

Can Urban Agriculture Contribute to Well-being?

An Analytical Perspective

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Declaration of authorship

I, SOOZIN RYANG, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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List of Acronyms and Abbreviations

AU	Agrarian Urbanism
CPUL	Continuous productive urban landscapes
GRI	Gyeonggi Research Institute, the Republic of Korea
IDRC	International Development Research Centre
MIDUS	Midlife in the United States
OECD	Organisation for Economic Co-operation and Development
PANAS	Positive and negative affect schedule
PWB	Psychological well-being
RUAF	Resource Centres on Urban Agriculture and Food Security
SWB	Subjective well-being
UA	Urban Agriculture
UNCHS	United Nations Centre for Human Settlements
WHO	World Health Organization

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ABSTRACT

Can agriculture improve the lives of urban citizens and the urban environment? This research explores this question by examining the impacts of urban agriculture on the lives of citizens and their environments through the notions of well-being and alienation.

A Eudaimonic perspective of well-being is based on the idea that people feel happy if they experience purpose, growth and challenges in their lives. From a eudaimonic perspective, psychological well-being can be understood as encompassing six dimensions: self-acceptance, personal growth, environmental mastery, positive relationships with others, purpose of life and autonomy.

Discourse on alienation begins with four dimensions as proposed by Marx: alienation from products, product activities, species beings and other fellows. De-alienation is discussed in relation to the tradition of alienation theory, which is grounded in both an American socialist and a neo-Marxist interpretation.

By analysing the impacts of urban agriculture through the perspectives of eudaimonic well-being and alienation, the study suggests a theoretical bridge between the two, whereby their associations with urban agriculture shape a type of farming for the purposes of achieving de-alienation.

The importance of this study is not just to examine urban agriculture, but also to emphasize its importance, especially with regard to the well-being of the community wherein it is practiced. Urban agriculture is not a comprehensive solution to the issues facing the future of cities in developing countries; however, it is an essential part of any program seeking to make these cities more liveable and to improve the lives of city dwellers.

This thesis finally explores an exemplary form of urban agriculture for psychological well-being and de-alienation from the following perspectives:

- Large-scale farming through communal farming and planning
- Ecologically friendly farming
- Long-term projects associated with public health
- Agricultural programs that enhance participants' mastery of agriculture by ensuring autonomy and environmental mastery

Acknowledgement

This study is conducted for the field of urban agriculture and for the people who are dedicating their lives to bring about urban agriculture in our society.

The term ‘urban agriculture’ has been used globally over the past several decades. Its conceptual breadth suggests many possibilities for future application. Economists might see the future of urban agriculture as a new approach to industry in the city with the terminology of a green economy. Urban planners might see a city with farming as one of an upcoming and primary urban planning trend. Environmentalists might see the future of urban agriculture as a man-made prep-utopia of living in the nature and achieving biophilia.

From some combination of these points, I would like to see ‘why urban agriculture’ as using the two tools of eudaimonic well-being and alienation. Although my thesis does not incorporate field researches, I hope it will be beneficial in the implementation of further research studies on seeking the reason for farming in our living cities.

My sincere thanks to my family, who supported me in this MPhil program throughout the academic year and have motivated me to work on this paper to fruition.

Last but not least, I would also like to thank my two supervisors, Dr. Vanesa Castán-Broto and Dr. Liza Griffin, without whom the paper might not have been completed to its present level. Your insight was amazing, and you have opened my thought process to opportunities and experiences I never would have had on my own.

CHAPTER 1: INTRODUCTION

1.1 Rationale

This study began with a short documentary film. This film, entitled ‘Love Farm¹’, introduced a church community engaged in supporting homeless people in Seoul, the capital city of the Republic of Korea.

Every morning, the leader of the community gathered homeless people to voluntarily participate in farming work. During the day, those people worked in the farm, learning practices of cultivation. One of them said in the film that the work gave him the experience of ‘deriving a lot of happiness from connecting to nature’ and a feeling of ‘being inspired by life’ as watching and caring for their crops across a year. Another homeless said that he felt ‘happiness through the success of cultivation’ ‘despite the hard labour’. In addition, the community leader said he had observed the homeless people ‘chang[ing] their mind-set’ and ‘becoming attached to life’ through the process of regularly cultivating crops and vegetables. The leader added that this activity is one of the most successful recovery programs for homeless people and it was because it brings each person’s own ‘meaning of life’.

These key words and phrases from the interviews in the film inspired me to explore the impetus behind urban agriculture in our society. Rather than current researches and studies on the impact of urban agriculture from economic, technical and environmental perspectives, I wanted to focus on psychological impacts of urban agriculture, whether a general perception that farming is good for people are effectively detected and proved from an exploration of people’s mind-set.

However, it is not enough to explore urban agriculture in the film only through a psychological mechanism. The community was using urban agriculture to empower isolated members of society by letting them re-join the society. Both the leader and the homeless people stated that they were farming because they were ‘seeking the goal of life’, rather than general psychological or aesthetic impacts, such as feeling good, peaceful or calm.

In this context, there was a need to approach urban agriculture in the context of Seoul-specific features. However, before narrowing the scope of urban agriculture down to Seoul, I should clarify the words from the film with a few additional general concepts and theories that have already been proven by many researchers.

1 The Little Big Hero #9 “Love Farm” (2012)
[<http://program.interest.me/tvn/littlebighero/30/Vod/View/10449>]

Two conceptual assumptions—eudaimonic well-being and Marx’s theory of alienation—came up to interpret the words of ‘seeking the goal of life’—or, in other words, ‘giving motivation to live life’.

Firstly, the reason to focus on eudaimonic well-being was as follows. The concept of well-being is generally divided into two parts: hedonic and eudaimonic. While hedonic well-being involves dealing with one’s happiness or pleasure, eudaimonic well-being goes beyond the simple attainment of pleasure to include the realization of one’s true potential or the congruence between the goals that a person pursues and his true self (Brdar 2011). It is also supported by Lee’s (2012) argument that well-being studies need to focus on environmental conditions that focus on individuals, but that go beyond discussing such individuals’ innate conditions or mind-sets, since human beings continuously interact with their surrounding environments. In this context, finally, the perception of eudaimonic well-being led this study to hypothesize that the impact of urban agriculture on an individual’s well-being may be more effectively discoursed as a search for such an effect at the level of society (rather than at the level of an individual).

Lastly, Marx’s theory of alienation addressed the ability of urban agriculture to break the burden of bondage-plagued humanity since the onset of capitalization (Cox 1998). The main reason for its ability to break this burden is that farming is capable of returning mastery to the people through self-esteem—which is known as one of missing features of human beings in modern society (Lewis 1995; Elings 2005). In other words, members of the farming community have complete control over what they do and what they can achieve. The farmers are not alienated from themselves or their work; rather, they are brought together by what they do from one season to the next. This empowers them to grasp the success they have achieved over the years. Given this context, it is alternatively hypothesized that what we understand regarding well-being and urban agriculture may signify a de-alienation from the spatialised working environment of the present society.

Interestingly, the origins of both the eudaimonic well-being and alienation concepts are the same as Aristotle’s own philosophy of eudaimonia: that one’s daemon or true nature appears as a mark of one’s own authenticity, which comes from fulfilling one’s virtuous potentials and living as s/he intends to live (Waterman 1993; Deci & Ryan 2008:2). This notion led me to wonder whether there may be conceptual linkages between the two concepts.

On the basis of the aforementioned hypotheses, I wondered whether the phenomenon in the film may explain my conceptual rationale for farming in the city. Like the agricultural project in the film, most urban agriculture projects in the Republic of Korea are started by private individuals. These people are most often involved in grass-root movements and are

actively engaged in resolving the social issues of isolated people. From the features of urban agriculture in Seoul, I developed the idea that urban agriculture can be considered a method of demonstrating a city's resilience through the securing of psychological sustainability in the everyday lives of people who live together. Based on these practices, it can be hypothesized that such advantages are carried into lives of people as a tool of self-motivation that provides the meaning of life.

Finally, I planned to explore the essence of farming in the city. My curiosity regarding why we are engaged in urban agriculture was developed into my main research question: Does urban agriculture contribute to well-being? From case studies in Seoul, moreover, I sought to explore what forms of urban agriculture we can implement to meet eudaimonic well-being and de-alienation together.

1.2 Research questions

Based on the research background, the main research question is as follows: Does urban agriculture contribute to well-being?

The main research question is developed into two specific research questions, as follows:

- What are the features of urban agriculture, as seen through the overlapping lens of eudaimonic well-being and alienation?
- What forms of urban agriculture can we expect from case studies of urban agriculture in Seoul?

1.3 Research hypotheses

The hypothesis for the main research question is as follows: There may be some concepts to support an understanding of the relations between urban agriculture and well-being.

From the sub-research questions, there are two hypotheses, as follows:

- What we understand of well-being in urban agriculture may be more effectively discoursed through the concept of alienation (i.e., de-alienation from a spatialised working environment in the present society), on the basis of conceptually bridging the aspects of eudaimonic well-being and alienation that need to be un-veiled.
- The impact of urban agriculture on one's well-being can be considered as a demonstration of a city's resilience through the securing of psychological sustainability in the everyday lives of people living together; that is, urban agriculture is a tool of self-motivation that provides a meaning for life.

1.4 Research objectives

Based on the aforementioned, the objective of this study is to re-approach the role of urban agriculture in society by overlapping perspectives of eudaimonic well-being and alienation and by seeking prospective forms of urban agriculture.

1.5 Research methodology

This study will employ two methodologies. Based on theoretical backgrounds on eudaimonic well-being, alienation and urban agriculture, case studies will be implemented to observe the conceptual framework of urban agriculture suggested in this study.

1.5.1. Theoretical background

In order to develop a conceptual framework for urban agriculture to respond to the research questions described above, a number of references, similarities and inferences will be drawn from three time-tested theoretical backgrounds of well-being, alienation and urban agriculture, respectively.

Primarily, Aristotle's idea of eudaimonia is introduced as a common ground to understand well-being. Ideas and theories developed from eudaimonic well-being are described, along with several discourses, such as that of Ryff's psychological well-being. Regarding the notion of alienation, Marx's alienation theory and his four provisions of alienation are explored. Afterwards, contemporary studies of alienation since Marx are explored through two academic streams: American socialism and neo-Marxism. Lastly, through a general description of urban agriculture, aspects of urban agriculture will be explored using the Ryff's six dimensions of psychological well-being and Marx's four provisions of alienation, respectively.

1.5.2. Case studies of urban agriculture in Seoul

For the case studies, diverse aspects of urban agriculture in Seoul will be analysed based on books, references, and articles on the Joseon Dynasty (1300s to early 1900s) and the era of the government of the Republic of (1945 to the present).

Afterwards, information collected from news articles related to the urban farming department of the Seoul Metropolitan Government will be introduced to explore urban agricultural activities between the level of individual and community.

Thirdly, case studies by site-visits and interviews from two urban agriculture communities in Seoul, 'Love Farm of Sanmaru community' which is the community in the aforementioned film, and 'Tot-bat-bo-geub-so', will be discussed.

In spite of introducing case studies of Seoul, I would like to pre-emptively state that this study is not exploration designed to define the characteristics of Seoul-specific urban

agriculture. Rather, triggered by the aforementioned film, this study seeks to address the reasons of urban farming focusing on their expressions on exploring meaning of life.

Based on case studies and theoretical reviews, finally, the features found out from the community introduced in the documentary film will be analysed based on the conceptual framework developed in this study.

1.6 Significance of the study

The most significant feature of this study is that it is a new exploration of urban agriculture through combining concepts of eudaimonic well-being and alienation. In other words, using alienation to explain the relationship between urban agriculture and well-being can be described as the unique aspect of this study. Despite the number of studies that have explored the links between urban agriculture or that of eudaimonic well-being and between urban agriculture and alienation, these works are limited to urban agriculture from the integrated viewpoint of eudaimonic well-being and de-alienation.

The contribution of urban agriculture to the livelihoods of the urban poor does not only apply to food security or economic gain; rather, this study suggests some of the unique advantages of urban agriculture that can advocate well-targeted public support. I argue that there is more to urban agriculture than economic benefits.

This study, finally, can support answers from both environmentalists and well-being practitioners with regard to the reason for farming in cities.

1.7 Limitations of the study

This study is designed as qualitative research to explore a natural setting in the real world; thus, it is extremely limited in terms of validity and reliability (Wiesma 2000:211).

Theoretically, this study does not contain entire aspects of well-being and alienation; instead, I deal with urban agriculture-related features from both concepts. In other words, this study seeks the intersection of a set of eudaimonic well-being and alienation; however, their theoretical overlaps are not the necessary and sufficient condition of the advantageous set of urban agriculture. In parallel with this, this study does not focus on the advantages of urban agriculture in terms of economic and scientific factors. In addition, with regard to the theory of alienation, despite a number of contemporary researchers on alienation, this study deals primarily with the conventional four sections of Marx's alienation to link the concept to urban agriculture. This study will also expand the scope of alienation by exploring American socialists' and neo-Marxists' ideas on alienation.

This paper, in any way either explicitly or implicitly, does not intend to make specific recommendations regarding what urban planners should do urban agriculture. We know very well from case studies of literatures that cities differ in the characteristics of their urban agriculture and even neighbourhoods living in the same city might require different approaches. The evidence presented here, however, seems strong enough to urge urban planners and policymakers to think twice before taking drastic action against urban agriculture, as they have often done in the past.

1.8 Thesis structure

This study will comprise six chapters, including an introduction and a conclusion.

In this introduction chapter, Chapter 1, I have described the research motivation, together with the research background. I primarily explain why I became interested in the concepts of psychological well-being and alienation. Then, I present the research objectives, hypothesis and research questions.

In the next two chapters, I explore the conceptual background of well-being and alienation. Chapter 2 starts with a general concept of well-being along with its two general discourses: hedonic and eudaimonic. Afterwards, Aristotle's idea of eudaimonia is introduced as a common ground to understand well-being which the study pursues. As representative of eudaimonic well-being, psychological well-being and its six indicators are introduced and described in the context of mental health, which is a current research trend of psychological well-being. The overlap and distinction between hedonic and eudaimonic (psychological) well-being are discussed finally to explain why this study moves the pendulum of well-being toward the eudaimonic.

In Chapter 3, the notion of alienation is introduced with three parts to expand the spectrum of well-being and its process in urban agriculture. Firstly, Marx's alienation theory is introduced with his four provisions of alienation. Afterwards, contemporary studies of alienation (i.e., proposed since Marx) are described in the context of two academic streams: American socialism and neo-Marxism. Moreover, Marx's alienation and eudaimonic well-being find common academic ground in Aristotle's eudaimonia, which may provide some interesting points in relation to well-being which have not been found thus far in the body of urban agricultural literature.

Chapter 4 focuses on the concept of urban agriculture. Through a general description of urban agriculture, this chapter mainly focuses on specific features of urban agriculture which can be explored by six dimensions of Ryff's psychological well-being and Marx's four provisions of alienation.

Chapter 5 discusses on the theoretical bridges between eudaimonic well-being and alienation based on case studies from urban agriculture. The case study of urban agriculture in Seoul will be explored, including an analysis of the documentary film triggering this study. On basis of them, the exemplary forms of farming used to explore relationships are described. Additionally for further researches, prospective methodologies for case studies to observe these forms on-site through field research are introduced.

Finally, the conclusion, Chapter 6, offers a summary of the key findings. The results are discussed, and suggestions are made for a possible framework to develop urban agricultural activities by embracing the notions of psychological well-being and alienation.

CHAPTER 2: PSYCHOLOGICAL WELL-BEING

2.1 Introduction

Well-being is a broad concept referring to the quality of people's lives. It is a dynamic concept indicating that in their life-time people interact with the surrounding world (Rees et al. 2010). The World Health Organization refers to well-being in the context of a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO 1948).

More recently, the WHO defined positive mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (WHO 2001; Huppert 2009:138). As such, the definition by the WHO has changed the concept of health from a condition without pathological symptoms to broader dimension of “complete well-being” (Kim 2005).

In addition, with the inclusion of factors such as spiritual well-being, satisfaction at work or environmental safety, the concept of well-being becomes expanded to balance on a wide spectrum of events occurring in one's life (Adams et al. 1997; Jim 2005; Kim 2005).

This chapter reviews well-being from two perspectives; hedonic and eudaimonic which have been developed in classical studies. Afterwards, psychological well-being is introduced to help in providing a specific understanding of eudaimonic well-being. In particular, Ryff's scale of physiological well-being describes a trend towards developing an integrative approach with notions of mental health. Finally, this chapter shed more light on the differences between the hedonic and eudaimonic well-being.

2.2 Well-being – hedonic view

One of the views on well-being focuses on its emotional and hedonic aspect (Ryan & Deci 2001), and is what has been divided as subjective well-being in a research of well-being. This view thus focuses on establishing an individual's sense of happiness. The view of hedonic well-being is derived from hedonism, a current of thought in Ancient Greece. Aristippus, a Greek philosopher from the fourth century B.C. discussed with his pupils on the goal of life, on which he expressed that it is “to experience the maximum amount of pleasure, and that happiness is the totality of one's hedonic moments” (Ryan & Deci 2001:143-144).

According to Ryan and Deci (2001:144), this is a similar view to that of psychologists who argue that “well-being consists of subjective happiness and concerns the experience of pleasure versus displeasure broadly construed to include all judgments about the good/bad

elements of life.” Adopting hedonism, modern psychologists have broadened the concept of well-being into not only the mind but also the body (Kubovy 1999; Ryan & Deci 2001).

In the mid of the 20th century, well-being was almost synonymous with happiness and in this way it was robustly studied in the field of positive psychology (Deci & Ryan 2008). By defining well-being in terms of “pleasure versus pain,” hedonic well-being studies were conducted on how to maximize human happiness (Ryan & Deci 2001:144).

Adopting this approach, Diener (1984) came up with the term subjective well-being (SWB), arguing that the degree to evaluate happiness is subjective in a general way because it is based on personal experiences of a sense of well-being (Deci & Ryan 2008). Although there are many ways to evaluate the pleasure/pain continuum in human experience, most researchers within the hedonic psychology have followed assessments of subjective well-being (Diener & Lucas 1999; Ryan & Deci 2001). Scholars of happiness became familiar with the idea of SWB as they focused on what type of factors influence it.

The primary focus however has been on the values that depending on personal, cultural and social-environmental backgrounds, may lead to SWB (Deci & Ryan 2008).

SWB consists of three operational components including life satisfaction, positive affect and the absence of negative mood; all of which are thought to contribute to happiness (Diener et al. 2002; Lent 2004). If these are the factors that contribute to happiness, then, increasing one of them will lead to an increase in SWB (Deci & Ryan 2008).

Examining the possible correlations between life satisfaction, positive affect and the absence of negative mood, Lent (2004:485) reported that “life satisfaction probes for relatively broad, abstract affective judgments (i.e., how happy or content one generally feels), whereas positive and negative affect tap the experience of more specific, intense, or defined states (e.g., feeling enthusiastic or excited), summed over different life contexts. Empirically, the three elements have been shown to represent distinct, though related constructs. Conceptually, rather than representing categorical differences in cognition versus affect, life satisfaction and positive–negative affect may involve more subtle, quantitative distinctions in the intensity and globalist–specificity of feeling descriptors.”

In other words, each aspect corresponds to a variation on aspects of happiness that could putatively be susceptible of quantitative evaluation. The question about achieving happiness becomes, thus, one of maximizing the different aspects that contribute to it. Equally, achieving one’s feeling of happiness can be regarded as maximizing one’s well-being (Deci & Ryan 2008).

Based on this conceptual background, there have been several measurement tools to gauge one's hedonic approach of well-being (mainly, subjective well-being). The Positive and Negative Affect Scale (PANAS) was developed (Bradburn 1969; Watson et al. 1988; Dolan & White. 2006) and contributed an assessment based on one's experiencing emotional states during a certain period of time. With a list of adjectives, for example, people are asked to say how often they have felt content, calm, nervous, or depressed. Its main advantage is that the development of a systematic approach through the measurements of time frames to compare one's states in yesterday, last week, last month, last year and so on.

A crucial question is whether life satisfaction is strictly a hedonic concept (Deci & Ryan 2008). According to Deci and Ryan (2008), although life satisfaction has been studied from a hedonistic approach, it is also attributed by one's cognitive evaluation of the conditions in life, arguing that two other hedonic components (positive and negative affect) describe hedonic well-being more precisely. Diener and colleagues have acknowledged that "life satisfaction is theoretically different from the amount of positive or negative affect a person experiences" (Lucas et al. 1996:616, as cited in Lent 2004:485).

According to Diener et al. (2002; Lent 2004), the notion of life satisfaction may be differently constructed from that of positive and negative affect. Moreover, they argue, an individual's satisfaction can be just understood as a cognitively affective outcome, because asking whether I am satisfied needs a cognitive filter. Referring to this, Lent (2004:485) said, "Intuitively, asking whether I am satisfied requires that I consider how I feel about my life or some aspect of it. It is difficult to imagine an answer to this question that would bypass the cognitive filters through which evaluations of one's affective experience are invariably processed." For these reasons, Lent (2004) proposed a specific integrative model which does not combine life satisfaction, positive affect, and negative affect together, but connecting jointly as functioning elements (Lent 2004).

Perhaps it is best to see hedonism from the point of Plato's view from which we can understand the need to look at things from a eudaimonic aspect. In his view, hedonism simply is the doctrine that good life is the life full of pleasure, and the bad life is the life that lacks pleasure, and is full of pain. He further argues that doing well and doing badly are opposites, though opposites cannot both exist together. In his simulation, it is impossible for you to be sick and feel healthy simultaneously. Our appetites can and will always be painful though suppressing such by meeting them is pleasant. A good case for the argument is quenching your thirst. Being overly thirsty can be one of the most unpleasant feelings ever, especially when there is no source of water in sight. However, quenching the thirst fills one with pleasure. In this retrospect therefore getting satisfaction generally in life is important.

However, the acquisition of this is not necessarily attained through momentary pleasures however much this might be possible. This is why we need to look at things from a eudaimonic point of view, with respect to human flourishing through virtues instead of a hedonistic conception of happiness.

2.3 Well-being – eudaimonic view

Functioning well-being is about the extent of life satisfaction. It is also referred to as eudaimonic well-being; for example, when an individual can say, “I am fulfilled with things occurring in my life” (Ryan & Deci 2001). The eudaimonic view follows the critique of hedonic perspective on well-being that focuses on estimating subjective feelings. Instead, proponents of the eudaimonic view propose that a high level of quality of life includes more than a feeling of being happy and it should also indicate how well an individual is able to function as a member of society (Ryff 1989).

The eudaimonic view follows the philosophy of Aristotle but is also aligned with various 20th century intellectual traditions especially humanistic psychology (Deci & Ryan 2008). In relation to Aristotle's philosophy, eudaimonia emerges together with his definition of 'the essence of well-being in his *Nicomachean Ethics* (Waterman, 1984).

From this perspective, Norton translated the term as “meaningful living conditioned upon self-truth and self-responsibility” (Norton 1976: xi, as cited in Ryff & Singer 2008:18). In this view the concept emerges from two imperatives ubiquitous in Greek philosophy: first, to “know thyself” (a phrase inscribed on the temple of Apollo at Delphi), and second, to “choose yourself” or “become what you are” (Norton 1976:16, as cited in Ryff & Singer 2008:18).

Waterman (1993; Deci & Ryan 2008) described eudaimonia in relation to living well or actualizing one's human potentials. He argued “Aristotle's conceptualization of eudaimonia maintains that well-being is not so much an outcome or end state as it is a process of fulfilling or realizing one's daimon or true nature—that is, of fulfilling one's virtuous potentials and living as one was inherently intended to live” (Waterman 1993; Deci & Ryan 2008:2). Daimon appears as a mark of one's own authenticity, which resonates with ideas a teleological view of the self.

According to Ryff and Singer (2008), Aristotle this conceptualization follows his efforts to answer what is seen as the fundamental question of human existence: how should we live? The authors highlighted that Aristotle's objective in the discussion of eudaimonia was to provide ethical guidelines for how to live, rather than findings an absolute nature of human well-being. As such, his opening question, “what is the highest of all goods achievable by

human action?’’ is directed towards an examination of what constitutes a well-lived life (Ryff & Singer 2008:15). His answers to this question have had an enduring influence through history among other fields, on the study of human well-being.

Bradburn and other utilitarian and happiness philosophers from the 19th century translated the term to mean just happiness, much in the vein discussed above as hedonic well-being (Ryff & Singer 2008). As Ryff and Singer (2008) pointed out, however, this formulation does not recognise Aristotle’s distinction of eudaimonia from hedonia, and, in particular, the satisfaction of right and wrong desires. Instead, Aristotle’s eudaimonia refers to “the idea of striving toward excellence based on one’s unique potential”, which was not present in early studies of the concept (Ryff & Singer 2008:14). In Aristotle’s Ethics, in addition, the lexicon “virtue” involves more than just reasoning behind behaviours. Eudaimonia thus requires aspiration, for if happiness is activity in accordance with virtue, it is reasonable that it should be in accordance with the highest virtue; and this will be that of the best thing in us (Ryff & Singer 2008:17).

As most happiness studies are conducted within the hedonic tradition, well-being scholars sometimes question the rationale to divide the concept of well-being into hedonic and eudaimonic. Although eudaimonic well-being is presented as a separated concept, empirical evidence has continuously suggested that hedonic and eudaimonic well-being overlaps each other (Kashdan et al. 2008). Most scholars accept that the dividing criteria are subjective. For example, both hedonic and eudaimonic well-being may have similar psychologically operational mechanisms.

Regarding this critique, eudaimonic well-being researchers (c.f. Keyes & Annas 2009) argue that the very distinction between hedonic and eudaimonic is grounded on whether one’s happiness (the positive side of the life spectrum) emerges from feeling or functioning. Hedonic well-being researchers, primarily thought eudaimonic well-being as being individual and subjective (and thus, susceptible of being measured by subjective well-being indicators such as SWB), since it also represented based on an individual’s private life events (as one’s quality of life) (Keyes & Annas 2009).

However, they also recognised that these indicators are not enough to show one’s well-functioning in life. That is to say “in defining our respective measures, because we assert that our measures of well-being reflect individual’s judgments of their functioning in life, which is contrasted with hedonic well-being, where scholars claim to measure individual’s evaluations of their feelings toward their life” (Keyes & Annas 2009:198).

Referring to well-functioning, well-being researchers rediscovered eudaimonia going back to basic principles of Greek philosophy. According to Keyes and Annas (2009:197), well-functioning may implicate “good works,” “behaving in a way that is noble and worthwhile for its own sake under,” or “an objective judgment reserved for observers.” However, each cannot stand as the sole symbol of Aristotle’s eudaimonia; they are all, collectively, part of eudaimonia. On the very meaning of well-functioning some scholars have synthesised it in one expression: “it was the way I live my life, not an opinion about my life had by others” (Keyes & Annas 2009:197).

To summarize, an Aristotelian concept of eudaimonic well-being moves the emphasis away from characterizing subjective states such as feeling happy (Ryff & Singer 2008). Instead, this concept turns towards humans search for the highest good in life through a process of self-realization and/or finding out the one’s own talent (Ryff & Singer 2008).

To achieve self-realization, Aristotle asserted the importance of action, rather than just remaining with abstract ideas. Aristotle argued that we need to seek external prosperity such as actions for getting healthy food for healthy body (Ryff & Singer 2008). In this context, Ryff and Singer (2008:17) said that Aristotle’s concept involves a highly teleological perspective because “the highest human good involves activities that are goal-directed and have purpose.” All in all, eudaimonic focuses in the assumption that the ultimate aim in life, which is “to strive to realize one’s true potential, was accompanied by considerably more detail about virtue, defined as finding the middle ground between excess and deficiency, than about virtue, defined as making the most of one’s talents and capacities” (Ryan & Singer 2008:18).

2.4 Psychological well-being (PWB)

Modern psychologists such as Carol Ryff, articulate eudaimonism in a concept of psychological well-being (PWB) combining the theories of life span development and self-realization of the individual (Ryan & Singer 2008). In Ryff’s (1989) approach, for example, there are several operational definitions of Aristotle’s eudaimonic well-being: “measures of meaning and purpose in life (e.g. clarity of life goals; McGregor & Little 1998); vitality (e.g. feeling energized; Ryan & Frederick 1997); self-actualization (see Ryan & Deci 2000); and, humanistic notions of fully functioning or self-actualized persons (e.g., Maslow, 1968; Rogers, 1961)” (all cited in Lent 2004:486). In this section, a detailed description of psychological well-being will be presented. Afterwards, an introduction of Ryff’s tool to measure PWB will be provided, focusing, especially in explaining the current challenges in relation to mental health.

2.5 Ryff's six scales of PWB

Eudaimonic well-being has given way to modern understandings of psychological well-being (Keyes 2005a). Generally psychological well-being is about lives functioning well. In contrast with the concept of feeling good within an hedonic approach which incorporates mainly the emotions of happiness and contentment, functioning good of PWB “involves the development of one’s potential, having some control over one’s life, having a sense of purpose (e.g. working towards valued goals), and experiencing positive relationships” (Huppert 2009:138). Rather than simply the attainment of happiness, PWB is characterized as “the striving for perfection that represents the realization of one’s true potential” (Ryff 1995:100, as cited in Lent 2004:485). Therefore, Ryff and Singer have asserted that in one’s high PWB, happiness is not “the main goal” but rather “the exhibiting result when one’s life is well-lived” (Ryff & Singer 1998b, as cited in Lent 2004:485).

Like eudaimonic approach, PWB also the following operations including optimal functioning, meaning, and self-actualization (e.g. Omodei & Wearing 1990; Ryff & Keyes 1995; Keyes 1998; Ryff & Singer 1998a; Ryan & Deci 2000; Dagenais-Desmarais & Savoie 2012). Specifically, Ryff (1989) sought to develop an integrative definition of well-being, drawing on the views of mental health, clinical, and life span developmental theorists. She established representative dimensions of PWB aligned with the eudaimonic view (Ryff 1989 & 1995; Ryff & Keyes, 1995; Ryff & Singer 1998b & 2002; Lent 2004). She described a life reflecting six factors including autonomy, personal growth, self-acceptance, purpose in life, environmental mastery, and positive relations with others (Lent 2004).

Outlining each component’s description is as follows: self-acceptance, “positive evaluations of oneself and one’s past life”; personal growth, “a sense of continued growth as a person”; purpose in life, “belief that one’s life is purposeful and meaningful”; positive relations with others, “the capability for empathy, affection, and intimacy, and having high-quality relations with others”; environmental mastery, “the capacity to manage effectively one’s life” and; autonomy, “a sense of self-determination” (Keresteš et al. 2012:1075).

In their research on PWB, Ryff and her colleagues have related the PWB components to indicators of emotional and physical health (Ryff et al. 1989; Ryff & Singer 2002; Lent 2004). Ryff and Singer have prioritized PWB components, arguing that life purpose and quality social relationships are the primary “goods in life central to positive human health” (Ryff & Singer 1998b:3, as cited in Lent 2004:486). Several of the scales (e.g., self-Acceptance, environmental mastery, purpose in Life), for example, have been found to correlate strongly with life satisfaction (Ryff 1989; Lent 2004). In a confirmatory factor analysis, Ryff and Keyes reported good support for a six-factor model of PWB as well as for

a single higher order well-being factor (Ryff & Keyes 1995; Lent 2004). Psychological well-being also varies with socio-demographic conditions (Ryff 2008), and its degree is changed by one's response to life events and transitions such as child's transition to adolescence and an adult's transition to midlife (Keresteš et al. 2012).

2.5.1 Self-acceptance

This is "positive evaluations of oneself and one's past life" (Keresteš et al. 2012:1075). Self-acceptance is a complex concept, whose central feature in relation to mental health, are baseline theories of self-actualisation, optimal functioning, and maturity (Ryff & Singer 2008), with respect to studies by Maslow, Rogers and Allport. A representative expression of this dimension could be the statement "I like most parts of my personality" (Keyes 2005a:542). An individual who has high scores of self-acceptance, usually also shows the following features: "a positive attitude toward the self; acknowledges and accepts multiple aspects of self-including good and bad qualities, and; feels positive about past life." When having low scores, in contrast, the individual: "feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities, and; wishes to be different than what he or she is" (Ryff & Singer 2008:25).

A good example of this scenario happens when an individual is bargaining for better pay at work. Once you have furthered your studies and attained advanced certifications like Masters and Doctorate degrees, it is easier to ask your employer for an increased pay package because you understand how much valuable you are to the organization especially with reference to your educational capacity. Such an individual knows what they are worth, and will not accept anything less than what they perceive is their worth. If this is not the case the individual can seek employment elsewhere, where their needs as per their self-evaluation will be met with a deserving pay.

2.5.2 Positive relations with others

This is "the capability for empathy, affection, and intimacy, and having high-quality relations with others" (Keresteš et al. 2012:1075). This dimension follows an Aristotelian concern and interest on friendship (Ryff & Singer 2008). With reference to Aristotle's Ethics, Becker (1992; see also Ryff & Singer 2008) emphasises the notion of friendship, in relation to experiences of love, empathy and affection, which is also crucial for achieving a "well-lived life."

Traditionally, this criterion has been widely studied in developmental psychology. The criterion of maturity follows the establishment of warm relationships with other people as an indicator for one's maturity (Willibald 2007). With Jahoda's argument on a person's altruistic loving ability, Maslow also described that one with fulfilled self-actualisation also

depends on the demonstrations of affection from others, and the capacity for deeper form of friendship (Jahoda 1955; Maslow 1973; Ryff 1989). Especially, Adult developmental stage theories espoused by Erikson (Barkway 2009) emphasise the importance of having close unions with others (intimacy) and the guidance of others (generativity) (Ryff 1989; Ryff & Singer 2008).

When one has a higher score in establishing positive relations with others, this person, usually, “has warm, satisfying, trusting relationships with others; is concerned about the welfare of other others; capable of strong empathy, affection, and intimacy, and; understands give and take of human relationships.” Low scores, on the other hand, point at a person who “has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships, and; not willing to make compromises to sustain important ties with others” (Ryff & Singer 2008:25).

Relationships between children and parents, for example, young children share with their parents because these are the kind of people that they look up to for protection and other altruistic needs. Although it may not be a general group of people in society, moreover, when observing the persons such as monks, priests or rabbis who can easily build trusting relationships with others by virtue of their positions compared to others, we can see that feeling as being connected with someone make the person fulfilled with energy.

2.5.3 Personal growth

This is “a sense of continued growth as a person” (Keresteš et al. 2012:1075). When one has high scores in this realm, then usually “has a feeling of continued development; sees self as growing and expending; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behaviour over time, and; is changing in ways that reflect more self-knowledge and effectiveness” (Ryff & Singer 2008:25). When low scores, in contrast, such person “has a sense of personal stagnation; lacks sense of improvement or expansion overtime; feels bored and uninterested with life; feels unable to develop new attitudes or behaviours” (Ryff & Singer 2008:25). There are several human life-span theories that support this description. Personal growth is also achieved among individuals who have high self-actualisation, as (Maslow, 1973) mentioned for the close relationship between self-actualisation and personal potential (Ryff & Singer 2008).

Rogers's description of the fully functioning person also emphasise those persons who see new experiences as positive opportunities for development (Ryff & Singer 2008). Particularly, this function directly pins on Aristotle's eudaimonia, which aims to overall personal growth. Referring to it, Ryff (1989:1071) said, “continued personal growth and self-realization is a prominent theme in the aforementioned theories. It may also be the

dimension of well-being that comes closest to Aristotle's notion of eudaimonia as described earlier.”

Based on this description, several examples in one’s life can show how the one is recognized personal growth, even though it is relative depending on the context. When a person grows from one stage in life to another, there are some habits that we drop and advance higher up the intellectual ladder. This is the first step towards personal growth. You realize that you are becoming a better and more advanced person in society. Children usually play and get their clothes dirty, but as they grow older, they start to see the need to be cleaner and presentable especially when they advance into the adolescent stage. In such a stage, it is easier to shun a member of your peer group who does not seem to have conformed to the new status as you perceive of it, especially when they still play in the dirt and get all dirty. Personal growth does not end either, it is a process that goes on far as long as someone is alive, and it takes different dimensions. It could be in terms of your thought process, your actions, or even the manner in which you carry yourself when interacting with other people.

2.5.4 Purpose in life

This indicates personal and individual belief “that one’s life is purposeful and meaningful” (Keresteš et al. 2012:1075). When one has high scores in its realm, this person, usually “has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose, and; has aims and objectives for living” (Ryff & Singer 2008:25). When low scores, in contrast, that person “lacks a sense of meaning in life; has few goals or aims; lacks sense of direction; does not see purpose of past life, and; has no outlook or beliefs that give life meaning” (Ryff & Singer 2008:25).

Relating to PWB, Jahoda already emphasized the importance of having sense of purpose and meaning in life (Ryff & Singer 2008). In addition, Ryff and Singer (2008) introduced Frankl’s logotherapy (the belief that it is the striving to find a meaning in one’s life that is the primary, most powerful motivating and driving force in humans) in a field of existentialism as one extraordinary back-up empirical research to support the factor, indirectly supporting the importance of purpose in life. He helped people who were suffering with having no desire to live affronting disastrous environment after World War II with his treatment called logotherapy. According to their description, the therapy is to guide people to find meaning and purpose to live (Ryff & Singer 2008:22).

Our lives should be full of purpose. In a perspective of vocation, on the one hand, the purpose means the goals that a person is working to achieve in society as growing up. As interacting with different people and learn different things in place such as schools, people mould their own goals via different paths depending on their talents. This is the moment

when the person starts to realize your purpose in life, and works towards it. On the other hand, one's meaning of life can be explained in a view of enlightenment, one's achieving a higher mental value via medication or religious ways.

2.5.5 Environmental mastery

This is defined as “the capacity to manage effectively one’s life” (Keresteš et al. 2012:1075). When one has high scores in its realm, “has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities, and; able to choose or create contexts suitable to personal needs and values” (Ryff & Singer 2008:15). Low scores, in contrast, indicate that an individual “has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities, and; lacks sense of control over-external world” (Ryff & Singer 2008:15).

There are two main reasons that support the importance of environmental mastery on well-being. One is an explanation from Jahoda’s concept of mental health that “the individual’s ability to choose or create environments suitable to his or her psychic conditions is denned as a characteristic of mental health” (Ryff 1989:1071). Another one is Allport’s criteria of maturity, one of life-span developmental theories, which also emphasized “the importance of being able to manipulate and control complex environments, particularly in midlife, as well as the capacity to act on and change surrounding world through mental and physical activities” (Ryff & Singer 2008:22). In addition, Ryff and Singer (2008:23) distinguished it from other similar psychological concepts such as sense of control and self-efficacy: “although this area of well-being appears to have parallels with other psychological constructs, such as sense of control and self-efficacy, the emphasis on finding or creating a surrounding context that suits one’s personal needs and capacities is unique to environmental mastery.”

Environmental mastery is one aspect of psychological well-being that most people do not portray. The context of the environment is wide, and can be anything from your work environment to your school or home environment. Using the work environment as an example, some people are able to make the workplace a haven of joy by the way they carry themselves out. They are helpful, are always full of bright ideas, and are so friendly. It is easier for the rest of the workforce to take to such people because they seem like they always have an answer to all problems and concerns. They also are able to offer a shoulder to lean on when one is needed. Such are the persons who have mastered their environment, and they have control over all the elements that are part of their environment. They may not really

have control over the environment around them, but their perception of life and situations makes them look invincible and in total control at all times.

2.5.6 Autonomy

This is defined as one's "sense of self-determination" (Keresteš et al. 2012:1075). When one has high scores in its realm "is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates social pressures to think and act in certain ways, and; regulates behaviour from within; evaluates self by personal standards" (Ryff & Singer 2008:15). Low scores, in contrast, indicate that an individual "is concerned about the expectations and evaluations of others; relies on judgments of others to make important decisions, and; conforms to social pressures to think and act in certain ways" (Ryff & Singer 2008:15).

Autonomy can manifest in an individual in different ways, but the most important of these is their sense of independence. Independence of thought, independence of will and actions are elements that everyone was born with. However, not all are able to take charge of these. Some people are too shy and as a result they can never make any significant decisions without consulting others or seeking someone else's opinion on the same. Another example of an autonomous individual is one who does not do things because others are doing the same, but does something that he/she believes is the best course of action.

The dimension of autonomy emerges in relation to different approaches to well-being such as a description of a 'fully functioning person' of Rogers (2011), in relation to the importance of evaluating oneself by internal criteria prior to other people's perspectives or approval (Ryff & Singer 2008). Similarly, Maslow's (1973) concept of the 'self-actualising person' also highlights autonomous functioning and "resistance to enculturation." Autonomy is also related to individuation, described as involving a "deliverance from convention" (Jung), in which one no longer belongs to the collective beliefs, fears, and laws of the masses (Ryff & Singer 2008:23). The existential idea of living in "bad faith" (Sartre, 1956) similarly conveys the importance of self-determination and living authentically, rather than following the dogma or dictates of others (Ryff & Singer 2008). Life-span developmentalists (i.e. Erikson, Neugarten and Jung) also wrote about autonomy in relation to the importance of turning inward in the later years of life, and relatedly, gaining a sense of "freedom of the norms governing everyday life" (Ryff & Singer 2008:23).

Overall, it is summarized that Jahoda's mental health and life span developmental theories mainly including Allport's maturity, Maslow's self-actualisation, and Rogers's fully functioning person are combined to establish the six dimensions of Ryff's psychological well-being (Warner & Lawton, 1991).

Despite the search for objectivity in eudaimonic perspectives of well-being, which includes the analysis of the concept of psychological well-being in six dimensions that could putatively be measured objectively, PWB still requires a number of subjective approximations. Ultimately, subjects determine PWB because “if you want to know how happy I am, you’ll have to ask me” (Irwin et al. 1979, as cited in Lent 2004:487). Measurements of psychological well-being, therefore, are necessarily based on internal criteria, and any attempt to fixate an ultimate independent and external standard in evaluating one’s well-being should be regarded as naïf.

Nevertheless, Ryff’s Scales of Psychological Well-being (PWB) aims to deal with the difficulties and uncertainties of understanding well-being. As described above, Ryff (1989a; Dierendonck 2004) developed this instrument on the basis of an extensive literature review which led to the integration of mental health, clinical and life span developmental theories. The scale emphasises one’s optimistic outlook on life, emphasizing personal growth and development. Moreover, the scale has been evaluated through its application in pilot-studies (Dierendonck 2004). In addition, Dierendonck (2004) suggests that a good factorial validity is one way to establish the validity of the scale. Since that original publication on Ryff’s scale, several scholars have examined the factorial validity of the theory-based model of PWB. Several studies including nationally representative samples, two from the U.S. (MIDUS, Midlife in the U.S.; NSFH, National Survey of Families and Households), and one from Canada (CSHA, Canadian Study of Health and Aging) have shown that the theory-guided six factor model is a plausible model of well-being dimensions (Ryff & Keyes 1995; Clarke et al. 2001; Kafka & Kozma 2002; van Dierendonck, 2004; Cheng and Chan, 2005; Ryff & Singer 2008).

2.6 PWB and mental health

The focal point of the studies on hedonic and eudaimonic views rests with the individual or a group’s perceptions of different scenarios from time to time. With regard to this, it is important to note that the state of mental health of an individual will have an impact on their perception of feelings, virtues and values and it is because of this that well-being can be related to mental health.

Conventionally, the concept of mental health is psychiatric; mental health is diagnosed in relation to the absence or presence of mental illness. However, there has been a paradigm shift to bring well-being and positive mental health together in the research on disorder and dysfunction (Diener 1984; Argyle 1987; Ryff & Singer 1998b; Kahneman 1999; Seligman 1991 & 2002; Huppert 2009).

Psychological well-being (PWB), particularly, needs to be understood in relation to mental health (Huppert 2009). This is firstly because the concept of PWB emerges from the combination of mental health, clinical, and life span developmental theories, exploring personal positive psychological functioning (Ryff 1989). Moreover, it also comes out from a requirement to develop an alternative approach to assess PWB, because some critiques have mentioned that the six factors of PWB may not be enough to analyse existing formulations of one's well-being (Ryff 1989). According to Lent (2004), although the six factors have been already challenged to foster human functioning in the fields of counselling and clinical psychology, they need to understand more deeply how PWB can be assessed and influenced. The works described below have taken up this challenge by developing an integrated approach to PWB and mental health.

Keyes (2005) conducted empirical research for an evaluation of mental health assessing several models of psychological well-being. Based on the two perspectives on well-being, he developed four categories² on mental health continuum from languishing, moderate with low hedonic, moderate with high hedonic, and flourishing.

Follow-up research has further suggested that factors of eudaimonic well-being can represent indicative signs for better mental health comparing to those of hedonic well-being (Keyes 2006 (a study on the US adolescent population); Keyes et al. 2008 (a study on Black Setswana-speaking South African adults); Keyes & Annas 2009). In particular, "the mental health continuum (from languishing, moderate, to flourishing mental health) differentiates level of functioning among individuals with a mental illness as well as individuals without a mental illness," as Keyes and Annas (2009:199) argued. Through their research they found a pattern showing that "less than one-quarter of the adult population is flourishing in life" including people who are happy (Keyes & Annas 2009:200). For example, their research (Keyes & Annas 2009:200) suggested that "most Americans are happy, but barely 2 in 10 adults are flourishing."

²Keyes and Annas (2009:199) explained the model of mental health, which Keyes introduced in 1998 at the first 'Akumal Meeting' for Positive Psychology. There is some description on this as follows: "A good deal of research has been published on this model since that time, and all of it points to one simple conclusion: anything less than flourishing in adolescents and adults is associated with greater burden to self and society. The mental health continuum, as it is now called, ranges from flourishing, moderate, to languishing mental health. Flourishing individuals have high levels of hedonic and eudaimonic well-being, meaning they feel good about life and are functioning well in life. Languishing individuals have low levels on both types of subjective well-being, meaning they don't have much good feeling toward life and they don't see themselves functioning well in life. Individuals with 'moderate' mental health either have moderate levels of on both hedonic and eudaimonic well-being, or they have disparate combinations of each (high hedonic but low eudaimonic or low hedonic and high eudaimonic well-being). The moderate group therefore provides a direct test of whether the distinction of hedonic from eudaimonic well-being is really useful. Individuals with moderate mental health have lower levels of eudaimonic well-being than those who are flourishing."

This, in turn, means that “not enough people are functioning well in a life about which they feel good.” In relation to their findings, they explore cautiously the implications of this findings for the wider society, particularly, the extent to which a society can thrive when most of its members do not feel fully functioning.

More recently, the WHO has defined positive mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (WHO 2001; Huppert 2009). This policy outlook resonates with an integrative approach on mental health and well-being.

Huppert (2009) and her team have studied well-being cooperating with the neurobiological basis of PWB. Basically, they also see well-being from a perspective of PWB, especially as a mode of flourishing, similar to Keyes (1998) approach to developing a continuum of mental health on the basis of PWB. According to Keyes (2002a:262, as cited in Huppert 2009:151), “flourishing individuals have enthusiasm for life and are actively and productively engaged with others and in social institutions.” They have also suggested that PWB can lead to better physical health by brain activation and neurochemical pathways. Positive mental health through improving PWB ultimately contributes to develop one’s physical condition. As mentioned above, these studies have contributed to expand the continuum of personal mental health and explore its potential contributions to improving public health at population level (Huppert 2009). Some of this work has focused on analysing the experiences of a group of people in society showing a languishing state.

Those “at greatly increased risk of depression and physical disorders including cardiovascular disease” are “languishing” (Keyes 2002b, as cited in Huppert 2009:151). Despite no mental illness, a languishing individual may feel that life seems empty (i.e. “a life of quiet despair”), and this condition indicates a languishing mode (Keyes 2002a:210, as cited in Huppert 2009:151).

Referring to this state, Keyes has also suggested that when people (especially young generations) seek ways to escape from the feeling of the void of life, languishing may be highly prevalent. This idea suggests that long-term care should be extended from people having mental disorders to those who, without mental problems, are in a languishing state. Huppert (2009:152) points out their habitual problems, such as sex, drugs, and alcohol “deepen the void and make the person more dysfunctional.”

Moreover, in this context, these are supported by Huppert’s suggestion to move the mean of mental health continuum towards increase of flourishing; then, its demographic graph can simultaneously have less number of people who are in languishing mode (Fig 1).

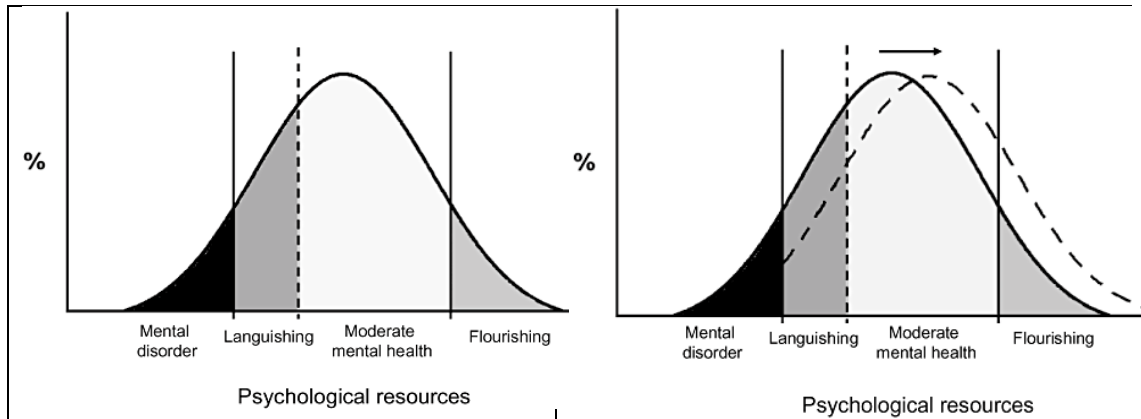


Figure 1: The mental health continuum (left) and the shifting the mean of the continuum (right). (Source from Huppert (2009), adopting Huppert et al. (2005))

The figures are a “schematic version of the mental health spectrum,” suggested by Huppert (2009). The X axis exhibits the amount of psychological resources, lower to higher, namely from mental disorder to flourishing, while the Y axis represents the percentage of population in society³. The figure on the left represents the general portion of people’s psychological resources in society.

The diagram shows evidence that the prevalence of any common disorder (hypertension, heart disease, depression, alcohol abuse and so on) is related to the average level of the risk factors or symptoms in the population (Anderson et al. 1993; Puska et al. 1998; Academy of Medical Sciences 2004; Huppert 2009), Huppert argues that it is not enough only focusing on the group with mental disorder. In order to prevent disorder in society, rather, more

³ Huppert (2009:153) mentions in the review on the history of the study connecting the population mean and the public maladies as follows: “[s]ome of the strongest evidence for a relationship between the population mean and the prevalence of disorder comes from research on alcohol abuse. Using data from over 32,000 adults, who participated in the Health Survey for England, Colhoun, Ben-Shlomo, Dong, Bost, and Marmot (1997) showed that, across all the regions in England, mean alcohol consumption (excluding heavy or problem drinkers) was strongly correlated with the prevalence of problem drinking. Similar data have been reported across 52 population samples from 32 countries (Rose, 1992). We can conclude, therefore, that a small reduction in the mean consumption of alcohol among light or moderate drinkers will result in a substantial decrease in the prevalence of problem drinking. Moreover, this appears to be a more effective strategy than the commonly used approach of targeting binge and problem drinkers (see Academy of Medical Sciences, 2004). Put simply, a small change in drinking culture such that most people have one or two drinks fewer each week will do more to reduce problem drinking than targeting the problem drinkers and trying to persuade them to change their habits.”

holistic modes of intervention are needed to include the languishing group of people, who are at high risk to increase the proportion of population with mental disorder. In his explanation, he says “evidence from epidemiology suggests that, if we use only this targeted approach, there will always be plenty of new cases of disorder, since the majority who develop disorder come from the general population; only a small percentage of the total who develop disorder are from the high risk group (Rose, 1992 & 2008). While treatment and prevention have a crucial role to play in the short term, the Rose model suggests that the way to reduce the prevalence of common mental disorder in the long term is to intervene at the general population level ” (Huppert 2009:152).

The second graph on the right side, shows what can be expected if the average level of psychological resources increases (moves to the right side). Even a small change in the average level of psychological resources can produce “a large decrease in the percentage with disorder and in the percentage who are languishing,” as well as “a large increase in the percentage who are flourishing.” Following the argument of Anderson et al. (1993), he argues the rationale for a demographic approach in well-being studies: “populations thus carry a collective responsibility for their own mental health and well-being. This implies that explanations for the differing prevalence rates of psychiatric morbidity must be sought in the characteristics of their parent populations; and control measures are unlikely to succeed if they do not involve population-wide changes” (Anderson et al. 1993:475, as cited in Huppert 2009:152).

From this diagram, Huppert suggests two ways of application. On the one hand, this approach can be applied to predict such sharing factors between well-being and ill-being, such as those including individual level (e.g. parental alienation) and societal level (e.g. income inequality). On the other hand, it can be utilised to develop public programmes at the population level to enhance well-being drivers which are not shared with those of ill-being (i.e. thinking in a positive way and intrinsic motivation and so on). Several studies have been conducted to develop empirical evidence to support this approach to PWB. This type of work has shown that “there is some evidence for a reduction in the prevalence of psychiatric morbidity being associated with a small decrease in population mean scores on a psychological symptom measure. This comes from a large observational study, the seven-year follow-up of *the UK Health and Lifestyle Survey*, in which a one point decrease on the symptom scale was associated with a 6 per cent reduction in clinically significant disorder” (Whittington & Huppert 1996; Huppert 2009:153-4). Aforementioned, integrating approaches are now expanding the realm of well-being into the public (mental) health.

Within the field of mental health, however, scholars who focus on establishing clinical diagnosis have questioned whether the notion of well-being can be a useful alternative lexicon for forecasting an individual's (let alone the public) mental health. Moreover, critics question whether eudaimonic well-being can be conceptually separated from the hedonic conception (Wissing 2013).

In response to critics, scholars argue that it cannot be demonstrated that a person is healthy even when s/he does not have mental problems (c.f. Keyes & Annas 2009). According to Compton et al. (1996; Lent 2004), measurements of a number of people's reprehensible conducts are highly correlated to the indicators of PWB. Although a concept of well-being is not simply about mental health, approaching mental health from the PWB perspective may be necessary to read some markers of one's psychological adjustment or adaptation (Diener et al. 1998; Lent 2004). Moreover, Maddux (2002; Lent 2004) asserts that PWB's methodology to approach one's well-being considering social factors is helpful to interpret mental health, since aspects of psychological health and pathology are ultimately socially constructed.

In terms of empirical evidence, Keyes (1998; Keyes & Annas 2009:199) introduced a model of mental health as flourishing ("high levels of hedonic and eudaimonic well-being") and languishing ("low levels on both types of subjective well-being, meaning they don't have much good feeling toward life and they don't see themselves functioning well in life") in life. Following her conclusions, she suggested that "anything less than flourishing in adolescents and adults is associated with greater burden to self and society." She developed the model into four mental health spectrum as flourishing, languishing and three moderate modes ("either have moderate levels of on both hedonic and eudaimonic well-being, or they have disparate combinations of each").

Following her observations on the moderate group, she found out that it "provides a direct test of whether the distinction of hedonic from eudaimonic well-being is really useful" (Keyes & Annas 2009:199). Her investigation of the symptoms of mental disorders targeting low hedonic moderate group of people, people in the low eudaimonic moderate group show higher levels of mental disorders comparing to high eudaimonic.

The Midlife in the United States (MIDUS) 1995 national sample, as explored by Keyes (2005a), show that among 48.5 % showing high hedonic well-being, 30.5% of the sample showed high hedonic but lower eudaimonic well-being. This indicates that the main drivers of mental health problems are factors related to well-functioning rather than feeling happiness. She described the results that mental illness is highest in individuals who don't feel great about life and aren't functioning well in it (i.e. languishing). By comparison,

mental illness is lower in individuals who don't feel great about life but are functioning better in it (i.e., moderate mental health with low hedonic well-being).

The author also mentioned that mental illness is lowest among individuals who feel great about a life in which they are also functioning well (i.e. flourishing). In contrast to those who are flourishing, individuals who feel great about a life in which they are not functioning as well (i.e. moderate mental health with high hedonic well-being) has a higher rate of mental illness.

Overall, Keyes argues that well-being studies are greatly helpful to predict latent problems within people who do not have a mental disorder including chronic physical illness at all ages (Keyes 2007). In this respect, eudaimonic well-being and its mental health continuum (from languishing, moderate, to flourishing mental health) differentiates level of functioning among individuals with a mental health problems.

2.7 Hedonic vs eudaimonic (psychological) well-being: overlap and distinction

Comparing eudaimonic (functioning) to hedonic (feeling) well-being, Deci and Ryan (2008) mention the substantial overlap between both in real-world experiences (Waterman et al. 2006; Bauer et al. 2006; Deci & Ryan 2008). This follows the assumption that if a person lives in an eudaimonic well-being environment, that person will also experience hedonic enjoyment. According to Keyes and Annas (2009:198), “throughout much of life, our feelings and functioning in life are consistent (i.e. overlapping), because we feel positive emotions toward a life in which we are functioning well, and we feel negative emotions in a life in which we are malfunctioning or functioning poorly.” However, this does not mean that all hedonic enjoyment comes from an eudaimonic living condition.

Some empirical studies statistically showed the difference between hedonic (feeling) and eudaimonic (functioning) well-being (i.e. factor analysis on well-being of teenagers (Keyes 2005b), college students in U.S. (Robitschek & Keyes, in press; Keyes & Annas 2009), and black Setswana-speaking South Africans (Keyes et al. 2008; Keyes & Annas 2009)).

Table 1: Defining and measuring well-being: major philosophical positions and their well-being definitions (adapted from Lent 2004).

Philosophical position	Major component	Type of well-being and related measure	Examples of proponents
Hedonic	Life satisfaction (or happiness) Positive affect (Absence of) negative affect	Subjective well-being : Satisfaction with life scale : Positive and negative affect schedule (PANAS)	Ed Diener
Eudaimonic	Meaning Purpose Growth	Psychological well-being : Self-acceptance : Environmental mastery	Carol Ryff

	Self-actualisation	: Positive relations with others : Purpose in life : Personal growth : Autonomy	
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Although this discussion has emphasized the distinctions between hedonic and eudaimonic positions, the two are still highly correlated, and there is considerable overlap (Ryan & Deci 2001 & 2008). Both forms of well-being show a common conceptual framework. A representative example shows it; “people can experience happiness in the midst of challenging activities (Nakamura & Csikszentmihalyi 2002, as cited in Lent 2004:486), and pursuit of engaging goals even offers one important route toward hedonic satisfaction (Locke & Latham 2002, as cited in Lent 2004:486).” Particularly, purpose in life of PWB and life satisfaction on SWB are reported to be often correlated moderately (Kozma et al. 2000; Lent 2004), and this is why life satisfaction in SWB have been discussed whether its location is in SWB due to its cognitive filter as described above (Ryan & Deci 2008). For the reason, Ryan and Deci (2001:148, as cited in Lent 2004:486) have suggested that “well-being is probably best conceived as a multidimensional phenomenon” that includes aspects of both the SWB–hedonic and PWB–eudaimonic.

To summarize, eudaimonic and hedonic well-being show significant differences, as well as some inevitable sharing realm of experience. The theoretical structure in defining the concept shows a clear gap between them including the consideration of human nature, motivation, evaluation criteria (Deci & Ryan 2008). As Lent (2004:486) concluded, “it is somewhat tempting to envision SWB and PWB as reflecting two necessary aspects or rhythms of human experience—a yin and yang of sorts, in which growth/effort alternates with rest and relaxation, much as work and vacation or mark many people’s lives. However, the concept of “flow” or peak experience accommodates the possibility that effort and enjoyment can occur together (Nakamura & Csikszentmihalyi 2002; Lent 2004) rather than only in distinct activities or at different times. For example, one can ask whether a professional athlete is working or playing (Bordin 1994; Lent 2004), or whether artists who are fully absorbed in their creations are experiencing effort or pleasure.”

2.8 Conclusion

Well-being can be understood within a modern and complex concept of health. In this way, it broadly indicates one’s mentally as well as physically well balanced health (WHO 1948 and 2001). The complex relationship between well-being, absence of mental and physical illness and functioning are explored through the concept of well-being.

In this section we have discussed the relative merits of two different perspectives on well-being. They are differentiated following classical debates on the search of happiness: hedonic and eudaimonic. Hedonic well-being is about one's own feeling happiness, while eudaimonic well-being is about one's functioning well in society. Historically, drivers to bring one's feeling happiness have focused in well-being studies, and thus, its main tools-subjective well-being (SWB) and life satisfaction- have widely been used as well-being measurement. However, a high level of quality of life cannot be explained only within an hedonic perspective on personal happiness.

Alternatively, eudaimonic well-being research has established its operational concept based on mental health and life span developmental theories that focus on finding meaning and purpose in life (e.g. clarity of life goals; McGregor & Little 1998), vitality (e.g. feeling energized; Ryan & Frederick 1997); self-actualization (see Ryan & Deci 2000) and humanistic notions of fully functioning or self-actualized persons (e.g., Maslow, 1968; Rogers, 1961). As a modern instrument of the eudaimonic tradition, Ryff (1989) suggested psychological well-being (PWB) with six dimensions as autonomy, self-acceptation, purpose of life, personal growth, positive relationship with others, environmental mastery and autonomy. This analysis enables the assessment of PWB, although this remains dependent on the subjective assessment of how individuals are affected by these factors.

Absence of mental illness alone is not mental health. There has been a paradigm shift to bring well-being and positive mental health as an important component of mental health, beyond studying disorder and dysfunction (Diener 1984; Argyle 1987; Ryff & Singer 1998b; Kahneman 1999; Seligman 1991 & 2002; Huppert 2009). From this it was concluded that the eudaimonic point of view allows someone to get a hold of the important aspects of their well-being, and the psychological well-being used as an effective tool for evaluating the public health of the society.

Well-being is a multidimensional phenomenon including both hedonic (feeling) and eudaimonic functioning aspects. Comparing them, there are four substantial differences in each definition (Keyes & Annas 2009) such as: their different perspectives on nature (Tooby & Cosmides 1992; Deci & Ryan (2008); a focus on experience for making one's condition better (Waterman 1993; Ryan & Deci 2001); and their measurement approaches to evaluate well-being (Keyes & Annas 2009). Nevertheless, an overlap is often found in real-world experiences (Waterman et al. 2006; Bauer et al. 2006; Deci & Ryan 2008).

Although there are several schools of thought on the hedonic and eudaimonic views especially with regard to psychological well-being, each and every one of them has their own point of view from which arguments are based. Each individual has their role to play in

life and in the society within which they belong, and their perceptions of their roles and status can be effected by their nature either as hedonic or eudaimonic individuals. Whether or not someone is comfortable in their life is one of the other things that has an important role to play especially with regard to the manner in which we live our lives and go about our roles in society. The prospect of developing and sustaining urban agriculture in different parts of the country can therefore be either a success or a failure, depending on the overall nature of the society in question. It is important that people look to the benefits that urban agriculture will have not just to them, but for the greater good, the society and the environment at large. Self-gratification from the fruits of urban agriculture is just the first step of many that should lead to the overall satisfaction of the region.

In as far as well-being is concerned hedonism and eudaimonia are interwoven together. This is because whilst eudaimonia focuses on the individual's perspective of happiness from the societal concept (or values), hedonism is rather selfish, and focuses on the individual's sole needs for happiness. However, an individual cannot be considered as a society without the other individuals that complete the communal makeup. Therefore the implication of this is that for the society to be considered a happy community, the individuals that make up the society must be happy at personal level, and then this happiness will follow through to the others and eventually have a happy society.

Borrowing from Aristotle's view, eudaimonia is not simply a matter of feeling that one is a good or virtuous person, but it is a matter of cultivating high degrees of virtue that people can look up to. These are the kinds of things that eventually contribute to the well-being in the society. Catholics all over the world look up to the pope as an important symbol in the society. This is not just because of the fact that he is a virtuous person, but the position he holds is of a high degree of virtuousness, one which so many worshippers look up to for spiritual guidance. Therefore eudaimonia rises above the individual's perception and is bestowed in a societal context.

The concept of well-being from a eudaimonic point of view of the society follows through from this chapter to the subsequent chapters, paying attention to how well-being in the society evolves from an individual's perspective to a collective unit that binds together different individuals in the society. Psychologists have also portrayed the good life not merely as a matter of feeling that one's life has meaning, especially through satisfaction attained from meaningful relationships or meaningful work, but also as a matter of cultivating higher degrees of richness, complexity or integration in the same meaning (Bauer et al., 2005; King, 2001). It is this integration that I seek to showcase in the proceeding chapters of this paper, from the effects that alienation has on the individual and the trickle

down effects to the society, all through to why de-alienation is important to the collective efforts of the society, and how this helps us achieve the desired results from urban agriculture. In essence, urban agriculture and its benefits are explicitly appreciated once we can also appreciate why it is important to our well-being, our individual characters, and our perspective of the work we do.

CHAPTER 3 ALIENATION

3.1 Introduction

The concept of alienation has been expressed in different aspects in society. With regard to the definition there are so many views expressed especially as a result of the varied inferences of alienation available in the world. Alienation simply refers to the act of isolation or dissociation from a given stimulus in the environment within which an individual exists (Kelly 2012).

One of the most popular studies on alienation is the Marxist view of alienation, a theory that has been studied for decades on end in an attempt to understand the nature of human social interactions and relations. The context of this paper relates to urban agriculture and how society can use this to improve the well-being of the residents in general. Agriculture is an important part of any society especially when you look at the benefits that we can derive from the activities. The participating individual or community stands to benefit from the proceeds of sale of the agricultural products, some of them can be used for subsistence, while in the long run the continued use of fair agricultural practices ensures that the community in question does play an important role in preserving the environment for future use.

Agriculture and well-being go hand in hand with respect to the fruits of labour that come as a result of the hard work that farmers invest in their farms. Even though alienation came into prominence in the early writings of Marx (1844/1932), the concept of alienation finds reference across a broad range of subjects such as theology, philosophy, sociology, psychology and psychiatry (see Johnson, 1973 for a review of the usage of the term across various disciplines). Fromm (1955) discussed alienation as the mode of experience in which a person experiences him/herself as an alien or in other words becomes estranged from the self. Horowitz (1966) suggests that alienation implies an intense separation first from objects of the world, second from people, and third from ideas about the world held by other people. The core meaning of the concept of alienation has also been identified with a dissociative state or a sense of separation in relation to some other element in his or her environment (Kanungo, 1979; Schacht, 1970).

Marx conceptualized alienation as the separation of the worker from ownership. In his *Economic and Philosophical Manuscripts* of 1844, Marx distinguishes three forms of alienation – alienation from the product of work, alienation in the process of production, and alienation from society. Weber's treatment of the concept of alienation (Gerth & Mills, 1946) has been similar to that of Marx who viewed alienation as emerging from perceived lack of freedom and control at work. Durkheim (1947, trans.) saw alienation as a

consequence of the condition of anomie, which refers to the breakdown of norms in society leading to experienced normlessness.

3.2 The significance of alienation in this study

The concept of alienation is prominent in social science (Williamson & Cullingford 1997). However, it is also a 'mysterious' concept, in the sense that it has fostered turbulent debates and hence, there is still much discussion about its meaning and operation ability. The ambiguity inherent to the term has attracted many scholars, who have explored subjects related to alienation through history with various perspectives (Williamson & Cullingford 1997). Here, I adopt a definition of alienation in relation to the discussion of well-being in the previous chapter, as related to the perception of self as estranged to one's surrounded environment (McClintock 2009). Alienation is often approached as a personal psychological trait and in that sense, it resonates with the concerns of well-being scholars; its symptoms are known as powerlessness, meaninglessness, normlessness, isolation and self-estrangement (Seeman 1959). However, the relationship between alienation and well-being has not been explored in depth.

Another question is the extent to which engaging with well-being discussions from the perspective of alienation offers the perspective to move beyond individual-based conceptions of well-being. Within the Marxist body of theory alienation from labour and from nature is regarded as a social phenomenon (McClintock 2009). Generally this body of work states that since the Industrial Revolution, the city has been represented as a place for integration of materials in the process of capitalism development. As cities became focal spots for economic exchange, the city's structure became more sophisticated by material and technological resources. The use of labour is central to this process. In this process, however, alienation refers to the estrangement of the worker from the means of production, and the resources that enable such production. Under capitalist production neither the capitalist creates nor cannot the worker produce for his or her own use. Instead, labour is activated for the sole purpose of maintaining the capitalist order and thus, products are sold as commodities for the main purpose of making profit (McClintock 2009). Such process of commodification is central to understand the relationship between the worker, the product and the means of production, and hence, explains the alienation process under capitalism.

Marx (1844) defined the concept of alienation in *Economic-Philosophical Manuscripts*, to explain the societal phenomena when the product of labour confronts a labourer "as something alien, as a power independent of the producer" (Musto 2010:81). He regarded alienation as intrinsically linked to the establishment of a system of division of labour (Sohn-Rethel 1978; McClintock 2009). As workers work in isolation in separated parts of

the production process, so knowledge for its completion is fragmented and divided alongside the production line. As technology advances and labour is concentrated through the rationalisation of production, workers are left with the limited skills that enable them to handle only their remit in the production process. By gaining skills and becoming specialised the workers come to understand less about the whole process of production than they did in more artisanal systems of production and thus their creative capacities are weakened (Braverman 1974; McClintock 2009).

In relation to the separation from the nature, alienation emerges in Marxist accounts as essential for human life and development (Dickens 1996; McClintock 2009). From an eco-Marxist perspective, humans concurrently mould and are moulded by their surrounded environment; humans themselves are also the part of nature (McClintock 2009). Moreover, alienation from nature does not only mean alienation from ecosystems, but also from the very nature of human beings. Marx highlights this as alienation from “man’s species being,” who are transformed into beings alien to him, and from other human beings, and in relation to their labour and the object of their labour (Marx 1844, as cited in Musto 2010:81).

Alienation from nature is also well reported in studies of development psychology. McClintock (2009:201-202) in a review, argues that “the shift from direct to ‘increasingly abstract and symbolic’ contact with the outside environment in the contemporary political economy (Orr 2002: 291) limits affective, cognitive and evaluative development in children (Kahn & Kellert 2002), leading to a rise in childhood behavioural problems, popularly referred to as ‘nature deficit disorder’ (Louv 2008). In doing so, McClintock links the political economy- social- view on alienation inherited from Marxist studies of labour with an understanding of the role that alienation may play in cognitive development. Several studies have concluded that exposure to vegetation and green space is essential to children’s cognitive development, can reduce attention deficit disorder and reduce crime and ‘mental fatigue’ or desperation in impoverished urban areas (Kuo & Sullivan 2001; Taylor et al. 2001).”

This context follows this point of view to develop an alienation perspective on well-being that enables widening the concept of well-being to incorporate wider sociological issues. To do so, it is necessary to develop a deep understanding of the concept of alienation and its evolution in three parts. Marx’s alienation theory is firstly introduced in relation to his four provisions of alienation. Afterwards, Marx discussion is updated in relation to contemporary studies of alienation since Marx is described .in two streams, America socialism and neo-Marxism. The chapter concludes with an exploration of the implications of the analysis for the understanding of well-being, in relation to the previous chapter.

3.3 Marx's alienation theory

To understand Marx's theory of alienation, this study would suggest that three components should be primarily discussed: the human nature, materialism, and the concept of labour by capitalism.

Regarding to the human nature, firstly, Marx was inspired by Aristotle's concept of *eudaimonia* (Chau 2003). His labour theory was rooted in his approach to eudaimonism, particularly in his concept of the human nature. Referring to the link between Aristotle and Marx, Gilbert (1992:136; Chau 2003:40) suggests "like Aristotle, Marx may have desired for humans to engage in activities for their own sakes in order to further *eudaimonia*. (...) Marx's goal was to set society in accordance with what was humanly natural (Gilbert 1992:316, as cited in Chau 2003:40). Such a eudaimonism view underlies Marx's thoughts on labour." Developing the idea, in addition, Marx's thought went into the central claim of Aristotle's goal of human nature in society, which is the essentially political or social nature of man (Mewes 1992; Chau 2003). Chau (2003:22) argues "it is the indirect but fundamental links between Aristotelian and Marxian philosophies that we seek to examine." He also suggests that Marx's notion of human being relates to *eudaimonia* which pinpoints the intrinsic human goods such as learning, friendship, and political community. Taken to its limit, such eudaimonic view suggests that well-being would lead human to freedom and cooperate in society (Gilbert 1992; Chau 2003).

To summarize, alienation of Marx indicates that human species cannot be in connections to their natural beings, unless they fulfil collective roles in the wider society. This explains the eudaimonic concept of how well-being initiates happiness in the society. Individuals who make up the society derive a lot of happiness from the success that comes as a result of their hard work from time to time. With reference to urban agriculture, the harvesting season usually brings forth good returns, especially for the whole community when they all take part in the planting process. Such success and happiness is what motivates people to work harder for the common goal, and eventually this improves their well-being.

Secondly, the concept of alienation espoused by Marx should be understood in relation to his doctrine of historical materialism. To Marx, humans do not have an unchangeable nature which independently manifests within the society they live in (Cox 1998). According to Cox (1998), Marx demonstrated that the enormously varied range of social factors that could be attributed to human nature can not to be fixed, "Marx developed a materialist theory of how human beings were shaped by the society they lived in, but also how they could act to change that society, how people are both 'world determined' and 'world producing'." (Cox

1998⁴) As such, Marx argued that human beings have originally the ability to shape nature through creative labouring processes that move them beyond survival, and simultaneously they are shaped by nature through self-reflection (Marx 1977; Stuart et al. 2012). Marx asserted, “nature is not only a means of sustenance, humanity’s spiritual life, and a means to realise powers, but a relational process in which humans construct and in turn are constructed by nature” (Marx 1977; Stuart et al. 2012:205). In this context, Marx maintained alienation is something rooted in the material world; something related to the process through which human lose control, specifically over labour (Cox 1998). This notion of alienation distinguishes Marx's perspective from that of Hegel and Feuerbach, whose notion of alienation is defined in relation to the mind and to religion, respectively (Cox 1998).

Finally, whereas human nature can be challenged by a wide range of factors, Marx argued, there is one fixed feature of all human societies in that human beings must work with nature to survive as well as to satisfy their needs, the same as other animal species (Cox 1998). However, Marx argued that the main difference between the labour of humans and animals is that human beings put consciousness on their work. In *Capital*, Marx described it with a metaphor, “a spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality. At the end of every labour-process, we get a result that already existed in the imagination of the labourer at its commencement.” (Marx in *Capital*, as cited in Cox 1998). Therefore, if alienation refers to a process that separates workers from their labour in, but the fragmentation of the production process without any participant to the commoditization of the final product, ultimately, alienation can be understood as a rift between labour and consciousness.

As a result the implications of alienation could be far reaching, from depression to inferiority and superiority complexes (Kelly 2012). Alienated individuals tend to have their perceptions of themselves and others shift and they become detached from society and their work (Kelly 2012). However, it is important to note that the effects will be different from one individual to the other. Perhaps an in-depth look into the four types of alienation by Marx will make this clearer.

3.4 Four types of alienation from Marx

In *the Manuscripts*, Marx described the flows of capitalism as irresistible and as pervading, alienation in society (Cox 1998). Marx wrote, “industry is the real historical relationship of

⁴All the citations of Cox (1998) in the study are in:
<http://www.marxists.org/history/etol/newspape/isj2/1998/isj2-079/cox.htm>

nature, and therefore of natural science, to man. If then it is conceived of as the open revelation of human faculties, then the human essence of nature or the natural essence of man will also be understood. Natural science will then lose its one-sidedly materialist abstract material, or rather idealistic, orientation and become the basis of human science as it has already, though in an alienated form, become the basis of actual human life” (Marx 2000:102, as cited in Wujin 2006:115).”

The implications of such are an estranged society where everyone looks at out for and after themselves, and either views themselves as superior or inferior to the others around them. Aggression is one of the most common problems that will develop as a result of this (Wissing 2013).

But, as explained above, it is important to understand alienation in relation to what is being estranged. In his manuscripts, Marx identified four specific aspects of alienated labour: alienation from product (material), labour (activity), the species being (oneself or human nature) and each other (between persons). These components are distinctive respectively but interrelated in society. Hence, the difficulty to relate this is analytic observation with the empirical experiences. Using the “method of abstraction,” Marx showed each component distinctively as well as being interrelated. Referring to this, Ollman explains “the results of Marx’s method of abstraction are not only such new factors as the relations of production and surplus-value, but as well all the other factors that come into his investigation.

They have all been individuated out of the whole which is relationally contained in each. And again, which group of qualities Marx chooses to treat as a unit is determined by the real similarities he sees in reality together with the particular problem under consideration” (Ollman 1976:62, as cited in Sawan 2011:143).

In essence what this means is that Marx takes time to look at the individual characters and it is through their similarities that he can group their qualities for a better observation. Besides, individuation of such characters is an indicator of just how the labourers are separated from their work in terms of their association with the end product.

Jiang (2012:102) said, “Alienation of labour is the basic starting point of Marx to criticize reality and observe the history and is the core and foundation of his alienation concept.” That is to say, “the alienated labour reflects the economic relations and political relations of exploiting and being exploited between capitalists and workers and the core of alienated labour is finally the alienation of human beings.”

An alienated workforce might be driving the results and the success required from the business end, but the impacts of this on the individuals from a personal level are disastrous. A workforce that is devoid of healthy social interactions will most often form some baseless opinions especially in their ideological arguments. This analytical division, however, helps to deepen our understanding of Marx' concept of alienation and its relationship with human well-being. In this section, thus, I review Marx's four understandings of alienation in relation to what has been strangled.

3.4.1 Alienation from the product

The first provision of Marx's alienation theory is alienation from the product, and in particular, how the labour of workers is alienated from their products (Jiang 2012). In the Manuscripts, Marx asserted that "the alienation of the worker means not only that his labour becomes an object, an external existence, but that it exists outside him, independently of him and alien to him, and begins to confront him as an autonomous power; that the life which he has bestowed on the object confronts him as hostile and alien" (Marx 1975, as cited in Cox 1998). According to him, before industrialization, workers could expect that they got much profit (products) as working harder. Under capitalism, however, the products which labourers produce are owned and disposed of by another, the capitalist (Cox 1998). Marx pointed out that the forced commodity production system enslaved the style of labour, and the power over their labour merely lubricates the commodity system and facilitates the exchanges of products and capital, while labourers and their inner worlds becomes poorer (Cox 1998). Referring to this, Marx stated, "the worker becomes all the poorer the more wealth he produces ... The worker becomes an ever cheaper commodity the more commodities he creates" (Marx 1978:71, as cited in Stuart et al. 2012:205). The problem is that the alienating labour deprives the worker's own essence, "things of animals became things of human beings, while things of human beings became things of animals" (Jiang 2006:102).

Alienation of labour is a common occurrence in the world today. Most employees go to work from Monday to Friday, and some even work over the weekends and late into the evenings, but unfortunately they do not work for themselves. You have to check in when you get to work and check out when you are leaving, so that at the end of the month when you are to be paid, you will be paid for the number of hours you were in the workplace. Even if you work twice or thrice as hard in the few hours you were present, it will not reflect in your payslip since your labour is owned by someone else, and they only pay you for your man hours. The link between you and your labour is perhaps your employer, who now owns your labour, and also owns the results of your labour.

Moreover, the devaluation of labour is akin to the devaluation of human beings which is also linked to the increase of the value of the things (the value of material) (Fischer 1996; Cox 1998). The products produced by the alienated labour reversely enforce and dominate the labour, as Ollman (1976; Stuart et al. 2012:205) suggested: “workers cannot use the products of labour for their own livelihood, the products of labour belong to an external entity, the worker has no control over what he/she produces nor what becomes of the product, and, most importantly, taking part in production perpetuates and bolsters the same system that enslaves the worker.” Considering both the quantitative and qualitative aspects of the production of commodities, Cox (1998) cites *Essays on Marx's Theory of Value* by Rubin. In the essay, Rubin offers some examples (Rubin 1975, as cited in Cox 1998) as follows. Quantitatively, “the worker is paid less than the value he creates. A proportion of what he produces is appropriated by his boss; the worker is, therefore, exploited.” Qualitatively, then, “he (the worker) also puts creative labour into the object he produces, but he cannot be given creative labour to replace it.” Rubin is concerned with the extinguishing of a labourer’s creativity in this system, because “in exchange for his creative power the worker receives a wage or a salary, namely a sum of money, and in exchange for this money he can purchase products of labour, but he cannot purchase creative power. In exchange for his creative power, the worker gets things” (Rubin 1975, as cited in Cox 1998). This loss of creativity is at the heart of Marx understanding of alienation from the product.

3.4.2 Alienation from productive activity

The second provision of Marx’s alienation theory is that workers are alienated from their productive activities. Jiang (2012:102) explains that the “labour of workers was [is] not a voluntary labour, but a forced and compulsory labour. Thus, it was [is] not a means to satisfy the need of labour, but a means to satisfy needs outside the need of labour... The labour was [is] not labourers themselves, but others; neither the labour belonged to labourers nor the labourers themselves belonged to themselves, but others.” Under capitalism, workers survive by selling their labour power to capitalists. In the process, their labour does not have their self-affirming or creativity; instead they become a despised activity. That is to say, the worker “does not affirm himself but denies himself, does not feel content but unhappy, does not develop freely his physical and mental energy but mortifies his body and ruins his mind” (Marx 1978:74, as cited in Stuart et al. 2012:205).

The labour activity is not controlled by workers, but capitalists (Cox 1998). According to her explanation, as the driving forces of labour move towards obtaining higher profits, this begins to break down the labour process into smaller parts. One of the best examples of labour process in modern times is the assembly line. Cox (1998) argues that the method has been spreading since Marx’s day. She explains that this method has several consequences in

society. Firstly, the process is organised such as it does not need a skilled labour anymore; it is divided in units of production and distinct procedures or techniques, so that “the unity of thought and action, conception and execution, hand and mind, which capitalism threatened from its beginnings, is now attacked by a systematic dissolution employing all the resources of science and the various engineering disciplines based upon it” (Braverman 1974:171, as cited in Cox 1998). The process treats labourers as machines, in order to work each subjective working process, “the entire work operation, down to its smallest motion, is conceptualised by the management and engineering staff, laid out, measured, fitted with training and performance standards - all entirely in advance” (Braverman 1974:171, as cited in Cox 1998). In this process, Ollman (1976; Stuart et al. 2012) describes the specialized workers as putting themselves into part of a production machine, rarely using their own consciousness and abilities. Fromm also points out that “the worker becomes an instrument for an external purpose and experiences himself as an alien” (Fromm 1955:111, as cited in Stuart et al. 2012:205).

When labourers are not able to associate with the end product, the consequences can be dire to the firm. The reason for this is because it is easier for them to pay less attention to detail when they are working because the final product and the end user probably do not care the world about them. This is one of the demotivating aspects of the alienated labor market.

Finally, Marx argued that alienated labour brings the deformed, stunted, and deskilled creator (Stuart et al. 2012). Moreover, labourers cannot have any opportunity to control their producing activity, as well as to put their consciousness into their activity. Labourers do not appear as the “authentic master of the process” anymore (Cox 1998). Cox (1998) explains that the “lack of control over the work process transforms our (labourers’) capacity to work creatively into its opposite.” As Marx (Braverman 1974:80, as cited in Cox 1998) mentioned, they experience “activity as passivity, power as impotence, procreation as emasculation, the worker's own physical and mental energy, his personal life - for what is life but activity?- as an activity directed against himself, which is independent of him and does not belong to him.”

The moment the labourer is separated from their productive process, the productive capacity becomes worthless. People work because they have to, and not because they want to. This is why most of the workplaces have employees who are frustrated by so many things in the institution of work where they belong. Today when you go to a construction site, you will come across workers who are working so hard to get their hourly pay at the end of the day, but not because they want to make the final outcome of the house amazing. It is therefore up to their employers to look into other means of getting them to work efficiently, either through bonuses, or at times threats of being sacked. Since their earnings are important to

them, the workers have to keep working harder, even at minimum wages, and hope that one day they might be able to build their own houses. Their desire is therefore not to have the house completed in the best way possible, but to attain a particular quota of work per day so that they can be paid their dues.

3.4.3 Alienation from species being

The third provision of alienated labour theory is alienation from species being, or, as Jiang puts it “the generic essence of human beings” (Jiang 2012:102). Marx (as cited in Jiang 2012:102) said, “in that case, the alienated labour caused such results that the generic essence of human beings, whether the nature or the spiritual and generic capacity of human beings, became the alienated essence of human beings and became a means to maintain his personal subsistence. The alienated labour made the body of human beings, the nature outside their body, their spiritual essence and their essence alienated from the human beings themselves.” For Marx, species symbolized unique potentialities, which indicated human being (Ollman 1976; Stuart et al. 2012).

Therefore alienation from species being means to lose potentialities as human being in the process of becoming nonhuman. Stuart and his colleagues describe features of species being as follows

Species being entails relationships with nature and the practice of species life activities. Species being is realised through an active species life, fulfilling innate species needs through the use of species powers. (...) It entails free activities and self-conscious, rational, and universal production. Marx emphasised that humanity produces beyond their immediate needs and can do so in a collaborative fashion”. What this means is that when working together, we have the potential to work harder and deliver over and beyond what we need momentarily. Most employers use this theory to encourage workers to work for them harder and more productively over and over again, though none of them ever cares about the personal experiences that the workers go through. To them and to most, it is a matter of the end justifying the means. (Stuart et al. 2012:205)

Marx develops a critique of capitalism that explained how labourers became alienated from their being. Marx asserted that capitalism changed labourers to become estranged from “man’s species being, both nature and his spiritual species property into a being alien to him” (Marx 1978:77, as cited in Stuart et al. 2012:205). Moreover, the division of labour under capitalism accelerated the alienation (Cox 1998). In the Manuscripts, Marx described, “it is true that labour produces marvels for the rich, but it produces privation for the worker. It produces palaces, but hovels for the worker. It procures beauty, but deformity for the worker.

It replaces labour by machines, but it casts some of the workers back into barbarous forms of labour and turns others into machines. It produces intelligence, but it produces idiocy and cretinism for the worker” (Marx 1975:325, as cited in Cox 1998).

Capitalists primarily focus on the improvement of the rate of profits, so as to occupy their selling portion in the market. This competence leads the excessive amount of products in the market in specified products. Cox (1998) highlights that the products are produced more than our needs, which can explain the current the capitalistic economic crises: “it is our social organisation which prevents us enjoying the potential of our ability to produce.”

We are driven by the need to be the best or at the top of whichever chain of hierarchy that we subscribe to in the society. Therefore the higher we get in terms of profits, the better our position will be. Such actions are common in the capitalist society because everyone wants to be the best. We therefore do not produce to enjoy our work, but to meet the needs of others, so that we can earn from the same. As a result all energy is channelled towards the long term profits other than satisfaction from our hard work.

As Marx argued, in addition, alienation from human beings is also alienation from other social beings. Cox (1998) explains that one’s involvement in society means that one has the ability “to act collectively to further our interests” and “to match what we produce with the developing needs of society.” Under capitalism, however, the ability is misused because of the separation of skills and its sole intervention in the production of commodities to obtain higher profits. Cox (1998) explains on the alienation from social being as linking to the current environmental issues people confront, “thus, rather than consciously shaping nature, we cannot control, or even foresee, the consequences of our actions. For example, new, cheaper techniques of production may, when repeated across industry, produce acid rain or gases which destroy the ozone layer. What makes us human is our ability to consciously shape the world around us. However, under capitalism our labour is coerced, forced labour. Work bears no relationship to our personal inclinations or our collective interests.” It is common to come across people who only go to work because they are paid sums that they consider enough to meet their needs, and not because they love what they do. In such a society people are driven by the need to get more money and not to achieve a sense of satisfaction from their hard work.

A good example of alienation from the species being is those who work late into the evenings. Naturally a mature human being requires 8 hours sleep as recommended by so many doctors all over the world. However, you will easily come across people who work two jobs and only manage to do with 2-3 hours of sleep on a daily basis. There are also those who do not work two jobs, but still work so late into the evenings that when they get home,

they can only muster 3 hours of sleep. For such individuals, they would rather work harder and impress their employers while taking no regard for their health. This is how we become slaves to the work system. Most people start to do this and give themselves a timeline of say a year then they will quit and venture into other things. However, 3 years down the line, they are still doing the same thing, working late hours into the evening, and perhaps the only difference is that they are now in senior management positions, and earning more than they did. However, the species being of which they belong becomes a stranger to them. They even become strangers to their wives, husbands and children who barely get to see them.

3.4.4 Alienation from fellow humans

The fourth provision of the alienation theory by Marx is alienation from fellow humans (Stuart et al. 2012). Jiang (2012) described Marx's assertion that the other three aspects of alienation led to human beings being estranged by other human beings. She explains that, "when human beings were opposite to themselves, they were also opposite to others. Anything that is applicable for the relationship between human beings and their own labour, their own labour products and themselves is also applicable for the relationship between human beings and others, others' labour and others' labour object" (Jiang 2012:101). This means that it is not possible to expect someone who has been working for their own personal gain to start working for satisfaction and if this were to happen, it might only last so long before the individual reverts to the original work plan, for personal gain.

Meanwhile, Strandmark (2004) suggests emotional suffering as a feature of an individual alienated from fellows, although it is not directly reflected on the Marxian perspective. The author suggested that "during periods of alienation, it becomes difficult to find new friends, especially for the handicapped individual. She/he often has few friends and few workmates because she/he appears as a stranger to others" (Strandmark 2004:144). The suffering can be described by the author that a situation of being excluded from the community, one's dissatisfaction with oneself, experiencing cultural differences through immigrant, bitter competence with siblings (in some cultures), having socially excluding disease, and so on. Referring to them, Standmark (2004:144) finally argues that it is "a feeling of being part of society in the short term but creates long-term barriers to communication with other groups."

Alienation from fellow humans is a reality, with most of the affected individuals being so tied up to their work that they do not see the need to be among other people. To them, they chase success through all means possible, regardless of what they lose in the process. Most of the time you will come across lawyers whose only circle of friends includes other lawyers and professionals within the legal fraternity. Such people do not fit into the normal society because it is dynamic, and is composed of so many different people. When such individuals

call time to their careers, they also find it hard to fit in to society because they never had time for the other individuals.

To sum up of the four provisions, Marx looks at alienation from different aspects, essentially breaking down the process of human interaction in society with relation to the work force in four parts. Naturally we are driven to become the best at what we do in society, and this need to be the best is one of the key reasons why we are alienated from one another in different ways.

Marx criticized capitalism based on the fact that the labourers are alienated from their personal beings in the pursuit of success at work. People lose themselves in the pursuit for glory and success in whatever it is that they do from day to day, and this formed the basis for his categorization of alienation as under productive capacity, species being, fellow humans and from the products in the labour process. This is a form of modern age slavery and the well-being of the individuals participating in the production process rarely ever gets paid attention to.

Alienation and well-being cannot go hand in hand because the core concept of alienation erodes the basics of well-being. Naturally, the human being is a social animal, and we thrive in societies and communities. However through alienation as Marx discusses it, we are separated from the things we spend so much time being around.

When someone is alienated from their individual being, it is very easy to lose confidence and feel that the whole society is out to make you feel so low. As a result someone who loses self-confidence ends up being alienated from society.

It is important to pay attention to individual well-being because it is the individuals that make up the society. When the different persons in society are happy as a result of being well-taken care of with respect to their work, their relations with others in and away from the work, it is easier to have a happy society, one whose well-being is paramount.

3.5 Contemporary studies on alienation

The publishing in 1932 of *the Economic-Philosophical Manuscripts of 1844* (which was unpublished text at that time) led to a revision of the concept of alienation of Marx (Musto 2010). Musto (2010:81) argued that considering his alienated labour theory within the economic context of capitalism, Marx was the pioneer to widen the problem of alienation “from the mere philosophical, religious and political sphere to the economic sphere of material production,” which led the academic development of political economy. Alienation theory rapidly spread out, becoming one of the most discussed philosophical concepts of the twentieth century (Musto 2010). Two key schools of thought on alienation have led to

contemporary perspectives: American socialism and neo-Marxists. These however, interact with a broad range of other perspectives that have dealt with alienation both within and beyond engagements with Marxism.

After the World War II, and particularly, since the early 1970s, the concept of alienation became part of the sociological lexicon in modern society (Williamson & Cullingford 1997). Given its complexities and multiple dimensions, vigorous debates on alienation had taken place during this period. Although a widely circulated icon across the borderline of academic ground, the vigorous debate on alienation theory reversely led to some problems such as “a combination of semantic confusion, questionable validity and reliability as a measurable construct and lack of conceptual credibility” (Williamson & Cullingford 1997:263). The concept was criticized of using as “a panchreston, a vogue term that when analysed is essentially meaningless” (Johnson 1973; Williamson & Cullingford 1997:263). As re-established by various theorists of different academic fields, the dimensions of alienation seemed not to explain anything because of their attempt at explaining all (Denise, 1973; Johnson 1973; Williamson & Cullingford 1997).

According to Cox (1998), the definition of alienation became vague after Western Marxists “intermingled with idealist theories, which explained alienation in terms of psychology rather than the organisation of society.” Rather than denying the heart of capitalism such as the class of people economically structured and its ruling the material world, they tried to analyse alienation as the individual psychological state and suffering in society. Such rift was deepened by the strong relationship between Marxism and psychoanalysis. Mandel and Novak (1970:6, as cited in Cox 1998) explained “alienation was seized upon to explain the miseries of modern life, and the 'lonely crowd', 'those aggregations of atomised city dwellers who feel crushed and benumbed by the weight of a social system in which they have neither significant purpose nor decision-making power'. Alienation came to refer predominately to a state of mind, rather than an understanding of how social organisation affected human beings.”

Despite the flow of psychological trend, there was also an opposite body of scholarship that adhered to Marx's notion of alienation within the political-economic body. Cox (1998) supports this perspective with the writings of Marx (from *the Manuscripts* to *the Grundrisse* and *Capital*) on alienation, arguing that alienation is merely not a state of mind; the species being is shaped as whole by its locating in society, and so is “the roots of the individual psyche.” That is to say, “if alienation is only a specific psychological problem, then it follows that the solution to alienation must be sought exclusively in the individual

consciousness. If alienation is predominantly a state of mind, there is an implication that it can be cured without fundamentally changing the organisation of society” (Cox 1998).

Psychological well-being might be considered from a personal or an individual point of view but in the long run individuals make up a society. In as much as the context of well-being can be looked at from the point of view of the individual, it is important to also take note of the collective abilities and the effects that togetherness has on the society.

Anyhow, alienation theory is still evolving. In this study, we consider two big streams which are largely accepted as the most significant descendants of Marx’s alienation: American socialism and Neo-Marxism. Regarding the relationship between the two, Williamson and Cullingford (1997:266) said that the notion of alienation of the former is “the induced distressed psychological state,” while the latter is “the process of oppression (by socio-political milieu).” Musto (2010:94-5) said that the former is “scientific,” while the latter is “political” ground. That is to say, “the differences between the two perspectives outlined above turned essentially on whether one sought to explore the sociological causes of alienation with reference to certain social and historical structures, or whether one wished to chart the psychological experiences of alienation as played out in the subjectivities of individual workers” (Yuill 2011:106).

Musto (2010) mentioned that the alienation theory espoused by American socialists was developed as maintaining the values (the existing world order) governed by US; that is why the latter began to stick to values of original alienation theory by Marx against the hegemonic values from US. In spite of those differences, both schools identified themselves as being inheritors to Marx' legacy. Yuill (2011) suggests the following parallels. Firstly, both agreed that alienation caused by individual experiences can also be traced of the structures of the one’s involved society (namely, one’s mediated by structure and agency). Secondly, the general appearance of alienation is a low sense of control, and a decrement of (positive) expressions, negative emotional relationship with others. Lastly, one’s various life events experiencing individually as well as collectively may reflect the one’s responses and reactions to alienation.

3.6 Alienation – American socialists

The impact of psychoanalysis of alienation in society among scholars in Europe, the concept also began to be actively discussed in North American sociology in the 1950s (Musto 2010). During its earlier period (the first half of the 1950s), although the basic framework was within the logic of Marxian, namely the rift between individual and society (Schacht 1970; Musto 2010), the main stream of US sociology (and its affected former European philosophy) was to see alienation as an individual psychological state (Clark 1959; Musto 2010).

Therefore, they believed the solutions depended on one's capacity to adjust to the existing social system, not on the collective movement to change the current social absurdity (Schweitzer 1982; Musto 2010). Meanwhile, there were also some authors conceptualising alienation as a positive life event (or experience), regarding it as a way to develop one's inherent ability, as an engine of creativity. (Kaufman 1980; Musto 2010)

Soon, however, there would be a critical shift in the understanding of the causes of alienation in society from individual capacity to social structure. Musto (2012:93) said, "The conceptual narrowness of the American sociological panorama," usually focusing on inherent themes of individual suffering, was changed after the publication of *On the Meaning of Alienation* (Seeman 1959). In the short article, Seeman approached alienation with a social-psychological interpretation of alienation, theoretically based on the Marxian notion of alienation, Durkheimian anomie and Mannheimian functional and substantial rationality (Yuill 2011). In his provisions of alienation, Seeman (1959) suggested six dimensions that one's alienation could be shown as, namely: powerlessness, meaninglessness, normlessness, cultural estrangement, self-estrangement, and social isolation. His concept of alienation soon became an obligatory reference for all scholars in this field, being central in sociological work (Musto 2010).

Thus, American sociology generally saw alienation as a problem linked to the industrial framework and its main influence on human psychology, rather than a matter of capitalism or socialism (Heinz 1992; Musto 2010). Including Seeman, various American socialists explored the phenomenon of alienation in society.

Although alienation was a popular subject in US sociology, the concept has attracted less interest since the 1980s, as evidenced in the number of papers on alienation which has markedly decreased since (Yuill 2011). Searching the title of articles in three US major sociology journals (*The American journal of sociology*, *American sociological review*, and *Social psychology quarterly*), Seeman (1983:171) reported that among nearly 1,000 publications there were no articles whose title had a word of alienation. Following his searching criteria, there are only three articles specifically relating to alienation from 1990 to 2008 (Yuill 2011). Since then, only one article marking the Turn: *Obligation, Engagement, and Alienation in Group Discussions* have been published after 2010. For the reason, Yuill (2011:107) points out the "lack of methodological plurality that could create a much richer and deeper exploration of alienation." According to him, most of these studies were

⁵In a book of Walter Kaufman *The Inevitability of Alienation*, Kaufman mentions about the essence of alienation in one's life, "life without estrangement is scarcely worth living; what matters is to increase men's capacity to cope with alienation" (Kaufman 1980:lvi, as cited in Musto 2010:92).

conducted by a quantitative research with the Likert scale. Likert scale is, a psychometric scale which is commonly involved in research that employs questionnaires and is one of the most widely used approaches in survey research.

Yuill (2011) said that although Seeman's six dimensions of alienation opened a new academic era to measure alienation, the developed measurement scale was possible only for studies of the mass population. Therefore, it sometimes failed to read personal live experience of alienation, as qualitative methodology should have developed in step for analysing the survey data in order to exclusively interpret the voice of alienation.

American sociologists argued that this perspective on alienation and their methodological choice enabled researchers to study alienation more neutrally with a scientific base and more freely from any political associations (Musto 2010). Nevertheless, some critiques argue that this transition led to the theoretical impoverishment of the original concept of alienation as developed by Marx. They argue that a-political study is un-realistic, because the dominant values and social order lay hidden behind these banners even though researchers conduct studies on value-neutrality (Musto 2010). Moreover, they critique that this perspective has caused a change of people's perception on alienation from socio-political to (hyper-) psychological concept. Treated as individual pathological symptoms (excluding political milieu or social context), alienation is regarded to be curable at the individual level "referring to an extraordinary variety of psycho-social disorders, including loss of field, anxiety states, anomie, despair, depersonalisation, rootlessness, apathy, social disorganisation, loneliness, atomisation, powerlessness, meaninglessness, isolation, pessimism, and the loss of beliefs and values" (Josephson & Josephson 1968:13, as cited in Cox 1998). In other words, the realm of sociology is often evaluated as reducing the idea of alienation to a phenomenon of individual maladjustment to social norms; alienation became a partial category from the original Marxist tradition, which criticize the capitalist mode of production with complicated phenomenological analyse on man's labour and social and intellectual way of life (Geyer & Schweitzer 1976; Musto 2010).

The socialist society lays a lot of emphasis on centralized control of resources or means of production. Common ownership thrives in such societies and this is why alienation would not bear fruits in such a society. Taking into consideration the fact that alienation brings forth a sense of personal approach and individuality, the common goal would cease to exist in such a society. Alienation brings forth effects like demoralization in the workplace, depression among the workforce, inferiority and superiority complex to say the least. Such would greatly affect the individual well-being and in the long run, the outcome might be

better in terms of the production and the income from labor work, but the individual's well-being will be deteriorating.

3.7 Five dimensions of alienation according to (Seaman 1959)

3.7.1 Powerlessness

Seaman mentioned that the notion is originated in the Marxian view of the worker's condition in capitalist society. In his essay, Seaman mentioned three specific ideas which are come from Marx's theory. Firstly, Seaman brought the process of powerlessness from Marx's description of the work place in the industrial system, which alienates labourers from the products as well as product activities. However, Seaman sees the labourer's experiences as a social-psychological view, he refers "it does not treat powerlessness from the standpoint of the objective conditions in society; but this does not mean that these conditions need be ignored in research dealing with this variety of alienation. These objective conditions are relevant, for example, in determining the degree of realism involved in the individual's response to his situation. The objective features of the situations are to be handled like any other situational aspect of behaviour to be analysed, measured, ignored, experimentally controlled or varied, as the research question demands."

Departed from the Marxian labour theory, secondly, Seaman explains this version of powerlessness as follows, "the individual's expectancy for control of events is clearly distinguished from: The objective situation of powerlessness as some observer sees it; The observer's judgment of that situation against some ethical standard, and; The individual's sense of a discrepancy between his expectations for control and his desire for control."

Lastly, Seaman points out that one's powerlessness can be generated when one feels some "internal versus external control of reinforcements."

3.7.2 Meaninglessness

Seaman refers to the second type of alienation as "the individual's sense of understanding the events in which he is engaged." For example, when one is under difficulties or excluded from decision-making, the one is alienated as experiencing meaninglessness. Seaman explains the process of meaninglessness as citing Mannheim's description, "this variant of alienation is involved in Mannheim's description of the increase of "functional rationality" and the concomitant decline of "substantial rationality." Mannheim argues that as society increasingly organizes its members with reference to the most efficient realization of ends (that is, as functional rationality increases), there is a parallel decline in the "capacity to act intelligently in a given situation on the basis of one's own insight into the interrelations of events."

3.7.3 Normlessness

Seeman borrowed the third variant of the alienation theme from Durkheim's description of "anomie," which traditionally "denotes a situation in which the social norms regulating individual conduct have broken down or are no longer effective as rules for behaviour." Seeman offers some phases of one's alienation as normlessness. When a person is under normlessness, the person does not consider the standards or the consequent of society; the society, in turn, becomes farther from the means to run society such as the development of instrumental, controlling attitudes. The anomic situation finally leads one's "socially unapproved behaviours (which) are required to achieve given goals."

3.7.4 Isolation

This usage is relevant to one's "intellectual" role. Considering the range of the concept, Seeman mentions, "This usage does not refer to isolation as a lack of "social adjustment" of the warmth, security, or intensity of an individual's social contacts." It means that isolation in Seeman's does not standardized by one's capability of such as being adapting to new conditions. Instead, Seeman suggests that when one experiences the detachment of "the intellectual" from the standard (namely the popular or customized); the one is under isolation, estranged from the one's society and the culture.

3.7.5 Self-estrangement

For the final aspect of alienation by Seeman, Fromm well illustrates the characteristic in *The Sane Society*. In the book, Fromm described the feature of one's self-estrangement as the one experiences oneself as an alien.

Despite several different aspects on alienation, finally, alienation in this perspective shows four common parts as follows: Where one's loss of self or relationships with others is experienced; That is profoundly important to being as both a societal member and an individual is unsatisfied and intervened, and; Whose root cause is found in the individual's relationship with wider historical and socio-political processes (Yuill 2011).

3.8 Alienation – neo-Marxists

The neo-Marxists have developed a rich and complex legacy (Williamson & Cullingford 1997). Aiming at maintaining the original spirit of Marxism, they basically maintain one's de-alienation would be resolved in a structural reform of capitalistic society. Primarily, neo-Marxists have made alienation theory more humanized, as reconsolidating the relationship between labourers and labour. With a normative focus, they believe work place by the structural logics of capitalist accumulation in the current society deprives people's free-time, separated an enjoyment part from labour (Williamson & Cullingford 1997), and degraded human creativity and a sense of control (Yuill 2011). The introduction of Marcuse as one of

the pioneers of the neo-Marxism discusses the nascence of the recent trend of the neo-Marxism through their dealing with alienation matters having a spatial and geographical perspective onto the urban space.

Describing the post-war societies of the modern world as blending ideas of Marxism and psychoanalytic thinking, the neo-Marxist Marcuse attempted to veil out the cause of widespread poverty and world widely exploiting situation (Williamson & Cullingford 1997). Within the process, the proletariat is centred as victims as well as offenders working under the ruling power (Williamson & Cullingford 1997). In this context, Marcuse was naturally interested in Marx's theory of time and freedom (Wujin 2006). He wrote, "the first precondition of freedom is to decrease the working-time so as to make the amount of mere working-time no longer block human development" (Marcuse 1970:152, as cited in Wujin 2006:122).

Profoundly understanding, he found out modern people usually perceive time as two parts, working and free time. He developed this logic into an analysis of the working system, which does not allow labourers freedom and time then finally led them to have a false desire (to avoid alienation), namely leisure time (Williamson & Cullingford 1997). He wrote thus: "after being free from the requirements of ruling, the quantitative decrease of working-time and working-energy will lead to a qualitative change of human existence: what determines the existent contents of human will be the free time, rather than the working time" (Marcuse 1970:218). Marcuse also focused on the increasingly stronger phenomenon of automatization in the modern capitalistic society. He asserted that "automatization would be likely to reverse the relation between free times and working time, which is the foundation of the existing civilization; that is, it is possible to minimize the working time and to make the free time be the dominant time. That reversal would lead to the radical revaluation of various values." He expected that the future society follow Marx's saying that "wealth is no longer measured by labour time but by disposable time" (Marx/Engels 1987:94, as cited in Wujin 2006:122).

Indeed, freedom among the working class became a repressed and achievable one merely through ceasing their labour (Williamson & Cullingford 1997). This finally led to shrink the overcoming project of alienation in society, because the revolution (to deny the current working system) interfered their economic livelihood. Therefore, Marcuse undoubtedly expected that the recognition of alienation and the drive of revolution would enthuse minorities outside the systems of production, e.g. artists and writers, the long-term unemployed, ethnic minorities, and students (Williamson & Cullingford 1997). In spite of criticism on modern civilization, meanwhile, Marcuse also argued that technology and the

decrease of working time and the improvement of the working condition help people to have more freedom, which is aligning to the idea of American socialists that the new technology generally can liberate workers from being alienated (Blauner 1964; Williamson & Cullingford 1997; Yuill 2011).

3.8.1. Land control

The city has been a fruitful arena for the discussion of alienation. Through urbanisation, there was an attempt of spatiotemporal connections among neo-Marxian philosophers, geographers and landscapers (Williamson & Cullingford 1997). The French Marxist Lefebvre (1961, 2008a,b,c), for example, suggested the importance of focusing on the production of social space, and its impact on everyday life. Lefebvre particularly contributed on widening the study of alienation to incorporate the use of space and the built environment. In this context, much theoretical discourses on the relationship between nature and society were discussed. Repressive linkages between industrial social production and urban landscapes were suggested to cause alienation (Hall 1996; Larson 2006).

Moreover, urban life styles having the lack of ecological connection between people and place were suggested to decrease a sense of place, a sense of belonging, as maintaining alienation (Rogers 1995; Larson 2006). A sense of place became important; many places have been considered whether to increase the sense or meaning of place in industrial and modern areas. In various discourses, the human impact agenda of landscapes were actively discussed under natural realism and social constructionism (Jones 2002; Hawkes & Timothy 2013) that how the city should be engaged to the environment appropriately (Demeritt 2002). They tried to understand “alienation from the world as a “spatial and temporal separation from the human subject’s context” (Dickens 1992:158, as cited in Hawkes & Timothy 2013:2), wherein nature becomes a replaceable commodity, prized solely for its exchange value. It is argued that this leads to a sense of ontological insecurity “and anxiety as people is removed from their own bodies and the wider environment on which they depend, both materially and psychologically” (Hawkes & Timothy 2013:2).

Meanwhile, considering alienation as separation of social and natural entities has been sometimes criticized as its problematic Cartesian binary logic that “this division of subjective human minds and objective physical matter metaphysically separates nature from society” (Sessions 1995, Pepper 1996, Meyer 1999; Hawkes & Timothy 2013:2).

Finally, urban green spaces (i.e. parks and community gardens) are recommended as beneficial places, particularly being illuminated by its recovering power of attachment and emotion on places which has been lost among people living in urban space (Rogers 1995; Larson 2006).

As representing the rights of citizens, the Neo-Marxists firstly focused on the land control issues occurring in urban space. According to Peluso and Lund (2011:669), land control “directs our attention to how actors are able to hold onto the land, and to the institutional and political ramifications of access, claims, and exclusions.” Historically, the questions to the land were issued by Western Marxists since 1900s with the rise of “colonialism, nationalisms, the invention and triumphalism of global markets, collectivization’s, and privatizations” (Peluso & Lund 2011:667). Their questions were mostly about agrarian and economic matters, “issues of land use, labour practice, and forms of social control have animated these contexts and questions, including engendered production, slavery, tied labour, Green Revolutions, the purported end of the peasantry, the future of family farming, and wage labour. Land control, alienation, and dispossession have played classic and contemporary roles in primitive and on-going forms of accumulation, with new frontiers, various kinds of territories, and ethnic and radicalized conflicts emerging at virtually all levels” (Peluso & Lund 2011:668). Widening their focus globally under the situation including the spread of colonialism and the rise of nationalism, they focused on the emergence of alienation by land control, its various form such as ethnic conflicts, territorial dispossession with such terms of exclusion, alienation, expropriation, dispossession, and violence (Peluso & Lund 2011).

3.8.2. Urban common

In addition to the land control, Neo-Marxists also expanded the concept sharing the term of ‘urban common’ and tried to find out social relations within the ground of urban. In this sense, they often used it to refer to environmental problems; the issues of alienation by Neo-Marxism were enlarged to environmental and ecological ones. This alienation process has been labelled as several terms such as “the ‘extinction-of-experience’ (Pyle 1978; Miller 2005), a sort of on-going generational amnesia among city peoples about their relationships to, and dependence upon, diverse ecosystems (Leopold 1949; Kahn & Friedman 1995; Kahn 2002; Pilgrim et al. 2008)” (all are cited in Bendta et al. 2013:18). In the studies, scholars often regarded urbanization as a dis-connector of nature from people due to decrease of green space (Theodori et al. 1998; McDaniel & Alley, 2005; McKinney, 2002; Stokes, 2006; Bendta et al. 2013), as well as a process of over-consumption more than the service ecosystem provide which finally leads environmental degradation (Folke et al. 1997; Grimm et al., 2008; Bendta et al. 2013). In this context, the ecological perspective was reflected on the Neo-Marxism, since they seriously considered that blocking a way of learning on environmental knowledge can be an urgent alienation occurring in the city, where the dominant portion of the population is living.

In terms of urban common property system, a new approach to see nature as hybrid space for people and environment (Yuill 2011). Regarding to the term of “urban common,” Colding and Barthel (2013) said that it is still in a normative status rather than providing some precise definition. They summarize some sharing parts on urban common among scholars as follows:

- Public open spaces such as community gardens, building facades, vacant lots, and public housing sites, which are “publically accessible, non-excludable, and managed through shared governance.” (Campbell & Wiesen 2009:11)
- “Shared natural environments” (Linn 1999)
- Urban public spaces (Blomley 2008; Campbell & Wiesen 2009)
- Space having common property rights (Ostrom 1990)
- Space for urban resilience building.

In this context, Colding and Barthel (2013:156) suggest urban green common with three examples of “collectively managed parks, community gardens, and allotment areas” in order to manage the city more resilient “with a focus on their institutional characteristics, their role in promoting diverse learning streams, environmental stewardship, and social–ecological memory.” The emergence of urban green commons appears closely linked to dealing with societal crises and for reorganizing cities; hence, they play a key role in transforming cities toward more socially and ecologically benign environments. With a property rights analytic perspective, Colding and his colleagues (2013) researched the right of urban green space in business site in Sweden, Germany, and South Africa. With case studies, they found out that urban common property systems have the important connections to “social–ecological learning, and management of ecosystem services and biodiversity” (Colding et al. 2013:11). In this hybrid space “reconnecting city-inhabitants to the biosphere,” they found out some cost reduction for ecosystem management (Colding et al. 2013:1). Finally, they suggest, “the right to actively manage urban green space is a key characteristic of urban green commons whether ownership to land is in the private, public, the club realm domain, or constitutes a hybrid of these” (Colding et al. 2013:11).

3.8.3. Metabolic rift

The issue of land control in urban space is also with the related neo Marxist theory of the metabolic rift. Marx highlighted the importance of comprehension of the essence of labour,

“labour is, first of all, a process between man and nature, a process by which man, through his own actions, mediates, regulates and controls the metabolism between himself and nature” (Marx, 1976:283, as cited in McClintock 2010:192). Under situations of

environmental deprivation such as urban pollution, lowering and soil fertility in agricultural land since 1850s, the neo-Marxists, particularly environmental sociologists and geographers, found out that it was closely connected to the quality of labour so that affected to decrease social metabolic processes. They noticed a city's changes based on Marx's criticism on labour in the development of capitalism (and its influence on urbanisation). For example, the emergence of industrial agriculture after World War II combining with capitalism, such as large scale mono-crop system or land use for large feedstock, brought the break of the balance in ecosystem so that biophysical degradation and changed geographical patterns, namely the metabolic rift (Foster & Magdoff 1998; Clark & York 2008; Moore 2011).

They found out such forms of alienation of urbanites from the natural environment as well as degraded balance in the material trade between the biophysical environment and its transformation into products for social development products, namely social metabolism (Foster 1999 & 2000; Moore 2000; Swyngedouw 2006; Clark & York 2008; McClintock 2010). They argued that it is crucial to perceive things in the city as co-production by social and natural processes, "understanding 'socio-natures' (such as cities, agricultural landscapes or other areas of resource extraction) is contingent upon uncovering the ways in which social and natural processes are co-produced through social metabolism" (Harvey 2006; Swyngedouw 2006; Smith 2008; McClintock 2010:193). As such, the concept is one of critical and powerful perspectives in political ecology (Moore 2011) and it has contributed to release un-seen socio-ecological patterns by world-wide developmental process under capitalism. Many environmental sociologists have used the theory of metabolic rift to explain shifts in nutrient cycling under capitalist agriculture as Marx did (Foster 1999 & 2000; Clark & York 2008; Foster & Magdoff 2000; McClintock 2010), as well as the ways that sustainable agriculture might help to overcome this rift (Foster & Magdoff 2000; Clausen 2007; Clow & McLaughlin 2007; McClintock 2010). Others have expanded the scope of analysis to include broader ecological crises: global warming (York et al. 2003; Clark & York 2005; McClintock 2010), fisheries depletion (Clausen & Clark 2005; McClintock 2010) and the ecological succession arising from the development of global capitalism (Moore 2000; Prew 2003; McClintock 2010). Despite Marx's conception of social metabolism as a fundamentally socio-ecological process, however, most scholarship on metabolic rift has emphasized the ecological dimensions of crises of capitalist accumulation (McClintock 2010).

To sum up, unlike empirical researchers of American sociology, the neo-Marxists are mostly normative theorists. Their discourses much more have focused on how the system released its problems, how it would become better or how it should be reformed in order to the next

era, rather than seen the society directly with the tool of measuring how much people are alienated. According to Yuill (2011:108), their normative position is “an obvious irony (...) (because) Marx always directed philosophers to change the world as opposed to remaining content only to understand it.” For the reason, he points out that putting a relatively higher gravity on empirical experiments of one’s powerlessness and self-estrangement in the spectrum of alienation as a branch of (capitalism-friendly) sociology for the last decades may lead the neo-Marxists failed to accumulate their own empirical work on alienation. Many normative theorists have one distinguish disadvantage that their theory easily become extinguished with a lack of empirical data. In their innovative new path to develop the Marx’s alienation theory as combining ecological perspective, moreover, how the research can prove people are de-alienated from subjects Marx described and how the measurement tool can be developed in order to prove the structural change and its influence on people’s de-alienation. Although green space is well-known as a potential place leading city-dwellers de-alienated, their normative way to maintain the argument reversely interfere to seek out the next paradigm of alienation. That is why this study attempts to explore de-alienation by Marxian perspective and psychological well-being together; the primary reason is that both originate from Aristotle’s eudaimonia.

Based on these studies on alienation the neo-Marxists more flexible in their perception of alienation and welcome a number of the advancements in society as a means to giving people more time to achieve personal respects. In particular, they see the use of technology not just as a means of getting more work done, but in the long run it helps to get more time off normal duties and gives room for personal development. Their concept of alienation spreads over and beyond the political scene as had been discussed by Marx and other researchers in the capitalism era. Their view on alienation is more diverse and considers other aspects of the society that are not directly associated with the human being, though their influence on the well-being of the society stands out. As compared to the researchers within the capitalist era, the neo-Marxists focus on making the society a better place. Their aim is not just to sue society as a laboratory for experiments on alienation, but to provide hints on what is wrong, and possibly answers on how to remedy the situation.

3.9 Implications of alienation

From this discussion, there are a number of implications of alienation that come out clearly, which do have a negative impact on the individual and eventually the society in as far as well-being is concerned.

For an individual and the society to enjoy a good sense of well-being, it is important that they feel empowered by and with the tasks that they carry out from day to day as they go

about their experiences. However, alienation brings forth a sense of powerlessness because the individuals do not enjoy the satisfaction of being one with their work.

It is not just about feeling powerless, but the demeaning nature of the work that the members of a society do is damaging to the well-being of these members in the community. This is because the members of society will feel like they are working for someone, and not for their greater good. In the long run this hampers the harmony in the society, and the well-being.

One of the key aspects of alienation that has been highlighted by scholars like Marx is isolation. Society is made up of individuals who share a common or a number of common ideas and perceptions about all things related to their existence and livelihood. However, when isolation sets in, people become individualistic about their work, the activities they carry out and their lives in general. This is one of the things that wreck the core of the society and its existence.

Alienation brings forth a loss of relations with other people in the society, and it is as a result of this that the well-being in society is damaged. With respect to well-being in the society, the participants in society need to consider major de-alienation moves to make sure that the society can bond on different levels, and encourage interactions and sharing of ideas freely.

It is important to take note of the fact that Marx on his part was inspired by eudaimonia and the need to make sure that there is a sense of fulfilment in the work that is carried out. The studies on alienation by Marx with respect to the labour force are an indication of the demerits that society stands to experience from alienation.

As we proceed to the chapter on urban agriculture therefore, we have to appreciate the effects of alienation on the well-being of the society, and from there look into the de-alienation process through urban agriculture to promote the overall well-being of the society.

3.10 Conclusion

Not just as individuals but also at the society level, there are a number of lessons that we can carry forward with respect to Marx's alienation theory, the neo-Marxist researchers and the overall concept on well-being. First we have to appreciate the fact that for a very long time alienation and well-being have been studied from the perspective of individuals, while not so much work has been done on the effect on society. Perhaps the most credible argument in favour of this notion is that a society is made up of individuals, and when alienation and well-being are studied from the individuals' perspective, the spillover effect applies to the society within which they belong.

Irrespective of the above, Marx's concept of alienation as is the case with the neo-Marxists' borrow from Aristotle's premise of eudaimonia. Eventually they all attempt to take a closer look at the things that make the human being a happy member of the society, though through different approaches. The Marxist view on alienation has often been construed as politically oriented, especially since it focussed heavily on the capitalist society. However, the neo-Marxist concept of alienation brings to the table a whole new dimension of the subject, laying an emphasis on how to move on from the premises that they have put forward.

With reference to the Marxist concepts of alienation, the human being is seen as an individual being in isolation from so many of the important aspects of their work and life, including their own selves. That unfortunately is as far as this goes. However, the neo-Marxist concept looks at alienation on another level. A good example is the introduction of technology in the workplace, which has been aimed at making work more efficient. This is aimed at getting more out of the existing labour force as is the case with the Marxist view of getting the labour to be highly productive. However, the Marxist view on the same ends at the production level, and the individual takes home nothing from their hard work. On the new concept, however, such advancements in the workplace bring forth success from the labour force, but there are benefits to the labourers too, including enlightenment and the ability to spend less time at work while achieving the results desired of them in the first place.

We live in a world where people are ever on the lookout for solutions to problems and means of making life easier. Because of this, the neo-Marxist concept of alienation seems fit for the society that we live in because it does not just mention the problems, but offers solutions or possible solutions to the same. Advancing into urban agriculture, we are trying to tackle worldwide crises with regard to food security, and urban agriculture has been considered one of the means through which such milestones can be achieved. Alienation and well-being are parallels though according to the neo-Marxist views on alienation discussed, there might just be links to which these two can blend. However de-alienation still remains the most important means of getting to achieve an overall acceptable well-being not just for individuals, but for society at large.

The alienation theory by Marx was based on the three step stones: eudaimonia, materialism and the distortion of labour by capitalism. Particularly, his concept of alienated labour is rooted in Aristotle's eudaimonia, living with achievement of the true nature of human in society. Developing the idea, Marx claims the Aristotle's goal of human nature in society, which is the essentially political or social nature of man. Marx demonstrated that enormously varied social factors attribute to human nature not to be fixed, "Marx developed

a materialist theory of how human beings were shaped by the society they lived in, but also how they could act to change that society, how people are both 'world determined' and 'world producing'." (Cox 1998) Finally, Marx established four provisions of alienation from product (material), labour (activity), the species being (oneself or human nature) and each other (between persons). These components are distinctive respectively but interrelated in society.

The publishing in 1932 of *the Economic-Philosophical Manuscripts of 1844* was the starting point of the flourishing era on the concept of alienation. Going through historical events worldwide, such as World Wars and economic development under capitalism, the alienation theory of Marx has been developed. Two big streams which are largely accepted as the most significant descendants of Marx's alienation are discussed: American socialism and Neo-Marxism. Regarding to the relationship between two, the notion of the former is "the induced distressed psychological state," while the latter is "the process of oppression (by socio-political milieu)" (Williamson & Cullingford 1997:266). Alienation in American socialism is often regarded as a personal psychological trait on the scientific ground. Seeman (1959) established its symptoms with five aspects as powerlessness, meaninglessness, normlessness, isolation and self-estrangement.

On the other hand, neo-Marxism deals with alienation on the political ground, focusing on a social phenomenon related to alienation from labour and from nature (McClintock 2009). More inclining the original spirit of Marxism, they basically maintain one's de-alienation would be resolved in a structural reform of capitalistic society. Neo-Marxists have made alienation theory more humanized, as reconsolidating the relationship between labourers and labour. With a normative focus, they believed work place by the structural logics of capitalist accumulation in the current society deprives people's free-time, separated an enjoyment part from labour (Williamson & Cullingford 1997), and degraded human creativity and a sense of control (Yuill 2011). The recent trend of the neo-Marxism is a spatial and geographical perspective onto the urban space with a concept of land control, the urban common and the metabolic rift. Their approaches ultimately move their interest on agriculture in urban space as one resolution.

In spite of those antipodes, both schools identified themselves as being within the framework of Marx (Yuill 2011). That alienation caused by individual experiences can also be traced of the structures of the one's involved society (namely, one's mediated by structure and agency). The general events of alienation are occurred by a low sense of control, and a decrement of (positive) expressions, negative emotional relationship with others.

CHAPTER 4: URBAN AGRICULTURE

4.1 Introduction

Urban agriculture (UA) is the practice of cultivating, processing and distributing food in or around an urban area such as a village, town, or city (Smit et al. 1996). As emerging both in the developing and in the industrialized countries (Gbadegesin 1991; Mlozi 1997), there is a significant portion of the economy that depends on agriculture in the cities and urban areas. At various cultivating scales, approximately 15-20 per cent of the global food production is grown in urban or peri-urban areas (Smit et al. 1996). This is in the face of the fact that the number of hungry people living in cities is growing (FAO 2007).

There is a need for the society as a whole to embrace urban agriculture especially focusing on its sustainable benefits. Key benefits from urban agriculture are known as: 1) connecting city residents to a broader food system; 2) building the community; 3) providing green space and recreation; 4) saving money for public agencies; 5) ecological benefits and green infrastructure, and; 6) offering food access, public health and economic development potential (Philips 2013).

Combining with the era of health, especially, urban agricultural studies is connected to well-being ones. Within the contemporary health discourse (WHO 1948 & 2001⁶), the concept of well-being has emerged as an important indicator of the growing acceptance of a broad definition of health (Germov 1999; Grbich 2004; Kingsley et al. 2009). According to a national study of Netherlands (DeVries et al 2003; Beatley 2011), “people report fewer symptoms and have better perceived general health in a greener environment; 10% more green space in the living environment leads to a decrease in the number of symptoms that are comparable with a decrease in age by 5 years.”

In this context, this study will focus on urban agriculture in its aspects related to well-being and alienation among diverse advantages of urban agriculture. This chapter firstly describes on urban agriculture considering the Ryff’s psychological well-being scales, it explores how UA can be connected to improvement of one’s well-being. Lastly, introducing western Marxism and its recent theories related to urban agriculture, the advantages of UA on de-alienation process are discussed in a perspective of the four provisions of alienation by Marx’s

⁶ According to WHO (1948), health integrates a “state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.”

In 2001, WHO defines positive mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.”

4.2 Urban agriculture and psychological well-being

Urban agriculture (UA) has been recognized as a well-being practice in its way to link humans with UA. This trend is related to people's desire to contact more "naturalness" (Kiesling & Manning 2010:316). In fact, biologically diverse in urban green space contribute to more well-being of visitors to the area (Fuller et al. 2007; Kiesling & Manning 2010). Most familiar look of UA in current cities are gardening, which provides people with contacting UA so that being emotionally, physically, and cognitively satisfied (Kaplan 1973; Francis & Hester 1990; Honeyman 1992; Kaplan & Kaplan 2005; Kiesling & Manning 2010). Home gardens are major bonds with UA in the city; people nurture small livestock or pets, or raise vegetables, spices and medicinal herbs (Madaleno 2001). Beatley (2011) noticed that "continually increasing number of city farmers raise food in backyard gardens in allotment gardens, on balconies and rooftops, which offers the chance for urbanites to connect with soil and plants, to be outside, and eat and savour healthful, tasty food". In this context, UA in a notion of well-being can be shared by urban dwellers with its active and continuous interrelations with UA.

The main advantage of gardening can be said providing enjoyment. Kaplan studied the benefits of gardening; he found that people can get a sense of calm and enjoyment by such as seeing the colours of plants and smelling the odours of different flowers. Further, people can have some physical benefits by working with the soil (Kaplan 1973; Elings 2005). In this context, traditionally, gardening in western countries is one of the most popular home-based leisure activities (Ashton-Shaeffer & Constant 2005; Sommerfeld et al. 2010). Particularly, gardening is one of two main leisure activities (another is walking) among adults older than age 65 years (Yusuf et al. 1996; Sommerfeld et al. 2010). Connell mentioned that the one's ownership of garden indirectly stimulate the one's desire to create or produce attractive environment around their home (Connell 2004; Gross & Lane 2007). This is because the process of urban agricultural activities (conceiving, constructing and enjoying) can be engendered in the garden (Hondagneu-Sotelo 2010:14, as cite in Freeman et al. 2009:137). Moreover, it has been often reported that 'enjoyment' is one motivation to let children spend time in gardening and be willing to explore learning in a garden context (Alexander et al. 1995; Canaris 1995; Moore 1995; Brunotts 1998; Brynjegard 2001; Thorp & Townsend 2001; Faddegon 2005; Blair 2009).

Feeling safe is another advantage of growing plants. Elings (2005:52) said the distinctive effect of plants, "plants are effective in challenging human responses because their environment is in contrast with the social world in which we move. The garden is a safe place, a friendly setting where everyone is welcome. Plants are non-judgmental, nonthreatening, and non-discriminating." According to Kingsley and his colleagues (2009),

people can escape daily pressures in community gardens regarding the place as a sanctuary; respondents identified the garden as spiritual, fitness and nutritional beneficial place. Moreover, Lewis asserted that plants can be one useful subsidiary tool for treating psychological disorders, because “plants and people share the rhythm of life” (Lewis 1996; Elings 2005:52). Unlike other activities, UA is able to let people continuously interact with UA through experiencing a cultivating cycle. They share the events of birth and grow, change and adapt to climate, and live and die (Elings 2005). For example, through working from mowing to harvesting in farmlands, they can directly touch the sources of UA. Rather than feeling UA in a passive way such as walking in the parks or seeing street trees, UA can provide more active greenness to citizens. Elings (2005) finally argued that the biological resemblance makes patients emotional inclining to a plant; it is a safe and un-harmful investment.

Within the contemporary health discourse, the concept of well-being has been arisen as an important barometer of the growing acceptance of a broad definition of health (Germov 1999; Grbich 2004; Kingsley et al. 2009). Referring to holistic perspective on health, psychological well-being is closely linked to human mental health as WHO’s definition of health indicates: “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO 1946, as cited in Kingsley et al. 2009). This definition of health comprehends not just the physical, but also psycho-social elements of health; and it leads to major components of eudaimonic well-being: meaning, purpose, growth, and self-actualisation.

In modern health and well-being studies, many mental health outcomes has been reported to be related to the urban environment’s physical and structural features (Wandersman & Nation 1998; Okvat & Zautra 2011). Emotional connection is produced between humanity and the environment, and people positively and negatively activate descriptive norms toward their surroundings. In this context, some scholars have explained that contact with UA is crucial for well-being including eudaimonic and hedonic happiness (Kaplan 1978; Davis 1998; Wells & Evans 2003; Tyrväinen et al. 2007; Lyytimaki & Sipilä 2009; Sommerfeld et al. 2010; Okvat & Zautra 2011). Visiting urban green areas is generally thought to increase physical and psychological well-being (Tyrväinen et al. 2007; Lyytimaki & Sipilä 2009). Trees or open lands are regarded as providing a green experience (Kaplan et al. 1972; Okvat & Zautra 2011), and gardening is highlighted for its mental health benefits (Davis 1998; Okvat & Zautra 2011). High levels of natural vegetation in neighborhoods is thought to moderate the impact of life stress of children as a buffer of life stress (Wells & Evans 2003; Okvat & Zautra 2011) while gardening appears to help older adults to increase their life quality (Sommerfeld et al. 2010).

Regarding urban agriculture, Matsuo (2004) drew a diagram showing how a life fulfilment can be achieved by urban agriculture (Figure 2). Through his diagram, it can also implicate how one has psychological well-being through UA. He urged one needs to gain active enjoyment; the essence of the enjoyment is come out when one feels producible via experience itself. The process of “produce something” creates a new discipline and meaning, which can provide one with a kind of life achievement or fulfilment. Matsuo said UA does not create only individual’s fulfilment (enjoyment) , but also does social one; for instance, when a community cleans the abandoned site and manages the site as farming place and share the products among the members, the whole process can create a high level of fulfilment beyond increasing happiness.

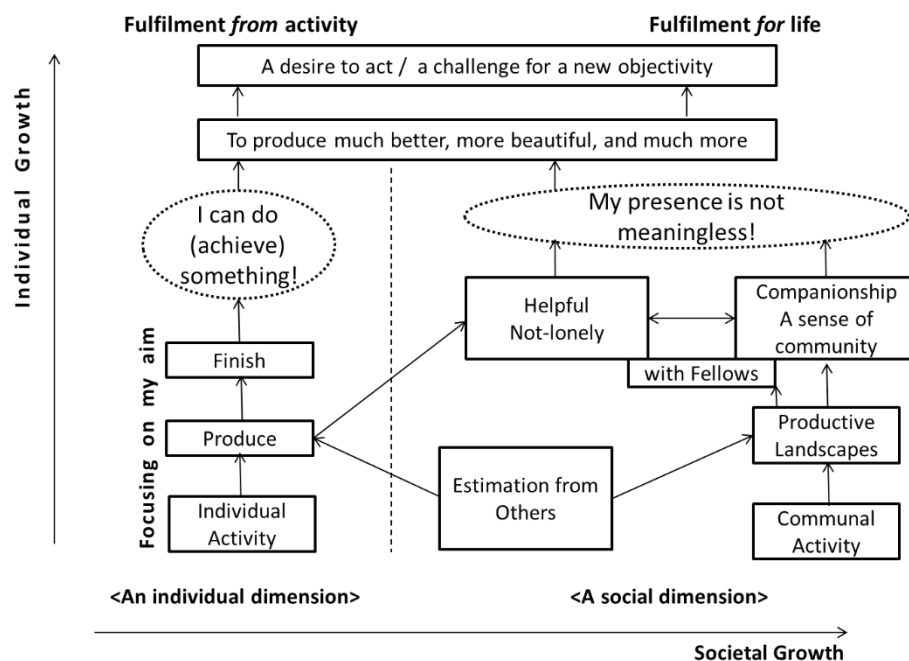


Figure 2: A diagram on one’s individual and societal fulfilment and growth from UA. Source from Oh & Choi (2006), adopting Matsuo E. (2004) *Humanity in Horticulture*, The 8th International Plant Propagators Society (IPPS) (Unpublished).

According to Bhatti, gardening can be regarded as “the work of human agency, a very personal act steeped in emotion, family history and self-identity” (Bhatti, 1999:184, as cited in Gross & Lane 2007:225). Being an owner of a garden, the farming land, and even a small pot provides one to find self-identification in regulating and enhancing mental conditions (Gross & Lane 2007). In fact, garden activities include “physical health and exercise, mental health, recreation, creativity, intellectual expansion, friendship, produce quality and nutrition, spiritual reasons (including contact with UA), self-expression/self-fulfilment, and cost and convenience” (Blair et al. 1991; Ashton-Shaeffer & Constant 2005; Sommerfeld et al. 2010:705). In addition, it has been reported that psychosocial health among urban residents

can be promoted by some characteristics of the physical environment (the presence of vegetable gardens, parks, and tree diversity), which leads the socio-cultural environment much better as correlated with such as poverty, unemployment, and population density (Brogan & James 1980; Okvat & Zautra 2011). As one example, Okvat and Zautra (2011) suggests “socio-ecological space” of a community garden, which can enhance the members’ mental health and community well-being in urban areas, so that he comments that using barren common space as community garden can be one resolution for a lack of neighbourhood social ties. This is especially important for inner-city neighbourhoods, because they have a lack of neighbourhood social ties which are linked to high crime rate, levels of noise, crowding and barren common space (Kuo et al. 1998; Okvat & Zautra 2011).

There are not many studies of well-being and urban agriculture using a scale of psychological well-being of Ryff (1989). However, there are a number of references on well-being indirectly mention psychological impacts of urban agriculture. In this context, it can be another chance to review and organize the well-being contribution of UA on people following characteristics of eudaimonic well-being, which can be also discussed as psychological well-being (PWB) in this study. Based on Ryff’s six dimensions of PWB (self-acceptance, environmental mastery, positive relationship with others, purpose in life, personal growth, and autonomy), the following section, among a wide realm of the contents on the connection of well-being and urban agriculture, aforementioned features on psychological well-being will be mainly described and discussed.

4.2.1 Self-acceptance

It indicates that one can perceive self and one’s life positively and accept various life events positive as well as negative. In other words, increasing acceptance pool means that a person can deal with ill-being environmental impacts in a more knowledgeable way. For example, understanding the context of all procedures leads the person to enlarge one’s pool (capacity) of self-acceptance. Freeman et al. (2012:142) observed that, “there was a sense of gardening as a lifelong process, something learned over time, adapted to over the different stages of life and growing in importance over a lifetime. Also there was a sense of realism about gardening and relationships with UA, an acceptance of success and failure, as well as a pragmatism about what could be achieved.” According to a study of 265 gardens in Australia, most people who are reluctant to become involved in gardening activities due to “UA’s messiness,” later on improve their attitude to such activities by involving in cultivating work on a continuous basis (Head & Muir 2007; Freeman et al. 2012).

Moreover, Hitchings (2006) researched how people spent their time in garden focusing on their labouring style. He found out that in order to obtain the core enjoyment of plants,

“people must become enjoyable expert in understanding that any complete control is always unlikely” (Hitchings 2006:364). In turn, they can perceive gardening more enjoyable activities when they can accept there is no such complete control of UA, so that they need to be adapted to unexpected occurring in the garden through patterns of practice. Through gardening, overall, one can master and become a mature individual to control one’s life by accepting pleasure as well as pain and suffering. However, it does not mean that the touchstone of increasing well-being is the individual’s capability improvement. This study remarks that urban agriculture is such a natural and common way that anybody can participate to take our well-being components back from the current environment in the city, which reveals its disharmonious structure consisting of material and technology.

4.2.2 Environmental mastery

Mastery is “a state of mind in which an individual feels autonomous and experiences confidence in his or her ability, skill, and knowledge to control or influence external events” (Wilson 1989; Ankony & Kelley 1999:121). Understanding one’s mastery from UA’s impact is to understand how its engaging with UA offers people the opportunity to understand their surrounding life events better, to achieve a better self-perception of their knowledge. From a perspective of environmental mastery, one should look through and manage all processes as a master from smoothing uneven soil for sowing seeds to harvesting and deciding which field would stay uncultivated the following year depending on the nutrition condition.

Self-esteem can be discussed in the context of environmental mastery, especially relating to its key aspects of feeling autonomy and experiencing confidence. Lewis has conducted a study to establish special characteristics of working with plants to benefits with human well-being (Lewis 1995; Elings 2005). In the study, he found out self-esteem is the groundings for well-being as developing a way to treat one’s surroundings. Lewis explained that “gardeners’ pride and self-esteem increase because other people in the community enjoy the plants and flowers, translated into improved feelings about the communities in which they live. People and plants are also independent, plants receive care and nurturing and gardeners find a confirmation of success in the growth of plants. Plants can therefore give people self-confidence” (Lewis 1995; Elings 2005:52). Particularly, gardening can enhance self-esteem and the feelings of dependency of old aged people, as improving the physical, emotional and cognitive condition of older people (Ryan 1992; Bhatti 2005)

Considering the achievement of environmental mastery through changes in cognitive functions (i.e. enhancing one’s ability of dealing better with various life conditions) (Kaplan 1985 & 1992; Korpela 2003; Wells & Evans 2003; Kiesling & Manning 2010), the level of

stress which influences on one's cognitive process (references) may also be related to environmental mastery. There are already several reports that green space as a stress buffer indirectly helps one's cognitive development which in turn improve one's controlling their surrounding events; and this is found both in adults as well as children (Kaplan 1985 & 1992; Korpela 2003; Wells & Evans 2003; Kiesling & Manning 2010). Further, some researches have shown positive cognitive responses to diverse natural settings including remote wilderness areas as compared to build settings (Hartig et al. 1991; Hartig et al. 2003; Maas 2009) as well as nearby green space such as gardens (Rodiek 2002; Ottosson & Grahn 2005; Maas 2009). In the context of UA, a fruitful evidence already have contended that activities with UA (e.g., visiting a scenic spot, tending plants or gardens, sitting by a window with natural views) can be a stress buffer for people (Cimprich & Ronis, 2003; Gidlöf-Gunnarsson & Öhrström 2007; Maas 2009), as well as restorative boosters (Health Council of the Netherlands & RMNO 2004; Van den Berg et al. 2007; Maas 2009).

Regarding the mechanism of environmental mastery by growing plants, Kjellgren and Buhrkall suggested it as experiences to alter their condition towards higher degree of states of consciousness and energy (Kjellgren & Buhrkall 2010; Freeman et al. 2009). Targeting hospital patients, they found out that actual physical contact with UA showed the most effective vital recovery for them comparing to simulated or indirect as opposed to direct contact. As direct contact to natural setting provides more complex and holistic experiences to people (Duerden & Witt 2010; Freeman et al. 2009), "it is the greenness of the direct surroundings of one's home that affects people's health most" and having a garden appears to also be beneficial (De Vries et al. 2003:1725, as cite in Freeman et al. 2009:136).

In a holistic approach, the level of psychological well-being, particularly environmental mastery, shows its change among immigrants in a process of their being adjusted to a new country. Immigrants are socially isolated easily as experiencing disruptions in building daily routines in a new environment (Graham & Connell 2006; Li et al. 2010). Especially, in a rare family support system and lack of social networks (Li 2006; Li et al. 2010), old aged immigrants have more difficulties to adopt and deal with new customs or settings (Wilmoth & Chen 2003; Li et al. 2010). Referring the positive process in gardening among immigrants, Graham and Connell maintained gardens provide them a sense of control and ownership, as providing continuity between country of origin and that of new (Graham & Connell 2006; Li et al. 2010). Through gardening, immigrants can find some cultural ties as growing ethnic plants and having an opportunity to their traditional skills; the whole process facilitates well-settling migration as they shift their negative focus on their daily lives into positive development in a new setting (McAdams & Bowman 2001; Li et al. 2010). The researchers suggest that gardening may help the migrants to retexture their physical worlds as growing

their ethnic plants in a new setting. Finally, gardening “provides a strategy for self-reconstruction through spatiotemporally establishing biographical continuity between participants’ old lives in China (home country) and their new lives in New Zealand (a new setting)” (Li et al. 2010:786).

In school gardening, environmental mastery can be developed as working as a physical labour in a garden. Distinct from the other tasks in school work, most of which are well-structured learning, gardening has multitude of “unstructured learning opportunities that are not in the lesson plan, happen spontaneously and non-hierarchically, and involve students and their adult mentors in multidirectional learning.” (Milton et al. 1995; Rahm 2002; Thorp & Townsend 2001; Blair 2009) This informal, a bunch of unexpected occurrences in a garden, however, indirectly provides a high qualified lessons as caring for plants over a long time watching a slow process with patient and repetitive working tasks (Blair 2009).

4.2.3 Positive relationships with others

This is a kind of intimate closeness to other people. When one has positive relationships with others, the one can build a warm and trustworthy network and be sympathized with people. As the literature from Kant onwards has suggested the garden is a place where a relationship with UA can flourish and thus much of the significance of gardens is represented by this opportunity they afford, especially as environments become more built up. (Kant 1914/1952:48; Gross & Lane 2007) Referring to gardening, Freeman and her colleagues said “Gardening has elements of a solitary activity but it is also important in forging and supporting social relationships” (Freeman et al. 2009:141). They conducted a research on elderly people’s gardening activities, and found that respondents used a garden as a point of communication for resolving matters among family members, even more “both with family and the wider neighbourhood and as offering an opportunity to cement neighbourhood relations through swapping produce (vegetables or picking flowers)” (Freeman et al. 2009:141). Other researchers also noted that gardening engenders social relationships as creating comfortable connections with family and neighbourhood by providing escapism from stressful parts of life and mental relaxation (Gross & Lane 2007; Freeman et al. 2009; Kiesling & Manning 2010).

In an area of horticultural therapy, researchers have used this advantage of gardening as intensifying social inclusion (Seller et al. 1999; Burchardt et al. 2002; Sempik et al. 2003; Gezondheidsraad 2004; Elings 2006). Through group processes in a horticultural therapy or gardening, for example, Seller et al. (1999) reported that it could enhance social interaction. Sempik et al (2003) also reported some appearance to promote social cohesion and the development of social and communication skills by group gardening projects. Lowering

loneliness for elderlies, particularly, their participation into horticultural therapy showed reduction of the symptoms of depression and weakening some cognitive functions (Penninx et al. 1997; Gezondheidsraad 2004; Elings 2005). Referring to social inclusion process through gardening, Burchardt with colleagues described four stages, namely: consumption, production, social interaction and political engagement (Burchardt et al. 2002; Sempik et al. 2003; Elings 2005). They said these four can be shown as the outcomes as social inclusion by therapeutic horticulture. They also mentioned that when the members do some altruistic actions such as donating their productions (vegetables or fruit) to other people, they feel they are more engaged socially with their valuable actions.

This positive effect has been also widely shown as one motivation to initiate communal (public) gardens for community well-being. Explaining community well-being with psychological concepts, some community psychologists refers a sense of community. A sense of community is an emotional connection; it concerns how other community members, such as family, friends, or others, contribute to an individual's attitudes and behaviours in her/his community (Young & Willmott 1957; Forrest & Keams 2001; Green & White 2007). In the context of gardening for the public, Zukin (2009) asserts that such gardens are "tangible symbols of the constant struggle to put down roots in the city" (Zukin 2009:194, as cited in Freeman et al. 2009:136). Community gardens, in particular, Okvat and Zautra (2011:378) explains that they "bring residents together into a denser network than their urban roles normally allow (Glover 2003)", as well as "decrease isolation through sharing of seeds, tools, knowledge, ideas, produce, culture, and recipes (Wakefield et al. 2007)," and "offer a participatory approach to community development (Saldivar-Tanaka & Krasny 2004)." In a research of the public gardening among 19 older adults in England (Milligan et al. 2004; Okvat & Zautra 2011:379), the researchers found out that community gardens "led to more neighbour-to-neighbour assistance, e.g. when one member was ill, injured, or busy, other members would tend their plots." There is a report that community garden can ease some interracial tension. Glover et al. (2004; Okvat & Zautra 2011) reported that there is some improvement of interracial contact and the potential for positive friendships among 180 African-American and white community gardeners in St. Louis. Sigelman et al. (1996; Okvat & Zautra 2011) also reported that community gardens provide a interacting chance for people of different cultures to develop friendships.

School garden, as another example of communal garden, can be also a good place for children to learn how to build positive relationships with others. There are several reports that school gardens offer "a strong community-building component, promoting teamwork, student bonding, a broader range of interaction with adults, and community outreach"

(Alexander et al. 1995; Canaris 1995; Moore 1995; Brunotts 1998; Brynjegard 2001; Thorp & Townsend 2001; Faddegon 2005). Specifically, Wells and Evans proposed that natural elements (rural natural settings in their paper) can be stress buffers for children as it provides a new ground to create friendship (Wells & Evans 2003; Gross & Lane 2007). For the reason, Gross and Lane (2007) mentioned that it may be due to learning social dimension in the garden activity. In the research for the reflection on the garden in childhood, the author found out that the respondents frequently refer to “we” rather than “I” in describing activities or places. Francis and Hester supported the idea arguing that garden is an integral setting as “an arena for the mediation of conflicts,” as communicating to others with one’s personal values and feelings through watching the creation of garden (Francis & Hester 1990; Gross & Lane 2007). Another is a research paper by Madaleno (2001) for pedagogic farms. Under the supervision of local government, pedagogic farms can promote some contests and prizes for cultivation and the quality of products for urban dwellers at different age groups. He found it finally promoted people's interest in enhancing their mind-set for ‘greening’ the city in household cultivation. For youngsters, especially, he argued that some purposeful recreation and education of UA, such as health and environmental issues, could help them to develop independent community bonds from their younger ages, due to learning cooperation between people and the sense of sharing (Madaleno 2001). However, it needs further research whether these impacts may alter the life course of children, and the mechanism within the body of well-being through gardening.

In a wider spectrum, a role of gardening can be thought to increase social ties in urban areas (Sullivan et al. 2004). From a perspective of community psychology on social-environmental linkages, it can also think about social connections, shared concerns and community values (Green and White 2007). In the inner city area, particularly, green space helps older adults to participate into social networks (Kweon et al. 1998; Okvat & Zautra 2011). Armstrong (2000) saw that community gardening in New York led to a positive effect on social cohesion in the neighbourhood low-income neighbourhoods. Kuo with colleagues also noticed that “a more distal benefit of green common spaces in that neighborhood social ties significantly predicted a greater sense of safety and sense of adjustment to living in the neighborhood” (Kuo 1998; Okvat & Zautra 2011:378). In their research with 145 female African-American residents of inner city, they found out that living with vegetation common spaces helps the community as lower life stress, increasing closeness with neighbourhoods, higher local sense of community, and finally neighbourhood social ties.

4.2.4 Purpose in life

This is able to be indicated by some key words such as life goal, aim, motivation, or motto. When one has a clear purpose in life, the one can maintain his/her own meaning of life. The

positive working experiences in farms have been known as offering participants sense of purpose and rehabilitation (Lenhard et al. 1997; Ketelaars et al. 2002; Vadnal 2003). Traditionally, the effect of UA on this feature of well-being has been reported in a field of horticultural therapy, which has steadily reported as a positive physical and psychological exercise for one's resilience (Mattson 1991; Brown & Jameton 2000) and spiritual uplifting (Gross & Lane 2007).

Theoretically, getting one's life purpose is set by building an identity for oneself. This is because personal identity is "an internal way of organizing information about the self and developing a portfolio of thoughts and beliefs about who one is and wants to be" (Clayton 2003; Zavestoski 2003; Kiesling & Manning 2010:317). Personal identity, in turn, helps people to proceed, shape, and manage life experiences in accordance with a fulfilment of their diverse social roles (Kiesling & Manning 2010). In the context of UA, moreover, it is mentioned the importance of one's ecological identity. Ecological (or environmental) identity means to "all the different ways people construe themselves in relationship to the earth as manifested in personality, values, actions, and sense of self, so that UA becomes an object of identification." (Thomashow 1995:3, as cited in Kiesling & Manning 2010:317) Ecological identity is crucial for one's development in understanding of self, therefore a positive affiliation with UA such as a sense of connection to other species and memories of one's special places are needed (Thomashow C. 2002; Thomashow M. 2002; Kiesling & Manning 2010). Clayton and Opatow state that environmental identity develops from an individual's "direct, personal, immediate, and emotionally significant experiences with the natural world that change the individual's understanding of self" (Clayton & Opatow 2003:14, as cited in Kiesling & Manning 2010:317). Furthermore, it is suggested that this can lead one's shift of worldview in a positive way from exploitation and extraction towards a belief that all life and life-sustaining processes; in this respect, one's building environmental identity is interrelated to one's social as well as psychological identity which finally influence on the one's social behaviours (Weigert et al. 1997; Zavestoski, 2003; Kiesling & Manning 2010).

4.2.5 Personal growth

It is one's cognition that the one can feel to develop or grow. When one shows high personal growth, the one is open-minded toward new, first-hand experience or challenge. In the context of the UA experience, the feature can be shown in children's participating in school gardening programmes and their developmental changes (Gross & Lane 2007). For children, "daily hands on contact with natural settings is [are] essential to children's health" (Moore 1997:217, as cited in Freeman et al. 2009:136). So far, there are a number of empirical cases that school gardening programmes helps to children's overall development (Lekies &

Eames-Sheavly 2007; Blair 2009; Freeman et al. 2009; McLennan 2010). Gross and Lane (2007) found that the making friends in UA and learning to work together were particularly meaningful elements of the garden for those in the younger age group, which can be one those reminiscence about their childhood. Referring to the experiencing gardening in young age, they captured Caruncho's phrase and said "Garden and gardener, two words that have the power of transformation that help us recapture memories of childhood and lead us to a future where we can once again interpret the dream on life" (Caruncho 2005:114, as cited in Gross & Lane 2007:238). For the reason, Mergen explained that "the landscape in which children find themselves is the staging ground for their imagination, their story, their sense of the world" (Mergen 2003, Blair 2009:17). In the garden, moreover, children can indirectly learn how to plan "close, personal experiences with the earth" (Thorp & Townsend 2001:349, as cited in Blair 2009:17), this learning is necessary for healthy human development (Blair 2009).

Not labelling directly as personal growth, considering its wide spectrum based on its definition, here can be found some empirical reports on the relationship with gardening and personal growth via school gardening. Through school gardening, some studies reported that students improved school attitude (Alexander et al. 1995; Canaris, 1995; Moore, 1995; Brunotts 1998; Brynjegard 2001; Thorp & Townsend 2001; Faddegon 2005; Blair 2009). Moreover, the gardening programmes encourage students being interested in natural phenomena, which indirectly helps them to increase their interest in math, science (i.e. measuring space, observing and experimenting with natural and plant processes, learning about soil improvement, recycling, creatively reusing materials, propagating, germinating, and saving seeds) (Alexander et al. 1995; Canaris 1995; Moore 1995; Brunotts 1998; Brynjegard 2001; Thorp & Townsend 2001; Faddegon 2005; Blair 2009), and nutrition and economy (i.e. food-systems thinking, tasting, snacking, cooking dinners, food sales and philanthropy, and good food as reward for good work) (Canaris 1995; Moore 1995; Thorp & Townsend 2001; Faddegon 2005; Blair 2009). In addition, some reported that students also become open-minded to a non-structured, discovery approach by exploring natural phenomena (Canaris 1995; Moore 1995; Brynjegard 2001; Thorp & Townsend 2001; Blair 2009). Even younger children ages four through six can show a great developmental enhancement by gardening programme. Through a case study of gardening project, Marie and McLennan (2010) suggests that without any textbooks, playing with dirt digging the ground and growing vegetable and flowers can be one of good live teaching in order to learn about healthy eating and active living. Plus, using educational tools such as literacy activities and the arts, it can empower children by learning the basics of nutrition through container vegetable gardening (Morris et al. 2000; Marie & McLennan 2010).

In addition, adapting UA for community growth can be through as a personal growth at the level of community. For the deprived community to resolve food insecurity and poverty, participating into community gardening with fellow citizens can improve the quality of life for themselves as well as their communities (Redwood 2009). Saldivar-Tanaka and Krasny (2004) conducted a research to examine the role of Latino community gardens in aspects of community and the growth of urban agriculture. The researchers found that rather than the conventional role of food production, the Latino gardens acted to be more important in community development. This particular landscape can integrate community development and effective landscape utilisation; moreover, it can also provide an emotional link between immigrants and their cultural heritage through cultivating their ethnic ingredients (Saldivar-Tanaka & Krasny 2004). They said that “in addition to being sites for production of conventional and ethnic vegetables and herbs, the gardens host numerous social, educational, and cultural events, including neighbourhood and church gatherings, holiday parties, children’s activities, school tours, concerts, health fairs, and voter registration drives. In some cases, the gardens also serve to promote community activism.” Finally, community development stimulates community members to evaluate and analyse their own issues and deal with their improvement engaging with economic, social, cultural, or environmental conditions; through this, the members can feel as they are a part of the community and can identify themselves as active runners (Christenson & Robinson 1980; Warner & Hansi 1987; Madaleno 2001).

4.2.6 Autonomy

Autonomy is an intimate strength and self-trust on one’s own decision and choice. When one is high in autonomy, the one is able to defend the immoral force outside such as unjust social pressure (Elings 2005). There are a number of evidence that green environments including UA can positively effect to one’s high level of autonomy. In Gezondheidsraad’s research, said people feel relaxation, autonomy, and open for refection leisure in green environments (Gezondheidsraad 2004; Elings 2005). In a study of Sempik, growing plants support elderly people to re-experience some kind of responsibility and the opportunities to make decisions; which finally help the mental condition of elderly who often show physical and psychological weakening (Sempik et al. 2003; Elings 2005). Kidd and Brascamp (2004) did a study on 361 New-Zealand gardeners and found out that there are high correlations between gardening and feelings of autonomy. In addition, Domestic gardens have been reported to be linked to a sense of self, autonomy, belonging and ownership (Gross & Lane 2007; Li et al. 2010).

Not only individual’s developmental change, high autonomy through gardening can reflect social justice. In a social perspective, growing number of people in high autonomy, it means

that grassroots community action can be more actively run (Okvat & Zautra 2011). Theoretically, community gardening is known to involve multiple empowerment⁷ processes, through which participants (especially the deprived) can enhance health, sense of control and mastery by controlling resources (food, land, tools) (Okvat & Zautra 2011). An urban community gardening system can yield multiple forms of capital such as natural, social, human, financial, and physical; through building their bottom-up network (Hancock 2001; Tidball & Krasny 2007; Okvat & Zautra 2011). Hassell noticed this and said, “straddles grassroots community activism, urban agriculture, environmental activism, and a more individualized search for meaning, spirituality, and community” (von Hassell 2005:92, as cited in Okvat & Zautra 2011:379). Finally, improvement of collective autonomy through gardening (particularly community gardening) can secure the public to have more consciousness on social issues such as environmental changes or even justice, beyond focusing on their local problems.

For example, Okvat and Zautra (2011:375) argues that community gardening can be one evoke place to develop the public’s more active enactment for global issues such as climate change, arguing “community gardening can serve as a vehicle for recognition of not only a human community but an Earth community, with benefits to the individual, social group, and natural environment.” They explain it with a reference of Reich’s book of *In Greening of America* (Reich 1970), and says “greening now means not only freeing the mind from big government and corporate influence, the boundary Reich urged readers to cross in his book, but balancing key forces in our lives— social, economic, and ecological” (Okvat & Zautra 2011:375). They also commented that well-positioning by community psychologists on psychological impact of community gardening for the consciousness change among the public, community gardens could provide an avenue for achieving such balance. Therefore, Okvat and Zautra (2011) emphasized the important role of community gardening for combating climate change, and suggested community psychologists develop more impactful and longer-lasting set of programmes in order to incorporate the core values of cultivating with enactment of public policy around community gardens.

Farming will not only benefit the individuals participating in the activity, but it is an activity that will benefit the whole community in the long run. Working together as a community does go a long way in bringing forth some good results not just for the farming activities, but also in bringing about togetherness since the farmers share a common goal. It is such de-alienation at work that promotes the good sense of togetherness in the society, and it also

⁷ Empowerment is “a process: the mechanism by which people, organizations, and communities gain mastery over their lives” (Rappaport 1981:3).

impacts positively on the psychological well-being. Therefore UA is not just an economic activity, but the benefits go beyond the limits of farming and tending to the farms.

4.3 Urban agriculture and de-alienation

Many contemporary theorists have demonstrated alienation as a sociological concept (Durkheim 1951, 1984; Fromm 1941, 1955; Marx, 1977; Seeman 1959; Simmel 1950 & 1971; Ankony & Kelly 1999). According to them, generation of alienation is mainly contributed by a condition in social relationship, which is reflected by “a low degree of integration or common values and a high degree of distance or isolation between individuals, or between an individual and a group of people in a community or work environment” (Ankony & Kelly 1999:121). From Marxian and ecological perspectives, particularly, humans concurrently mould and are moulded by their surrounded environment; humans themselves are also the part of UA (McClintock 2010). Therefore, alienation from UA does not only mean ecosystem itself, but also human beings. Not only indicating ‘alienation from labour’, they assert that alienation in society is also formed by the separation from UA, which is essential to human life and development as Marx theorized (Dickens 1996; McClintock 2010).

Indeed, a number of studies dealing with urban agriculture in a perspective of alienation are in a theoretical framework of Neo-Marxism (*for more detail on its theoretical history, see Chapter 2*). There are three basic concepts which Neo-Marxists use for rationale of UA in alienation studies. Firstly, they use UA as a tool for land control. Exploring changes of UA within the transition to capitalistic economy is one of the classic questions among Marxists (Lenin 1956; Chayanov 1986; Aschmann 1988; Kautsky 1988; Byers 1991; Watts & Goodman 1997; Pelluso & Lund 2011). According to Pelluso and Lund (2011), Marx’s influence on land issues have primarily been aroused in agrarian studies particularly with some key words of exclusion, alienation, expropriation, dispossession or violence. As such, they argue that the Marxian-based agrarian questions led to a question on managing natural resources. In this context, studies of UA have been developed to explore the relationship on the prevention of re-investment of urban natural resources.

Expanding the idea of land control, secondly, they often mention UA place as one of urban green common for linking human being and environment. As described in Chapter 2, urban common generally accepted with this meaning: “public open spaces that is publically accessible, nonexcludable, and managed through shared governance” (Campbell & Wisen 2009:11, as cited in Colding et al. 2013:3). Colding and Barthel argue in their research that urban green common can lead “community empowerment, social integration, democratic values, health benefits, cultural diversity, and the increase of property values” (Colding &

Barthel 2013; Colding et al. 2013). One of the reason to entitle it as urban green “common” rather than public green spaces is that it is engaged to “a larger bundle of property rights becoming vested in urban citizens” (Colding et al. 2013:10) such as the right to include/exclude in public space (Webster 2007; Colding et al. 2013). Moreover, many scholars argue that it supports recent studies addressing that “collective forms of green space management” in cities well promote “a multitude of desirable social and ecological objectives” (Barthel et al. 2010a,b; Boyer & Roth 2006; Colding et al. 2006; Krasny & Tidball 2009; Larsson 2009; Tidball & Krasny in press; Colding & Barthel 2013:159). In this context, scholars have focused on UA for “collective green space management” such as through community gardening (Colding, 2011b; Shinew et al. 2004; Colding & Barthel 2013:160). Up-scaling of community gardening can promote positive neighbourhood atmosphere, community empowerment and improvement (Saldivar-Tanaka & Krasny 2004; Colding & Barthel 2013). Working together on various sized vacant area in cities, local dwellers grow plants publicly or privately (Schukoske 2000; Colding & Barthel 2013). In the level of city, the urban green common can lead social integration (Holland 2004; Shinew et al. 2004; Glover et al. 2005; Levkoe 2006; Colding & Barthel 2013) as well as public health in a holistic perspective (Marcus and Barnes 1999; Colding & Barthel 2013). This property system enables the citizens to have a sense of stewardship through crafting such a form of (collective) management for ecological resources (Berkes & Folke 1998; Berkes et al. 2003; Colding et al. 2006; Colding & Barthel 2013).

Lastly, they argue that UA can fill the gap, namely the metabolic rift in urban space (McClintock 2010). Marx mentioned the rift occurred by capitalistic system of production (“the rise of wage labour, in particular”), which in turn removed small-scale agriculture with urbanisation and industrialisation (McClintock 2010:192). For the manner, large-scale agricultural system which can fit the profit the capitalists are willing could remain, Marx pointed out this transition gradually caused the rift of social metabolism (a balance to move society by “the natural laws of life itself”) (McClintock 2010:192). In agriculture, the soil environment was firstly targeted (Marx 1981; McClintock 2010). According to Marx, “this process also cleaves a biophysical rift in natural systems (such as nutrient cycles), leading to resource degradation at points of production and pollution at points of consumption. Finally, this rift reifies a false dichotomy between city and country, urban and rural, humans and UA, obscuring and effacing the linkages between them” (McClintock 2010:193). Rather than the town–country division of labour, Moore argues that Marx’s urbanization of the countryside and its influence on the metabolic rift should be explained in the context of un-successive recompositions of capitalist space (Moore 2000, 2007, 2010a, 2010b, 2011); “absent a systemic mechanism to encourage the recycling of urban-industrial wastes to the countryside

– as was the case, for instance, with the ‘night soil’ traffic of Late Imperial China or Tokugawa Japan (Xue 2005), or even the Dutch Republic of the seventeenth century (de Vries and van der Woude 1997, 202–4) – historical capitalism tends to produce nutrient depletion in the countryside, and pollution in the cities” (Moore 2011:7).

To sum up, the three approaches mostly focus on re-connecting the relationship between UA and human. Alienation is discovered as “extinction-of-experience” in cities (Pyle 1978; Miller 2005; Bendt et al. 2013:18), citizens’ blank relationship to the natural (Kahn & Leopold 1949; Friedman 1995; Kahn 2002; Pilgri et al. 2008; Bendt et al. 2013). This concept has rapidly been infused into the perception of people; cities, where the dominant part of people live, are the final place exhibiting their changes (Bendt et al. 2013). The imbalanced consideration on UA has been revealed as the reduction of green areas (McDaniel & Alley 2005; McKinney 2002)

4.3.1 Urban agriculture and four dimensions of de-alienation by Marx

As one of distinct features of Neo-Marxists that they humanized the alienation theory, they highlighted the emotional relationship in contacting UA (sometimes using psychological term such as a sense of place). They try to achieve the productive activity at the individual level, as well as to lead or encourage the just action of the public for social and environmental issues. In order to set criteria, this section discusses the relationship between UA and its potential de-alienation process based on Marx’s four types of alienation: de-alienation from product, product activity, species being and fellow species.

4.3.1.1 De-alienation from the product

The product must have the labourer’s consciousness. From the Marxian perspective, human beings originally have used their own creative abilities to produce, exchange or sell objects they use (Cox 1998⁸). Under capitalism, the products became separated from the workers and their needs and their infusing creativities, because “the worker cannot use the things he produces to keep alive or to engage in further productive activity... The worker's needs, no matter how desperate, do not give him a licence to lay hands on what these same hands have produced, for all his products are the property of another” (Ollman 1996:143, as cited in Cox 1998). The products finally became cash crops for the market, workers produce food they do not eat, build houses they do not live, make clothes they never buy, and so on.

In the context of UA, de-alienation from the product can be primarily considered as fulfilling the desire to own the product, as well as commoditize it as they are willing to. In other

⁸ All the citations of Cox (1998) in the study are in:
<http://www.marxists.org/history/etol/newspape/isj2/1998/isj2-079/cox.htm>

words, de-alienation can be achieved by occupying two properties: food from the commercial net (or trap under capitalism) and the land from the (economic) power. One example is allotment gardening. In the British cultural landscape, allotments are widely known as one of providing ways of leisure exercise and fresh vegetable. During the period of owning the unit of land, each allotment holder can hold the rights to own the products as excluding the public from the land (Colding et al. 2013).

Meanwhile, one interesting thing in the process is that although people perform such activities in the farm-land even including transforming commodities as buying or selling as the owner wants, their activities reversely prevent 'UA's capitalisation.' According to Hawkes and Acott (2013), they explain it with two reasons. Firstly, it is because "the process of mobilising an autonomous natural world alongside human trajectories in the co-production of a plot therefore provides an opportunity for humans to resist the commercialisation of UA and human alienation from the physical world by asserting their place in relation to UA." (Hawkes & Acott 2013:13) Afterwards, UA's generation of hybrid networks between people and socio-natural environment can lead people to deeply sense the world in a potential way, "experiencing and sensing the world in the way facilitated by allotment cultivation can therefore be seen to contribute to the deconstruction of the notion that people are alienated from matter and their own bodies" (Szerszynski et al. 2003; Brook 2010; Hawkes & Acott 2013:14).

4.3.1.2 De-alienation from productive activity

The ultimate activity for labourers in producing the objects is whether it is their voluntarily leading work, not driven by the procedure. Referring to oppressing working system, Marx claimed that "the worker's relation to the labour process was one of 'self-estrangement' (Marx 1978:75, as cited in Stuart et al. 2012:205). Labour is not a voluntary process where one is free to actualise capacities and to meet needs, but a necessity forced externally upon the worker" (Stuart et al. 2012:205). Moreover, the monotonous process under the division system can disempower one's talents or skills, finally remove one's sense of freedom in labour; Marx particularly asserted on manual workers in modern society, "factory work exhausts the nervous system to the uttermost, it does away with the many-sided play of the muscles, and confiscates every atom of freedom, both in bodily and intellectual activity... The special skill of each individual insignificant factory operative vanishes as an infinitesimal quantity before the science, the gigantic physical forces, and mass of labour that are embodied in the factory mechanism and, together, with that mechanism, constitute the power of the master" (Fischer 1996:58-9, as cited in Cox 1998).

In this respect, de-alienation from productive activity by UA must show the basic two components: whether the working process can ensure people a sense of freedom; and whether the producer can master the overall multi-sided process beyond taking mere a part of the whole. However, there has been little empirical evidence on UA's contribution to the de-alienation process.

4.3.1.3 De-alienation from species being

Under the alienated labour system, the division of labour leads to lose the potential to be human species as well as identities of social beings. People's forgetting their essence as social beings are more fatal in resolving an environmental issue because it is engaged to people's perception to be connected to nature (Cox 1998). In this respect, de-alienation from species being reflects the shift of the perception on environment, how to engage with it in an appropriate way (Demeritt 2002; Hawkes & Acott 2013).

So far, urban populations have perceived that they can consume services from the ecosystem as much as they want with little consideration on further matters (Folke et al. 1997; Grimm et al. 2008; Bendt et al. 2013). Lack of having a just relationship with environment has derived such stereotype on UA (natural resources) that it is always freely provided for social development (Bendt et al. 2013). Therefore, conjugating with "human impact agenda" (Castree 2006:111) in the Anthropocene, the de-alienation from UA is not only to rehabilitate the capacity of humankind but also to lead the biosphere into more sustainable direction (Rockström et al. 2009; Steffen et al. 2011; Westley et al. 2011; Bendt et al. 2013).

De-alienation from species being via UA means how people can reconcile with such separation from UA, whole ecosystem in urban space. In other words, de-alienation process via UA can be highlighted its recovery of species being as its provision of meaningful relationships on the natural world, namely as hybrid space (Hawkes & Acott 2013). For example, Hawkes and Acott describe the human-UA relationship in allotment gardens can be summarized as "formulating important social values, such as identity, knowledge and community" (Hawkes & Acott 2013:1). Through the hybrid process in gardening, the authors argue that it can help "collapse the natural-social dualism, which is often cited as a root cause of unsustainability, and enrich the lives of plot-holders in diverse and significant ways. Advocacy for their inclusion in urban communities is discussed" (Hawkes & Acott 2013:1). In addition, supporters for urban green commons recommend maintaining landforms such as community gardens (Linn 1999; Blomley 2007; Kassa 2008; Colding et al. 2013). Regarding to its advantage, Colding with colleagues suggest its reconnecting "city-inhabitants to the biosphere" (Colding et al. 2013:xxx). The authors also mention that as transforming cities more socially and ecologically harmonized, this type of urban common

can enhance the city's more sustainable management achieving political justification as well as biodiversity conservation.

Moreover, the environment affects an individual's expressing social behaviour (Schwartz's 1977); the importance of sense of belonging in order to achieve de-alienation became important in the sense of the contemporary alienation theory. For example, allotment gardens have been reported that they can "foster sense-of-place and experiential learning about local ecosystems, providing "social-ecological memories" of gardening skills and local ecosystem" (Barthel et al. 2010a; Barthel et al. 2010b; Bendt et al. 2013).

Studies of linking UA and de-alienation have been also reported in the researches of immigrant communities. Relieving the culture shock and feelings of dependence and uselessness, urban gardening supports them to have a sense of accomplishment as organising their time by growing their food and supplying their families (Corlett et al. 2003: 377; McClintock 2010). In the process, people can simultaneously mould and re-create themselves through space and time (Hodgetts et al. 2009; Li et al. 2010). Northern Vietnamese refugees overcome their trauma of asylum, which impacts their lack of adaptability in a new country such as relative powerlessness through marginal position in a new place, lower environmental mastery, facing with unexpected fluctuations to their way of life, and social isolation (Goodkind 2006), through UA practice as a means of putting their agrarian knowledge to work (Airriess & Clawson 1994; McClintock 2010). This simultaneously enhances their mental as well as physical conditions, so that several researches in a field of public health and education suggest UA to be a rehabilitating junction of learning desire and physical vitality (Morris & Zidenburg-Cherr 2002; Twiss et al. 2003; Pothukuchi 2004; Hermann et al. 2006; Wakefield et al. 2007; McClintock 2010).

In a perspective of hybrid place in cities, moreover, Bendt with colleagues analysed the role of public community gardens in Berlin. They suggested that community gardens can provide opportunities to learn about local sustainability such as "ecological conditions, urban political issues, and social entrepreneurship" (Bendt et al. 2013:18). They finally concluded that blending gardening activities with social, political and economic practices may help neighbourhoods (particularly the deprived) to develop sense of place (Bendt et al. 2013).

Finally, de-alienation from human being can be said as rehabilitation of identities as social-being. For the manner, the green Marxists Colding and Barthel (2013) suggest a theoretical cooperation between alienation and resilience theory. In their reviews on community gardens, they particularly introduced a research of Krasny and Tidball (2009). In order to highlight civic life with stewardship, they found that community gardening can deliver local residents

multiple societal patterns of behaviour which is finally helpful for urban sustainable management:

For instance, the plants and insects in gardens offer opportunities for students to observe and perform experiments, thus acquiring content knowledge related to pollination. Moreover, community gardening involves learning about planting techniques, how to tend plants, as well as collaboratively developing rules related to plot allocation and pesticide use. This in turn provides opportunities for youth to become increasingly more skilled as members of a civic ecology community of practice. Such contributions can include fostering biological and cultural diversity and ecosystem services, such as food, pollination, and sites for reconnecting people with UA (Krasny & Tidball 2009, as cited in Colding & Barthel 2013:160).

They finally suggest that such learning programmes of community gardening has the potential to “foster environmental outcomes such as environmentally responsible behaviours, opportunities for unstructured time in UA, positive youth development, understanding of linkages between global and local food security, and gardening skills” (Krasny 2009, as cited in Colding & Barthel 2013:160).

4.3.1.4 De-alienation from fellow humans

This type of alienation can be summarized as to alienate one another from knowing each other as individuals, but regarding them as extension of products. As Ollman wrote, "in bourgeois society capital is independent and has individuality, while the living person is dependent and has no individuality" (Ollman 1996:144, as cited in Cox 1998). People's identities or abilities are defined as amount of profit after converting theirs into means of making money, the money divide the grade of people, inferiors or superiors, namely eternal competitors (Caudwell 1997; Cox 1998). In the class division under capitalism, moreover, separation between labourer and manager; both cannot view each other as fellow humans but only see each other through the buying and selling of the commodities we produce with the lens of profit and loss (Stuart et al. 2012). People usually regard one another by their commodities such as economic backgrounds. One of the worst part of alienation from the fellows is people are mostly perceiving them as competitors, unwilling to know each other individually.

In urban space, furthermore, the strong separation from other human beings can be linked to the cause of the public perception of urban places. Generally, cities are often illustrated as place with full of criminal activity comparing to the countryside. Referring to this, Artibise (1995) says that alienation in the city originates from this stereotype of urban areas ‘where bad things happen,’ while the countryside is ‘where good things happen.’ This illusion leads

to urban alienation (Artibise 1995; Larson 2006), whereby a sense of community cannot be easily established (Roseland 1992; Larson 2006).

In this respect, UA may contribute to this type of de-alienation as follows. Firstly, UA can contribute to build a sense of community. Individually, on the one hand, “growing up with gardens as part of your childhood memories, the thought of never having a garden is unimaginable. Everyone is entitled to cultivate the soil. It is part of our natural and cultural heritage. These sentiments are reflected in a special city landscape - the community garden which provides food for the bodies and spirit for the souls of urban dwellers” (Quayle 1989, as cited in Larson 2006:127). In the neighbourhood or community level, it has been reported that such a form of collective gardening (community or allotment gardens) can build social capital and sense of community although their research was on gardens in Europe (Bendt et al.2013).

4.4 Conclusion

The definition of UA has been varied depending on site-specific condition. One common feature in defining UA is that urban agriculture is ‘a form of farming’ including from a small pot in balconies to open space urban outskirts, which ‘urban dwellers’ actually ‘practice’ (Smit et al. 1996; Adeyemi 1997; Yoshida 2002; Oh & Choi 2006). There is much practical experience in utilization of UA.

There are not many researches on well-being and urban agriculture using a scale of psychological well-being of Ryff (1989). However, there are a number of references on well-being indirectly mention psychological impacts of urban agriculture. Based on the references, the contribution of UA can be explored in the context of six dimensions of psychological well-being (PWB) by Ryff: self-acceptance, environmental mastery, purpose in life, personal growth, and autonomy. Finally, the literature review proves that UA’s contribution can be evaluated by PWB scales.

On the other hand, introducing western Marxism and its recent theories related to urban agriculture, the advantages of UA on de-alienation process are primarily associated with the idea of land control, as investigating the changes of agriculture within the transition to capitalistic economy is one of the classic questions among Marxists (Lenin 1956; Chayanov 1986; Aschmann 1988; Kautsky 1988; Byers 1991; Watts & Goodman 1997; Pelluso & Lund 2011). The land control theory supports agricultural space in cities as one of urban green common for linking human being and environment. The space finally is suggested as one resolution to fill the gap, namely the metabolic rift in urban space (McClintock 2010). Particularly, the notion of metabolic rift provides a significant criterion of UA’s de-

alienation that the soil environment is also targeted in agriculture (Marx 1981; McClintock 2010) for a biophysical rift in natural systems (such as nutrient cycles).

In the neo-Marxian context, it is expected the relationship between UA and its potential de-alienation process based on Marx's four types of alienation: de-alienation from product, product activity, species being and fellow species. De-alienation from the product by UA can be primarily considered as fulfilling the desire to own the product, as well as commoditize it as they are willing to. In other words, de-alienation can be achieved by occupying two properties: food from the commercial net (or trap under capitalism) and the land from the (economic) power. In this respect, the productive activity by UA can be de-alienated as showing the basic two components: a sense of freedom and a sense of mastery. Nevertheless, there is little evidence in empirical researches to prove it.

In the context of UA, de-alienation from species being via UA means how people can reconcile with such separation from UA, whole ecosystem in urban space. In other words, de-alienation process via UA can be highlighted its recovery of species being as its provision of meaningful relationships on the natural world, namely as hybrid space (Hawkes & Acott 2013). In addition, de-alienation from species being via UA means how people can reconcile with such separation from UA, whole ecosystem in urban space. In other words, de-alienation process via UA can be highlighted its recovery of species being as its provision of meaningful relationships on the natural world, namely as hybrid space (Hawkes & Acott 2013). In urban space, the strong separation from other human beings can be linked to the cause of the public perception of urban places. Finally, de-alienation from human being can be said as rehabilitation of identities as social-being. For the manner, there has been suggested a theoretical cooperation between alienation and resilience theory (Colding & Barthel 2013).

CHAPTER 5: DISCUSSION

5.1 Introduction

The main objective of this study is to re-approach the role of urban agriculture in society through the overlapping perspectives of eudaimonic well-being and alienation, as well as to seek prospective forms of urban agriculture. In order to answer the research question, “Does urban agriculture contribute to well-being?” this study conducted theoretical journeys based on its main hypothesis that there may be supportive concepts to understand the relations between urban agriculture and well-being. The study of eudaimonic well-being led to the exploration of psychological well-being, whose specific factors in the field of urban agriculture were determined through the concept of alienation. Finally, the study was able to address some significant evidence that urban agriculture activities may be influential on well-being and de-alienation for both levels of individual and society.

The study has two sub-research questions: (1) What are the features of urban agriculture observed through the overlapping lens of eudaimonic well-being and alienation? and; (2) What forms of urban agriculture can we expect from case studies of urban agriculture in Seoul? Based on the reviews in previous chapters, this chapter will discuss and answer the sub-research questions in three parts as outlined below.

Firstly, following a discourse on the theoretical link between psychological well-being (PWB) and alienation, the chapter will discuss connections between urban agriculture and the two concepts of PWB and alienation to examine the first hypothesis of this study: what we understand regarding well-being in urban agriculture may be more effectively discoursed through the concept of alienation, which is linked to de-alienation from a spatialized working environment in the present society on the basis of conceptual bridges between eudaimonic well-being and alienation, which need to be un-veiled.

Secondly, this chapter will describe case studies of urban agriculture in Seoul in order to investigate another hypothesis: the impact of urban agriculture on individuals’ well-being can be considered a way of demonstrating a city’s resilience by securing psychological sustainability in the everyday lives of people living together; that is, urban agriculture is a tool of self-motivation that addresses the meaning of life.

Lastly, the study suggests a prospective area for observing urban agriculture in the context of psychological well-being and de-alienation together in a real-world situation based on theoretical reviews and case studies aforementioned. The study also suggests further directions and requirements for relevance including limitations and challenges in the methodology.

5.2 Discourses on theoretical bridges

The first sub-research question of the study is: What are the features of urban agriculture, as perceived through the overlapping lenses of eudaimonic well-being and alienation? This section explores this research question, along with the hypothesis that what we understand about well-being in urban agriculture may be more effectively discoursed through the concept of alienation, which is linked to de-alienation from a spatialized working environment in the present society on the basis of conceptual bridges between eudaimonic well-being and alienation, which need to be un-veiled.

5.2.1 Psychological well-being and alienation

Two concepts—Ryff's psychological well-being and the alienation of Marxism—have the same theoretical origin: both theories are derived from the idea of eudaimonia proposed by Aristotle. Ryan and Deci (2001:145) provide a good description of this Aristotelian view of Eudaimonia as follows:

Aristotle, for example, considered hedonic happiness to be a vulgar ideal, making humans slavish followers of desires. He posited, instead, that true happiness is found in the expression of virtue—that is, in doing what is worth doing... The term eudaimonia is valuable because it refers to well-being as distinct from happiness per se. Eudaimonic theories maintain that not all desires—not all outcomes that a person might value—would yield well-being when achieved. Even though they are pleasure producing, some outcomes are not good for people and would not promote wellness. Thus, from the eudaimonic perspective, subjective happiness cannot be equated with well-being.

From the perspective of psychological well-being, Aristotle's view of optimal well-being is explained as being connected to societal structures, such that one's realization that his/her desire to be connected to society is his/her human nature "is conducive to human growth and produces eudaimonia" (Fromm 1981:xxvi, as cited in Ryan & Deci 2001:145). Moreover, Aristotle's view of optimal well-being implies that it is connected to societal structures and individual desires, "which are rooted in human nature and whose realisation is conducive to human growth and produces eudaimonia" (Fromm 1981:xxvi). Finally, labourers can perform their works following their own recognition or motivation, expecting to achieve a certain degree of happiness.

In terms of the idea that people are also social beings, Marx's idea on the nature of human beings is linked to the concept of eudaimonia (Marx 1844). Cox (1998⁹) described Marx's point of view as follows: "humanity relates to the physical world through labour; through labour humanity itself develops and labour is the source of human beings' relationships with each other. What happens to the process of work, therefore, has a decisive influence on the whole of society." As such, alienation and psychological well-being can be discussed by reflecting a feature of eudaimonia, which is interconnected with one's fulfilment in the development in society and the essence of labour.

Likewise, the notion of psychological well-being (Ryff 1989) indicates a person's good functioning in society (eudaimonia), which is interconnected with the Marxian perspective, the labour theory of Marx. Aristotle argues that the essence of the 'right' activity depends on conducting such a move in recognition of reason, since the realisation of reason through the activity brings one's final happiness (Kain 1992). In other words, the essence of an objective (a thing) is identified through the process of development of said essence. Marx re-named Aristotle's 'happiness' as 'freedom', or the realisation on reason of work (Kain 1992).

This 'freedom' can bring individual 'happiness' as Aristotle argued in the form of eudaimonia, which is the theoretical origin of Marx's development of the labour theory and Ryff's psychological well-being. Aristotle argues that the essence of the right activity depends on conducting said activity in recognition of reason, since the realisation of reason through activity leads to final happiness (Kain 1992). In other words, the essence of an objective (a thing) is identified through the process of development of the essence.

Furthermore, Marx (as cited in Musto 2010) emphasised that labour can involve the free expression—and, hence, the enjoyment—of life. As Marx points out, labour is originally a part of play, game and sport. Such a freedom and positive environment at work leads to the highest level of creativity and joy (Freeman et al. 2012). Reinforcing this idea within urban agriculture, finally, can develop the conclusion that process may improve individuals' labouring styles.

Finally, the ultimate goal of Aristotle's eudaimonia could begin as a form of well-being and de-alienation. Referring back to the opening question of Aristotle, 'the highest of all goods achievable by human action', the answer given by well-being researchers could be happiness resulting from well-functioning in society—namely, psychological well-being. Alternatively, the answer given by Marxists could be de-alienation or freedom (emancipation).

⁹ All citations related to Cox (1998) are drawn from:
<http://www.marxists.org/history/etol/newspape/isj2/1998/isj2-079/cox.htm>

5.2.2 Alienation and two PWB factors of autonomy and environmental mastery

Conscious labour is a capacity of human beings (Musto 2010). Marx explains that when a labourer works in a framework of alienation, the framework promotes an attitude of the labourer such as “my labour is not life, it is torture for me” (as cited in Musto 2010). For example, as Marx¹⁰ theorized in *Capital*, “by thus acting on the external world and changing it, he at the same time changes his own nature. He develops his slumbering powers and compels them to act in obedience to his sway.” This process develops one’s freedom to shape and mould the outside world—and, thus, to further create and innovate this world following the individual will.

From previous scholarly works on alienation, in the context, it can be addressed that there are theoretical bridges between alienation and factors of psychological well-being, particularly between alienation and the two factors of psychological well-being: autonomy and environmental mastery.

Autonomy is theoretically known that it is generated by such qualities as self-determination, independence, and behavioural regulation (Ryff 1989). Ryff (1989: 1071) emphasises that autonomy can provide a person with “a sense of freedom from the norms governing everyday life”. Although the availability of governing things is a touchstone of autonomy, the time-running labour system has radically altered the concept of time due to work done by machineries in factories. The changes in people’s perceptions of time transformed labourers’ working ethics and punctuality (Cox 1998). Ultimately, alienation due to the utilisation of machines and a machine-friendly concept of time has deprived labourers of the personal freedom to be flexible and autonomous in their work.

Less autonomy also decreases people’s ability to control and enjoy the work they perform by taking away an opportunity to be involved in the whole process. There have been many suggestions that conflicts of autonomy may be the essential causes of social alienation (Jahoda 1958; Shapiro 1981; Kuhl & Beckmann 1994; Ryan et al. 1995, 1997). In relation to work alienation, moreover, it has been steadily reported that tasks that grant less autonomy may affect to an individual’s work alienation (Blauner 1964; Dean 1961; Korman et al. 1981; Mottaz 1981; Lang 1985; Nair & Neharika 2010).

Environmental mastery is “the individual's ability to choose or create environments suitable to his or her psychic conditions” (Ryff 1989:1071). Specifically, mastery is related to one’s “life span development,” which requires the “ability to manipulate and control complex

¹⁰ <http://www.marxists.org/archive/marx/works/1867-c1/ch07.htm>

environments” (Ryff 1989:1071). By attaining environmental mastery, individuals can actively utilise opportunities from the outside world in advantageous ways. Meanwhile, in environments where a division of labour exists, the individual’s capability is disturbed by workers’ specialisations in particular tasks, as well as by a series of atomised activities (Cox 1998). Cox (1998) explains this situation using Marx’s theory of the division of labour. She argues that the division of labour enables “only one or two aspects of people’s human powers at the expense of all the others” (Cox 1998). Finally, alienation from the division of labour makes it difficult for an individual to achieve environmental mastery.

In studies on alienation, environmental mastery exhibits a distinctive connection with alienation (Rotter 1966; Seeman & Anderson 1983; Ankony & Kelley 1999). Seeman and Anderson (1983) have demonstrated that a person's sense of mastery affects his or her outcomes and estrangement in work. They have also argued that a person’s sense of mastery can be correlated with a sense of powerlessness due to its relation to a person's generalized expectancy of control (Rotter 1966; Seeman & Anderson 1983). Moreover, in research on community alienation among police officers, researchers have found that the alienated working environment of the organisational pyramid structure of decision making affected officers’ sense of confidence or mastery in decision making—and, thus, their motivation for proactive enforcement (Ankony & Kelley 1999).

5.2.3 Reason of urban agriculture: de-alienation from nature and obtainment of ecological identity

Recognizing a sense of self is critical aspect in Marx’s concept of alienation, since it can prove the ontological identity of alienation and the nature of human beings as labourers (Yuill 2005). That is to say, “it is in this manner that he ‘puts his life’ into his objects, the latter expressing in what they are the character of the organic whole to which they and the living person who made them belong” (Ollman 1976:142, as cited in Yuill 2005:131). Yuill (2005) concludes that ability to solve problems with consciousness and creativity is the essence and rationale of working.

According to well-being researchers who have studies the positive relationship between human beings and nature, working in nature including gardening and cultivating activities is critical in developing a person’s a sense of self (Naess 1989; Kellert & Wilson 1993; Thomashow 1995; Bragg 1996; Chawla 1999; Cooch 2003; Kiesling & Manning 2010). As an integral part of self-identity, a person also possesses an environmental identity, involving the belief that the environment is important for their essence of being (Clayton 2003; Kiesling & Manning 2010). Kiesling & Manning (2010) describes well about meaning of ‘a sense of self’ and a person’s ‘environmental identity’ as follows:

Developing a sense of self that includes nature is a natural recognition of similarities between persons and other organisms to literally see oneself in the other (Naess 1989; as cited in Kiesling & Manning 2010:317).

An ecological identity arises not only from psychological forces but also from a socially constructed understanding of self and others, human and nonhuman (Chawla 1999; Thomashow 1995). (...) For example, an ecological identity involves adherence to social in-group principles (e.g., not using toxic pesticides) and can be strengthened through social interactions that occur during or as a result of experiences with nature, such as volunteering to help clean-up a river (Cooch 2003) or creating an organic garden. (as cited in Kiesling & Manning 2010:317).

Finally, these two features can be expanded to assist the rationale of urban farming, which is one of the most active activities working with nature in the city.

5.2.4 Results

Regarding the first research question of the study, ‘What is the feature of urban agriculture through the overlapping lens of eudaimonic well-being and alienation?’, the study addresses that autonomy and environmental mastery may be the linking aspects between eudaimonic well-being and alienation.

As described in the hypothesis, what we understand of the advantages of urban agriculture may indicate some measure of its ability to provide autonomy and a feeling of mastery to people. Both of them can de-alienate people from nature through the provision of an ecological identity.

Then, can we find the two, autonomy and mastery, in the real-world context of urban agriculture? Can they be found in urban agriculture in Seoul?

5.3 Case studies of urban agriculture in Seoul

The second research question of the study is ‘What forms of urban agriculture can we expect from case studies of urban agriculture in Seoul?’ This section explores this research question with the hypothesis of: the impact of urban agriculture on individual well-being can be considered a demonstration of a city’s resilience through the securing of psychological sustainability in the everyday lives of people living together; that is, urban agriculture is a tool of self-motivation that provides a meaning for life.

5.3.1 History of urban agriculture in Seoul

Urban agriculture in Seoul has come a long way since Seoul was the capital city of the Joseon Dynasty from 1394 to 1910. During that time, urban farming was characterized by

several kitchen gardens. Kitchen gardens have historically given individuals and families greater control of the land and its products (Guo 2006). Since Seoul was decided as a capital city, urban agriculture in Seoul has been implemented in various farming activities in and around the city. These activities remain as the names of towns nowadays, such as Jamsil and Jamwon-dong (examples of sericulture), Gwonnonng-dong (the garden supplying vegetables for the royal family) and Yeonhui-dong (the pepper cultivation land)¹¹.

In the 17th century, *The Manual on Farming (Saekgyeong)* by Pak Se-dang (1629-1703) introduced the ideas of fruit tree cultivation, livestock raising, horticulture, irrigation, and weather. As a scholar of practical science in that era, Pak Se-dang wrote this book to guarantee steady income sources for commoners. According to Kang (2013)¹², Pak Se-dang addressed in his book that land owners need to change their ways of thinking about the land. That is, for city dwellers who do not have lands to cultivate, a land owner can lend his land and let the people do farming. This approach supports the training of citizens in agricultural skills. In the book, Pak Se-dang highlighted that it would help people to be prepared for going to rural areas at any time as easily settling down from a steady income by farming.

After the Joseon dynasty, nothing was left of urban agriculture following Japan's conquering of Korea from the late 1800s to 1945. In the last couple of decades since the Korean War (1950-1953), the acreage of urban agriculture has diminished as a result of urbanization and industrialization. Despite the long period of urban agriculture, the historical strain and the country's industrialization hindered the sustainability of urban agriculture in Seoul until the late 1990s.

Following the trend of urban agriculture and the community garden movement (UNCHS 2001), however, numerous types of urban agriculture have sprouted in Seoul since 2000s. Movements of environmentalists have also encouraged urban agricultural activities in Seoul.

In its initial stages, Seoul's urban agriculture involved community-based urban agricultural activities. One such example is Sangam Neighbourhood¹³. This community was started by members involved in 'guerrilla farming' in 2009. These people used a space that was originally planned to be a parking lot, but that wasted away over a decade. The community set up a day-long vegetable farmers' market, at which they offered organic vegetables. The profit from the market was returned to the community, since it was donated to a youth

¹¹ Daedeok-gu office [http://www.daedeok.go.kr/uap/urban_agricultureP.do]

¹² Kang, H. (2013, June 7). "Saekyung by Pak Se-dang and Urban Agriculture", *Kyeonggi Bukbu Focus* [http://www.kbfocus.com/read.htm?ns_id=3318]

¹³ Kim, H.D. (2013, May 25). "Reportage: Urban agriculture booms in Seoul" [http://www.hani.co.kr/arti/english_edition/e_national/588995.html]

detention centre. The main aim of the community was to encourage those who were not able to engage in farming and to improve the community landscape.

In 2012, Seoul announced the policy of urban agriculture as marking the year as “The Year of Urban Agriculture.” The Seoul Community Development Support Centre was established, which has been at the forefront of consulting with and offering financial support to community-based agricultural activities (UNCHS 2001). The city invested 6.5 billion won (nearly 5.7 million dollars) to turn 1% of the city area into urban farm projects¹⁴ and has planned to convert unused patches of land into green farming zones. As a result, organic restaurants, gardening shops and even farmers markets have developed across Seoul, much to the empowerment of the resident population and the benefit of the wider markets at the end of the distribution chain.

For example, an urban farming park located in Nodeul Island in Central Seoul is part of the municipal government’s new green policy. About 70 different rice varieties have been planted in the park’s 10-million square meters of land, which is named the “toad field” because of the toads living near the rice fields. Besides the rice field, there are many other gardens in the urban farming park: the Nodeul vegetable garden, measuring over 22,500 square meters; 6,000 square meters of civic vegetable gardens; 2,300 square meters of community farms; and 500 square meters allotted for growing indigenous plants.

Despite endeavours to highlight urban agriculture’s socio-economic benefits, urban agriculture in Seoul has not appealed to the public as an income-generating activity. Rather, urban agriculture in Seoul has become a cultural activity for the public. The urban agriculture movement has spontaneously led the national government to establish legislation on urban agriculture. Local authorities have also been encouraged to set up regulations to allow such activities to flourish (OECD 2011). As follow-up activities, Seoul has set up spaces such as community gardens, rooftop gardens, school gardens, container gardens, urban agriculture parks and youth gardens. The general objective of urban agriculture in the perspective of national and local governments is to revitalize the community and to protect the environment in a long run within the global context of climate change. Today, there are more than 11,000 professional farmers in Seoul, as well as more than 800 ha of land involved in agricultural use (OECD 2011).

5.3.2 Case studies of urban agriculture: level of individual vs society

The information below was collected from news articles related to the urban farming department of the Seoul Metropolitan Government. Although it may not show all aspects of

¹⁴ [<http://www.cityfarmer.info/category/asia/page/3/>]

urban farming, two case studies from Seoul illustrate that our movements for urban agriculture as connecting to nature within the city under the theme of well-being may also be a factor to achieve de-alienation from nature.

The first case shows how farming in the city can be a factor in de-alienation from nature at the individual level¹⁵. Even a small patch of vegetable garden in a balcony makes a person rejuvenate their bodies and minds. A newfound joy of being attached to nature can be multiplied by sharing vegetables cultivated with others. Mr. Park Hyun-geun, who enjoys tending his vegetable garden at home, purports that having a vegetable garden has not only brightened his home, but also mellowed him. He states:

I used to be really impatient, but having this garden made me calmer. My children didn't have much reaction to gardening, but once they tried out the home-grown vegetables, they volunteered to water the plants. Now my family talks about gardening all the time and my wife and I drink tea and relax together at the garden. Having a vegetable garden is especially nice when I'm having a barbecue, because I can pick lettuce leaves and vegetables for grilling whenever I need them. They are more flavourful than the store-bought ones.

Another is about the change in the public perception on urban agriculture. In the level of society, the following interview shows that the change of perception may be one of effective tools for success of urban agriculture, that its de-alienation from nature in a long-term. Mr. Shin Dong-heon of the Urban Farming Forum's addresses the following¹⁶:

Urban consumers taking direct part in farming is what urban farming is all about. The key to urban farming, therefore, lies in the city dwellers whoever engages in farming. Urban farming is the activity free from the conventional type of lands for growing products; urban dwellers can use any space in the city such as rooftops or balconies or neglected patches of land to farm.

Simply considering urban agriculture as spending a few hours turning soil, planting seeds, and watering transforms the urban dwellers into urban farmers. Farming in the city can bring nature closer to city residents, help them realize the importance of land, clear the air inside a home, and motivate people to appreciate nature more. This is the appeal of urban farming.

¹⁵ [<http://greenurbanscapeasia.com/industry-news/urban-farming-korea%E2%80%99s-new-eco-friendly-trend>]

¹⁶ [http://world.kbs.co.kr/english/program/program_trendkorea_detail.htm?No=43778]

In summary, the case studies in Seoul illustrate some linkages between urban agriculture and well-being via de-alienation. In other words, they show that urban agriculture in Seoul is creating an ecological identity for the citizens, so that they can both understand nature and indirectly learn how to live with other living organisms as members of an ecosystem. The first case shows how urban agriculture can help individuals de-alienate from nature. This is based on the inclusive manner in which the activities that make up this form of agriculture bring together the participants and the community as a whole.

However, the case studies merely covered one aspect of de-alienation from urban agriculture: the de-alienation from nature. What about other overlapping achievements of well-being and de-alienation? As theoretically explored, are urban agricultural activities able to enhance people's autonomy and environmental mastery?

5.3.3 Case studies in urban agriculture communities in Seoul: 'Love Farm of Sanmaru community' and 'Tot-bat-bo-geub-so'

In order to satisfy my curiosity about the urban agriculture exhibited in the documentary film 'Love Farm', I visited two organisations in Seoul that are currently running agricultural programs, wherein I attempted to discover the insights involved, the mechanisms used, and their approaches to agriculture in an urban centre.

My first stop was the Sanmaru Community, represented by Rev. Lee Ju-Yoen. This was the same urban agricultural community that was featured in the documentary film 'Love Farm' (mentioned earlier in the Introduction Chapter). This community is using urban agriculture to help homeless people regain autonomous lives. I volunteered in the community for a month, and every week, I had a chance to interview the representative of the community. My questions were open questionnaires that mainly sought to determine what the driving force was behind their success in implementing urban agriculture.

On the basis of a series of interviews with the representative, I determined that the program was originally planned to decrease the chronic powerlessness exhibited across groups of homeless people. According to the leader, the program has shown positive results so far in rehabilitating the participants especially in giving motivating them to get jobs. In addition, the leader has noted that teaching methods that have less environmentally harmful effects are also significant for approaching nature in a more friendly way.

For my ultimate question, 'what process within urban agriculture rehabilitates homeless people and gives them a motivation?', the community gave me some additional questions. Firstly, the community is a church-based so some responses from the interview were from religious backgrounds and spirituality, which cannot be deduced into mere words.

Moreover, it needed to explore other urban agricultural communities for general people in society, since the activities of Sanmaru Community mostly targeted homeless people.

Having collected information from Sanmaru Community, therefore, I needed to visit another example site. My aim was to compare the responses from citizens to those that I had received from the Sanmaru Community. I decided to visit one more place, not religion-based and targeting general citizens. This second place, Tot-bat-bo-geub-so¹⁷, is a non-governmental organisation concerned with advanced information and teachings on urban farming in Seoul. The organisation is also known as one of the oldest organisations related to urban agriculture. Interestingly enough, Tot-bat-bo-geub-so simply means “the centre of a kitchen garden supply”.

During my volunteer time, I got information that the representatives of Tot-bat-bo-geub-so occasionally hold meetings and farming classes. The core concept of those classes is to instil in urban farmers the notion that farming is not just about growing crops; it is also about restoring the land and preserving it for future generations.

One interesting aspect of this program is that participants learn how to raise crops in cities in a life-friendly way. They explain ‘a life-friendly way’ as ways involving a respect for a life (living) and a desire to farm soil in an un-harmful manner. So they called their farming as ‘life-farming’. The term was used philosophically to indicate that the human species shares a special bond with the environment. The organisation persuades people that it is our role to nurture and preserve the environment for future generations, since higher beings, as well as other animals and plants, form part of the ecosystem. This is particularly true because we have the will and the ability to take control of the environment and preserve it.

In an interview with one of the representatives of the organisation, he criticized that the current cultivating process of urban agriculture followed the conventional process, including using chemical materials, fossil fuels, etc. He argued that this approach to urban farming revealed its limitations to environmental degradation in near future.

5.3.4 Results from the case studies on two communities

During my visits to the two sites, it was interesting to observe how happy and content the participants were as joining the programs. I discovered that some features of urban agriculture may involve well-being and de-alienation which the study has explored.

¹⁷ The head office of the organisation is the National Back to Farm Movement. [<http://www.refarm.org/>] [<http://cafe.daum.net/gardeningmentor>]

Although the target groups were different, first of all, one common aspect from both communities was their manner of cultivation. They were seeking a method of organic farming for two reasons to let the participants: approach nature more closely; and, indirectly be taught the value of life by themselves. In terms of alienation under eco-Marxian perspectives, this phenomenon can be interpreted as resolving the metabolic rift resulting from such chemical use in the land since the soil environment, which can cause further biophysical rift in natural systems such as nutrient cycles (Marx 1981; McClintock 2010).

Secondly, it is necessary to pursue a large-scaled of urban agriculture which is implemented in environmental friendly ways. Because the commonality of eudaimonic well-being and de-alienation in this study has been found at the level of community or on an even larger scale, rather than the individual level. Following the study's first hypothesis, the impact of urban agriculture on well-being may be more effectively discoursed through the search for such an impact at the level of society.

There may be some eco-Marxists who criticize for its capitalist monopolization of benefits when doing 'large-scale' farming. However, there is a critical difference: the profits from the land belong to the farmers, not to the capitalists. In references to the field of urban planning, I found some instances of urban agriculture's psychological well-being process through de-alienation at a large scale: continuous productive urban landscapes (CPULs) and agrarian urbanism (AU).

Continuous productive urban landscapes¹⁸ (CPULs) are planned and designed concepts of urban agriculture (Vijoen et al. 2005). A CPUL has been defined as a "coherently planned combination of connected open urban spaces which include space for urban agriculture and ecologically productive landscapes" (Vijoen & Bohn 2005). In other words, they allow many portions of urban populations to participate in activities and processes that are accompanied by urban agriculture for the purposes of rehabilitating the relationship between life and its required practices. On the basis of a CPUL study in London, Vijoen and Bohn (2005) stated

¹⁸ CPULs focus primarily on its design framework: that is, the creation of a new kind of open space for farming within existing urban open spaces. Supporters of CPULs expect "a new kind of extended public park, integrating traditional recreational and leisure facilities, with areas devoted to urban agriculture fields, ecological corridors, cycle and pedestrian routes" (Vijoen & Bohn 2005). With regard to the peri-urban agriculture, Vijoen and Bohn (2005) stated:

Sole reliance on peri-urban agriculture would result in the loss of associated social benefits of urban agriculture, such as community building, facilities for children's experiences and learning about natural cycles and sustainable development, neighbourhood improvement, etc. (...) Ultimately, this would minimise potential food miles savings, and the quality of life, health and environmental benefits associated with urban agriculture.

that three issues need to be improved before CPULs can be implemented in large-scale urban infrastructural projects: land ownerships and their associated policies for developers/investors and land users, adequate infrastructure for farming (considering both urban and peri-urban agricultural lands), and public appreciation of CPULs.

Agrarian urbanism¹⁹ (AU) is another prospective model that embraces well-being and de-alienation together at a large scale. It considers the socio-economic benefits to the level of collective gardening and the unit of planning. AU seeks harmonious landscape planning, from rural to urban areas, with systemically but ecologically divided agricultural zones. Duany and DPZ (2011) argued that AU can be distinguished from other agricultural planning only when its succeeding in three points: being profitable, being popular and being sustainable. One distinction of AU is that it is “the physical pattern of the settlement supports the workings of an intentional agrarian society” (Duany & DPZ 2011:7). AU endeavours to incorporate enjoyment into its planning, as well as to respect previous or existing urban agriculture types.

Thirdly, in perspective of psychological well-being including a sense of autonomy and environmental mastery, the study may approach the meaning of the word ‘happiness’, which the interviewees often mentioned. As previously mentioned, the two concepts of Ryff’s psychological well-being, a sense of autonomy and environmental mastery, and Marxist alienation have the same theoretical origin: Aristotle’s eudaimonia. From the perspective of psychological well-being, Aristotle’s view of optimal well-being is explained as relating to one’s desires, which are designed by human growth and produced through connections to societal structures (Fromm 1981; Ryan & Deci 2001). Aristotle’s eudaimonia is also relevant to Marx’s alienated labour theory, since Marx re-named Aristotle’s ‘happiness’ as ‘freedom’—or the realisation of reason to work (Kain 1992).

¹⁹ AU is a concept from New Urbanism, a neoclassical urban theory that attempts to develop conventional city formats into contemporary planning issues. The movement ultimately creates a new urban tradition by carrying on the successive materials inherited by small towns. In the United States, for instance, New Urbanism was particularly successful in developing conventional patterns for small towns and city neighbourhoods during the pre-World War II environment. In this context, AU in New Urbanism is defined as “settlements where the society is involved with food in all its aspects: organising, growing processing distributing, cooking and eating it” (Duany & DPZ 2011:7). Supporters of urban agriculture in AU argue that there is:

...the great difference between Agrarian Urbanism and the moribund communes, kibbutzim, social gardens, cooperative farms and old villages: the really hard work, the demanding schedule, and the boring aspects of agriculture are handled by contract workers. The lighter, more satisfying and pleasant roster of tasks—still a good portion—would be done by the willing residents in their spare time, much as they putter (and sometimes much more) in their own gardens. (Duany & DPZ 2011:62)

Moreover, the theory of eudaimonia is linked to Marx's (1844) ideas regarding the nature of human beings as social beings. In response to Aristotle's opening question regarding the highest of all goods achievable by human action, I can expect well-being researchers to answer 'happiness' from 'well-functioning in society (namely, PWB)', while Marxists could answer be 'de-alienation' or 'freedom (emancipation)'. Finally, one's eudaimonia can begin as a form of well-being and end as de-alienation. Reflecting on a feature of eudaimonia is interconnected with one's sense of fulfilment in societal development, as well as the essence of labour. In this context, the causes of alienation and psychological well-being can be discussed.

In addition, this kind of 'bringing-back' or 'lost-founder' mechanism of feeling can be interpreted as falling into the more current stream of PWB, which is linked to mental psychology. Moreover, previous research studies involving a spectrum of populations based on national surveys may suggest a way to link PWB to public health. This, in turn, can be linked to Huppert's (2009) review of PWB's four spectrums, as well as his suggestion to move the mean of the mental health continuum towards increased flourishing; then, its demographic graph may involve fewer people in a state of languishing (for more detail on Huppert's concept, see chapter 2).

With regard to observing them in a real world, nevertheless, the literature reviews still made me raise many questions. Specifically, one's perception towards well-being and alienation are a private and innate process. This may case a major struggle when research is conducted in a real-world setting. As McGregor and Little (1998:508, as cited in Lent 2004:487) suggest, "none of us can know with full certainty the extent to which another individual is happy or imbued with a sense of purpose, most well-being researchers elect to grant their participants 'best-expert status' on their own phenomenological experience". In observing alienation and well-being, therefore, a methodological difficulty still remains in qualitative research studies.

Lastly, the aforementioned mechanism can be also linked to a continuing approach to the relationship between alienation and public health. The socio-psychological approach to health issues has rapidly grown among alienation researchers, such that the concept of mastery in the health domain is now regarded as an association between the sense of powerlessness and poorer learning of health-relevant information (Seeman & Evans 1962; Seeman & Lewis 1995). Moreover, a person's sense of low control has been reported to be related to worse preventive health behaviour, poorer self-attention regarding health, and more illness episodes (Seeman & Seeman 1983; Seeman & Lewis 1995).

Seeman and Lewis (1995:517) suggest that a sense of powerlessness accompanies illness and that a sense of control is highly relevant to health conditions, such as “the generation of stress under conditions of low control; the deleterious physiological consequences of stress and low control; and the unfavourable behaviour patterns associated with low control (e.g. less utilization of health-related information).” In addition, Standmark (2004) illustrates how ill health is connected to one’s sense of powerlessness. Through an in-depth interview based on individual experience, they found:

...feelings of alienation, anguish, shame and guilt take over, and the individual’s autonomy and existence are threatened. Stigmatization results from suffering and a sense of worthlessness. The informants compensated for their vulnerability by means of human support, intimacy with others, a society adapted to disability, living in the present and awareness. (Standmark 2004:135)

Although this analytical approach may be radical, urban agriculture can be an essential part of any program for creating a better sense of well-being in cities. It can link citizens to happiness and freedom, which can also be described as well-being and de-alienation. This finding summarizes the results of this study, which suggest a link between urban agriculture and the well-being of the community within which it is practiced. This study will ultimately support the second hypothesis, which states that the impact of urban agriculture on well-being can be considered a demonstration of a city’s resilience through the securing of psychological sustainability in the everyday lives of people living together; that is, urban agriculture is a tool of self-motivation that provides a meaning for life.

5.4 Suggestions and challenges

What kind of farming we can design for embracing not only well-being but also de-alienation in reality? For future research, several additional questions are still raised. If the de-alienation process can be combined with psychological well-being (PWB), for instance, what evidence can support its message of competence? Or, if one exhibits changes due to engaging in urban agriculture, how can these changes be persuasively interpreted as de-alienation terms?

Thus far, extensive data on alienation from the perspectives of Seeman (e.g., powerlessness, isolation and so on) or Marx (e.g., alienation from nature or fellows) suggest that a cause or controller is embedded in the social structure (c.f. Geis & Ross 1998; Yuill 2011). Moreover, Heinz suggests a synthesizing definition of alienation, such that:

Alienation should be used as a bridging concept between social conditions and individual responses in specific areas of social life like work, politics or community:

‘alienation’ focuses sociological interests on the various manifestations of a discrepant or conflicting relationship between individuals and their social and historical living conditions (Heinz 1991:213–14, as cited in Yuill 2011:106).

This gives the insight how to apply urban agriculture for de-alienation and well-being. In order to use a notion of alienation as a bridging concept “that is most insightful, bringing to the fore how human experience is mediated by structure and agency” (Yuill 2011:106), it must be considered the stratified ontological understanding of the public. Rather than debating alienation between the neo-Marxian (normative theorists) and socio-psychological (descriptive empiricists) perspectives, it is more crucial to seek a way to combine both in order to welcome the next era of alienation into society.

5.4.1 Four factors of urban agriculture for well-being and de-alienation

Focusing on the fundamental question of the role of urban agriculture in living spaces in the context of de-alienation through the improvement of PWB, this section will finally introduce the conditions of urban agriculture which are able to show the integration of well-being and de-alienation.

Firstly, when discussing the contribution of urban agriculture to de-alienation, it may not be enough to detect the changes with a small scale such as growing vegetables in a pot or private garden; rather, these activities can be dealt as aspects of well-being. Urban agriculture’s psychological well-being process, as part of de-alienation, should be conducted in a large scale of communal farming or planning. These scales are also good to embrace socio-economic benefits which can be usually escalated to the level of collective gardening or to the unit of planning (e.g., CPULs or AU). Even though urban agriculture is large-scale which conventionally may draw some critiques from eco-Marxists due to its supposed capitalist monopolization of benefits, there is a critical difference the large-scaled urban farming discoursed in this study: the profits from the land belong to the farmers, not to the capitalists.

Secondly, the de-alienation process may resolve alienation from nature via urban agriculture. This can be shown through people’s connections to nature and also through an ecological friendly farming. Moreover, to determine the interrelation between urban agriculture’s impact on urban dwellers and environmental change, in-depth analyses of the well-being effects of urban agriculture are required. This will support the construction of a clear argument for the city’s desire to cultivate lands in urban open spaces. Planners and policy makers who recognise the potential use of urban agriculture in city sustainability can address the surrounding social and ecological issues.

Thirdly, the current stream of PWB with mental psychology from a spectrum of populations based on a national survey can suggest a positive link between PWB and public health. In the context of alienation, the social psychological approach to health issues has boomed, and the concept of mastery in the health domain has become known as the association between a sense of powerlessness and poorer learning of health-relevant information (Seeman & Evans 1962; Seeman & Lewis 1995). In this context, the development of long-term projects that enable the observation of generational change over decades is needed to observe urban agriculture's engagement with the public health (e.g., in the contexts of joint monitoring and the incidence of mortality) (Seeman & Lewis 1995).

Lastly, with regard to the fundamental question concerning the role of urban agriculture in living spaces in the context of de-alienation as improving PWB, such improvements can be achieved through urban agriculture activities that lead to both a sense of mastery and a sense of freedom.

In sum, urban agriculture's psychological well-being process via de-alienation would:

- be conducted on a large scale at the level of communal farming or of planning;
- resolve alienation from nature, which can be seen both through people's connections to nature and through ecologically friendly farming;
- engage the area of public health to develop long-term projects that enable the observation of generational change over decades; and,
- ensure the basic two components of de-alienation: a sense of freedom and a sense of mastery.

5.4.2 Public health: a prospective area in society coordinating urban agriculture to achieve PWB and de-alienation

Among four conditions aforementioned, this study specifically suggests that the effects of urban agriculture would be maximized when it can be engaged to a field of public health.

Firstly, current research stream of PWB with mental psychology can suggest a prospective link between PWB and public health. In PWB studies, Ryff's dimensions of PWB can be abstracted as following keywords: personal comfort, recovery, and neighbourhood improvement via an increasing personal sense of community (c.f. Kaplan 1978; Blair et al. 1991; Lewis 1996; Davis 1998; Wells & Evans 2003; Ashton-Shaeffer & Constant 2005; Matsuo 2004; Elings 2005; Tyrväinen et al. 2007; Lyytimäki & Sipilä 2009; Sommerfeld et al. 2010; Okvat & Zautra 2011).

Now the researchers are seeking the PWB's application to socio-ecological improvement at a social scale. This kind of approach, in turn, can be linked to the Huppert's (2009) review of

PWB's four spectrums, as well as his suggestion to move the mean of mental health continuum towards increased growth; then, its demographic graph can involve fewer people who are languishing (for more detail on Huppert's (2009) concept, see chapter 2).

There has been also a continuous effort to connect alienation and public health. The social psychological approach to health issues has rapidly boomed among alienation researchers, such that the concept of mastery in the health domain is now regarded as an association between a sense of powerlessness and poorer learning of health-relevant information (Seeman & Evans 1962; Seeman & Lewis 1995).

Moreover, a low sense of control was reported to be related to less preventive health behaviour, poorer self-attention to health, and more illness episodes (Seeman & Seeman 1983; Seeman & Lewis 1995). In this respect, Seeman and Lewis (1995:517) argue that a sense of powerlessness is accompanied by illness and that a sense of control is highly relevant to health conditions, such as "the generation of stress under conditions of low control; the deleterious physiological consequences of stress and low control; and the unfavourable behaviour patterns associated with low control (e.g. less utilization of health-related information)".

Standmark (2004) illustrates how ill health is connected to a sense of powerlessness. Through in-depth interviews based on the individual experience, they found that:

feelings of alienation, anguish, shame and guilt take over, and the individual's autonomy and existence are threatened. Stigmatization results from suffering and a sense of worthlessness. The informants compensated for their vulnerability by means of human support, intimacy with others, a society adapted to disability, living in the present and awareness. (Standmark 2004:135)

From this perspective, Yuill (2005) argues that Marx's alienation theory is necessary for understanding health issues in society. He explains this as being related to two reasons as follows:

...the first reason is that there is a general discussion about theory within medical sociology with tensions concerning the sub-disciplines empirical and positivistic leanings (Scambler 2002) and constructionist versus realist perspectives (Williams 2003). Secondly, within medical sociology there has been a growing use of theories and concepts of the body and emotion in assisting a deeper understanding of health (Yuill, 2005:127).

“Studies on alienation theory are lacking within the wider theoretical framework of medical sociology however, given current theoretical trends (e.g., ‘realists’ who turn away from postmodernism and wider concerns within medical sociology relating to the body/biology and emotions), a reappraisal is timely. What Marx’s alienation theory can provide is a theory that articulates the experience of real, natural, biological humans, without collapsing the social into the biological, in a society that inverts human creativity and the ability to purposefully transform nature for the collective good into a painful and fragmented opposite. His theory also reminds us, at the very least, that the commodities that fill the supposedly leisure-centred world of late/high/post-modernity are the actual outcomes of the activities and relationships of real people involved in an exploitative harmful system of production (Yuill, 2005:140).

Expanding the concept of public health into a perspective of resilience of community, additionally, it may be helpful to review Tidball’s concept of a resilience cycle²⁰. Tidball (2012) argues that people follow the cycle of adaption and resilience to aid themselves as well as other parts of the ecosystem. He modified an adaptive cycle of ecosystem and tried to explain a resilience cycle of people with UA.

In this respect, the study suggests exploring the area of public health as a setting for coordinating urban agriculture to achieve PWB and de-alienation. In this section, the study will describe a virtual scenario of field research. Firstly, a large-scale ecological farming site in the field of public health will be the research site. In order to observe autonomy and environmental mastery, I will participate in the farming activity over the long term and will interview the participants. This methodology relates to the research of Stuart, Schewe and Gunderson (2012) on alienated phenomena in the dairy, which examined how robotic milking technology systems might address aspects of alienation in human-animal-

²⁰ When disasters such as war or natural threatening happen and deteriorate surrounding environments, people feel as they are lower potential due to a loss of resources surrounding them. People subconsciously cognize the condition before and that after the disaster, whereby they enter the physical as well as psychological stages of feeling threatened or sense of losses. In responding to the situation, they consciously compensate themselves as achieving physical and emotional affiliation with other living things.

Expanding Tidball’s notion, Tidball & Krasny (2009) organized these psychological effects and established a resilience framework, where various fields including education, ecology, and socio-economy are integrated and show the public that driving powers in society can be driven by linking social and ecological factors. Therefore, this indicates that UA may show some physical and emotional changes such as one’s health, life motivation, or powerlessness. As one activity, they introduce community gardens as a civic ecology practice, through which people learn how their actions impact the biological and physical environment, as well as interconnect to other living components in the ecosystem.

technology interactions. For this research, the authors analysed observations and interviews with dairy farmers in the Netherlands and Denmark and described the results based on four aspects of Marx's alienation.

However, there are still many methodological challenges. For example, in urban agriculture, though there is a great deal of talk about farming in the cities, nothing is perfect. With regard to suggestions for further direction, one thing to remember is that, as a leisure activity, urban agriculture cannot exist as an ultimate form of de-alienation asserted by Marx. Marx argued that alienation can exist as long as capitalism exists in society. As Marx wrote in *Capital*, "the veil is not removed from the countenance of the social life process, i.e. the process of material production, until it becomes production by freely associated men and stands under their conscious and planned control" (Marx 1976:173, as cited in Cox 1998). If we implement urban agriculture in the context of attempting to reclaim our creativity from capitalism, for example, this kind of attempts cannot completely negate alienation.

With regard to forming an ideal answer:

...the eradication of alienation depends on the transformation of society as a whole. However we organise our personal lives and leisure time, we cannot individually fulfil our collective ability to shape the natural world we live in. Lifestyles and leisure activities cannot liberate us from alienation, or even create little islands of freedom in an ocean of alienation. As alienation is rooted in capitalist society, only the collective struggle against that society carries the potential to eradicate alienation, to bring our vast, developing powers under our conscious control and reinstitute work as the central aspect of life. (Cox 1998)

CHAPTER 6: CONCLUSION

Why do people argue that we should implement farming in cities? Why do numerous people still resist participating in the wave of urban agriculture? Various reports and literatures have delivered the message of urban agriculture and its realistic values, mainly in the context of food security. Without focusing on food security, the rationale of conducting urban agriculture has not yet existed as a firm subject in urban studies, including planning.

This phenomenon initially led me to ask about the reason for implementing agricultural work in urban spaces. In the trend of environmental friendly ways of living, city farming has become a well-being activity, incurring benefits beyond the conventional objective of food security. In the Republic of Korea, for example, some government sectors have been relatively interested in the effects of urban agriculture on landscape improvement and the well-being of urbanites. A number of cities in the Republic of Korea have continuously issued regulations concerning urban agriculture. For example, in 2012, the municipal government of Seoul issued a regulation aiming to increase the cultivating area per household to 3.3 m² by 2020²¹ (in 2012, it was 0.3 m²). In addition, the national government has run urban agriculture programs for the deprived, the elderly and immigrant families for several years²². In addition to being adopted by local governments as part of welfare planning, urban agriculture has also appealed to different publics, who engage with urban architecture because it provides healthy food and supports well-being for city dwellers (GRI 2012).

In this context, I questioned whether urban agriculture is able to contribute to well-being—and, if so, what the linkage between the two could be. These questions ultimately motivated the thesis to explore the relationship between urban agriculture and well-being. By engaging with the socio-ecological processes underlying people's well-being, I hypothesized that there may be a process whereby well-being may be affected in the context of alienation. Building on this initial exploration, this study approached the mechanism interlinking well-being and urban agriculture through the lens of alienation. Finally, with regard to the question concerning the role of farming in the city, two sub-research questions were established, as follows: What are the features of urban agriculture, as expressed through the overlapping lens of eudaimonic well-being and alienation? and, What forms of urban agriculture can we expect from case studies of urban agriculture in Seoul?

²¹ "2013 Plan for Urban Agriculture" Seoul Announced (December 18th, 2012) [<http://www.newswire.co.kr/newsRead.php?no=670501>]

²² Seoul Agricultural Technology Service Center [<http://agro.seoul.go.kr/farm/index.html>]

I started my journey with an exploration of well-being. Historically, well-being studies have focused on drivers of feeling of happiness. Such studies have taken a utilitarian approach through various instruments, including subjective well-being and life satisfaction, which have widely used for well-being measurements. However, a high level of quality of life cannot be explained solely through hedonic bodies of happiness. In this context, eudaimonic well-being begins to focus on people's functioning roles in society as alternatives for expanding the concept of happiness.

As a modern instrument of eudaimonic tradition, Ryff (1989) suggested that PWB has six dimensions: autonomy, self-acceptance, purpose of life, personal growth, positive relationships with others, environmental mastery and autonomy. The development of PWB enables the validity of empirical research, although its assessment is still ambiguous due to investigations of internal factors.

In addition, well-being researchers have attempted to combine the concept of psychological well-being with that of public mental health by observing well-being and positive mental health together in their research into disorder and dysfunction. Based on empirical research, they argue that, rather than hedonic happiness, eudaimonic happiness is the key to controlling well-being and further public mental health (Keyes & Annas 2009). Moreover, they suggest that PWB is a capable evaluation tool for public health at the society level, as well as for the schematic version of the spectrum of well-being (Figure 1).

Finally, my research approached urban agriculture and its contributions to people's well-being. Particularly, from a eudaimonic point of view, the concept of societal well-being suggests urban agriculture's possible character in society as involving the provision of satisfaction attained from meaningful relationships or work. It may appear to contribute only to individual desires; however, it contributes to more than that. When urban agriculture's activities achieve psychological well-being, they can finally support community well-being and further public health in society.

The next review concerns alienation. I should note that the effects of alienation on individuals may finally trickle down to the society (as the effects of well-being tend to do). Therefore, it is worthwhile to understand why de-alienation is important for achieving the collective efforts of society, as well as to understand how this helps us achieve the desired results from urban agriculture (as it interacts with psychological well-being).

Alienation is generally defined as a feeling of estrangement from something (McClintock 2009). With regard to this 'something', the concept to alienation has been actively debated among scholars. Marx's alienation theory was based on the three pillars: eudaimonia,

materialism and capitalism's distortion of labour. Particularly, Marx's concept of alienated labour is rooted in Aristotle's eudaimonia, which can be described as living with the achievement of the true nature of humans in society. For his notion of alienation, Marx claims Aristotle's goal of human nature in society, which is an essentially political or social nature. Finally, Marx establishes four provisions of alienation: from product (material), labour (activity), the species (oneself or human nature) and each other (between persons). These components are analytically distinct, but societally interrelated.

The Marx's publication of *The Economic-Philosophical Manuscripts of 1844* was the starting point for an era of rapid growth surrounding the concept of alienation. Marx's alienation theory has evolved through historical events worldwide, such as World Wars and economic development under capitalism. Two significant streams—which are largely accepted as the most significant descendants of Marx's alienation—are discussed: American socialism and Neo-Marxism. Alienation in American socialism is often regarded as a personal psychological trait with scientific grounds. Seeman (1959) established its symptoms as involving five aspects: powerlessness, meaninglessness, normlessness, isolation and self-estrangement.

On the other hand, neo-Marxism deals with alienation on political grounds, focusing on a social phenomenon related to alienation from labour and from nature (McClintock 2009). In an approach that is closer to the original spirit of Marxism, neo-Marxists essentially maintain that individual de-alienation would be resolved through the structural reform of capitalistic society. Neo-Marxists have humanized alienation theory through the reconsolidation of the relationship between labourers and labour. Through a normative focus, they believe that workplaces built on the structural logics of capitalist accumulation in current society deprive people of free time, separate enjoyment from labour (Williamson & Cullingford 1997), and degrade humans' creativity and sense of control (Yuill 2011). The recent trend of neo-Marxism involves a spatial and geographical perspective of the urban space, involving the concepts of land control, the urban common and the metabolic rift. Neo-Marxists' approaches ultimately support their interest in agriculture in the urban space as a single resolution.

From the literature review, I note that both schools of alienation identify themselves as existing within the framework of Marx: that is, alienation caused by individual experiences can also be traced to the structures of individuals' involvement society (namely, individuals mediated by structure and agency).

These two main theoretical streams of well-being and alienation finally led me to understand how to approach features of urban agriculture. In essence, urban agriculture and its benefits

can be explicitly appreciated once we can also appreciate why they are important to our well-being and de-alienation. This will involve some explanation of our characters as social member, as well as our perspectives of labour.

Few research studies on the correlations between well-being and urban agriculture use of Ryff's (1989) scale of psychological well-being. However, a number of references on well-being indirectly mention the psychological impacts of urban agriculture (c.f. Kaplan 1978; Blair et al. 1991; Lewis 1996; Davis 1998; Wells & Evans 2003; Ashton-Shaeffer & Constant 2005; Matsuo 2004; Elings 2005; Tyrväinen et al. 2007; Lyytimäki & Sipilä 2009; Sommerfeld et al. 2010; Okvat & Zautra 2011). The advantages of urban agriculture are divided among Ryff's (1989) dimensions of PWB, and they can be abstracted through the following keywords: personal comfort, recovery, and neighbourhood improvement via an increased personal sense of community. The contribution of urban agriculture to society is best studied from the contexts of self-acceptance, mastery of the environment, purpose in life, personal growth and autonomy.

In Western Marxism and its recent theories of urban agriculture, the advantages of urban agriculture for the de-alienation process are primarily associated with the idea of land control as an investigation into agricultural changes within the transition to capitalistic economy—which is one of the classic questions among Marxists (Lenin 1956; Chayanov 1986; Aschmann 1988; Kautsky 1988; Byers 1991; Watts & Goodman 1997; Pelluso & Lund 2011). The land control theory supports agricultural space in cities as an urban green common area for linking human beings and the environment.

Such a space is finally suggested as one way to fill the gap—namely, the metabolic rift in urban space (McClintock 2010). Particularly, the notion of metabolic rift provides an additional explanation that the soil environment is also targeted to cause a biophysical rift in natural systems (such as nutrient cycles) when farming in the city (Marx 1981; McClintock 2010) In the neo-Marxian context, it is expected that the relationship between urban agriculture and its potential de-alienation process is based on Marx's four types of alienation: de-alienation from product, from product activities, from species beings and from fellow species.

With regard to the question concerning the role of urban agriculture in living spaces in the context of de-alienation as a method of improving PWB, the study notes that the two theories are derived from Aristotle's idea of eudaimonia. From the perspective of psychological well-being, Aristotle's view of optimal well-being can be explained as a set of individual desires that are designed through human growth and produced by connecting

societal structures (Fromm 1981; Ryan & Deci 2001). Aristotle's eudaimonia was also relevant to Marx's alienated labour theory.

Marx re-named Aristotle's 'happiness' as 'freedom'—or the realisation of a reason to work (Kain 1992). Moreover, the theory of eudaimonia is linked to Marx's (1844) ideas concerning the nature of human beings: that is, that people are social beings. With regard to Aristotle's opening question concerning the highest of all goods achievable by human action, well-being researchers could answer that this good is happiness due to well-functioning in society (namely, PWB), while Marxists could answer that it is de-alienation or freedom (emancipation).

Finally, an individual's eudaimonia may begin as a form of well-being and end as de-alienation. In this context (i.e., the interconnections among eudaimonia, individual fulfilment in societal development and the essence of labour), the cause of alienation and psychological well-being can be discussed.

In the context of urban agriculture, de-alienation from species beings via urban agriculture concerns how people can reconcile with their separation from nature through whole ecosystems in urban spaces. In other words, de-alienation via urban agriculture can be highlighted as the recovery of a species, due to its provision of meaningful relationships with the natural world (namely, through hybrid spaces) (Hawkes & Acott 2013). In addition, de-alienation from species beings via urban agriculture refers to how people can reconcile with separations from nature through whole ecosystems in urban spaces. In urban spaces, the strong separation from other human beings can be linked to the public perception of urban places. Finally, de-alienation from human beings can be said to involve a rehabilitation of identities as social beings. In this context, a theoretical cooperation between alienation and resilience theory has been suggested (Colding & Barthel 2013).

Ultimately, urban agriculture's psychological well-being process of de-alienation may be conducted at a large scale at the level of communal farming or of planning, thereby enabling socio-economic potential. Individuals can improve their PWB through urban agriculture, which has been proven beneficial from the perspective of well-being in a number of research studies. In order to embrace PWB and de-alienation together, however, the study suggests that urban agriculture should be increased, considering its socio-economic benefits, to the level of collective gardening or of planning. Moreover, farming—through the de-alienation process—may resolve individuals' alienation from nature, which is clear both in people's connections to nature and in ecologically friendly farming.

The current stream of PWB, which links mental psychology to a spectrum of populations based on a national survey, may suggest a way to link PWB to public health. In the case of alienation, furthermore, I can see that the social psychological approach to health issues has grown rapidly. Specifically, the concept of mastery in the health domain is known to be the association between a sense of powerlessness and poorer learning of health-relevant information (Seeman & Evans 1962; Seeman & Lewis 1995). In this context, the development of long-term projects that enable observations of generational change over decades may be needed to observe urban agriculture's involvement in public health. Urban agricultural programs supporting enhanced mastery can be suggested as a form of farming for de-alienation.

REFERENCES

- ADAMS, T.B., BEZNER, J.R. & STEINHARDT, M.A. (1997) The conceptualization and measurement of perceived wellness: Integrating balance across and within dimensions. *American Journal of Health Promotion*, 11:208-218
- ADEDEJI, O.H. & ADEMILUYI, I.A. (2009) Urban agriculture and urban land use planning: Need for a synthesis in metropolitan Lagos, Nigeria. *Journal of Geography and Regional Planning*, 2(3): 043-050.
- ADEYEMI, A. (1997) *Urban Agriculture: An Abbreviated List of References and Resource Guide*, Beltsville, MD: USDA, ARS, National Agricultural Library.
- AIRRIESS, C.A. and CLAWSON, D.L. (1994) Vietnamese market gardens in New Orleans. *Geographical Review*, 84:16–31.
- ALEXANDER, J., NORTH, M.W. & HENDREN, D.K. (1995) Master gardener classroom garden project: An evaluation of the benefits to children. *Child Environments*, 12(2):124-133.
- ANKONY, R.C. and KELLY, T.M. (1999) The impact of perceived alienation on police officers: sense of mastery and subsequent motivation for proactive enforcement. *Policing: An International Journal of Police Strategies & Management*, 22(2):120-134.
- ANNERSTEDT, M. and WAHRBORG, P. (2011) Review Article. Nature-assisted therapy: Systematic review of controlled and observational studies. *Scandinavian Journal of Public Health*, 39:371-388.
- ARGYLE, M. (1987) *The psychology of happiness*. London: Routledge.
- ARMSTRONG, D. (2000) A survey of community gardens in upstate New York: Implications for health promotion and community development. *Health and Place*, 6:319–327.
- ARTIBISE, A. (1995) Keynote Address. *PIBC News*, Vol. 37(2):10.
- ASCHMANN, H. (1988) Proprietary rights to fruit on trees growing on residential land. (In) FORTMANN L.P. and BRUCE, J.W. (Eds.) *Whose trees? Proprietary dimensions of forestry*, Boulder: Westview Press.
- ASHTON-SHAEFFER, C. and CONSTANT, A. (2005) Why do older adults garden? *Activities, Adaptation and Aging*, 30:1–18.
- BABU, S & GULATI, A 2005, *Economic Reforms and Food Security*.
- BARTHEL, S., FOLKE, C. & COLDING, J. (2010a) Social–ecological memory in gardening: Retaining the capacity for management of ecosystem services. *Global Environmental Change*, 20(2):255–265.
- BARTHEL, S., SÖRLIN, S. & LJUNGQVIST, J. (2010b) Innovative memory and resilient cities: echoes from ancient Constantinople. (In) SINCLAIR, P., HERSCHEID, F., ISENDAHL, C. & NORDQUIST, G. (Eds.) *The Urban Mind* (pp. 391–405), Uppsala: Uppsala University Press.

- BARTOLOMEI, L., CORKERY, L., JUDD, B. & THOMPSON, S. (2003) *A bountiful harvest: Community gardens and neighborhood renewal in Waterloo*, Sydney: University of New South Wales.
- BAUER, J.J., MCADAMS, D.P. & PALS, J.L. (2006) Narrative identity and eudaimonic well-being. *Journal of Happiness Studies*, DOI 10.1007/s10902-006-9021-6.
- BEATLEY, T. (2011) *Biophilic Cities: Integrating UA into urban design and planning*, Washington D.C.: Island Press.
- BECKER, L.C. (1992) Good lives: Prolegomena. *Social Philosophy and Policy*, 9:15–37.
- BEHNASSI, M, POLLMANN, O & KISSINGER, G 2010, *Sustainable Food Security in the Era of Local and Global Environmental Change*.
- BENDT, P., BARTHEL, S. & COLDING, J. (2013) Civic greening and Environmental learning in public-access community gardens in Berlin. *Landscape and Urban Planning*, 109:18–30.
- BERKES, F. and FOLKE, C. (1998) *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience*, Cambridge, U.K.: Cambridge University Press.
- BERKES, F., COLDING, J. & FOLKE, C. (2003) *Navigating Social–Ecological Systems: Building Resilience for Complexity and Change*, Cambridge, U.K.: Cambridge University Press.
- BERTO R. (2005) Exposure to restorative environments helps restore attentional capacity. *Journal of Environmental Psychology*, 25:249-259.
- BHATTI, M. (1999) The meaning of gardens in an age of risk. (In) Chapman, T. & Hockey, J. (Eds.) *Ideal homes? Social change and domestic life* (pp. 181–193), London: Routledge.
- BHATTI, M. (2006) ‘When I’m in the garden I can create my own paradise’: Homes and gardens in later life. *The Sociological Review*, 54(2):318-341.
- BLAIR, D. (2009). The child in the garden: An evaluative review of the benefits of school gardening. *Journal of Environmental Education*, 40(2):15-38.
- BLAIR, D., GIESECKE, C.C. & SHERMAN, S. (1991) A dietary, social, and economic evaluation of the Philadelphia urban gardening project. *Journal of Nutritional Education*, 23:161–167.
- BLAUNER, R. (1964) *Alienation and Freedom: The Factory Worker and his Industry*, Chicago, IL: University of Chicago Press.
- BLOMLEY, N. (2007) Enclosure, common right and the property of the poor. *Social & Legal Studies*, 17:311–331.
- BOONE, C & MODARRES, A 2009, *City and Environment*.
- BOURDIEU, P. (1987) *Die feinen Untertchiede*, Frankfurt a.M.: Suhrkamp (Trans.) CHOI, J.C. (1995/1996) *구별짓기: 문화와 취향의 사회학(상/하)*, 서울: 새물결.

- BOYER, L. and ROTH, W.M. (2006) Learning and teaching as emergent features of informal settings: an ethnographic study in an environmental action group. *Science Education*, 90:1028–1049.
- BRADBURN, N.M. (1969) *The Structure of Psychological Well-Being*. Chicago: Aldine.
- BRAGG, E.A. (1996) Towards ecological self: deep ecology meets constructionist self-theory. *Journal of Environmental Psychology*, 16:93-108.
- BRAVERMAN, H. (1974) *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York: Monthly Review Press.
- BRDAR, I 2011, *The Human Pursuit of Well-being: A Cultural Approach*, Springer, London.
- BRINK, L and YOST, B. (2004) Transforming Inner-city School Grounds: Lessons From Learning Landscape. *Children Youth and Environments*, 14(1):209-233.
- BROGAN, D.R. and JAMES, L.D. (1980) Physical environment correlates of psychosocial health among urban residents. *American Journal of Community Psychology*, 8:507–522.
- BROOK, I. (2010) The importance of UA, green spaces, and gardens in human well-being. *Ethics, Place and Environment*, 13(3):295–312.
- BROWN, K.H. and JAMETON, A.L. (2000) Public Health Implications of Urban Agriculture. *Journal of Public Health Policy*, 21(1):20-39.
- BRUNOTTS, C.M. (1998) School gardening- A multifaceted learning tool. An evaluation of the Pittsburgh civic garden centers Neighbors and Schools Gardening Together. *Unpublished Masterss Thesis*, Duquesne University, Pittsburgh, PA.
- BRYLD, E. (2003) Potentials, problems, and policy implications for urban agriculture in developing countries. *Agriculture and Human Values*, 20:79-86.
- BRYNJEGARD, S. (2001) *School gardens: Raising environmental awareness in children*. San Rafael, CA: School of Education, Dominican University of California. (ERIC Documentation Reproduction Service No. ED452085). Retrieved December 23, 2006, from <http://edres.org/eric/ED452085.htm>
- BURCHARDT, T., LE GRAND, J. & PIACHAUD, D. (2002) Degrees of exclusion: developing a dynamic, multidimensional measure. (In) HILLS, J., LE GRAND, J. & PIACHAUD, D. (Eds.) *Understanding social exclusion* (pp.30-43), New York: Oxford University Press.
- BYERS, B. (1991) Ecoregions, state sovereignty and conflict. *Bulletin of Peace Proposals: Sage Publications*, 22(1):65–76.
- CALIFORNIA DEPARTMENT OF EDUCATION (2005) *Catalogue listing of publications*. Retrieved July 8, 2006, from <http://www.cde.ca.gov/re/pn/rc/ap/pubdisplay.aspx?ID=001512>
- CAMPBELL, L. and WIESEN, A. (2009) *Restorative Commons: Creating Health and Well-being through Urban Landscapes*, PA, USA: USDA Forest Service.
- CANARIS, I. (1995) Growing foods for growing minds: Integrating gardening into the total curriculum. *Children's Environments*, 12(2):134-142.

- CARUNCHO, F. (2005) The spirit of the geometrician. (In) Richardson, T. & Kingsbury, N. (Eds.) *Vista: The culture and politics of gardens* (pp. 111–117), London: Frances Lincoln.
- CASTREE, N. (2006) *Nature*, Oxon: Routledge.
- CAUDWELL, C. (1977) *The Concept of Freedom*, Lawrence & Wishart Ltd.
- CHAU, A. (2003) On Aristotle and Marx: A Critique of Aristotelian Themes in Marxist Labor Theory. *Unpublished paper*.
http://economics.stanford.edu/files/Theses/Theses_2003/Chau.pdf
- CHAWLA, L. (1999) Life paths into effective environmental action. *The Journal of Environmental Education*, 31(1):15-26.
- CHAYANOV, A.V. (1986) *The theory of peasant economy*, Madison: University of Wisconsin Press.
- CHENG, S.T. and. CHANG, A.C.M (2005) Measuring psychological well-being in the Chinese, *Personality and Individual Differences*, 38(6):1307–1316.
- CHRISTENSON, J.A. and ROBINSON, J.W. Jr. (1980) *Community Development in America* (pp. 3-17), Ames, I.A.: Iowa State University Press.
- CHUN, S.Y. (2006) Structural characteristic and social effect of ‘Well-beign discourse’ (IN Korean: ‘웰빙담론’의 구조적 성격과 사회이론적 함의). *Eastern and Western thought*(1):75-95. [<http://www.dbpia.co.kr/Journal/ArticleDetail/631015>]
- CIMPRICH, B. and RONIS, D.L. (2003) An environmental intervention to restore attention in women with newly diagnosed breast cancer. *Cancer Nursing*, 26:284-92.
- CLARK, B. and YORK, R. (2005) Carbon metabolism: global capitalism, climate change, and the biospheric rift. *Theory and Society*, 34: 391–428.
- CLARK, B. and YORK, R. (2008) Rifts and shifts: getting to the root of environmental catastrophe. *Monthly Review*, 60: 13–24.
- CLARK, J. (1959) Measuring alienation within a social system. *American Sociological Review*, 24(6):849–852.
- CLARKE, P.J., MARSHALL, V.W., RYFF C.D. & WHEATON B. (2001) Measuring psychological well-being in the Canadian Study of Health and Aging, *International Psychogeriatrics*, 13(Suppl 1):79–90.
- CLAUSEN, R. (2007) Healing the rift: metabolic restoration in Cuban agriculture. *Monthly Review*, 59: 40–52.
- CLAUSEN, R. and CLARK, B. (2005) The metabolic rift and marine ecology: an analysis of the ocean crisis within capitalist production. *Organization & Environment*, 18:422–444.
- CLAYTON, S. (2003) Environmental identity: a conceptual and an operational definition. (In) CLAYTON, S. and OPOTOW, S. (Eds.) *Identity and the natural environment: The psychological significance of nature* (pp. 45-
- CLAYTON, S. and OPOTOW, S. (2003) Introduction: identity and the natural environment. (In) CLAYTON, S. and OPOTOW, S. (Eds.) *Identity and the natural environment: The psychological significance of UA* (pp. 1-24), Cambridge, MA: MIT Press.

- CLOW, M. and McLAUGHLIN, D. (2007) Healing the metabolic rift between farming and the eco-system: challenges facing organic farmers in Canada and in Sweden. *Journal of the Society for Socialist Studies*, 3:5–21.
- COHEN, S., DOYLE, W.J., TURNER, R.B., ALPER, C.M. & SKONER, D.P. (2003a) Emotional style and susceptibility to the common cold. *Psychosomatic Medicine*, 65(4):652–657.
- COHEN, S., DOYLE, W.J., TURNER, R.B., ALPER, C.M. & SKONER, D.P. (2003b) Sociability and susceptibility to the common cold. *Psychological Science*, 14:388–395.
- COLDING, J., BARTHEL, S., BENDT, P., SNEP, R., KNAAP, van der W. & ERNSTSON, H. (2013) Urban green commons: Insights on urban common property systems. *Global Environmental Change*, (2013).
- COLDING, J. (2011) Creating incentives for increased public engagement in ecosystem management through urban commons. (In) BOYD, E. and FOLKE, C. (Eds.) *Adapting Institutions: Meeting the Challenge of Global Environmental Change*, Cambridge, UK: Cambridge University Press.
- COLDING, J. and BARTHEL, S. (2013) The potential of ‘Urban Green Commons’ in the resilience building of cities. *Ecological Economics*, 86:156–166.
- COLDING, J., LUNDBERG, J. & FOLKE, C. (2006) Incorporating green-area user groups in urban ecosystem management. *Ambio*, 35:237–244.
- COLDING, J., BARTHEL, S., BENDT, P., SNEP, R., KNAAP van der, W. & ERNSTSON, H. (2013) Urban green commons: Insights on urban common property systems. *Global Environmental Change*, in press.
- COMPTON, W.C., SMITH, M.L., CORNISH, K.A., & QUALLS, D.L. (1996) Factor structure of mental health measures. *Journal of Personality and Social Psychology*, 71:406–413.
- CONNELL, J. (2004) The purest of human pleasures: The characteristics and motivations of garden visitors in Great Britain. *Tourism Management*, 25:229–247.
- COOCH, M. (2003) A sense of place: ecological identity as a driver for catchment volunteering. *Australian Journal on Volunteering*, 8(2):23-33.
- CORLETT, J.L., DEAN, E.A. & GRIVETTI, L.E. (2003) Hmong gardens: botanical diversity in an urban setting. *Economic Botany*, 57:365-379.
- COTTERELL, J. (1996) *Social Networks & Social Influences In Adolescence*, London: Routledge.
- COX J (1998). An introduction to Marx’s theory of alienation. *International Socialism*, 79:41-62. <http://www.marxists.org/history/etol/newspape/isj2/1998/isj2-079/cox.htm>
- DAGENAIS-DESMARAIS, V. and SAVOIE, A. (2012) What is Psychological Well-Being, Really? A Grassroots Approach from the Organizational Sciences. *Journal of Happiness Studies*, 13:659–684.
- DANNER, D., SNOWDON, D. & FRIESEN, W. (2001) Positive emotions in early life and longevity: Findings from the Nun Study. *Journal of Personality and Social Psychology*, 80:804–813.

- DAVIDS, A. (1955) Alienation, social apperception and ego structure. *Journal of Consulting Psychology*, 2:1-27.
- DAVIS, S. (1998) Development of the profession of horticultural therapy. (In) SIMSON S.P. & STRAUS, M.C. (Eds.) *Horticulture as therapy: Principles and practice* (pp. 3–18), New York: The Haworth Press.
- De VRIES, J. and van der WOUDE, A. (1997) *The first modern economy*, Cambridge: Cambridge University Press.
- De VRIES, S., VERHEIJ, R.A., GROENEWEGEN, P.P. & SPREEUWENBERG, P. (2003) Natural environments healthy environments? An exploratory analysis of the relationship between greenspace and health. *Environment and Planning A*, 35:1717-1731.
- DEAN, D.G. (1961) Alienation: its meaning and measurement. *American Sociological Review*, 26(5):753-758.
- DECI, E.L. and RYAN, R.M. (2008) Hedonia, Eudaimonia, and well-being: an introduction. *Journal of Happiness Studies*, 9:1–11 DOI 10.1007/s10902-006-9018-1.
- DEMERITT, D. (2002) What is the ‘social construction of nature’? A typology and sympathetic critique. *Progress in Human Geography*, 26(6):767–790.
- DENISE, T.C. (1973) The Concept of Alienation: Some Critical Notices. (In) JOHNSON, F. (Eds.) *Alienation: Concept, Term & Meaning*, New York: Seminar Press.
- DICKENS, P. (1992) *Society and nature: towards a green social theory*, Hertfordshire: Harvester Wheatsheaf.
- DICKENS, P. (1996) *Reconstructing Nature: Alienation, Emancipation and the Division of Labor*, London: Routledge.
- DIENER, E. (1984). Subjective well-being. *Psychological Bulletin*, 95:542–575.
- DIENER, E., LUCAS, R. E., & OISHI, S. (2002) Subjective well-being: The science of happiness and life satisfaction. (In) SNYDER, C.R. & LOPEZ, S.J. (Eds.), *Handbook of positive psychology* (pp. 63–73). New York: Oxford University Press.
- DIENER, E., SAPYTA, J J., & SUH, E. (1998) Subjective well-being is essential to well-being. *Psychological Inquiry*, 9, 33–37.
- DIENER, E., SUH, E.M., LUCAS, R.E., & SMITH, H.L. (1999) Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125:276–302.
- DIRKS, A.E. and ORVIS, K. (2005) An evaluation of the junior master gardener program in third grade classrooms. *HortTechnology*, 15:443-447.
- DOLAN, P. and MATHEW White, M. (2006) *Final report for Defra Review of research on the influences on personal well-being and application to policy making*, The Department for Environment, Food and Rural Affairs, The United Kingdom. [<http://defra.gov.uk/sustainable/government/publications/pdf/WellbeingProject2.pdf>]
- DRECHSEL, P & KUNZE, D 2001, *Waste Compositing for Urban and Peri-urban Agriculture*.

- DRESCHER, A. & IAQUINTA, D. (1999) *Urban and peri-urban agriculture: A new challenge for the UN Food and Agriculture Organisation (FAO)*, Rome, FAO Internal report.
- DUANY, A. & DPZ (2011) *Garden cities: theory and practice of agrarian urbanism*, London, The Prince's Foundation for the Built Environment.
- DUERDEN, M.D., & WITT, P.A. (2010) The impact of direct and indirect experiences on the development of environmental knowledge, attitudes and behaviour. *Journal of Environmental Psychology*, 30:379-392.
- DURKHEIM, E. (1951) *Suicide: A Study in Sociology* (translated by Spalding, J.), Glencoe, IL: The Free Press.
- DURKHEIM, E. (1984) *The Division of Labour in Society* (translated by Halls, W.D.), Macmillan: Houndsmills.
- ELINGS, M. (2005) CHAPTER 4. PEOPLE–PLANT INTERACTION: The physiological, psychological and sociological effects of plants on people. (In) ELINGS, M. and HASSINK, J. (Eds.) *Farming for health in the Netherlands*. (pp. 43-55), Wageningen UR, Plant Research International.
- ERNSTSON, H. (2013) Re-translating nature in post-apartheid Cape Town: the material semiotics of people and plants at Bottom Road. (In) HEEKS, R. (Eds.) *Actor-Network Theory for Development: Working Paper Series. Institute for Development Policy and Management, SED, University of Manchester, Manchester.* , ISBN: 978-1-905469-67-3, <http://www.cdi.manchester.ac.uk/resources/ant4d/documents/ANT4DWorkingPaper4Ernstson.pdf>.
- FADDEGON, P A. (2005) The kids growing food school gardening program: Agricultural literacy and other educational outcomes. *Doctoral dissertation*, Cornell University, Ithaca, NY.
- FAO (1996) *World Food Summit*.
- FISCHER, E. (1996) *How to Read Karl Marx*, Monthly Review Press.
- FOLKE, C., JANSSON, A., LARSSON, J., & COSTANZA, R. (1997) Ecosystem appropriation by cities. *AMBIO: A Journal of the Human Environment*, 26:167–172.
- FORREST, R. and KEARNS, A. (2001) Social cohesion, social capital and the neighbourhood. *Urban Studies*, 38(12):2125-43.
- FOSTER, J. B. (1999) Marx's theory of metabolic rift: classical foundations for environmental sociology. *American Journal of Sociology*, 105:366–405.
- FOSTER, J. B. (2000) *Marx's Ecology: Materialism and Nature*, New York: Monthly Review Press.
- FOSTER, J.B. and MAGDOFF, F. (2000) Liebig, Marx, and the depletion of soil fertility: relevance for today's agriculture. (In) MAGDOFF, F., FOSTER, J.B. & BUTTEL, F.H. (Eds.) *Hungry for Profit: The Agribusiness Threat to Farmers, Food and the Environment*, New York: Monthly Review Press.
- FOSTER, J.B. and MAGDOFF, F. (2009) *The great financial crisis*, New York: Monthly Review Press.

- FRANCIS, M., and HESTER, R.T. (1990). *The meaning of gardens*, Cambridge, MA: MIT Press.
- FREDRICKSON, B.L., MANCUSO, R.A., BRANIGAN, C., & TUGADE, M. (2000) The undoing effect of positive emotions. *Motivation and Emotion*, 24:237–258.
- FREEMAN, C., DICKINSON, K.J.M., PORTER, S. & HEEZIK, Y. VAN (2012) “My garden is an expression of me”: Exploring householders’ relationships with their gardens. *Journal of Environmental Psychology*, 32:135-143.
- FROMM, E. (1941) *Escape from Freedom*, New York, NY: Holt, Rinehart and Winston Inc.
- FROMM, E. (1955) *The Sane Society*, New York, NY: Holt, Rinehart and Winston, Inc.
- FROMM, E. (1981) Primary and secondary process in waking and in altered states of consciousness. *Academy of Psychological Bulletin*, 3:29–45.
- FRUMKIN, H. (2002) Urban sprawl and public health. *Public Health Report*, 117: 201–217.
- FULLER, R.A., IRVINE, K.N., DEVINE-WRIGHT, P., WARREN, P.H., & GASTON, K.J. (2007). Psychological benefits of greenspace increase with biodiversity. *Biology Letters*, 3:390-394.
- GALLIE, D. (1978) *In Search of the New Working Class*, Cambridge: Cambridge University Press.
- GARRISON, C.Z., SCHLUCHTER, M.D., SCHOENBACH, V.J. & KAPLAN, B.K. (1989) Epidemiology of depressive symptoms in young adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 28:343–351.
- GBADEGESIN, A. (1991) Farming in the urban environment of a developing nation - A case study from Ibadan metropolis in Nigeria. *The Environmentalist*, 11(2): 105-111.
- GEIS, K.J. and ROSS, C.R. (1998) A New Look at Urban Alienation: The Effect of Neighborhood Disorder on Perceived Powerlessness. *Social Psychology Quarterly*, 61(3):232-246.
- GERMOV, J. (1999) Conclusion: Beyond common sense and towards constructive doubt. (In) GERMOV, J. (Eds.) *Second opinion: An introduction to health sociology* (pp. 315-325), Melbourne: Oxford University Press.
- GEYER, F. and SCHWEITZER, D. (1976) Introduction. (In) GEYER, F. and SCHWEITZER, D. (Eds.) *Theories of Alienation* (pp. xx-xxi), Leiden: Martinus Nijhoff.
- GEZONDHEIDSRAAD (2004) *Natuur en gezondheid: invloed van natuur op sociaal, psychisch en lichamelijk welbevinden (Deel 1 van een tweeluik: verkenning van de stand der wetenschap)*. Gezondheidsraad, Den Haag. GR no. 2004/09. [<http://www.gr.nl/pdf.php?ID=1018>]
- GILBERT, Alan (1992) Marx’s Moral Realism: Eudaimonism and Moral Progress. (In) MCCARTHY, G.E. (Eds.) *Marx and Aristotle: Nineteenth Century German Social Theory and Classical Antiquity* (pp. 303-329), Maryland: Rowman & Littlefield Publishers, Inc.
- GIDLÖ F-GUNNARSSON, A. and ÖHRSTRÖM, E. (2007) Noise and well-being in urban residential environments: the potential role of perceived availability to nearby green space. *Landscape Urban Planning*, 83:115-26.

- GLOVER, T., SHINEW, K. & PARRY, D. (2005) Association, sociability, and civic culture: the democratic effect of community gardening. *Leisure Sciences*, 27:75–92.
- GLOVER, T.D. (2003) The story of the Queen Anne memorial garden: Resisting a dominant cultural narrative. *Journal of Leisure Research*, 35:190–212.
- GLOVER, T.D., PARRY, D.C., & SHINEW, K.J. (2004) Leisure spaces as potential sites for interracial interaction: Community gardens in urban areas. *Journal of Leisure Research*, 36:336–355.
- GOODKIND J.R. (2006) Promoting Hmong Refugees' Well-Being through Mutual Learning: Valuing Knowledge, Culture, and Experience. *American Journal of Community Psychology*, 27(1-2):77-93.
- GRAHAM, H., BEALL, D. L., LUSSIER, M., MCLAUGHLIN, P., & ZIDENBERG-CHERR, S. (2005) Use of school gardens in academic instruction. *Journal of Nutrition Education Behavior*, 37(3):147-151.
- GRAHAM, H., FEENSTRA, G., EVANS, A.M., & ZIDENBERG-CHERR, S. (2004) Davis school program supports life-long healthy eating habits in children. *California Agriculture*, 58, 200-205.
- GRAHAM, S. and CONNELL, J. (2006) Nurturing relationships: The gardens of Greek and Vietnamese migrants in Marrickville, Sydney. *Australian Geographer*, 37:375–393.
- GRBICH, C. (2004) Health. (In) GRBICH, C. (Eds.) *Australia: Sociological concepts and issues* (pp. 28–41), Sydney: Pearson and Longman.
- GREATER LONDON AUTHORITY (2001) *Green spaces Investigative Committee. Scrutiny of Green Spaces in London*, Greater London Authority, Romney House, London.
- GREEN, A.E. & WHITE, R.J. (2007) *Attachment to place: Social networks, mobility and prospects of young people*, York: Joseph Rowntree Foundation.
- GREENBERG, P.E., STIGLIN, L.E., FINKELSTEIN, S.N., & BERNDT, E.R. (1993) The economic burden of depression in 1990. *Journal of Clinical Psychiatry*, 54:405–418.
- GRI (2012) *Revitalization planning of urban agriculture in Gyeonggi-Do*, Gyeonggi Research Institute, the Republic of Korea [www.grl.kr].
- GRIMM, N.B., FAETH, S.H., GOLUBIEWSKI, N.E., REDMAN, C.L., WU, J., & BAI, X. (2008) Global change and the ecology of cities. *Science*, 319:756–760.
- GROSS, H. and LANE, N. (2007) Landscapes of the lifespan: Exploring accounts of own gardens and gardening. *Journal of Environmental Psychology*, 27:225–241.
- GUO, S 2006, *The Political Economy of Asian Transition from Communism*, Ashgate Publishing Company, Hampshire.
- HALL, D. (1996) Community Gardens as an Urban Planning Issue. *Masters Thesis*, The University of British Columbia.
- HANCOCK, T. (2001) People, partnerships and human progress: Building community capital. *Health Promotion International*, 16:275–280.

- HANNA, A.K. and OH, P. (2000) Rethinking urban poverty: A look at community garden. *Bulletin of Science, Technology and Society*, 20:207–216.
- HARTIG T., EVANS, G.W., JAMNER, L.D., DOWS, D.S. & GÄRLING, T. (2003) Tracking restoration in natural and urban field settings. *Journal of Environmental Psychology*, 23:109-123.
- HARTIG, T., BÖÖK, A., GARVILLE, J., OLSSSEN, T., & GÄRLING, T. (1996) Environmental influences on psychological restoration. *Scandinavian Journal of Psychology*, 37:378-393.
- HARTIG, T., MANG, M. & EVANS, G.W. (1991) Restorative effects of natural environment experiences. *Environment and Behavior*, 23:3–27.
- HARVEY, D. (2006) *Spaces of Global Capitalism*, London: Verso.
- HASSAN, MR, SCHOLE, R & ASH, N 2005, *Ecosystems and Human Well-Being*.
- HAWKES, F.M. and ACOTT, T.G. (2013) People, environment and place: the function and significance of human hybrid relationships at an allotment in South East England. *The International Journal of Justice and Sustainability*, DOI:10.1080/13549839.2013.787590.
- HEAD, L. and MUIR, P. (2007) *Backyard: Nature and culture in suburban Australia*, Wollongong, Australia: Wollongong University Press.
- HEALTH COUNCIL OF THE NETHERLANDS (2004) Dutch Advisory Council for research on Spatial Planning, UA and the Environment. UA and health: the influence of UA on social, psychological and physical well-being. The Hague/The Hague: Health Council of the Netherlands/RMNO, 2004 (URL:<http://www.gr.nl/pdf.php?ID=1019&p=1>. Accessed: 2008-05-27) (Archived by Website at <http://www.webcitation.org/5Y7iVCpyn>)
- HERMANN, J.R., PARKER, S.P. & BROWN, B.J. (2006) After-school gardening improves children's reported vegetable intake and physical activity. *Journal of Nutrition Education and Behavior*, 38: 201-202.
- HITCHINGS, R. (2006) Expertise and Inability: Cultured Materials and the Reason for Some Retreating Lawns in London. *Journal of Material Culture November*, 11:364-381.
- HODGETTS, D., STOLTE, O., CHAMBERLAIN, K., RADLEY, A., GROOT, S., & NIKORA, L.W. (2009). The mobile hermit and the city: Considering links between places, objects, and identities in social psychological research on homelessness. *British Journal of Social Psychology*, 49(2):285-303.
- HOLLAND, L. (2004) Diversity and connections in community gardens: a contribution to local sustainability. *Local Environment*, 9:285–305.
- HONDAGNEU-SOTELO, P. (2010) Cultivating questions for a sociology of gardens. *Journal of Contemporary Ethnography*, 35(9):498-516.
- HONEYMAN, M. K. (1992) Vegetation and stress: a comparison study of varying amounts of vegetation in countryside and urban scenes. (In) RELF, D. (Eds.) *The role of horticulture in human well-being and social development* (pp. 143-145), Portland, OR: Timber Press.

- HUPPERT, F.A. (2005) Positive mental health in individuals and populations. (In) HUPPERT, F.A., BAYLIS, N. & KEVERNE, B. (Eds.) *The science of well-being* (pp. 307–340), Oxford: Oxford University Press.
- HUPPERT, F.A. (2009) Psychological Well-being: Evidence Regarding its Causes and Consequences. *Psychology: health and well-being*, 1(2):137–164.
- HUPPERT, F.A., and WHITTINGTON, J.E. (2003) Evidence for the independence of positive and negative well-being: Implications for quality of life assessment. *British Journal of Health Psychology*, 8:107–122.
- IRVINE, S., JOHNSON, L. & PETER, K. (1999) Community gardens and sustainable land use planning: A case-study of the Alex Wilson community garden. *Local Environment*, 4(1): 33–46.
- IVARSSON, C.T. & HAGERHALL, C.M. (2008) The perceived restrictiveness of gardens e Assessing the restorativeness of a mixed built and natural scene type. *Urban Forestry & Urban Greening*, 7: 107-118.
- JIANG, L. (2012) Several thoughts on alienated labor theory by Marx. *Asian Social Science*, 8(7):100-103.
- JESSOR, R. and JESSOR, S.L. (1977) *Problem Behaviour and Psychosocial development*, New York: Academic Press Inc.
- JOHNSON, F.J. (1973) *Alienation: Concept, Term and Meanings*, New York: Seminar Press.
- JONES, S. (2002) Social constructionism and the environment: through the quagmire. *Global Environmental Change*, 12(4):247–251.
- JOSEPH E. and SAWAN, J.E. (2011) Recovering Marx’s Theory of Alienation: Theoretical Considerations from a Case Study with Community Activists in Scarborough, Ontario. *Just Labour: A Canadian Journal of Work and Society*, 17 & 18:139-154.
- JOSEPHSON, E. and JOSEPHSON, M. (1968) *Man Alone: Alienation in Modern Society*, Dell Publishing Co.
- KAFKA, G.J., and KOZMA, A. (2002) The construct validity of Ryff’s scales of psychological well-being (SPWB) and their relationship to measures of subjective well-being. *Social Indicators Research*, 57:171–190.
- KAHN Jr., P.H. and KELLERT, S. R. (Eds) (2002) *Children and UA: Psychological, Sociocultural, and Evolutionary Investigations*, Cambridge: MIT Press.
- KAHN, P. (2002) Children’s affiliations with UA: Structure, development, and the problem of environmental generational amnesia. (In) KAHN, P.H. and KELLERT, S.R. (Eds.) *Children and UA: Psychological, socio-cultural and evolutionary investigations* (pp. 93–116), USA: MIT Press.
- KAHN, P. and FRIEDMAN, B. (1995) Environmental views and values of children in an inner city black community. *Child Development*, 66(5):1403–1417.
- KANT, I. (1914) *The critique of judgement* (p. 45). (Trans.) MEREDITH, J.C. (1952) Oxford: Oxford University Press.
- KAPLAN, R. (1973). Some psychological benefits of gardening. *Environment and Behavior*, 5:145-162.

- KAPLAN, R. (1978) The green experience. (In) KAPLAN, S. & KAPLAN, R. (Eds.) *Humanscape: Environments for people*, North Scituate, MA: Duxbury Press.
- KAPLAN, R. (1982) *Cognition and Environment: Functioning in an Uncertain World*, Praeger, New York.
- KAPLAN, R. (2001) The nature of the view from home: psychological benefits. *Environment and Behavior*, 33:507-42.
- KAPLAN, R. and KAPLAN S. (2005) Preference, Restoration, and Meaningful Action in the Context of Nearby UA. (In) BARLETT, P.F. (Eds.) *Urban place: Reconnecting with the natural world* (pp. 271-298), Cambridge, MA: MIT Press.
- KAPLAN, R. and KAPLAN, S. (1989) *The experience of nature – A psychological perspective*, Sydney: Cambridge University Press.
- KAPLAN, S. (1995) The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15:169-182.
- KAPLAN, S., KAPLAN, R., & WENDT, J.S. (1972) Rated preferences and complexity for natural and urban visual material. *Perception and Psychophysics*, 12:354–356.
- KAPLAN, R. and KAPLAN, S. (1989) *The experience of nature – A psychological perspective*, Sydney: Cambridge University Press.
- KARANJA, N & PRAIN, G 2010, *African Urban Harvest: Agriculture in the Cities of Cameroon, Kenya and Uganda*.
- KASSA, D.G. (2008) *A tragedy of the urban commons? A case study of two public places in Addis Ababa*, Digital Library of the Commons. Available at:<http://dlc.dlib.indiana.edu/dlc>.
- KASHDAN, T.B., BISWAS-DIENER, R. & KING, L.A. (2008) Reconsidering happiness: The costs of distinguishing between hedonics and eudaimonia. *Journal of Positive Psychology*, 3:219–233.
- KAUTSKY, K. (1988) *The agrarian question*, London: Zwan.
- KAZDIN, A. E. (1993). Adolescent Mental Health Prevention and Treatment Program. *American Psychologist*, 2:127-141.
- KELLERT, S.R. (1993) The biological basis for human values of nature. (In) KELLERT, S.R. & WILSON, E.O. (Eds.) *The biophilia hypothesis*, Washington D.C.: Island Press.
- KELLERT, S.R. (2005) *Building for like: designing and understanding the human-UA connection*, Washington D.C.: Island Press.
- KELLERT, S.R. (2007) Connecting with creation: the convergence of UA, religion, science and culture. *Journal for the study of religion, UA, and culture*, 1(1):25-37.
- KELLY, R 2012, *Educating for Creativity: A Global Conversation*, Alberta.
- KERESTEŠ, G., BRKOVIĆ, I. & GORDANA-KUTEROVAC, J. (2012) Predictors of Psychological Well-Being of Adolescents' Parents. *Journal of Happiness Studies*, 13:1073–1089.

- KESSLER, R.C., MCGONAGLE, K.A., ZHAO, S., NELSON, C.B., HUGHES, M. & ESHLEMAN, S. (1994) Lifetime and 12-month prevalence of *DSM-III-R* psychiatric disorders in the United States: Results from the National Comorbidity Survey. *Archives of General Psychiatry*, 51:8–19.
- KETELAARS, D., van ERP, N. & HASSINK, J. (2002) Landbouw en zorg in beeld: blik op heden en toekomst. *Plant Research International, Wageningen. Rapport / Plant Research International* no. 50. [http://library.wur.nl/wasp/bestanden/LUWPUBRD_00318774_A502_001.pdf]
- KEYES, C.L.M. (1998). Social well-being. *Social Psychology Quarterly*, 61(2):121–140.
- KEYES, C.L.M. (2002a). Promoting a life worth living: Human development from the vantage points of mental illness and mental health. (In) LERNER, R.M., JACOBS, F. & WERTLIEB, D. (Eds.) *Promoting positive child, adolescent and family development: A handbook of program and policy innovations* (Vol. 4, ch. 15, pp. 257–274), Thousand Oaks, CA: Sage.
- KEYES, C.L.M. (2002b). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43:207–222.
- KEYES, C.L.M. (2004) The nexus of cardiovascular disease and depression revisited: The complete mental health perspective and the moderating role of age and gender. *Aging and Mental Health*, 8:266–274.
- KEYES, C.L.M. (2005a) Mental illness and/or mental health? Investigating the axioms of the complete state model of health. *Journal of Consulting and Clinical psychology*, 73:539-548.
- KEYES, C.L.M. (2005b) The subjective well-being of America's youth: Toward a comprehensive assessment. *Adolescent and Family Health*, 4:3–11.
- KEYES, C.L.M. (2006). Mental health in adolescence: Is America's youth flourishing? *American Journal of Orthopsychiatry*, 76:395–402.
- KEYES, C.L.M. (2007) Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist*, 62: 95–108.
- KEYES, C.L.M. and ANNAS, J. (2009) Feeling good and functioning well: distinctive concepts in ancient philosophy and contemporary science. *The Journal of Positive Psychology*, 4(3):197–201 .
- KEYES, C.L.M. and LOPEZ, S.J. (2002). Toward a science of mental health: Positive directions in diagnosis and interventions. (In) Snyder, C.R. & Lopez, S.J. (Eds.), *Handbook of positive psychology* (pp. 45–59), New York: Oxford University Press.
- KEYES, C.L.M., SHMOTKIN, D., & RYFF, C. D. (2002) Optimizing well-being: The empirical encounter of two tradition. *Journal of Personality and Social Psychology*, 82:1007-1022.
- KEYES, C.L.M., WISSING, M., POTGIETER, J.P., TEMANE, M., KRUGER, A., & VAN ROOY, S. (2008) Evaluation of the Mental Health Continuum Short Form (MHC-SF) in Setswana speaking in South Africans. *Clinical Psychology and Psychotherapy*, 15:181–192.
- KIDD, J.L. and BRASCAMP, W. (2004) Benefits of gardening and the well-being of New-Zeland gardeners. (In) RELF, D., KWACK, B.H. AND HICKLENTON, P. (Eds.)

Expanding roles for horticulture in improving human well-being and life quality (pp. 103-112), ISHS, Leuven, Acta Horticultura no. 639.

- KIESLING, F.M., and MANNING, C.M. (2010) How green is your thumb? Environmental gardening identity and ecological gardening practices. *Journal of Environmental Psychology*, 30:315-327.
- KIM, S.K. (2005) The Effects of Mental Health and Mental illness of Prison inmates on Psychosocial Functioning, *Master's Thesis*, Seoul National University.
- KINGSLEYA, Y., TOWNSENDA, M. & HENDERSON-WILSONA C. (2009) Cultivating health and well-being: members' perceptions of the health benefits of a Port Melbourne community garden. *Leisure Studies*, 28(2):207-219.
- KJELLGREN, A. and BUHRKALL, H. (2010). A comparison of the restorative effect of a natural environment with that of a simulated natural environment. *Journal of Environmental Psychology*, 30:464-472.
- KORMAN, A.K., WITTIG-BERMAN, U. & LANG, D. (1981) Career success and personal failure: alienation in professionals and managers, *The Academy of Management Journal*, 24(2):342-360.
- KOZMA, A., STONE, S. & STONES, M.J. (2000) Stability in components and predictors of subjective well-being (SWB): Implications for SWB structure. (In) Diener, E. and Rahtz, D.R. (Eds.) *Advances in quality of life theory and research* (pp. 13–30), Dordrecht, The Netherlands: Kluwer Academic.
- KRASNY, M. and TIDBALL, K. (2009) Community gardens as contexts for science, stewardship, and civic action learning. *Cities and the Environment*, 2:1–18.
- KUBOVY, M. (1999) On the pleasures of the mind. (In) KAHNEMAN D, DIENER E, & SCHWARZ N (Eds.) *Well-Being: The Foundations of Hedonic Psychology* (pp. 134–54), New York: Russell Sage Found.
- KUHL, J. and BECKMANN, J. (1994) Alienation: Ignoring one's preferences, (In) KUHL, J. and BECKMANN, J. (Eds.) *Volition and personality* (pp. 475-483), Seattle: Hogrefe and Huber.
- KUO F.E. and SULLIVAN, W.C. (2001) Environment and crime in the inner city: does vegetation reduce crime? *Environment and Behavior*, 33(3):343-67.
- KUO F.E., BACAICOA, M. & SULLIVAN, W.C. (1998) Transforming inner-city landscapes: Trees, sense of safety and preference. *Environment and Behavior*, 30:28-59.
- KUO, F.E., SULLIVAN, W.C., COLEY, R.L. & BRUNSON, L. (1998) Fertile ground for community: Inner-city neighborhood common spaces. *American Journal of Community Psychology*, 26:823–851.
- KUTIWA, S., BOON, E. & DEVUYST, D. (2010) Urban agriculture in low income households of Harare: an adaptive response to economic crisis, *Journal of Human Ecology*, 32(2):85-96
- KWEON, B.S., SULLIVAN, W.C. & WILEY, A.R. (1998) Green common spaces and the social integration of inner-city older adults. *Environment and Behavior*, 30:832–858.

- LAI, J.C.L., CHONG, A.M.L., HO, S.M.Y., SIU, O.T., EVANS, P.D. & NG, S.H. (2005) Optimism, positive affectivity, and salivary cortisol. *British Journal of Health Psychology*, 10:467–484.
- LANG, D. (1985) Preconditions of three types of alienation in young managers and professionals. *Journal of Occupational Behaviour*, 6(3):171-182.
- LARSON, J.T. (2006) A comparative study of community garden systems in Germany and the United States and their role in creating sustainable communities, *Arboricultural Journal: The International Journal of Urban Forestry*, 29(2):121-141.
- LARSSON, M. (2009) Stadsdelsträdgård - plats för gemenskap och kreativa processer. *Doctoral thesis*, Dept. of Landscape Architecture, SLU. Acta Universitatis agriculturae Sueciae vol. 2009:40.
- LAWSON, L.J. (2005) *City bountiful: A century of community gardening in America*, Berkeley, CA: University of California Press.
- LEE, K.H. (2012) Happiness as Existential Feeling: toward an integrate model of happiness. (Korean: 실존감으로서의 행복: 통합적 행복모델을 향하여). *Journal of the Daedong (Great Unity) Philosophical Association*, 59:219-243. [<http://earticle.net/article.aspx?sn=177756>]
- LEFEBVRE, H. (1968) *Dialectical Materialism*, London: Cape.
- LEFEBVRE, H. (2008a) *Critique of Everyday Life, vol. 1, Introduction*, London: Verso.
- LEFEBVRE, H. (2008b) *Critique of Everyday Life, vol. 2, Foundations for a Sociology of the Everyday*, London: Verso.
- LEFEBVRE, H. (2008c) *Critique of Everyday Life, vol. 3, From Modernity to Modernism*, London: Verso.
- LEKIES, K. S. and EAMES-SHEVELY, M. (2007) Fostering children's interests in gardening. *Applied Environmental Education and Communication*, 6:67-75.
- LENHARD, L., MÖVIUS, R. & DABBERT, S. (1997) Struktur und Organisationsformen von Therapie- und Betreuungseinrichtungen in der Landwirtschaft: eine explorative Studie. *Berichte über Landwirtschaft*, 75, 459-485.
- LENIN, V. (1956) *The development of capitalism in Russia*, Moscow: Progress Publishers.
- LENT, R.W. (2004) Toward a unifying theoretical and practical perspective on well-being and psychosocial adjustment. *Journal of Counseling Psychology*, 51(4):482–509.
- LEOPOLD, A. (1949) *A sand county almanac*, Oxford, UK: Oxford University Press.
- LEVKOE, C. (2006) Learning democracy through food justice movements. *Agriculture and Human Values*, 23:89–98.
- LEWIS, C.A. (1995) Human health and well-being: the psychological, physiological, and sociological effects of plants on people. (In) MATSUO, E. and RELF, P.D. (Eds.) *Horticulture in human life, culture and environment: international symposium 22 August 1994* (pp. 31-39). ISHS, Leuven, ISHS Acta Horticulturae no. 391.
- LEWIS, C.A. (1996) *Green nature/human nature: the meaning of plants in our lives*, University of Illinois Press, Urbana.

- LI, J. (2006) Immigration and psychological well-being. *Paper presented at the Annual Meeting of the American Sociological Association*, Montreal, August.
- LI, W.W., HODGETTS, D. & HO, E. (2010) Gardens, Transitions and Identity Reconstruction among Older Chinese Immigrants to New Zealand. *Journal of Health Psychology*, 15:786-797.
- LIFELAB (2006) *Garden based learning that promotes a sustainable future*. Retrieved July 31, 2006, from <http://www.lifelab.org/about/index.html>.
- LINDSTRÖM, M., JOHANSSON, M., HERRMANN, J. & JOHANSSON, O. (2006) Attitudes towards the conservation of biological diversity- a case study in Kristianstad municipality, Sweden, *Journal of Environmental Planning and Management*, 49(4):495-513.
- LINN, K. (1999) Reclaiming the sacred commons. *New Village*, 1:42-49.
- LOCKE, E.A., & LATHAM, G.P. (2002) Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57:705-717.
- LOUV, R. (2008) *Last child in the woods: saving our children from UA-deficit disorder*, Chapel Hill: Algonquin Books.
- LUCAS, R.E., DIENER, E., & SUH, E. (1996) Discriminant validity of well-being measures. *Journal of Personality and Social Psychology*, 74:616-628.
- LYSON, T.A. and RAYMER, A.L. (2000) "Stalking the wily multinational: Power and control in the U.S. food system," *Agriculture and Human Values* 17: 199-208.
- LYYTIMAKI, J. and SIPILÄ, M. (2009) Hopping on one leg- The challenge of ecosystem disservices for urban green management. *Urban Forestry & Urban Greening*, 8:309-315.
- MADALENO, I.M. (2000) Research note: urban agriculture in Belém, Brazil. *Cities*, 17(1):73-77.
- MADALENO, I.M. (2001) Cities of the Future: urban agriculture in the third millennium. (In) *Food, Nutrition and Agriculture* (pp. 14-21), 29, FAO, Rome.
- MADDI, S. R., KOBASA, S. C., & HOOVER, M. (1979) An alienation test, *Journal of Humanistic Psychology*, 1(9):73-76.
- MADDUX, J.E. (2002) Stopping the "madness": Positive psychology and the deconstruction of the illness ideology and the DSM. (In) SNYDER C.R. WELL-BEING 507 and LOPEZ, S.J. (Eds.), *Handbook of positive psychology* (pp. 13-25), New York: Oxford University Press.
- MANDEL, E. and NOVAK, G. (1970) *The Marxist Theory of Alienation*, Pathfinder Press.
- MARCUS, C. and BARNES, M., (1999) *Healing Gardens: Therapeutic Benefits and Design Recommendations*, New York: John Wiley & Sons.
- MARCUSE, H. (1970) *Triebstruktur und Gesellschaft*, Frankfurt A.M.: Suhrkamp Verlag.
- MARX / ENGELS COLLECTED WORKS vol. 29 (1987) Moscow: Progress Publishers, (<http://www.marxists.org/archive/marx/works/cw/>).
- MARX, K. (1975) *Early Writings*, op cit, p325. Penguin.

- MARX, K. (1976) *Capital: A Critique of Political Economy, Vol. 1*. London: Penguin Classics.
- MARX, K. (1977) *Capital: A Critique of Political Economy* (translated by Fowkes, B.), Vol. 1, New York, NY: Vintage Books
- MARX, K. (1977) *Capital: A Critique of Political Economy, Vol. 1*, New York: Vintage.
- MARX, K. (1978) Economic and philosophic manuscripts of 1844. (In) TUCKER, R.C. (Eds.) *The Marx-Engels reader* (pp. 66–125), New York: W.W. Norton.
- MARX, K. (1981) *Capital: A Critique of Political Economy, Vol. 3*, London: Penguin Classics.
- MARX, K. (2000) Economic and philosophical manuscripts of 1844. (In) MCLELLAN, D. (Eds.) *Karl Marx Selected Writings*, Oxford University Press.
- MARX, K. (2008) *Economic & Philosophical Manuscripts of 1844*, Beijing: People's Publishing House.
- MASLOW, A. (1968) *Toward a psychology of being* (2nd ed.), New York: Van Nostrand Reinhold.
- MATSUO E. (2004) *Humanity in Horticulture*, The 8th International Plant Propagators Society (IPPS) (Unpublished)
- MATTSON, R.H. (1991) Prescribing Health Benefits Through Horticultural Activities. (In) RELF, D. (Eds.) *The Role of Horticulture in Human Well-being and Social Development: A National Symposium*, Portland, OR.: Timber Press.
- MAU, R. (1989) Student alienation in a school context. *Research In Education*, 42:17-28.
- MAU, R. (1992) The validity and devolution of a concept: student alienation. *Adolescence*, 27(107): 731-741.
- McADAMS, D. and BOWMAN, P. (2001) Narrating life's turning points: Redemption and contamination. (In) D. McADAMS, R. JOSSELYN, & A. LIEBLICH (Eds.) *Turns in the road: Narrative studies of lives in transition* (pp. 3–34), Washington, D.C.: American Psychological Association.
- McCLINTOCK, N. (2010) Why farm the city? Theorizing urban agriculture through a lens of metabolic rift. *Cambridge Journal of Regions, Economy and Society*, 3:191–207.
- McDANIEL, J. and ALLEY, K. D. (2005) Connecting local environmental knowledge and land use practices: A human ecosystem approach to urbanization in West Georgia. *Urban Ecosystems*, 8:23–38.
- McGREGOR, I. and LITTLE, B.R. (1998) Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology*, 74:494–512.
- McKINNEY, M.L. (2002) Urbanization, biodiversity, and conservation. *BioScience*, 52:883–890.
- McKINNON, M.H. (1980) Work Instrumentalism Reconsidered: a Replication of Goldthorpe's Luton Project, *The British Journal of Sociology*, 31(1): 1–27.

- MCLENNAN, D.M.P. (2010) “Ready, Set, Grow!” Nurturing Young Children Through Gardening. *Early Childhood Education Journal*, 37:329–333.
- MCLENNAN, D.M.P. (2010) “Ready, set, grow!” Nurturing young children through gardening. *Early Childhood Education Journal*, 37:329–333.
- McMANUS, P. (1996) Contested terrains: politics, stories and discourses of sustainability. *Environmental Politics*, 5(1):48–73.
- MELMAN, S. (1958) *Decision-making and Productivity*, Oxford: Basil Blackwell.
- MEYER, J. (1999) Interpreting nature and politics in the history of western thought: the environmentalist challenge. *Environmental Politics*, 8(2):1–23.
- MERGEN, B. (2003) Review essay: Children and UA in history. *Environmental History*, 8:643–669.
- MEYER, J. (1999) Interpreting UA and politics in the history of western thought: the environmentalist challenge. *Environmental Politics*, 8(2):1–23.
- MILLER, G.A. (1967) Professionals in Bureaucracy: Alienation among Industrial Scientists and Engineers, *American Sociological Review*, 32(5): 755–768.
- MILLER, J. (2005) Biodiversity conservation and the extinction of experience. *Trends in Ecology & Evolution*, 20(8):430–434.
- MILLER, T. (2002) Urban rainwater: from pollution source to resource via value-added design. *A Report for the Hixon Center for Urban Ecology*, Yale School of Forestry and Environmental Studies.
- MILLIGAN, C., GATRELL, A. & BINGLEY, A. (2004). ‘Cultivating health’: Therapeutic landscapes and older people in northern England. *Social Science and Medicine*, 58:1781–1793.
- MILTON, B., CLEVELAND, E. & BENNET-GATES, D. (1995). Changing perceptions of UA, self, and others: A report on a park/school program. *The Journal of Environmental Education*, 26(3):32–39.
- MLOZI, M.R.S. (1997) Urban agriculture: Ethnicity, cattle raising and some environmental implications in the city of Dares Salaam, Tanzania. *African Studies Review*, 40(3): 1–28.
- MOORE, J.W. (2000) Environmental crises and the metabolic rift in world-historical perspective. *Organization & Environment*, 13(2):123–58.
- MOORE, J.W. (2007) Ecology and the rise of capitalism. *PhD thesis*, University of California, Berkeley. Available from: <http://sites.google.com/site/jasonwmoore/site/> [Accessed 1 May 2010].
- MOORE, J.W. (2010a) Amsterdamis standing on Norway. Part I: the alchemy of capital, empire, and UA in the diaspora of silver, 1545–1648. *Journal of Agrarian Change*, 10(1):35–71.
- MOORE, J.W. (2010b) Amsterdam is standing on Norway. Part II: the global North Atlantic in the ecological revolution of the seventeenth century. *Journal of Agrarian Change*, 10(2):188–227.

- MOORE, J.W. (2011) Transcending the metabolic rift: a theory of crises in the capitalist world-ecology, *The Journal of Peasant Studies*, 38(1):1-46.
- MOORE, R.C. (1995) Growing foods for growing minds: Integrating gardening and nutrition education into the total curriculum. *Childrens Environments*, 12(2):134-142.
- MOORE, R.C. (1997) The need for nature: A childhood right. *Social Justice*, 24(3):203-220.
- MORRIS, J., BRIGGS, M., & ZIDENBERG-CHERR, S. (2000) School-based gardens can teach kids healthier eating habits. *California Agriculture*, 54:40-46.
- MORRIS, J.L. and ZIDENBURG-CHERR, S. (2002) Garden enhanced nutrition curriculum improves fourth-grade school children's knowledge of nutrition and preferences for some vegetables. *Journal of the American Dietary Association*, 102:91-93.
- MOUGEOT, LJA 2006, *Growing Better Cities: Urban Agriculture for Sustainable Development*.
- MOTTAZ, C.J. (1981) Some determinants of work alienation. *The Sociological Quarterly*, 22(4):515-529.
- MURDOCH, J. (2001) Ecologising sociology: actor-network theory, co-construction and the problem of human exemptionalism. *Sociology*, 35(1):111-133.
- MUSTO, M. (2010) Revisiting Marx's Concept of Alienation. *Socialism and Democracy*, 24(3):79-101.
- NAESS, A. (1989) *Ecology, community, and lifestyle*. (D. Rothenberg, Trans.), Cambridge, UK: Cambridge University Press.
- NAIR, N. and NEHARIKA, V. (2010) An exploration of factors predicting work alienation of knowledge workers. *Management Decision*, 48(4):600-615.
- NAKAMURA, J. and CSIKSZENTMIHALYI, M. (2002) The concept of flow. (In) SNYDER C.R. and LOPEZ, S.J. (Eds.), *Handbook of positive psychology* (pp. 89-105), New York: Oxford University Press.
- NEAL, A.G. and SEEMAN, M. (1964) Organizations and Powerlessness: a Test of the Mediation Hypothesis, *American Sociological Review*, 29(2): 216-26.
- NICHOLS, T. and BEYNON, H. (1977) *Living with Capitalism*, London: Routledge & Kegan Paul.
- NIELSEN, S.T. and HANSEN, B.N. (2007) Do green areas affect health? Results from a Danish survey on the use of green areas and health indicators. *Health and Place*, 13:839-850.
- NORTON, D.L. (1976) *Personal Destinies: A Philosophy of Ethical Individualism*, Princeton University Press, Princeton, NJ.
- O'Brien & Murray 2007 O'BRIEN L. and MURRAY, R. (2007) Forest schools and its impacts on young children: case studies in Britain. *Urban forestry & Urban Greening*, 6:249-265.
- O'BRIEN, L. and MURRAY, R. (2007) Forest schools and its impacts on young children: case studies in Britain. *Urban forestry & Urban Greening*, 6:249-265.
- OECD 2011, *Challenges for Agricultural Research*.

- OH, D.M. and CHOI, Y.A. (2006) *자연과의 만남으로 나와 세상을 치유하는 도시농업 (Urban Agriculture: a therapy to heal myself and the world through connecting UA)*, Seoul: Hakjisa.
- OKVAT, H.A. and ZAUTRA, J. (2011) Community Gardening: A Parsimonious Path to Individual, Community, and Environmental Resilience. *American Journal of Community Psychology*, 47:374–387.
- OLLMAN, B. (1976) *Alienation: Marx's conception of man in capitalist society*, New York: Cambridge.
- OLLMAN, B. (1996) *Alienation*, Cambridge University Press.
- OMODEI, M.M. and WEARING, A.J. (1990) Need satisfaction and involvement in personal projects: Toward an integrative model of subjective well-being. *Journal of Personality and Social Psychology*, 59(4):762–769.
- ORR, D. W. (2002) Political economy and the ecology of childhood. (In) KAHN P.H. JR and S.R. KELLERT (Eds.) *Children and UA: Psychological, Sociocultural, and Evolutionary Investigation*. Cambridge: MIT Press.
- OSTIR, G.V., MARKIDES, K.S., PEEK, M.K., & GOODWIN, J.S. (2001) The association between emotional well-being and the incidence of stroke in older adults. *Psychosomatic Medicine*, 63:210–215.
- OSTROM, E., (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge: Cambridge University Press.
- OTTOSSON, J. and GRAHN, P.A. (2005) comparison of leisure time spent in a garden with leisure time spent indoors: on measures of restoration in residents in geriatric care. *Landscape Research*, 30(1):23-55.
- PALOSUO, H. (2000) Health-related lifestyles and alienation in Moscow and Helsinki. *Social Science & Medicine*, 51:1325-1341.
- PARRY-JONES, W.L.I. (1990) Natural landscape, psychological well-being and mental health. *Landscape Research*, 2:7–11.
- PEARSON, CJ, PILGRIM, S & PRETTY, JN 2010, *Urban Agriculture: Diverse Activities and Benefits for City Society*.
- PELLUSO, N.L. and LUND, C. (2011) New frontiers of land control: Introduction. *The Journal of Peasant Studies*, 38(4):667-681
- PENNINX, B.W., VAN TILBURG, T., & KRIEGSMAN, D.M. (1997) Effects of social support and personal coping resources on mortality in older age: the Longitudinal Aging Study Amsterdam. *American Journal of Epidemiology*, 146(6): 510-519.
- PEPPER, D. (1996) *Modern environmentalism: an introduction*, London: Routledge.
- PERALIN, L.L. (1962) Alienation from Work: a Study of Personnel. *American Sociological Review*, 27(3): 314–326.
- PHILIPS, A 2013, *Designing Urban Agriculture*.
- PILGRIM, S., CULLEN, L., SMITH, D., & PRETTY, J. (2008) Ecological knowledge is lost in wealthier communities and countries. *Environmental Science & Technology*, 42(4):1004–1009.

- POTHUKUCHI, K. (2004) Hortaliza: a youth “Nutrition Garden” in Southwest Detroit. *Children. Youth and Environments*, 14: 124-155.
- PRESSMAN, S.D. and COHEN, S. (2006) Does positive affect influence health? *Brain, Behavior, and Immunity*, 20:175–181.
- PRETTY, J., PEACOCK, J., HINE, R., SELLENS, M., SOUTH, N. & GRIFFIN, M. (2006) Green exercise in the UK Countryside: effects on health and psychological well-being, and implications for policy and planning. *Journal of Environmental Planning and Management*, 50(2):211-231.
- PREW, P. (2003) The 21st century world-ecosystem: dissipation, chaos, or transition? (In) DUNAWAY, W.A. (Eds.) *Emerging Issues in the 21st Century World-System*, vol. 2, London: Praeger.
- PYLE, R. (1978) The extinction of experience. *Horticulture*, 56:64–67.
- QUAYLE, M. (1989) The Changing Community Garden: Legitimizing NonTraditional Open space. *Landscape Architect Review*, May:23-27.
- RAHM, J. (2002) Emergent learning opportunities in an inner-city youth gardening program. *Journal of Research in Science Teaching*, 39:164-184.
- RAPPAPORT, J. (1981) In praise of paradox: A social policy of empowerment over prevention. *American Journal of Community Psychology*, 9:1–25.
- RAYFUSE, RG & VEISFELT, N 2012, *The Challenge of Food Security: International Policy and Regulatory Frameworks*.
- REDWOOD, M. (2009) Introduction. (In) REDWOOD, M. (Eds.) *Agriculture in urban planning: generating livelihoods and food security*, London: Earthscan.
- REES, G., BRADSHAW, J., GOSWAMI, H. & KEUNG, A. (2010). *Understanding Children's Well-being: A national survey of young people's well-being*. The Children's Society, London.
- REICH, C.A. (1970) *The greening of America*, New York: Random House.
- RELf, D. (1992) *The role of horticulture in human well-being and social development (A national symposium, April 19–21, 1990, Arlington, VA)*, Portland, OR: Timber Press.
- ROBITSCHKEK, C., & KEYES, C.L.M. (2009) The structure of Keyes’ model of mental health and the role of personal growth initiative as a parsimonious predictor. *Journal of Counselling Psychology*, 56(2): 321–329.
- ROCKSTRÖM, J.,W. et al. (2009) A safe operating space for humanity. *UA*, 461(7263):472–475. doi:10.1038/461472a.
- RODIEK, S.D. (2002) Influence of an outdoor garden on mood and stress in older persons. *Journal of Therapeutic Horticulture*, 13:13-21.
- ROGERS, C.R. (1961) *On becoming a person*, Boston: Houghton Mifflin.
- ROGERS, N. (1995) *Modern Commons. Masters Thesis in Geography*, Burnaby Simon Fraser University.

- ROSELAND, M. (1992) *Towards Sustainable Communities: A Resource Book for Municipal and Local Government*. National Round Table on the Environment and the Economy, Ottawa, Canada.
- ROSZAK, T. (1996) *Mind. Psychology Today*, 29(1):22-24.
- ROTTER, J.B. (1966) Generalized expectancies for internal vs external control. *Psychology Monograph*, 80(1).
- RUBIN, I.I. (1975) *Essays on Marx's Theory of Value*, Black Rose Books.
- RYAN, A., (1992), Positive Gardening: benefits for Elderly People, *Growth Point*, Summer, Number 190.
- RYAN, R. M., and DECI, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1):68–78.
- RYAN, R.M. and DECI, E.L. (2001) On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52:141–166.
- RYAN, R.M. and FREDERICK, C.M. (1997) On energy, personality and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65:529–565.
- RYAN, R.M., PLANT, R.W. & O'MALLEY, S. (1995) Initial motivations for alcohol treatment: Relations with patient characteristics, treatment involvement and drop-out. *Addictive Behaviors*, 20:279-297.
- RYFF, C.D. (1989) Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6):1069-1081.
- RYFF, C.D. (1989a) Beyond ponce de leon and life satisfaction: new directions in quest of successful aging. *International Journal of Behavioral Development*, 12:35–55.
- RYFF, C.D. (1995) Psychological well-being in adult life. *Current Directions in Psychological Science*, 4:99–104.
- RYFF, C.D. (2008) Challenges and opportunities at the interface of aging, personality, and wellbeing. (In) JOHN, O.P., ROBINS, R.W. & PERVIN, L.A. (Eds.) *Handbook of personality: Theory and research* (3rd ED., pp. 399–418). New York: Guilford.
- RYFF, C.D. and KEYES, C.L.M. (1995) The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69:719–727.
- RYFF, C.D. and SINGER, B.H. (1998a) Human health: New directions for the next millennium. *Psychological Inquiry*, 9: 69–85.
- RYFF, C.D. and SINGER, B.H. (1998b) The contours of positive human health. *Psychological Inquiry*, 9: 1–28.
- RYFF, C.D. and SINGER, B.H. (2002) From social structure to biology: Integrative science in pursuit of human health and well-being. (In) SNYDER, C.R. and LOPEZ, S.J. (Eds.) *Handbook of positive psychology* (pp.541–555), New York: Oxford University Press.

- RYFF, C.D. and SINGER, B.H. (2008) Know thyself and become what you are: a eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9:13–39.
- RYFF, C.D., and KEYES, C.L.M. (1995) The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4):719–727.
- SALDIVAR-TANAKA, L., & KRASNY, M.E. (2004) Culturing community development, neighborhood open space, and civil agricultural: The case of Latino community gardens in New York City. *Agriculture and Human Values*, 21:399–412.
- SANYAL, P & BABU, S 2009, *Food Security, Poverty and Nutrition Policy Analysis*.
- SARTORIUS, N. (2001). The economic and social burden of depression. *Journal of Clinical Psychiatry*, 62:8–11.
- SCAMBLER, G. (2002) *Health and Social Change: A Critical Theory*, Buckingham: Open University Press.
- SCHACHT, R. (1970) *Alienation*, Garden City: Doubleday.
- SCHUKOSKE, J.E. (2000) Community development through gardening: State and local policies transforming urban open space. *Legislation and Public Policy*, 3:351–392.
- SCHWARTZ, S.H. (1977) Normative Influences on Altruism, (In) BERKOWITZ, L. (Eds.) *Advances in Experimental Social Psychology, Vol. 10*, New York: Academic Press.
- SCHWEITZER, D. (1982) Alienation, De-alienation, and Change: A critical overview of current perspectives in philosophy and the social sciences. (In) SHOHAM, G. (Eds.) *Alienation and Anomie Revisited* (pp 36-7), Tel Aviv: Ramot.
- SEEMAN, S. (1959) On the meaning of alienation. *American Sociological Review*, 24(6): 783-791.
- SEEMAN, M. (1983) Alienation Motifs in Contemporary Theorizing: The Hidden Continuity of the Classic Themes. *Social Psychological Quarterly*, 46(3):171-184.
- SEEMAN M. and EVANS J. W. (1962) Alienation and learning in n a hospital setting. *American Sociological Review*, 27:772.
- SEEMAN M. and SEEMAN T.E. Health behavior and personal autonomy. *Journal of Health and Social Behavior*, 24:144, 1983.
- SEEMAN, J. (1989) Toward a model of positive health. *American Psychologists*, 44, 1099-1109.
- SEEMAN, M. and ANDERSON, C.S. (1983) Alienation and Alcohol: The Role of Work, Mastery, and Community in Drinking Behavior. *American Sociological Review*, 48(1):60-77.
- SEEMAN, M. and LEWIS, S. (1995) Powerlessness, health and mortality: a longitudinal study of older men and mature women. *Social Science & Medicine*, 41(4):517-525.
- SELIGMAN, M. (1991) *Learned optimism*. New York: Knopf.
- SELIGMAN, M. (2002) *Authentic happiness*. New York: Free Press.

- SELLER, J., FIELDHOUSE, J. & PHELAN, M. (1999) Fertile imaginations: an inner city allotment group. *Psychiatric Bulletin*, 23(3):291-293.
- SEMPIK, J., ALDRIDGE, J. & BECKER, S. (2003) *Social and therapeutic horticulture: evidence and messages from research*. Thrive with the Centre for Child and Family Research, Reading: Loughborough University.
- SESSIONS, G. (1995) (Eds.) *Deep ecology for the 21st century: readings on the philosophy and practice of the new environmentalism*, Boston: Shambhala Publications.
- SHAPIRO, D. (1981) *Autonomy and rigid character*, New York: Basic Books.
- SHEPARD, J.M. (1970) Functional Specialization, Alienation and Job Satisfaction. *Industrial and Labor Relations Review*, 23(2):207-219.
- SHINEW, K.J., GLOVER, T.D., & PARRY, D.C. (2004) Leisure spaces as potential sites for interracial interaction: community gardens in urban areas. *Journal of Leisure Research*, 36:336-355.
- SIGELMAN, L., BLEDSAE, T., WELCH, S. & COMBS, W. (1996) Making contact: Black-White social interaction in an urban setting. *American Journal of Sociology*, 101:1306-1332.
- SIGERIST, H. E. (1941). *Medicine and human welfare*, New Haven, CT: Yale University Press.
- SIMMEL, G. (1950) *The Sociology of George Simmel* (translated and edited by WOLFF, K.), Glencoe, IL: The Free Press.
- SIMMEL, G. (1971) *On Individuality and Social Forms*, Chicago, IL: The University of Chicago Press.
- SMIT, J., RATTA, A. & NASR, J. (1996) *Urban agriculture: food, jobs and sustainable cities. Publication Series for Habitat II, Vol. I*, New York, United Nations Development Programme (UNDP).
- SMITH, M.B. (1959) Research strategies toward a conception of positive mental health. *American Psychologist*, 14:673-681.
- SMITH, N. (2008) *Uneven Development: Nature, Capital, and the Production of Space*. Athens: University of Georgia Press.
- SOHN-RETHEL, A. (1978) *Intellectual and Manual Labor: A Critique of Epistemology*, Atlantic Highlands, NJ: Humanities Press.
- SOMMERFELD, A.J., WALICZEK, T.M. & ZAJICEK, J.M. (2010) Growing minds: evaluating the effect of gardening on quality of life and physical activity level of older adults. *HortTechnology*, 20(4):705-710.
- STEFFEN, W., PERSSON, Å., DEUTSCH, L., ZALASIEWICZ, J., WILLIEMAS, M., & RICHARDSON, K. (2011). The Anthropocene: From global change to planetary stewardship. *AMBIO: A Journal of the Human Environment*: 40, 739-761.
- STOKES, D. (2006) Conservators of experience. *BioScience*, 56(1):7-8.
- STRANDMARK M.K. (2004) Ill health is powerlessness: a phenomenological study about worthlessness, limitations and suffering. *Scandinavian Journal of Caring Sciences*, 18:135-144.

- STANDMARK, M.K. (2004) Ill health is powerlessness: a phenomenological study about worthlessness, limitations and suffering. *Scandinavian Journal of Caring Sciences*, 18:135–144.
- STUART, D., SCHEWE, R.L. & GUNDERSON, R. (2012) Extending Social Theory to Farm Animals: Addressing Alienation in the Dairy Sector. *Sociologia Ruralis*, 53(2):201-222.
- STUART, S.M. (2005). Lifting spirits: Creating gardens in California domestic violence shelters. (In) P. F. BARLETT (Eds.) *Urban place: Reconnecting with the natural world* (pp. 61–88). Cambridge, MA: MIT Press.
- SULLIVAN, W.C., KUO, F.E. & DEPOOTER, S.F. (2004). The fruit of urban UA: Vital neighborhood spaces. *Environment and Behavior*, 36:678–700.
- SWYNGEDOUW, E. (2006) Metabolic urbanization: the making of cyborg cities. (In) HEYNEN, N., KAIKA, M. & SWYNGEDOUW, E. (Eds.) *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*, London:Routledge,
- SZERSZYNSKI, B., HEIN, W., & WATERTON, C. (2003) (Eds.) *Nature performed: environment, culture and performance*, Oxford: Blackwell.
- TAYLOR, A.F., KUO, F.E. & SULLIVAN, W.C. (2001) Coping with ADD: the surprising connection to green play settings. *Environment and Behavior*, 33: 54-77.
- TAYLOR, A.F., WILEY, A., KUO, F.E., & SULLIVAN, W.C. (1998) Growing up in the Inner City: green spaces as places to grow. *Environment and Behavior*, 30:3-28.
- TENNESSEN, C.M. and CIMPRICH, B. (1995) Views to nature - Effects on Attention. *Journal of Environmental Psychology*, 15:77-85.
- THEODORI, G.L., LULOFF, A.E., & WILLITS, F.K. (1998) The association of outdoor recreation and environmental concern: Reexamining the Dunlap-Heffernan thesis. *Rural Sociology*, 63:94–108.
- THOMASHOW, M. (1995) *Ecological identity: Becoming a reflective environmentalist*, Cambridge, MA: MIT Press
- THORP, L., & TOWNSEND, C. (2001, December 12). Agricultural education in an elementary school: An ethnographic study of a school garden. *Proceedings of the 28th Annual National Agricultural Education Research Conference in New Orleans, LA* (pp. 347-360). Retrieved from http://www.aaaeonline.org/conference_files/758901.
- TIDBALL, K. G. & KRASY, M. E. (2007) From risk to resilience: What role for community greening and civic ecology in cities? (In) A.E.J. WALS (Eds.) *Social learning towards a sustainable world: Principles, perspectives and praxis* (pp. 149–164). Wageningen, The Netherlands: Wageningen Academic Publishers.
- TIDBALL, K.G. (2012) Urgent Biophilia: Human-UA interactions in Red Zone Recovery and Resilience. *Ecology and Society*, 17(2):5.
- TIDBALL, K.G. and KRASNY, M.E. (in press). From risk to resilience: expanding the role of community greening and civic ecology in urban stability, security, transition and reconstruction contexts, (In) TIDBALL, K.G. and KRASNY, M.E. (Eds.) *Greening in the Red Zone: Disaster, Resilience, and Urgent Biophilia*, Dordrecht: Springer, ISBN 978-90-481-9946-4.

- TIDBALL, K.G., and KRASNY, M.E. (2009). *An ecology of environmental education*. Paper presented to the World Environmental Education Conference, Montreal, Canada.
- TOOBY, J. and COSMIDES, L. (1992) The psychological foundations of culture. (In) BARKOW, J.H., COSMIDES, L., & TOOBY, J. (Eds.) *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (pp.19-136), New York: Oxford University Press.
- TWISS, J., DICKENSON, J. & DUMA, S. (2003) Community gardens: lessons learned from California healthy cities and communities. *American Journal of Public Health*, 93: 1435–1438.
- TWISS, J., DICKINSON, J., DUMA, S., KLEINMAN, T. & PAULSEN, H. (2003) Community gardens: Lessons learned from California healthy cities and communities. *American Journal of Public Health*, 93(9): 1435–1439.
- TYRVÄÄNEN, L., SILVENNOINEN, H., KORPELA, K. & YLEN, M. (2007) Luonnon merkitys kaupunkilaisille ja vaikutus psyykkiseen hyvinvointiin (The meaning of UA for urban residents and effects on psychological well-being). (In) LUONTOMATKAILU, METSAT JA HYVINVOINTI. *Working papers of the Finnish Forest Research Institute*, 52: 55-77 (in Finnish).
- TZOULAS, K., KORPELA, K., VENN, S., YLI-PELKONEN, V., KAZMIERCZAK, A., NIEMELA, J. & JAMES, P. (2007) Promoting ecosystem and human health in urban areas using green infrastructure: a literature review. *Landscape and Urban Planning*, 81:167-178.
- ULRICH, R.S., SIMONS, R.F., LOSITO, B.D., FIORITO, E., MILES, M.A. & ZELSON, M. (1991) Stress recovery during exposure to natural and urban environments. *Journal of Environmental Psychology*, 11:201-203.
- UNCHS 2001, *Cities in a Globalizing World: Global Report on Human Settlement*
- UNRUH, A.M., SMITH, N., & SCAMMEL, C. (2000) The occupation of gardening in life threatening illness: A qualitative pilot project. *The Canadian Journal of Occupational Therapy*, 67(1):70-77.
- UZZELL, D., POL, E. & BADENAS, D. (2002) Place identification, social cohesion, and environmental sustainability. *Environment and Behavior*, 34(1): 26–53.
- VADNAL, K. (2003) Povpraševanje po socialnih storitvah kot dopolnilni dejavnosti na kmetiji. (In) KAVCIC, S., ERJAVEC, E. & KUCHAR, A. (Eds.) *Slovensko kmetijstvo in Evropska unija. 1. Izd* (pp. 259-272), Ljubljana: Društvo Agrarnih Ekonomistov Slovenije (DAES).
- van den BERG, A.E., HARTIG, T., & STAATS, H. (2007) Preference for UA in urbanized societies: stress, restoration, and the pursuit of sustainability. *Journal of Sociological Issues*, 63:79-96.
- van den BERG, A.E., KOOLE, S.L. & Van der WULP, N.Y. (2003) Environmental preference and restoration: (How) are they related? *Journal of Environmental Psychology*, 23(2):135-146.
- van den BERG, B. and FERRERI-CARBONELL, A. (2005) The well-being of informal caregivers: A monetary valuation of informal care, *paper for International Health Economics Association 2005*, Barcelona, Spain.

- van DIERENDONCK, D. (2004) The construct validity of Ryff's Scales of Psychological Well-Being and its extension with spiritual well-being. *Personality and Individual Differences*, 36(3):629–643.
- VEATCH, R. (1981) The medical model: Its nature and problems. (In) CAPAN, A.L., EAGELHARDT, H.T. & MCCARTNEY, J.J. (Eds.) *Concept of Health and disease: Interdisciplinary perspectives*, Reading, MA: Addison-Wealey.
- VIJOEN, A. and BOHN, K. (2005) Continuous productive urban landscapes: urban agriculture as an essential infrastructure. *UA-Magazine*, 34-36.
- VIJOEN, A., BOHN, K., & HOWE, J. (2005) An introductory glossary. (In) VIJOEN, A. (Eds.) *Continuous productive urban landscapes: designing urban agriculture for sustainable cities*, Oxford, UK: Architectural Press.
- von HASSELL, M. (2005) Community gardens in New York City: Place, community, and individuality. (In) BARLETT, P.F. (Eds.) *Urban place: Reconnecting with the natural world* (pp. 91–116), Cambridge, MA: MIT Press.
- WAKEFIELD, S., YEUDALL, F., TARON, C., REYNOLDS, J., & SKINNER, A. (2007) Growing urban health: Community gardening in South-East Toronto. *Health Promotion International*, 22:92–101.
- WALTER R. and HEINZ, W.R. (1992) Changes in the Methodology of Alienation Research. (In) GEYER, F. and HEINZ, W.R. (Eds.) *Alienation, Society and the Individual*, New Brunswick/London: Transaction.
- WANDERSMAN, A., & NATION, M. (1998) Urban neighborhoods and mental health: Psychological contributions to understanding toxicity, resilience, and interventions. *American Psychologist*, 53:647–656.
- WARNER, S.B. & HANSI, D. (1987) *To Dwell is to Garden: A History of Boston's Community Gardens*, Boston, MA: Northeastern University Press.
- WATERMAN, A.S. (1984) *The Psychology of Individualism*, Praeger, New York, NY.
- WATERMAN, A.S. (1993) Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64:678–691.
- WATERMAN, A.S., SCHWARTZ, S.J. & CONTI, R. (2006) The implications of two conceptions of happiness (hedonic enjoyment and eudaimonia) for the understanding of intrinsic motivation. *Journal of Happiness Studies*, DOI 10.1007/s10902-006-9020-7.
- WATSON, D., CLARK, L.A. & TELLEGEN, A. (1988) Development and validation of brief measures of positive and negative affect: The PANAS scale. *Journal of Personality and Social Psychology*, 54:1063-1070.
- WATTS, M. and GOODMAN, D. (1997) Agrarian questions: global appetite, local metabolism: UA, culture, and industry in fin-de-siecle agro food systems. (In) WATTS, M. and GOODMAN, D. (Eds.) *Globalising food: agrarian questions and global restructuring*, London: Routledge.
- WEBSTER, C.J. (2007) Property rights, public space and urban design. *Town Planning Review*, 78:81–101.

- WEIGERT, A.J. (1997) *Self, interaction, and natural environment*, Albany, New York: State University of New York Press.
- WELLS, N.M. and EVANS, G.W. (2003) Nearby nature, a buffer of life stress among rural children. *Environment and Behaviour*, 35(3):311-330.
- WEN LI, W., HODGETTS, D. & HO, E. (2010) Gardens, transitions and identity reconstruction among older Chinese immigrants to New Zealand. *Journal of Health Psychology*, 15(5):786-96. doi: 10.1177/1359105310368179.
- WESTLEY, F., OLSSON, P., FOLKE, C., HOMER-DIXON, T. & VREDENBURG, H. (2011) Tipping toward sustainability: Emerging pathways of transformation. *AMBIO: A Journal of the Human Environment*, 40:762–780.
- WHO (1948) *Preamble to the Constitution of the World Health Organization*. Geneva: World Health Organisation.
- WHO (2001) *The world health report—Mental health: New understanding, new hope*. Geneva: World Health Organisation.
- WIERSMA, W. (2000) *Research methods in education: An introduction*, Boston, MA. Allyn and Bacon.
- WILLIAMS, S.J. (2003) Beyond meaning discourse and the empirical world. *Social Theory and Health*, 1: 42–71.
- WILLIAMSON, L. and CULLINGFORD, C. (1997) The uses and misuses of ‘alienation’ in the social sciences and education. *British Journal of Educational Studies*, 45(3):14-45.
- WILMOTH, J.M., & CHEN, P.C. (2003) Immigrant status, living arrangements, and depressive symptoms among middle-aged and older adults. *Journal of Gerontology: Social Sciences*, 58B(5), S305–S313.
- WILSON, E.O. (1984) *Biophilia*, Cambridge, Massachusetts, USA: Harvard University Press,
- WISSING, MP 2013, *Well-being Research in South Africa*.
- WUJIN, Y. (2006) Thing, Value, Time, and Freedom: A Consideration of Some Key Concepts in Marx’s Philosophical System. *Frontiers of Philosophy in China*, 1:114–123.
- XUE, Y. (2005) Treasure nightsoil as if it were gold. *Late Imperial China*, 26(1):41–71.
- YEE-TSE, M.M. (2010) Therapeutic effects of an indoor gardening programme for older people living in nursing homes. *Journal of Clinical Nursing*, 19:949-958.
- YOSHIDA, T. (2002) *The Birth of Ecological City of Havana*, (Trans.) AN, C.H. *생태도시/ 아버나의 탄생*, Seoul:Deulnyeok. (ISBN: 9788975274145).
- YOUNG, M. and WILLMOTT, P. (1957) *Family and kinship in East London*, Penguin, Harmondsworth.
- YORK, R., ROSA, E.A. & DIETZ, T. (2003) A rift in modernity? assessing the anthropogenic sources of global climate change with the STIRPAT model. *International Journal of Sociology and Social Policy*, 23:31–51.

- YUILL, C. (2005) Marx: Capitalism, Alienation and Health. *Social Theory & Health*, 3:126–143.
- YUILL, C. (2011) Forgetting and remembering alienation theory. *History of the Human Sciences*, 24:103-119.
- YUSUF, H.R., CROFT, J.B., GILES, W.H., ANDA, R.F., CASPER, M.L., CASPERSEN, C.J. & JONE, D.A. (1996) Leisure-time physical activity among older adults. *Archives of Internal Medicine*, 156:1321–1326.
- ZAFF, J. and DEVLIN, S. 1998. Sense of community in housing for the elderly. *Journal of Community Psychology*, 26(4): 381–398.
- ZAVESTOSKI, S. (2003) Constructing and maintaining ecological identities: the strategies of deep ecologists. (In) Clayton, S. & Opatow S. (Eds.) *Identity and the natural environment: The psychological significance of UA* (pp. 297-316), Cambridge, MA: MIT Press.
- ZOELLNER, J., SCHWEIZER-RIES, P. & WEMHEUER, C. (2008) Public acceptance of renewable energies: results from case studies in Germany. *Energy Policy*, 36:4136-4141.
- ZUKIN, S. (2009) *Naked city the death and life of authentic urban places*, Oxford: Oxford University Press, USA.