessons may be drawn from a comparison of the two cases?
- How can principles and practices of Taoism be incorporated into these responses?

#### ***Sub-Questions:***

- What are the salient features of the responses in the Netherlands and Taiwan to rising sea levels?
- To what extent is the philosophy behind these responses influenced by a dominant (mainstream) paradigm to sustainable development and its under currents?

## **V. Research methods**

### ***Primary Data:***

1. The information collected during a series of documentary about water management in the Netherlands and Taiwan which I made in 2004.

### ***Text analysis:***

1. Secondly data analysis including project reports and figures related to sea levels in Taiwan and the Netherlands
2. Academic materials will be collected from books, journals, website resources which are related to Taoism and global sea level raising issues.

### ***Semi-structured interview:***

1. Scholars and philosophers in the field of Taoism and Environment
2. Project leader of the master plan which is dealing with climate change in NL and Taiwan
3. Citizens or local organizations who are located in the area where is threaten by the raising sea level.

## **VI. Chapter organization**

This paper is including introduction and 5 chapters. In the introduction part, statement of the research problem, relevance and justification will be address with research questions and research methods. In Chapter one start from a conceptual framework, continue with ongoing debate between sustainable development and alternative approach to climate change crisis. Aside from mainstream theories, I would like to bridge the holistic approach of Taoism to face sea level rise crisis through Cognitive Justice and Post-development concepts. In chapter two and chapter three are analysis of the challenges for Taiwan and The Netherlands as it relates to climate change and sea level rise. Meanwhile create a space for multi-cultural learning and dialogue between eastern and western philosophy.

In the chapter four, the findings about how Taoism can contribute and implement to deal with raising sea level in Taiwan and Netherland will be discussed and addressed. In the close chapter, overview for the analysis of case studies, I would come up a critical perception of dealing with climate change and sea level rise crises in the Netherlands and Taiwan.

# Chapter 1 Conceptual framework

## 1.1 Why do we need a holistic approach to climate change?

The study draws on the debates in Western and Eastern philosophies, sustainable development theories and water management policy in the Netherlands and Taiwan. The aim is to illustrate that transformation of environmental consciousness in response to the environmental crisis is an important element of water management policies dealing with rising sea levels.

Sustainable development is an ideal theory to justify current human being's lifestyle; this means we can achieve "sustainability" and "development" at the same time. However, the increasing crises in the whole world are triggering scholars to start exploring other options. For the conceptual framework of this paper, I provide an overview of the mainstream theory of sustainable development and alternative theories to deal with climate change. Nevertheless, these are not enough in order to promote a holistic approach.

As what Swami Veda Bharati says: "Sustainability is the principle and the set of practices which supports our spiritual quests and shows us how by loving nature alone we can love ourselves."<sup>3</sup> Climate change crisis is not only about human being's physical life, but also a spiritual quest. In this paper, I will use Post-development and Cognitive justice to open the space for the holistic approach of "Taoism".

I use Taoism as a base to analyze in particular water management policies dealing with sea level rise. Following the path of Western and Eastern history, there are some interesting encounters regarding water and I would like to observe the culture of mutual-learning processes based on Taoism to analyze these water management systems in the Netherlands and Taiwan.

### ***Mainstream Sustainable Development and Climate change***

The Brundtland commission defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own need". How to achieve it? According to Adams (2001: 104-117) mainstream sustainable development can be divided into three approaches: Market Environmentalism, Ecological Modernization, and Environmental Populism.

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<sup>3</sup> Interview by Tinyu Chen

### **(a) Market environmentalism**

This approach considers market-oriented methods as the most important tool for mobilizing and regulating the interaction between people and the environment. It encourages utilitarian, individualistic and anthropocentric perspectives. The concept is in line with the IMF and World Bank's development projects based on 'structural adjustment' loan packages in the 'developing countries'. They call these measures 'green economy' to highlight a growing environmental consciousness, but it keeps following the ideology of capital growth.

### **(b) Ecological modernization**

This school of thought recognizes the ecological dangers posed by an unregulated market and it believes that through advances in technology the consumption of natural resources can be reduced. The ecological crisis can be 'solved' by technical and procedural innovation which includes two dimensions: "one is eco-centric (romantic concerned with the rights of other species) and the other is technocratic (rationalist, mechanistic and bureaucratic)". Just like modernization, which is informed "by the ethos of enlightenment, ecological modernization is informed by the ethos of scientific rationality" and its capacity to transform (Salih, 2008a: 5). The state should play an important role in helping experts to create more efficient products that facilitate a new living style. It also promotes that human beings can keep modernizing and save the planet at the same time under principles such as rational planning, management, and utilization of the environment.

The ecological modernization approach has been strongly supported by Brundtland and Rio, and also accepted by agenda 21<sup>4</sup>. On the contrary, Hajer (1995) speaks of the possibility of "reflexive" ecological modernization: "political and economic development that proceeds on the basis of a critical self-awareness." (Dryzek, 2005: 174). The notions of ecological modernization can seem very appealing and ideal, however individuals should not follow blindly the sometimes biased view of "experts", and keep critical self-awareness to think and express their own concerns, because climate change is complicated and no one can guarantee and forecast the future.

### **(c) Environmental Populism**

Environmental populism emphasizes that the citizen should generate change through participating in the decision-making processes. The main purpose is to create the capacity

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<sup>4</sup> According to UN: "Agenda 21 addresses the most pressing problems of today and also aims at preparing the world for the challenges of the next century. It reflects a global consensus and political commitment at the highest level on development and environment cooperation." web link: [http://www.un.org/esa/dsd/agenda21/res\\_agenda21\\_01.shtml](http://www.un.org/esa/dsd/agenda21/res_agenda21_01.shtml)

and to empower ordinary people through participation, thus reaching basic needs, human development, decentralization and equitable distribution of resources, etc. The approach has much in common with the popular development value and can also be seen as the political arm of mainstream development.

The three mainstream approaches of sustainable development are all based on keeping the fruit of modernization and seeking the ‘win-win’ approach. Facing the global environment crisis, the common view is that global environment protection can be considered a global cooperative action.

However, the evidence of green house and climate change shows that there must be something wrong with the past models of development. Is the reformist perspective too scientific rationality without considering the struggle in South? The debt crisis in the South resulting from IMF and Word Bank loans under structural adjustment are not only deepening the gap between North and South, but also oppressing the people, making them suffering in poverty. These free-market oriented “development projects”, and trade policies did not help people in the South to get out from poverty or satisfy basic needs. The transnational corporations continue to exploit natural resources from the South and oppress people as cheap labour.

Globalization made it easier as a justification to extract raw materials serving the Northern economic market. Considering the painful history, is there any possibility of hope that another new industrial revolution will happen again, and the new technology can be adopted in the North and South to protect the environment and “modernize” at the same time?

## 1.2 Opening other window for sustainability

The world value and order nowadays is shaped by modernization and Neo-liberalism. The debates that still are going on about modernization theory emerged to understand the industrial and French revolution. The central argument of modernization theory is that “traditional society cannot smoothly enter into modern society unless the traditional structure and value systems are abandoned”. (Grimm 2008:3) Neo-liberalism and the value system it promotes, has influenced fundamentally international economic and political systems. However, the paradigms of Modernization and Neo-liberalism which includes nation-building, representative democratization, secularization, the principles of equality before the law, individual independence, participation in mass-consumption, among others are presented by Northern countries which have more power and try to impose into Southern countries.(Grimm 2008: 3-10, Kreutzmann 1998: 255-265)

These paradigms of modernization and neo-liberalism were adopted to the newly independent countries after World-War II, but human being's activities based on these paradigms paid a serious price due to abandonment of traditional knowledge. Climate change and sea level rise are one of the serious results of "over-development" and destroying our natural environment.

In order to build the bridge from modern science to a holistic approach, an open mind, innovation and creativity are needed. Cognitive justice and Post-development theories are suitable to play an important role in bridging the gap between modern science and a holistic approach. By acknowledging the diversity of knowledge and their value, Cognitive Justice and Post-Development theories provide a different perspective to explore the beauty and mysteries of knowledge. Furthermore, they open another window for sustainability.

### **(a) Post-development**

Post-development reflects the notion that development theory is too narrow and focuses on "western" and "modernization" concepts which created polarization and made the people from the "South" and "The Third World" become second class citizens.

Post-development theories recognize the struggles between the North and South, "developed countries" and "underdeveloped countries". Scholars like Eduardo Galeano and Vandana Shiva provide examples from Latin America and India respectively on the damage that was caused by not considering local culture, difference and local knowledge (Galeano 1997, Shiva 1997b).

Shiva argues that modern "development" and economic globalization are not only a "maldevelopment" but also "a process of ascending hierarchies that concentrate power and exclude people from participating in the political and economic life of their societies" (Shiva 1997a: 22). Shiva describes how the women in a small village in North India stood up against the authorities to "develop" their holy forest. Because these women worship the "tulsi" plant which is a very important symbol to connect them with the universe force. Although these women are not considered "experts", they can recognize how economic globalization will destroy their traditional culture. (Shiva 1997a).

As Majid Rahnema emphasize that Post-Development thinking tries to find a way out by using a more broad perspective without judging whether development approaches are "good" or "bad". (Rahnema 1997: 381) It is very similar to the principles of Taoism. In Taoist philosophy, the "Tao" is the highest rule for all the beings in the universe to follow. The "Tao" is every being linked and connected to each other; everything that happens must have some reasons behind. There are so many diverse cultures and structure systems in the whole world. The process of appreciating the diversity and structure systems are not only to show the life value of the local society, but also to

represent the wisdom of how people can adopt and learn from different times and spaces. Post-development respects and put these traditional culture and knowledge in equal position with modern science. This point is about exploring all kinds of possibilities for our problems and dilemmas in our current world.

Eastern philosophies such as Buddhism, Hinduism, Confucianism and Taoism make important contributions to the Post-development area. Majid Rahnema mentions that moving towards post-development means “a deeper and unbiased knowledge of how different cultures have solved their problems and of what they have learned to cherish or dislike through the ages would be instructive for all those in search of alternatives to our own dilemmas” (Rahnema 1997: 381). Therefore, post-development starts the journey by looking for new possibilities of change.

The most interesting part of post-development concepts for this paper is Maid’s idea of rethinking “Wu-Wei”, one of the most important essences of Taoism. “Wu-Wei” is a term that means “non-intervention” or “action through non-action”. This does not mean passivity or apathy. A real leader should implement “Wu-Wei” which is far from exercising coercive power over his/her people, allowing people to follow the “Tao” and develop diverse lifestyles. If a leader can do so, “Wu-Wei” will lead the political order emerging from the grassroots, and people can enjoy harmony in life (Rahnema 1997: 397).

### **(b) Cognitive justice**

From my perspective, Cognitive justice is one of the most important thinking in the Post-development area. After long reflection on modern science, Cognitive Justice was proposed by Shiv Visvanathan who is an India human rights researcher and anthropologist. He argues that all kinds of knowledge should be equally assessed. Because the ethics of modern science is the root cause leading to the violence of development. Moreover, this violence is not only the result of the abuse of science; violence is entrenched in science itself and creates a “monoculture of the mind” (Kraak 1999: 79, Velden 2006) by excluding other knowledge and worldviews.

According to Visvanathan Cognitive Justice provides a possible solution for the crisis of modern science. There are various principles in support of this argument:

1. All forms of knowledge are valid and should co-exist in a dialogic relationship to each other.
2. Cognitive justice implies the strengthening of the ‘voice’ of the defeated and marginalised.
3. Traditional knowledge and technologies should not be ‘museumized’.
4. Every citizen is a scientist. Each layperson is an expert.

5. Science should help the common man/woman.
6. All competing sciences should be brought together into a positive heuristic dialogue (Kraak 1999).

Although some scholars criticise that Cognitive Justice is a ‘romantic idea’ and ‘unrealistic’, Visvanathan argues that “Cognitive Justice, democracy, social justice and an ethics of freedom are the building blocks of a framework for an alternative conception of science”(Velden 2006).

The challenge of Cognitive Justice is how to bring different systems of knowledge into existence as part of dialogue after the society is dominated by “expert knowledge” for such a long time. However, from the historical perspective, alternative knowledge or ancient wisdoms have always played and continue to play a key role in human civilization. Open plural vision of knowledge means allow more space for creating opportunity to transformative change(Visvanathan 2009: 156-157).

### **1.3 The Principles of Taoism**

Laozi is a central thinker in Taoism. He was assigned by the king as a librarian in the Zhou dynasty and got self-enlightenment by focusing on reading and studying. His writing “Tao Te Ching” made notable impact on Chinese history, culture and spirituality. The book “Tao Te Ching” is translated into many different languages and has made big influence in the whole world. He proposes a total different perspective from Chinese traditional culture which always taught people that they needed to be strong and smart. On the contrary, Laozi argued that people should be soft, flexible and “Wu-Wei” (non-intervene). “Wu-Wei” which means non-intervention was misunderstanding by many people. “Wu-Wei” is not Pessimism or “do nothing”, on the contrary it indicate that we need to harmonize our inner self.

Laozi became a famous philosopher and wise man in that time, even the one of the greatest educationist in China history; Confucius came to visit him and looked for his guidance. In their meeting, Laozi advised Confucius that he should reduce his ego, let go attachment, illusions and go back to his deepest inner to hear and follow the rule of nature which is “Tao”. After the conversation with Laozi, Confucius always shown his admiration for him: “Birds, I know they can fly. Fish, I know they can swim. Tigers, I know they can run. However the dragons, they are in the top of the sky and full of mysteries. Laozi, he is just like dragons, I can never tell how wise he is” (Cai 2001: 16-19). After meeting with Laozi, Confucius got lot of inspiration, for example, on his most important theory “Tian ren heyi” which means that human beings should immerse with the universe in response to “Tao”. “Tian ren heyi” made a notable influence in Neo-Confucianism and ecological ethics in Chinese history.

According to Laozi, the “Tao” cannot be named and talked about. “Tao” is “the origin” of heaven-and- earth and the “mother of all things”. Tao emerges from “emptiness”, the essence of the universal force. From the “emptiness”, “Yin and Yang” appeared and then the entire physical world was born. The “Tao” means the rule of the true reality, the principles and rules of the universal “force”, it can only be understood through perceiving spontaneously (Cai 2001: 22,Laozi 1961: 3).

He explains his worldview in the “Tao Te Ching” that the whole world should be seen as one, the world consists of the Tao, Earth, the Sky and the Human beings, the four elements needed for balance such as “Yin and Yang”, “Sun and Moon”. He also says that human beings should learn from nature and act as “following the flow and energy”. For example, a farmer should sow in spring from the beginning of the year; work hard in the summer; then, enjoy harvesting in the autumn, and finally rest and recharge the energy for the next year during winter. Through following the seasonal rhythm of nature, human beings can achieve balance with the environment.

Adopting Taoism into the environment and ecology is not only an ancient philosophy, but also provides practical actions. There are four moments of cognitive shift in the process of transformation which I address below. They are important moments to show what cognitive environment we are in now and what it can be expected to trigger. By recognizing these processes, we can see how Taoism can contribute to climate change and sea level rise responses in the case studies in the Netherlands and Taiwan as well.

### **(a) From linear thinking to harmony**

The mainstream approach used to deal with environmental crisis is based on a linear thinking using scientific knowledge, technology and capital to solve the problem. In the Taoist philosophy, the four elements of the world are Tao, Sky, Earth and Human being. The relationship among the four elements should harmonize with each other. Compared to mainstream linear approach which sees a “direct” way to deal with the environmental problem, Taoist philosophy emphasizes an “indirect” way, so-called non-action or non-intervene (Wu- Wei) in order to face the environmental challenge. Human beings should maintain a harmonious connection with nature (Sky and Earth), thus can achieve “the way” (Tao).

### **(b) From separation to unity**

The mainstream approach is based on a notion that human beings are separated from the nature; furthermore human beings can dominate the natural resources. Nevertheless, Taoism indicates that human beings and nature form a unity. Joanne D. Birdwhistell mentions that all existence -of humans, animals, and plants are equally important.

Human beings can live well by realizing that there is no difference between human and other existence(Birdwhistell 2001: 26-27).

**(c) From selfishness to altruism**

Laozi also remind us of the importance of individual awareness and promoting altruism. Selfishness and utilitarianism is one of the root causes of individual suffering and conflicts in the material world. Under this philosophy 'All is one'. Taoism focuses on the idea that human beings and nature (earth and sky, Yin and Yang) are all connected and in the same boat sharing the same fate, thus believing that whatever you do to others (including other people or nature and every being in the planet) will come back to affect you. To achieve the balance of individual, environmental, social, economic and political life, human beings need to observe their deep intention inside their minds. Is the purpose for action is based on selfishness, utilitarianism or is it based on altruism? Through the transformation of the mind (awareness) one can balance the relationship between human society and natural environment.

**(d) From knowledge to awareness and action**

"Instead of speaking out loud in order to change others, Taoism speaks the soft language of the transformation of the inner self." (Schipper 2001: 79-80). In using Taoism to deal with environmental crisis, one of the big challenges is to bridge the gap between "knowing" and "doing". Looking for the change within to raise people's awareness and action needs many alternative methods such as authentic dialogue, leadership, meditation, etc.

Figure1

Four moments of cognitive shift in the process of transformation in Taoism

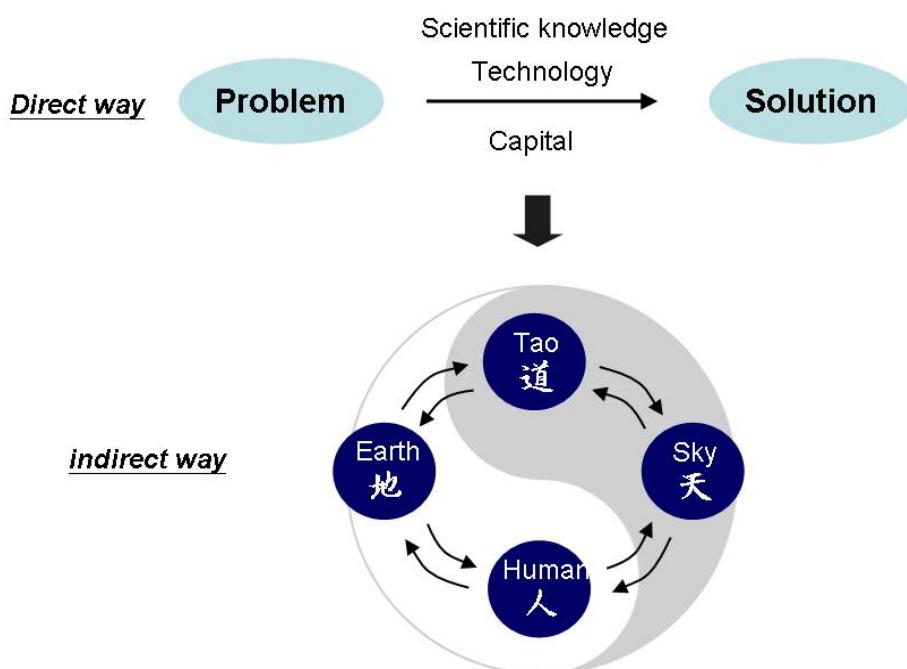
## Taoism & Nature



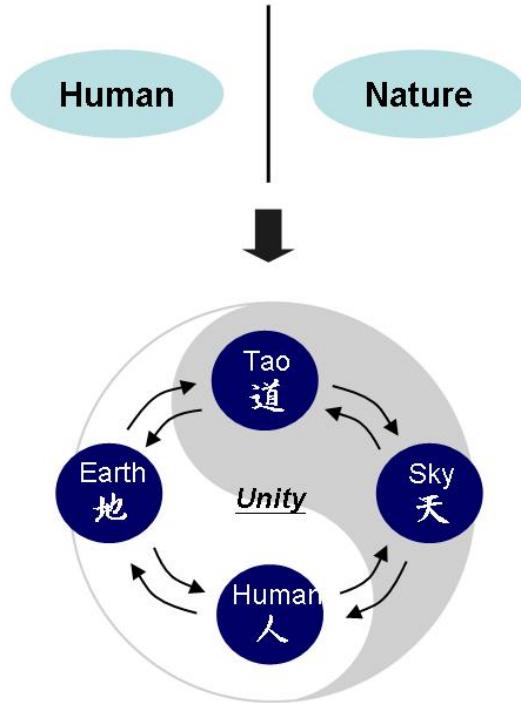
- From linear to harmony
- From separation to unity
- From selfish to altruism
- From knowledge to awareness and action

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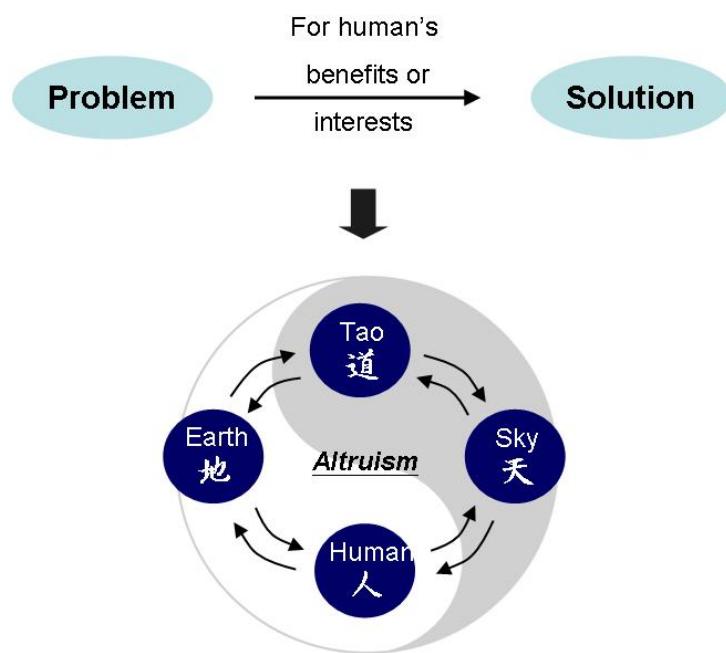
- From linear to harmony



• From separation to unity



• From selfish to altruism



Source: Tinyu Chen 2009

## 1.4 Harmony, Water, individual and collective awareness transformation in Tao Te Ching

Related to climate change and raising sea level crisis, I would to analyze “Tao Te Ching” from three dimensions which are harmony, water and individual and collective awareness transformation. There are two parts of “Tao Te Ching”, one is “Tao” and another is “Te”. “Tao” represents Laozi’s worldview. He explains what is the “Tao”, what is the rule and reality in the world and universe; how human beings can achieve the “Tao” and enjoy life through harmonizing themselves with nature and respecting all the beings in the planet. “Te” is how Laozi taught people how to focus on spirituality and exploring to achieve individual and collective awareness transformation. This individual awareness transformation including the notion of leadership is based on historical matter that it was an autocratic monarchy when he wrote the book.

Harmony is the central argument in “Tao Te Ching”. Laozi’s philosophy which proposed that human beings should harmonize with nature, made an impact in modern ecological ethics. Scholars conclude that our elements in Taoist ecological ethics are a) “We-Wei” (non-intervene); b) Know when and how to stop; c) appreciate all beings; and d) love every being or non-beings in the planet. The first element, “We-Wei” (non-intervene) states that all the beings and non-beings emerge from the “Tao”. Human beings have a very important position in the “Tao”. However, human beings are equal to the sky, earth, and other beings. Furthermore, to achieve the “Tao”, human being’s behaviours should follow the rule of nature and harmonize with the rhythm of the nature. If human being’s activities do not follow the rule of nature, then the power of nature will try to balance and fight back. (Jun Dong 2008: 203-205)

The second element which is “knowing when and how to stop” reveals how, as Laozi teaches us, we should measure our behaviours. Laozi proposes that a simple life is what human should follow by restraining human’s activities to achieve harmony with nature. In the Taoist perspective, all ecological systems are seen as one organism. Every being in the universe is linked and connected, therefore, if humans destroy the nature they are damaging themselves. In Taoism, one of the meaning and purpose of life is harmony with nature and living a simple and joyful life. The priority of life is focus on spiritual exploration to know the reality of the world. (Jun Dong 2008: 203-205)

The third and forth elements “appreciate all the beings” and “love every beings or non-beings in the planet” represent the Taoist ecological philosophy. Human beings are not the ones that have been chosen by god to dominate the Earth. Human beings are equal and should appreciate and love the other beings. If human beings follow and respect this guidance, then every being in the world is like a family, such as a sister and a

brother. Will you kill or destruct your own house or beloved family? (Jun Dong 2008: 203-205)

In Laozi's book "Tao Te Ching", water is a very important symbol. Water is one of the most important elements of life. Over two third of earth's surface is water; over 70% of our body is water. Water is essential for life, all the beings in the planet cannot survive without water. By using the metaphor of water, Laozi teaches us the way of "Tao" and how to harmonize with nature. Meanwhile, he provides very practical methods to show the real meaning of individual and collective awareness transformation, leadership and how individuals can achieve enlightenment (which means connecting to the "Tao"). In the eighth chapter of Tao Te Ching, Laozi used water to represent the highest form of goodness.

"The highest form of goodness is like water.

Water knows how to benefit all things without striving with them.

It stays in places loathed by all men.

Therefore, it comes near the Tao.

In choosing your dwelling, know how to keep to the ground.

In cultivating your mind, know how to dive in the hidden deeps.

In dealing with others, know how to be gentle and kind.

In speaking, know how to keep your words.

In governing, know how to maintain order.

In transacting business, know how to be efficient.

In making a move, know how to choose the right moment.

If you do not strive with others,

You will be free from blame.

--Laozi, Tao The Ching" (Laozi 1961: 17)

In this chapter, Laozi interpreters water with three dimensions. If people can learn from water through these three dimensions, then he/she can reach the highest goodness and close to Tao.

First of all, water benefits all things. It shows selflessness and altruism, water flow and gives nutrition to all beings without difference and without expectations. Meanwhile, water is transparent and honest; it reflects everything without hiding it. If people can learn from water, then he/she will benefit others without condition. They will always aim to be honest and responsible, so people will trust them.

Secondly, water is soft and always following the flow without fighting with other beings. Water is flexible and able to adapt all kind of landforms. Although it seems weak and soft, however this weakness and softness makes water much stronger than others. There is a Chinese saying: “Water dropping day by day wears the hardest rock away!” It is just like our teeth and tongue, teeth seems hard and tongue seems soft, however when we get old and lose all our teeth, the tongue is still there and working hard to send the food to our body! The power of water especially was noted by the recently crisis of climate change, raising sea level, flood, tsunami, etc. So, if people learn from water, he/she might seem soft, but is flexible and naturally is very powerful. Laozi also uses the character of water to advice leaders to learn from the water, the most powerful leader is the one who knows he/she has strong power but still remains soft and humble.

The final dimension of water is that water stays in places loathed by all men. It shows humbleness and a huge capacity, just like the sea has the capacity to receive the rivers from the whole world. If human beings can immerse in the metaphor of water and realize the highest form of goodness, than we are very close to Tao.(Cai 2001: 35-36)

Water, the most marvellous essential element in the planet; nurtures life, but also causes the natural disasters such as floods, typhoons and storms, etc. From a human's perspective, water is violent and destructive. However, from the macro perspective of universe and comparing to how human being's activities have caused environmental destruction, what happens through the climate change is just nature trying to balance itself. Over industrialization and urbanization have polluted the water and brought acid rain. Climate change is accompanied by extreme rainfall and brings flood, sea level rise, typhoons and storms, etc. Human beings are suffering from these disasters and we need take responsibility for it.

In addition to using the metaphor of the water, Laozi also put lot of effort to teaching how individuals can work on awareness transformation. In Tao Te Ching, individual awareness transformation including leadership is very important. From Laozi's point of view, the world is the projection of our mind. Only people who connect with Tao can realize the “reality of truth” or the “reality of the world”. In Buddhism, there is a saying “Heaven and hell is only within a flash of thought” sent the same message of Taoism. Actually, many eastern mysteries or philosophies have been talking about the same concepts in different languages or interpretations. In “Tao Te Ching”, Laozi emphasizes that everyone and everything surrounding us is like our mirror. These mirrors reflect our deep intentions and thoughts. If people have enough awareness and consciousness, then they can learn and adjust their mind and behaviour. Laozi said people will not recognize things which they do not already have. For example, when we see someone and feel he/she is selfish or egoist, then it means that we are selfish and

egoist too. People around us are our mirrors and we recognize ourselves through facing those mirrors. (Cai 2001: 120-121)

Working on individual awareness transformation, altruism, compassion, humbleness are the most important key elements. In Tao Te Ching chapter sixty- seven, Laozi said:

“I have three treasures, which I hold fast and watch over closely.

The first is Mercy.

The second is Frugality.

The third is not daring to be the first in the world.

Because I am merciful, therefore I can be brave.

Because I am frugal, therefore I can be generous.

Because I dare not be the first, therefore I can be the chief of all vessels.

If a person wants to be brave without first being merciful, generous without first being frugal, a leader without first wishing to follow, he is only courting death.

Mercy alone can help you to win a war.

Mercy can help you to defend your state.

For heaven will come to the rescue of the merciful, and protect him with its Mercy.”

--- Laozi, Tao The Ching” (Laozi 1961: 17)

In other words, to achieve the “Tao”, spirituality is necessary. Laozi teaches us about the need to be selfless, humble and compassionate, pure of our minds through reducing desires and ego. When your mind is clean as a mirror, you can learn from everything and everyone surrounding you. At the same time, you can also follow the principles of the “Tao” and realize the “truth of the world”.

Due to living under the autocratic monarchy, Laozi also spent some chapters to talk about leadership. Different from the stereotype of leadership, Laozi gave it a total new perspective and meaning. A real leader is not who owns the power; on the contrary, he/she is the one who never wants to become leader or fight for the power. They are humble, soft, altruistic and working on self reflection. In Tao Te Ching, a real leader focused on purifying his/her mind, reducing ego, following the rule of nature and “the force”. Through these practices they become wise and reach the “Tao”. At the same time, people will come and follow them naturally. The real leader has no need to pursue power; power comes to them because they never think to own the power.

In Tao Te Ching, Laozi also connects water and leadership in chapter 66.

“How does the sea become the king of all streams?

Because it lies lower than they!

Hence it is the king of all streams.

Therefore, the sage reigns over the people by humbling himself in speech;

And leads the people by putting himself behind.

Thus it is that when a Sage stands above the people,

They do not feel the heaviness of his weight;

And when he stands in front of the people, they do not feel hurt.

Therefore all the world is glad to push him forward without getting tired of him.

Just because he strives with nobody,

Nobody can ever strive with him.

--- Laozi, Tao The Ching” (Laozi 1961: 17)

The essential principles of Taoism such as leadership or “Wu-Wei” which means non-intervene was misunderstanding by many people. The critique consider that Taoism was too Pessimism, however “Wu-Wei” and non-intervene does not mean “do nothing”. Actually, harmony in Taoism does not only mean connecting with nature, but also means that you need to harmonize your inner self. From Laozi’s perspective, all the beings in the universe form a big system, but human beings including our body, mind and soul are another small universal system. You have to harmonize your own small universal system which means balancing your body, mind and soul. Then you can connect with the big universal system. On the other hand, “Wu-Wei” means you do not fight with people; you do not pursue your own interest or power. On the contrary, ”Wu- Wei” encourage people to work on your own “change within”, “Wu-Wei” means every being including people should try our best and put all our effort to work on spiritual transformation and to synchronize with the rhythm of the nature and the universe which is the “Tao”. Taoism is enthusiastic and constructive in revealing the secret of Tao: the power of “Wu-Wei” is “change within”. Under the truth of Tao, everything is connected, related and influenced by each other. When people’s mindset change, the effect of change will like water flow or produce a butterfly effect, from individual awareness, social behaviour, policy making, collective activities even human being civilization transformation will totally change.

As Swami Veda Bharati said: “In this very moment, we can make change. We just need to have two things: clear vision and freedom from fear. If yes, this vision is true. Then no matter what happens, I have to do it. Not because of my self interest but because I see this, just like the flash. It is like an engineer has the map. When we have the map, we can create whatever we want. We can destroy the planet, or we can make it a paradise.” (Tinnyu Chen 2004)

# Chapter 2 Water management system to deal with raising sea level in Taiwan

## 2.1 Hydrology in Chinese history

Four thousand years ago, the integration of water control and leadership lead to the emergence of the first dynasty in China – Xia Dynasty. According to Qiguangz Hao: “Yu worked single-heartedly for thirteen years, fighting the Great Flood that had long devastated the land. To channel the waters, he dug great “drainage canals.” Yu was the master of hydraulic society or the great builder of hydraulic works. His job included both “productive and protective installations.” When he died, the people did not accept his designated successor but turned to his son. Thereby they began the practice of hereditary succession and created the first Chinese dynasty, the Xia.” (Zhao 1989)

This way of water management which Yu use to deal with the flood did not only matched the principles of Taoism, but also was done in a holistic manner. Another example is the Dujiangyan. The Dujiangyan is an ancient and amazing water management project. The local Shu state governor Li Bing (250-200BC) design this water management and irrigation project without building the dam and using modern technology. Dujiangyan consists of the Fish Mouth Water-Dividing, the Flying Sand Fence and the Bottle-Neck Channel and it succeeded avoiding flood. Moreover it diverts the Mingjiang River automatically and leads the water for irrigation. Until now, Dujiangyan still functions well and became a UNESCO World Heritage Site in 2000.

However, the Chinese ancient water management approach was forgotten in the contemporary society by adopting a modern approach. An example is Taiwan, ancient named “Formosa” which means beautiful island. Despite its name, it has suffered from climate change. It experiences regular natural disasters like typhoons and earthquakes cause huge damage. In the past 15 year massive rainfalls have brought floods and landslides.

## 2.2 Who takes responsibility for the disasters?

On the date of 8th of august in 2009, Taiwan was hit by the deadly typhoon Morakot and became the head-line on the worldwide news. “A mudslide triggered by torrential rains may have buried up to 800 villagers in southern Taiwan, media report said Monday, as the country counted the cost of its worst flooding in decades.” (CNN 2009)

According to Taiwan government report, there are 769 victims (including dead and disappearances) and thousands stranded in typhoon Morakot.(Morakot Post-Disaster

Reconstruction Council 2009) People complained that the authorities did not take full responsibility to neither predict the possible damage nor relieve the victims of the disaster. Taiwan president Ma apologized several times to the people who were affected by the typhoon Morakot. But people's anger could not be released, one month later, the Prime Minister Liu Chao-Shiuan resigned and his Cabinet also resigned in masses as a response to the criticisms from the society.

Taiwan paid a huge price, but the question is what can we learn or improve after this sad disaster? Will we forget easily as usual or can we really change and make a difference? Facing climate change, the authorities and citizens in Taiwan still encounter a lot of challenges. The former commissioner of Water Resources department, Professor Lee Hong Yuan from the National Taiwan University said: "Taiwan now is really in a critical moment. My background is engineering, however the crisis of climate change is out of our imagination, it means the engineer approach and old thinking did not work anymore. Taiwan needs a comprehensive master plan. We need to consider variable of climate change before policy making. Also, we have to include citizens and stakeholders to dialogue. The master plan is related to common interest for everyone in this island, not for political or self interest. It is a pity that I have mentioned this issue for almost ten years, but our government did not consider it as a very serious issue. No mention to start the National land integer master plan. I am not sure what will happen under the pressure of climate change, but I am sure that if we don't do it now, we will regret it in the future! "<sup>5</sup>

The most damaged area by typhoon Morakot is southwest part of Taiwan. Besides natural disasters such as typhoons or earthquake, people face serious flooding because the raising sea level as a result of global warming and the pumping of water from underground for fish farms. The government has fallen into the dilemma of allowing local people to continue to pump water to make a living or setting regulations to reduce the damage. Under the pressure from the congress and considering electoral victory, the officer of the government decided to simply set the budget and assign engineering experts to build the so-called 'new ecological dam' systems to avoid flooding. However, the way to spend budget without considering climate change and local people's real need, it end up in wasting money and people still suffering to make living because the dam was damaged by strong rainfall or raising sea level year by year. The top down policy making and economic-political priority did not solve the problem but only wasted money.

Although sometimes it is unfair to say that Taiwan government did not put much effort to deal with climate change. Nevertheless, the "out of box thinking" is needed

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<sup>5</sup> Interviewed by Tinyu Chen

badly. A government officer whose job was to distribute the budget into institutions for climate change said: “Honestly, I don’t know how to distribution this money. I can not take risk to spend the entire budget in one institution, so I choose 10 institutions to do the research. But at the end, I got 10 different results about the effect from climate change. For example, what is the possible raising sea level will be for the next 50 years in Taiwan? Some of them told me 1m, some of them said that it will be 2m to 5m. I have no idea which report is right, how can I make policy suggestion according these report? All I need is someone can tell me the exactly information and data about climate change, in short, I need the truth!”<sup>6</sup> This is typical complain the government employs due to bureaucracy and political parties take turn of power. In general, they got used to follow orders from the top to avoid taking full responsibility for their own decisions or giving advice to their supervisor.

Until now, all the strategies related to climate change and raising sea level in Taiwan are only projects on paper. The difficulties to implement the project on paper to real policy are lacking leadership, dialogue, citizen awareness, education and inter-administrational cooperation. The climate change crisis and raising sea level is not only an issue about “water management” anymore, but a serious situation concern about suitability for human and all beings. “Taiwan as an island country is affected by raising sea level by losing coast lands, water reservation and economic transform, etc. That is why we need transformation in different level to solve these problems.” said by Professor Yu from environmental engineering program in NTU.<sup>7</sup>

From many perspectives, the ancient wisdom Taoism and the tradition of water management seems abandoned now. However, as Laozi’s teaching: “Yin and Yang” look like opposite sides but actually complement each other. In this way, you can always see the light from the dark. For the last two years, there is a project in Chi-Yi county where people are suffering from the flood cause by raising sea level and pumping underground water for fish farm. Professor Lee Hong Yuan and his colleagues try to adopt wisdom of Tao in this area and provide other option for people here. Lee Hong Yuan mentioned “Through dialogue, people have the opportunity to make choice. I was involved the dialogue with these fish farmers. At beginning, many people think we will failure to convince these fish farmers. However, we initiated hundreds hours dialogue with local people and made big successes. Because we told these fish farmers, their lands will be rent by the government and become a wet-land park. Meanwhile help them to change career into leisure business. They are very happy that they can have other options. The

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<sup>6</sup> Interview by Tinyu Chen

<sup>7</sup> Interview by Tinyu Chen

reason why they keep pumping underground water is they thought they have no choice. Now the dialogue create a innovative opportunity.”(Lee 2009: 221)

The project in Chi-Yi County has a good start, but the challenge now is that the project needs 5 different ministries and 12 departments for inter-administrational cooperation. The project will be a good objective to examine if the authorities have enough capacity to integrate different systems and opinions to solve raising sea level problems in southeast part of Taiwan.

## 2.3 Cognitive justice and revalue the treasure of Taoism

Taiwan’s case study provides the best opportunity for cognitive justice to enter in and open a space to multi-cultural learning of Easter philosophy and modern science. Although the spirituality of Taoism was abandon in Taiwan, this eastern philosophy is rooted in the society. What Laozi proposed such as harmony with our inner self and nature actually is deep in Taiwanese people’s thought; it is part of their heritage. Forgetting the principle of Taoism does not mean it disappeared already. It is still there, all we need to do is to recognize and revalue the treasure of Taoism. Taiwanese have good foundation from Laozi’s teachings and the Taoist philosophy. As Visvanathan proposed, all forms of knowledge should co-exist with each other and science should help the common people. If Taiwanese people can revalue Taoist philosophy and take advantage of modern science it can open a new perspective for water management policy to deal with sea level rise in Taiwan.

Actually, there some scholars that propose that Taiwan should not forget the traditional treasure we had from the history or ancient wisdom such as Laozi, Confucius, and how Yu’s concept to channel and create space for the water. However, these suggestions are not given enough attention to be adopted into policies by the authorities.

The philosophy and core value behind the culture are the foundation stones of society system. Now facing the climate change and sea level rise, from the bureaucratic system to the local citizens in Taiwan are full of fear and uncertainty. The leaders and the government officers do not want to take full responsibility for the policies, so they usually put blame something else stating that climate change is a natural disaster that we cannot control or predict. Local citizens are also suffering because they do not know who they can rely on and why they have lost their beloved ones and their property again and again during these horrible disasters.

Dealing with these, what the former US vice-president Al Gore called, “inconvenient truth”, acknowledging the principles of Taoism, shifting our mindset and paradigms, while at the same time translating them into policies and everyday life is very

important for Taiwanese people and the government. Also, it can be Taiwan's contribution to other countries in the world which are suffering with the same crisis.

From the project in Chi-Yi, we can see the shift in paradigm. Even though, it still follows Western modern logic such as liberal democracy, they are trying to listen to local people's needs and initiating dialogues. This is a very good start and challenge, but it is not deeper enough to touch the promote consciousness and fundamental transformations. Revaluing Taoism can bring new opportunities for real change in Taiwan. Taiwan has a big potential to deal with climate change and sea level rise due to the fact that Taoism provides a good foundation to change within quickly and efficiently. When the mindset changes the whole paradigm will shift towards an innovative and creative direction. It can be evolution within and influence the policy and society as a whole.

By adopting the Taoism principles, there can be individual and collective awareness and change from within. At the individual level, if the leaders and government officers can realize how to harmonize their inner fears and conflicts, give rise to compassion and altruism, connect with the nature and follow the rule of the force. Then, they will take full responsibility for their decisions and promote policies for public welfare, not for their own interests. If it happens, these processes are cognitive shift moments such as "from separation to unity" and "from selfish to altruism". Through these individual changes from within it can emerge real leadership which Laozi mentioned in Tao Te Ching. This power of change from within can interact with modern science and open an equal dialogue space leading policy and societal change which is collective awareness transformed. This dialogue can be done in cooperation between Taoist philosophy and modern science. Just as what Majid Rahnema mentioned in post-development thinking, take the nutrition from the ancient wisdom and modern science and find out holistic approach for our own dilemma. (Rahnema 1997: 381)

# Chapter 3 Water management system to deal with raising sea level in the Netherlands

## 3.1 God created the world, but the Dutch created Holland

There is a saying ‘God created the world, but the Dutch created Holland’. Although it has been interpreted as a joke, it also shows a serious issue which Dutch people have been really concerned for a long time in history. The geographic challenge stimulated Dutch people to explore and go to the other areas in the world, created a trade-oriented economic growth. As the chairman of the Delta Committee Professor Veerman mentioned: “The sea and the river have shaped our identity and the country itself: its nature and landscape, its prosperity and economy, and the way it is governed (water boards; the polder model)”. Also, by trying to overcome the flooding caused by under sea level it lead Dutch people to pioneer in hydraulic engineering.(Meyer 2009: 4, Veerman 2008: 3)

After War World Two, the disastrous floods in 1953 caused deathly damaged in The Netherlands. In the same month the Minister of transport and Public works set first Delft Committee to examine “which hydraulic engineering works should be undertaken in relation to those areas ravaged by the storm surge, (and) also to consider whether closure of the sea inlets should form one of these works.” (Veerman 2008: 3-4)

The first Delta projects to avoid big flood made The Netherland famous for its water management and technology. Experts all over the world came to NL to learn about how to reclaim the sea to make lands and build dams and canals. Nevertheless, facing the reality of climate change makes Dutch people realizing that first Delta Committee which concerned about hydraulic engineer work and constructions cannot withstand the environmental crisis anymore. Hence the “New” Delta Committee, the Sustainable Coastal Development Committee is trying to figure out a long-term vision which can protect Dutch coast and its hinterland. Facing the crisis of climate change, especially the fact of raising sea level, has influenced a lot and promoted change on water management and urban design projects.

## 3.2 From claiming the land from the sea to working with water

There are two important cultural aspects that influence the policy making in the Netherlands: one is practical problem- solving and the other is dialogue. From Dutch people’s perspective, the first thing to deal with water and face the crisis of climate

change is understand the reality. Professor Stuyt describes that the term “climate change” makes us uncomfortable, the feeling of facing climate change is just like you are stuck in a traffic jam and you cannot find your way out. Because you are not only just waiting on a long-line, but also you are contributing to make the traffic jam worse. So, how to solve this situation? The Delta commission started with dialogues. Different people from different specializations, stakeholders, citizens from grass-root are all involved to express and listen to each other. Dialogue seems easy; however, it is the most important foundation for policy making and full of challenge due to the fact that everyone has different perspectives and interests. But the geographic aspect that the Netherlands is the “sink” of NW-Europe and the sad collective memories of flooding in the history has made most of Dutch people realize that the only way to keep life moving is dialogue, negotiating with each other and find the way to coexist with the nature.(Stuyt 2009: 70-76) As the president of The Netherlands National Commission for UNESCO Lieteke van Vucht Tijssen said: “you can not manage the Dutch canals or river only from one point. There are all kinds of people involved in all places and everybody has to cooperate. In the Netherlands, we have a tradition of negotiating. We always try to find the middle of the road and say everybody’s interest. And see everyone get something, not one get all, and the other one get nothing. We try to compromise.” (Tinny Chen 2004)

The dialogue meetings were initiated by the Delta commission in different areas in The Netherlands. Stuyt mentioned the experience from involved in two years dialogue meetings, they realized that most of policy maker do not know where exactly the right direction to deal with raising sea level and climate change crisis. The issue is urging and lacking experience from them, even the scientists do not have the answer. Therefore, everyone needs to open their minds and brainstorm searching for all kinds of possibilities.

The report was finished in September, 2007. It indicated that the strategy for future centuries is based on two pillars: flood protection and sustainability. There are twelve suggestions and assessing cost be addressed. (Stuyt 2009: 76-77,'Working together with water- A living land builds for its future' 2008) The Delta Committee’s recommendations emphasize on development along with climate change and ecological processes; thus, cost effective and produce additional value for society can be achieved. The report concludes that a regional sea level rise of 0.65 to 1.3 m by 2100, and 2 to 4 m by 2200 should be seriously considered. At the same time, a raising sea level, reduced river discharges in summer, salt water intrusion via the rivers and ground water, all these facts will put pressure on the drinking water supply, agriculture, shipping and those sectors of the economy that depend on water need be taken into account as well. The twelve recommendations for the future including different issues and levels including flood protection, plans for new urban development, areas outside the dikes, north sea

coast, Wadden sea area, South-western delta like Eastern Scheldt and Western Scheldt, the major rivers area, etc. Implementation of the Delta programme until 2050 needs 1.2 to 1.6 billion Euros per annum and 0.9 to 1.5 billion Euros per year in the period 2050-2100 to deal with climate change and raising sea level crisis. (Delta Commission Report, 2008)

The most interesting part and that draw my attention in this report is the committee's proposals for sustainable strategy as following:

- harmonise as far as possible with the natural processes: 'building with nature and other ecological processes';
- as far as possible comprehensive and multifunctional; solutions deliver added value to society;
- cost-effective;
- flexible and can be implemented gradually to take advantage of long-term developments;
- contain prospects for action in the short term;
- rooted in Dutch tradition and can serve as a beacon to the rest of the world.

Base on these proposals, hence there are alternative thinking emerging, for example remove the tulip farm and return the land to the sea, research for looking new plants which can stay in the salty land, create more space to water, etc. Moreover, the first floating houses or cities are created to deal with the raising sea level, if the flooding happened, the house can move following the sea level. Aside the collective cooperation and activities inside the country, cross-border co-operation within the European Union is necessary as well.(Stuyt 2009: 79)

### **3.3 Explore sustainability spiritual possibilities for climate change**

In order to adapt to nature, both the philosophy and policy are changing in NL, and the directions is very close to the principles of Taoism. From a Taoist perspective, when people have different cognitive knowledge the policy will follow. Although Dutch government and many Dutch people do not know about Taoism, but the result of Delta Committee Report is a good demonstration how they start to connect and respect the power of nature. From claim the lands from the sea to work with water; Dutch people recognize the limitation of modern science and try to harmonize with the natural and water. The cognitive shift shows the Taoism's principles like "from liner to harmony" and "from separation to unity" are implemented in the water management policies such as remove the tulip farm and floating housing. Nevertheless, there is still a lot of space to explore more possibilities to deal with climate change and sea level rise crisis in the

Netherlands. Especially in the field of recognizing that spirituality is a necessary element to create another new window for sustainability.

From the cultural and historical perspective, Dutch people have been facing crisis with a very practical way. This can be an advantage but it is also a disadvantage at the same time. Learning from the painful flooding experience and recognizing climate change is unavoidable challenge, the advance hydrology technology and Delta Committee Report represent the core value of Dutch culture. Furthermore, The Netherlands take the pioneer and leader position in the world to deal with climate change. Nevertheless, the way how the Netherlands action still is dominated by modern science logic and the shift of policy was passive by forcing from the natural disasters. In other words, they learned from this painful experience, tried to solve the problems now and think how to avoid the climate change crisis in the future. This is typical modern science liner way dealing with the problem. What if the Netherland can open more space to multi-learning and dialogue with the ancient wisdom such as Taoism, Buddhism, Maya, Hinduism, etc. There might be open another process of policy-making and awareness transforming? In the fact that the suggestions from the result of the Delta Committee report will put lot of budgets to reverse what the Dutch people did in the past. For example, the land claimed from the sea for tulip in the past, now needs to be returned to the sea. The cost to deal with the climate change and sea level rise crisis is huge, more than government's expectations.

Different from the modern science logic, Taoism is looking for harmonizing within and also balancing with the nature and the universe. Through individual and collective awareness transformation we can initiate a holistic approach to solve the problem. Taoist process is a different from modern science which looks and tries to solve the problem. Taoist process tries to deal with the root causes from the very beginning and solve the problem without too much effort and without having to pay a painful price. These new space and new opportunities are where post-development thinking like Taoism can contribute to The Netherlands. By exploring the spirituality and philosophy behind these ancient wisdoms, the technology in water management in the Netherlands can find a new engine for creative and innovative way of holistic approach.

From now to the future, the challenges for Dutch government are how to earn the public trust that it is worth and necessary to spend the huge budget to solve the climate change crisis, and how to adapt the experience from the Netherlands to other countries, especially countries that do not have as much budget and resource as the Netherlands. Because in the Taoist perspective, the world is connected, everybody is linked to each other which means that everyone and every country are in the same boat, the only way to face climate crisis from the root cause is to help each other to go through the difficulties.

# Chapter 4    Synthesis and Finding

## 4.1 Cognitive shift in the context of climate change and sea level rise

From the case studies in the Netherlands and Taiwan, we can see the cultural and core value differences in the water management policies to deal with climate change and sea level rise. Taiwan has ancient legacy such as Taoism but it was put aside and was influenced by the modern knowledge for recent 50 years. On the contrary, The Netherlands developed advance technology based on modern science but now shows the cognitive shift direction close to the principle of Taoism. From my perspective it is the best opportunity to demonstrate how different cultures can dialogue and learn from each other under post-development thinking and cognitive justice. Taiwan and The Netherland can complement each other and explore sustainability for climate change together.

From Taoist perspectives, we can always find new opportunities and necessary to learn from each other. Dealing with climate change and sea level rise crisis will be best chance to experience and realize how everyone is connected to each other. Sustainability is not economic-oriented development or dominated by single knowledge. Sustainability is balance, harmony within individual awareness, social cultural systems, all the beings in the planet and the universal force. Climate change and sea level rise will affect everyone in the world. Taiwan as an island, the Netherlands as the “Low Countries” are especial first target. Pessimism focuses on the disasters which climate change and sea level rise crisis will bring to us, but I would like to take Taoism’s perspective and argue climate change and sea level crisis is the message from the universal force and provide people in Taiwan and the Netherlands a good moment to reflect about the real meaning of our civilization and to learn from each other to find a holistic approach dealing with the crisis together. Because I think we do not have right to be pessimist. We need to take full responsibility for our life including what is happening on climate change and sea level rise now. Taoism is one of the approaches from eastern ancient wisdom; I believe there are many kinds of knowledge in the world that play the same role as Taoism in Chinese history. All these traditional knowledge should be re-valued and immersed with each other; the harmony and diversity of knowledge will bring new energy and change to modern knowledge.

People in Taiwan and the Netherlands can realize and experience “All is one” through appreciating the differences and multi-cultural processes of each other. The only path to reach “All is one” is starting from selflessness and altruism, love, and compassion. When human beings really overcome selfishness and ego, the beauty of Tao and the

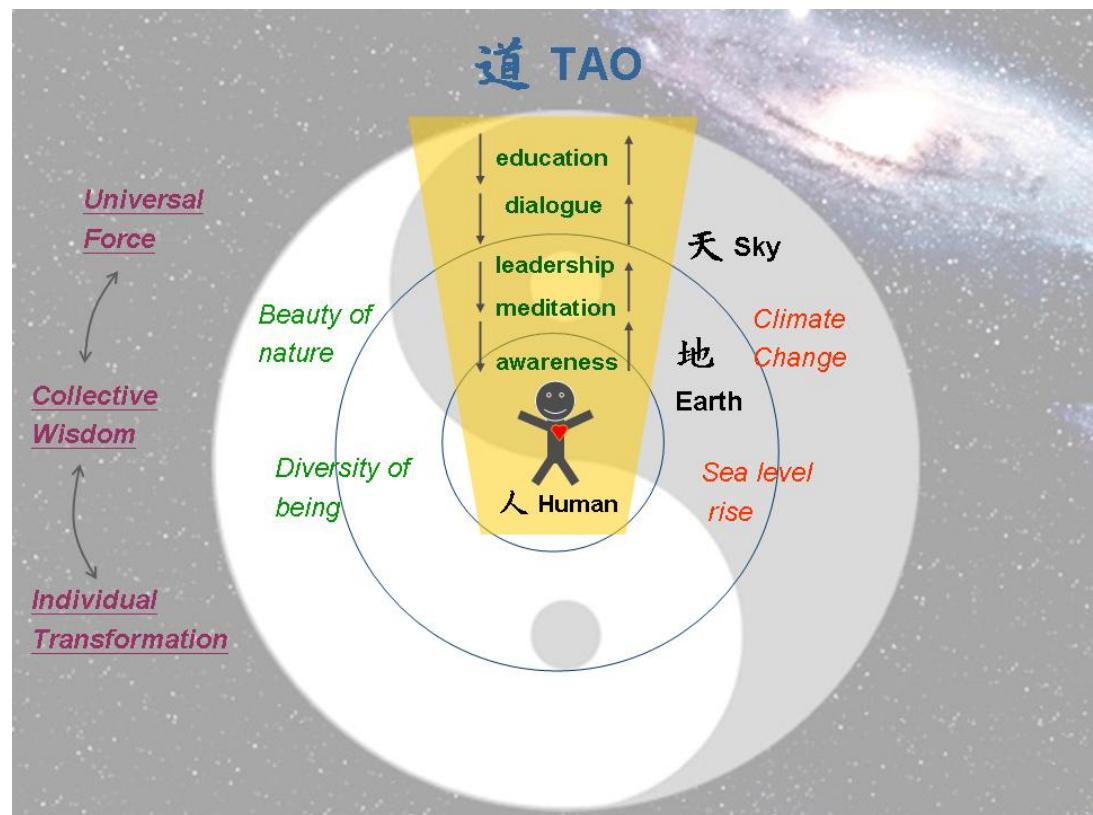
harmony in society will show up. Therefore I would like to emphasize that climate change and raising sea level crisis actually can be seen as learning process related to human being's consciousness transformation or it can be seen as a "message" from the "Tao" (universal force).

It is such as "Yin-Yang" in the "Tao", human beings can learn from the difficulties (to learn to connect with nature through disasters such as flooding because raising sea level) or love (to connect with nature through appreciating the beauty of nature and enjoy simple but joyful life like Laozi's shared in his teaching in the Tao Te Ching). However either we choice to learn from the difficulties or from the positive process through love and joy, the purpose is all the same—connect with the "Tao", find the harmony within in individual, collective society and at the universal level, finally rise our awareness to achieve enlighten about the "reality of the world".

To reflect on Taoism and its possible contributions to responses to rising sea level, I would like to use the following figure in order to express the concept in the findings from my analysis and answer my research questions that Taoism can bring a holistic approach to achieve change within: (Tinyu Chen 2009)

**Figure2**

**Holistic approach through Taoism to bring Change within**



Source: Tinyu Chen 2009

## 4.2 Some contributions of Taoism to climate change and sea level rise

### (a) A call for change within:

In the mainstream development process, the policies to deal with climate change and raising sea level are market-oriented and focused on economic and political interests. Climate change and sea level rise crisis show the results of how we have promoted over-consumption and destroyed the ecological system in the planet under mainstream development approach. In the past, Taiwan and the Netherlands have suffered from disasters, experiencing flooding, typhoons, and other natural disasters. Now the big challenge is to face climate change and raising sea level crisis. From a historical perspective, both Taiwan and the Netherlands have experienced cognitive shift in water management in the context of climate change and rising sea level. The Netherlands shift the paradigms from Dutch people's determination to conquer nature to working with water. Taiwan, on the contrary, has forgotten the legacy of Taoism and followed the process of modernization. Nevertheless, experienced the painful experience of climate change and sea level rise, now Taiwan is on the way trying back to walk the path searching for the wisdom treasure from ancestry.

Some of the main problems that Taiwan is dealing with in facing raising sea level seem to be: lacking authentic leadership, dialogue and cross departmental interaction and cooperation in the government sectors. Actually, it is a call for deeper awareness transformation within, a reflection to revalue traditional culture such as Taoism, an promote action for a holistic approach towards authentic sustainability and facing coming challenge from climate change and sea level rise.

After typhoon Morakot, Taiwan government propose to enact a national land planning law to prevent repetition of the similar disaster. However, the national land planning was proposed more than 10 years ago but never passed into law due to many complicated political and economic interests. Now the national land planning proposal is subject of attention again after the painful experience during typhoon Morakot. However, rising awareness and promoting a cognitive shift from over-consumption to respect and harmonize with nature is necessary precondition and key challenge to initiate change within.

On the other hand, the Netherlands's challenges are how to earn public trust support in investing the huge amount of budget for climate change and raising sea level crisis. At the same time, by acknowledging that only relying on modern science and technology is not enough to deal with the global warming and climate change crisis it will open a space to exchange ideas and learn from other cultures such as Taoism. Also, how to adopt the Netherlands innovative ideas such as floating houses to other countries.

Especially countries that do not have enough resources and capital but that will be affected seriously by climate change and sea level rise.

**(b) An opportunity for multi-cultural learning:**

From the raising sea level and climate change crisis in Taiwan and the Netherlands, we can explore the best opportunity for multi-cultural learning. Taiwan and the Netherlands have different cultures and society values. Historically, under almost 3000 years of autocratic monarchy, Taiwan presents a more collectivist society and people got used to Top-down policy-making. The Netherlands that was influenced by modern knowledge after industry and French revolution is more individualistic and science-oriented thinking. However, Taiwan has very good root of culture which is Taoism and Laozi's teaching more than two thousand years ago. The eastern philosophy which talks about how human beings should be connected with nature and the universe are part of people's mind and life already. Although the principles of Taoism have been forgotten for now, it is possible to catch up and explore it again once we revalue the ancient wisdom.

On the other hand, the Netherlands can provide new technology and creative ideas for deal with climate change and sea level rise. Taiwan and The Netherland are in a good time to open a dialogue between the Western and Eastern, ancient wisdom and modern knowledge. If Taiwanese people and the authorities can rethink the legacy from Taoism, meanwhile provide the essence of Tao philosophy for brainstorming with Dutch people. It might open another worldview for modern technology and leading an intrinsic quality of change. Joining together the two powers and capacity from the Netherlands and Taiwan just like "Yin and Yang", it can create lot of new possibilities for sustainability. These new possibilities can be the key to achieve the "Tao" and create a holistic action to solve the crisis.

**(c) A lesson from water:**

Water is a very important metaphor in Taoism. Laozi used water to express how individuals can achieve awareness transformation and emerge real leadership. It is easier to realize the "Tao" through water. For example, water benefits all things. It shows selflessness and altruism. Water is soft without fighting with other beings. It shows the flexibility and ability to adapt to all kinds of landforms. Water seems weak and powerless, however this weakness and softness makes water much stronger than others. Moreover, water stays in places abandon by all people. It shows humbleness and a huge capacity, just like the sea has the capacity to receive the rivers from the whole world. However, Laozi also reminds us that water will balance and fight back if people do not respect the natural power of water. When water tries to clean and balance all the mass in the planet, there is nothing that can stop it.

In facing sea level rise and climate change crisis learning the lesson from water is very important. If we follow Laozi's teaching in Tao Te Ching, through understanding and practicing the metaphor of water, it can provide a shortcut to realize the real meaning of "Tao" and initiate the "real change" within. Meanwhile, the water management policies will also change due to understand the characters of water. If certain amount of citizens, elite and government officers including leaders can develop holistic thinking through understanding the lesson from water. Then, creative and innovation action and ideas like floating housing in the Netherlands will more and more to provide solutions to deal with the challenge from raising sea level and climate change.

**(d) A diversity perspective to achieve the "Tao":**

There are different methods and levels to connect with "Tao" (universal force). At the individual level, Taoism can contribute to solve these problems through raising individual awareness transformation, authentic leadership, and spiritual methods such as mediation to promote human beings to connect with the natural and the universal force.

Through harmonize yourself with "Tao" or universal force; people will know 'the reality of the world'. Just like Swami Veda said: "you can make the planet a paradise or you can make it a hell". In other words, this path shows the power of "All is one". All individuals including politicians, elites even a normal citizen like farmer has the same potential can develop the real leadership from Tao, then they can shift the policy and make big influence very quickly.

At the public level, through authentic dialogue and education, Taoism can help to increase collective wisdom and long-term human being consciousness transformation. Dialogue at different levels and with different people is very crucial to humanize public interests. Furthermore, certain amount of public awareness can speed up the awareness and open a whole new perspective for human being's civilization.

At the universal level which means connecting with the "Tao", Laozi mentioned when individual or collective awareness can realize the rule of the force, they will enlighten and receive the wisdom form the Tao. I would like to interpret his teaching by using the metaphor of a super computer and individual laptop for example. Individual's mind is just like a laptop with different capacity and function, the "Tao" (the universal force) is just like super computer or server. If we can connect and "log in" with the super computer, then we can speed up, increase capacity and download much new information. However the challenge is how to "log in" or the password to "log in" this can be harmony, altruism, humbleness, egoless, love and compassion, etc. It is close to self-enlightenment and the highest state of Tao (means to synchronize with the rhythm of the nature and the universal force).

#### **(e) A last jump for the real change:**

To achieve the real change, Taoism provides the energy for the last jump. Taoism deals with the process from knowledge to awareness and action by using some alternative methods such as authentic dialogue, authentic leadership, meditation, etc. is very useful to bridge the gap between “knowing” and “doing”. Nevertheless, the elements to achieve “real change” not only physical support, development strategy but also awareness and consciousness transformed. In the other worlds, the “real change” needs the spiritual power and energy to support the will in the whole process and do the “final sprint” to make change happened.

Taoism is one of the spiritual philosophies from the ancient wisdom that provides some alternative space to bridge awareness and actions. Actually, every citizen and actor in civil society has their own cultural and belief system, how to find out the spiritual power from your own background might be another challenge. Taoism emphasizes the principle of change within which is harmony, unity, altruism; also indicates the methods such as authentic dialogue, authentic leadership, meditation, love, compassion, etc. No matter where the spiritual power comes from, it is very crucial to explore the engine of spirituality. Leading the real change, an inner revolution, a broader and richer space needs to be explored. In addition to spiritual power such as Taoism philosophy to support the action and “jump the last step”, “real change” can be reach in a holistic and success way!

### **4.3 Bridging the gap from knowledge to action**

#### **(a) Meditation and “chwamang” (sitting and forgetting):**

In order to realize the spirit of Tao, it is very crucial to rise awareness above the world of differentiation marked by dichotomies such as black and white, bad and good, life and death, poor and rich and immerse with the “Tao” which everything and every being is undifferentiated and linked to each other. Through rising awareness of undifferentiating can open the window of selflessness and compassion. Laozi’s follower, another important thinker in Taoism, Chuang Tzu described how to “entails mind-training and self-cultivating practices in order to see a myriad of things with disinterested, even, and impartial eyes.” (Shin 2003: 252)

Chuang Tzu advises the method of “sitting and forgetting” (chwamang) which is very similar with the principles of meditation. However, “sitting and forgetting” does not mean actual forgetting. It is the state when you focus on the breath (breath is recognized as the evidence from the power of force in Taoism, because no one can control or stop breathing and continue alive. It is the nutrition that cleans the system for our life.) and let your personal issues go such as “knowledge, honour, interests, thinking, words, names,

forms, mind and merits, all of which eventually converge on “the self””.(Shin 2003: 253-254) and allow a new space for the wisdom from the “Tao”.

In Taoism or other ancient knowledge like Buddhism, Yoga in Hinduism, etc, meditation is very fine science to balance the energy from body, mind and soul. Through “chwamang” (sitting and forgetting) and meditation, individuals can develop the spiritual power to help their minds reaching the “Tao”. The power from change within brings energy for collective wisdom and social change.

### **(b) Authentic leadership:**

Leadership in Taoism is part of individual awareness transformed. A real leader never thinks she/he want to be a leader, the tricky part of leadership is that it emerges naturally from inner power and change. As what Laozi said in Tao Te ching:

“To lead people, walk beside them.

The highest type of ruler is one of whose existence the people are barely aware.

Next comes one whom they love and praise,

Next comes one whom they fear.

Next comes one whom they despise and defy.

When you are lacking in faith,

Others will be unfaithful to you.

The Sage is self-effacing and scanty of words.

When his request is accomplished and things have been completed,

All the people say, “We ourselves have achieved it!”

--Laozi, chapter 17 in Tao Te Ching” (Laozi 1961: 17)

A sincere focus on self-awareness transformation is precondition to initiate real leadership. When people reduce their ego and conflict inside and create space to harmonize with others, nature and the “Tao”. They will become humble, altruistic, which attract other people to come and follow them.

### **(c) Authentic Dialogue**

Authentic dialogue is not simply sit and talk to each other, it require a higher awareness state when it is going through. Swami Veda Bharati said: “All dialogue is within oneself, with oneself. The parts of our minds we identify with are stated as ‘I’. The parts of our minds that we suppress are seen as ‘the other’ and its attributes are projected on to the personal or social other. The dialogue is between these two parts, our divided selves. All

conflicts are collective projections of the conflicts between our own variously identified or unidentified divided selves.”(Bharati 2005)

Dialogue is a moment for self-reflection. Re-establish internal harmony and create collective harmony are the main purpose of dialogue. Through practicing 5 principles for authentic dialogue we can create an inter-contemplative process for inner-self and communicate with others.

- Be here and in the Now: Be happy with what you are today, not yesterday or tomorrow.
- Release your personal agenda and expectations: Be open and examine your motivation for wanting to say something. Examine your opinions, do not hang on them, and look for reasons to give them up.
- Express your deepest knowing from your Heart: Always allow a brief silence before a reaction. Speaking only your deepest knowing, not your first thought. Sharing why you say what you say, share your underlying motivation. Do not repeat yourself, trust that people will have listened.
- First listen, and then be silent: respect everyone who speaks authentically. Respect does not mean accept. Endeavour to sense the deepest meaning, the essence of what someone is trying to say. Do not speak until you have succeeded in this.
- Trust, the result will come: Enjoy the sharing, the views and the perceptions. Focus on understanding and learning, not on results. Be prepared to receive something more beautiful than ever thought of”.(CE-DESD 2007)

#### **(d) Education**

Besides dialogue, investing in education is very important. Especially in Taiwan, when young generations are getting used to disasters easily will bring more harm to the nature and society. Young generation is our future, if they can learn Taoism from the beginning of school; they will know how to coexist with nature. It is long-term and necessary investment to solve climate change.

On the other hand, the way how Taoism and climate change are seen as separate it is taught separately as different concept. Actually Taoism and climate change should relate to each other as a holistic thinking and approach. Also the knowledge of Taoism and sea level rise of climate change should be addressed not only in formal education system but also in other alternative community schools or organizations related to education. Meanwhile, it is also very important to explain the authorities and the public in Taiwan and the Netherlands that compare to the cost for reconstruction after typhoon or flooding disasters if we invest now to deal with climate change is more cost effective.

Overall, there are lot of possibilities opened for the eastern traditional knowledge like Taoism, even modern science has started to embrace and reflect on the Taoism philosophy. The challenge of bringing change within through Taoism principles is that it needs to be experienced directly. Capra emphasizes that Taoism focuses on intuitive knowledge and self-enlightenment experience; sometimes it is difficult to be understood by western logic. “Eastern mysticism has developed several different ways of dealing with the paradoxical aspects of reality. Whereas they are bypassed in Hinduism through the use of mythical language. Buddhism and Taoism tend to emphasize the paradoxes rather than conceal them. The main Taoist scripture, Lao Tzu’s “Tao Te Ching”, is written in an extremely puzzling, seemingly Tao of illogical style. It is full of intriguing contradictions and its Physics compact, powerful and extremely poetic language is meant to arrest the reader’s mind and throw it off its familiar tracks of logical reasoning.” (Capra 1975: 47-48)

People learn from experience, but the process of learning we can decide if we would like to learn from suffering or learn from love and joy. Although, the fact is that most people are used to learn from painful experiences like climate change. However, human beings can also learn from love and joy if we work on individual and collective awareness transformation. From the inspiration of Taoism and personal experience, I know the power of change within, when you open another window to unknown forces or ancient wisdoms and try to merge with the modern knowledge we develop. There can be more innovation and creative possibilities to explore. I am looking for a world in which people can learn from love and joy without suffering. In facing climate change and sea level crisis, we need an entirely different way of thinking and action. And I believe that one of the fastest ways is the power from change within, when the engine of change within starts, the world will enter a whole new area.

## Chapter 5 Conclusion

Climate change and sea level rise represents a global and serious challenge for everyone and every country in the planet. It can be seen as a disaster and crisis, or from a Taoist perspective it is the message from the “Tao” (the force) to remind us about the need of reflecting about our relationship with the nature. Climate change and sea level rise crisis are largely a result of human beings’ activities such as over-industrialization and urbanization. It is impossible to solve the dilemmas only by using modern science or western knowledge. Post-development thinking and cognitive justice provide a door to enter in, initiating the dialogue and open a space for other ancient wisdoms and eastern knowledge. Taoism, as an important ancient ecological ethic, should play an important role to deal with climate change and sea level rise crisis. So far, there are a lot of prediction about the result of climate change and sea level rise according to different scientist’s report. However, there is no one that can 100 % guarantee what will happen in the next coming future. In this very moment, Taoism can make important contributions to alterative holistic approach. Also, it can show the necessity of spiritual power for sustainability. Acknowledging cognitive shift and spirituality is an essential element to recognize the ‘reality of the world’. Human beings have free will to choose how to learn from our life, either by suffering from the disasters or by appreciating the positive message and natural beauty from the universal force.

Facing Climate change and sea level rise crises, mainstream sustainable development tries to keep market-oriented strategies to achieve the so called “win-win” situation. However, the market-oriented development process based on growth is one of the main reasons that have caused climate change, how can you solve the problem by using the methods which are causing it? The speeding up of sea level rise reveals the contradictions of mainstream sustainable development. At the same time, it also shows how necessary and urgent it is to explore other knowledge and possibilities to deal with the crises.

Post-development thinking and cognitive justice provide a bridge between modern science and Taoism; create space for authentic dialogues between western and eastern knowledge. Post-development thinking and cognitive justice actually very close to Taoism’s principles in that it provides the space to appreciate the diversity in worldviews. From Taoist perspective, everything needs to be balanced like “Yin and Yang”, linked to each other and harmonized together. So when the world only pays attention and believe in single knowledge like modern science, human beings set up themselves into an unbalanced and dangerous trap already. The “Tao” represents the rule of nature and universe, including all kinds forms of knowledge, all beings. Taoism gives equal respect to human beings, sky, earth and “Tao”; and recognizing and acknowledging sky, earth,

Tao is as important as human beings. If the balance of “Yi and Yang” can not be achieved; it also means that we are out of the track from the universal law and the principles of the force. When the universal rules are out of control, the “Tao” (universal force) will try to rebalance. The rebalancing process of nature and universe from a human being’s view sometimes is presented in the form of disasters such as climate change and sea level rise.

By comparing and analyzing the water management approaches to deal with climate change and sea level rise in Taiwan and Netherlands, it shows how mainstream sustainable development process has contradictions and dilemmas. Taiwan now gets into a series of dilemmas to keep a balance between economic growth and holistic approach to solve climate change and sea level rise crises. In 1950s, Taiwan was one of the four tigers (Taiwan, Hong Kong, South Korea and Singapore) which it is sometimes called the Asian miracle. Incredible economic growth rate based in follow the western development model is the reason that Taiwan government choose the same logic to deal with climate change and sea level rise. Follow the mainstream sustainable development approach lead Taiwan government to make conservative policy which only base on economic growth without concern the balance and harmony with the natural. Additionally, due to the culture of top-down decision making, Taiwan’s policy for climate change and sea level rise become budget and time waste without government officer taking full political responsibility. The legacy of Taoism or ancient hydrology is ignored and put aside. Although the project in Chi-Yi tried to initiate a new concept of facing sea level rise, but it is stuck a deadlock because of the bureaucratic system. Furthermore, it did not reach the deepest awareness transformation and change within which are emphasized by Taoism’s principles.

On the other hand, The Netherlands went from claiming the land from the sea to deciding working with water. The water management policies and philosophy behind have changed in NL. The change in direction in the NL is very close to the principles of Taoism. From Taoist point of view, when people make decisions by accepting different knowledge the policy will follow. Although Dutch government and Dutch people are not too familiar with Taoism, the result of Delta Committee Report shows how they have started to connect and respect the power of the nature. Nevertheless, there is still a lot of space to explore more possibilities to deal with climate change and sea level rise crisis in the Netherlands. Especially in the field of recognizing that spirituality is necessary element to create another new window for sustainability.

The water management policy and philosophy behind to deal with climate change and sea level rise in the Netherlands it is still based on modern science logic. Policy shifting was passive by forcing from the natural disasters. I argue that The Netherlands can open more a space to multi-cultural earning and dialogue with the ancient wisdom

such as Taoism, Buddhism, Maya, Hinduism, etc. It will open another process of policy-making and awareness transformation in order to expand the capacity to solve the problem of climate change and sea level crisis. Moreover, The Netherlands can contribute more to help other countries which are suffering the same problems.

By suffering from painful experiences such as disasters like flooding and typhoons, Taiwan and the Netherlands both made a cognitive shift for dealing with climate change and sea level rise. Although the moments of cognitive shift which closer to the principles of Taoism like “from liner thinking to harmony” and “from selfishness to altruism” and “from separation to unity” were consider under the pressure of the climate change and sea level rise crises. How to trigger the power of spirituality and the deeper awareness transform to achieve “from knowledge to awareness and action” is still a big challenge.

Dutch people’s determination to conquer nature shifted to working with water, the Netherland is in the process learning to adapt and harmonize with water. Taiwan, on the contrary, forgot the legacy of Taoism and followed the paradigm of modernization. Nevertheless, now Taiwan is on the way to revalue and pick up the treasure of Taoism. Due to the fact that Taiwan and The Netherlands have similar geographical aspects and similar concerns, they can promote the exchange in knowledge and technology in the water management field. Multi-cultural learning provides the best opportunity to explore new holistic approaches to facing challenge from climate change together.

To adopt Taoism’s principles to reflect on climate change and sea level rise crisis, there are some main findings from my analysis as of this moment.

(a) A call for change within: which means rising awareness and shift mindset from consumption and exploiting nature to respect and harmonize with the natural world is a necessary precondition and main challenge to initiate change within.

(b) An opportunity for multi-cultural learning: Taiwanese people and the authorities should rethink the legacy from Taoism; meanwhile provide the essence of Tao philosophy to start the multi-cultural learning process with Dutch people. Together with the two powers and capacity from the Netherlands and Taiwan just like “Yin and Yang”, it can create a lot of new possibilities for sustainability and solve the crises through the journey of reaching the “Tao”.

(c) A lesson from water: Laozi used water to teach us how individuals can achieve awareness transformation and letting emerge a real leadership on policy making through learning from some of the characteristics of water such as balance, selflessness, altruism, flexibility, humbleness and how weakness and softness makes us stronger than others.

(d) A diversity perspective to achieve the “Tao”: There are different methods and levels which includes individual, public and universal levels to connect with Tao (universal force). Through harmonizing yourself to the Tao or universal force; people

will be able to know the ‘reality of the world’ and develop real leadership. At the public level, through authentic dialogue and education, Taoism can help to increase collective wisdom and long-term human being consciousness transformation. At the universal level which means connecting with the “Tao”, receive the wisdom from the universal force and synchronizes with the rhythm of the nature with harmony, altruism, humbleness, egoless, love and compassion, etc. It is close to self-enlightenment and the highest state of Tao.

(e) A last jump for the real change: To achieve the real change, Taoism provides the energy for the last jump. Taoism is one of the spiritual philosophies from the ancient wisdom; provide some alternative space to bridge awareness and actions. Actually, every area and civil society has their own cultural and beliefs, how to find out the spiritual power from your own background might be another challenge.

When the nature change, the “Tao” is promoting change, human beings have to follow the rhythm of change as well. Through different methods and social systems such meditation, authentic leadership, authentic dialogue and education, individual and collective awareness can be transformed and find the energy for change within. Actually, Taoism supports in dealing with the deepest fears and finding the real intentions inside our mind, it is never easy to follow the principle and practices of Laozi’s teaching; however I argue it is the most worth effort to change our life and the crises of the world.

There are two ways of learning which are: learning from suffering or explore the capacity to learn from joy and happiness. It is just like when we face crises or injustice in the world, we can choose to jump into the mud, experience the pain until we see the light of the end of darkness, or we can choose to overcome our fears and conflicts inside then being able to recognize and solve the problems from root by connecting, inspiring, receiving the wisdom from nature and Tao. I am looking forward to an alternative way of changing within through learning from joy and happiness without suffering, by increasing our awareness. In providing some principles and practical methods from Taoism based on my own experience and analyses of this paper, I would like to address that Taoism is one of the alternative but holistic knowledge to achieve it.

The attitude of “We - Wei” from Taoism is not “do nothing” or passivity, on the contrary it requires intensive effort inside to purify our mind, reduces the conflicts and ego inside ourselves and harmonizes with other beings. The key point is we need to shift the fear and selfishness into altruism and compassion, and then we can start the path of “Tao”. People who are on the path of “Tao” can understand the root causes of problems and find the solution through being connected with natural and the force. This is what I emphasize the power and energy from change within. When the change happens from inside our mind, it will bring intrinsic transformation and provide holistic perspective to deal with crises. When the engine of spirituality starts, the awareness and transformation

starts as well, and consequently, the leadership and policy will follow. The Taoist philosophy like “We - Wei” (non-intervene) is not only just theory in the Tao Te Ching, but also can make significance practical influence and contributions for climate change and sea level rise.

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