Challenges to Interorganisational learning in learning networks: implications for practice

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Abstract

Research on organisational learning (OL) was mainly positioned within the psychological and sociological domains. Past and extant research on OL focused on the behavioural, cognitive and intuitive perspectives in addition to a growing track of research grounded on social theory. So far, a countless number of research studies attempted to address inter-organisational learning (IOL) from various perspectives. However, the lack of understanding of how IOL occurs in networks can be observed due to the social tensions that are created at the inter-organisational level such as free-riding and knowledge leakage.

This thesis, therefore, aims to draw theoretical explanations of IOL and how it occurs in learning networks, taking into consideration similarities and contradictions amongst a network's participating organisations. Towards this end, the thesis employs two theoretical lenses, namely structure-agency and social exchange theories to draw conclusions that provide fresh explanations of how networks are helpful in fostering or hindering learning activities in addition to how reciprocity as an efficacy device mediates IOL dynamics.

Positioned within a qualitative vein, the thesis employs an interpretive perspective to collect and analyse empirical evidence. The qualitative data were developed through a mixture of participant observations, semi-structured interviews and casual conversations with network administrators and participants. The data were analysed using thematic analysis which generated codes, following which conclusions were drawn. The main contributions of this article are (1) unfolding the network as agency which provides a fresh understanding of how the agential role of networks mediates IOL and (2) drawing a framework of dimensions of reciprocal exchanges that explains how IOL occurs in networks.
The first conclusion of this thesis explained how the agential role is socially constructed and how the interpretive device facilitated this construction. The second conclusion of this thesis explained how reciprocal exchanges mediate IOL and provide a framework that suggested IOL can be better understood through temporal, spatial, directional and symmetrical perspectives.
Declaration

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Acknowledgements

In the name of Allah, the compassionate, the merciful who said in the Noble Quran (but over every possessor of knowledge is one [more] knowing). This verse of the Quran reminds me of how precious seeking knowledge is and that every day I find out that I know less. Peace and prayers be on the seal of the prophet and best servant, Mohammed, who said, “Seeking knowledge is obligatory”.

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Conferences Presentation


- Abu Alqumboz M and Chan PW (2013), 'Inter-organisational learning in project based organisations Perspectives on reciprocity', British Academy of Management Conference, Liverpool, UK.

PART ONE: PROBLEMATISATION

Introducing Part One

The first part of this thesis is dedicated towards problematising theoretical constructs of research in addition to explaining how this problematisation will be settled down. A literature review sets out the basic assumptions behind the operationalisation of this thesis. To that end, I will present a theoretical framework that illustrates the basic constructs of the thesis subject in addition to how the flow of thoughts was put into effect in order to present the thesis in a manageable order.

At the present time, fiercely competitive markets require actions from organisations that are more responsive to satisfying the increasing demands for competitiveness. These actions, which focus on customer satisfaction or fulfilling supplier demands, are crucial for the success of the organisation. Networks between organisations were created to meet the increasing need for knowledge that is required to meet responsive actions, which the standalone organisation does not have the individual capacity to do. Subsequently, an emergent literature concerning learning in networks and between organisations evolved dramatically (Beeby and Booth, 2000).

As established in the introductory chapter of this thesis, the way inter-organisational learning (IOL) occurs in learning networks from reciprocity and agentiality theories is complicated. Hence, a review of the literature is necessary to build up the theoretical framework of the study and to allow the contribution of the study to be relevant and robust. The basic constructs of IOL have become more complicated in networks, for they gather various participants who present diverse...
and sometimes competing goals. This complication lends itself to reality when fundamental social norms such as reciprocity and the agential role of networks confront the basic theoretical assumptions of networks, considering networks differ from organisations, upon which OL was theorised.

Therefore, I maintain that studying IOL should start from the context in which it occurs; that is networks, by critically reading their fundamental constructs, definitions, theories, and challenges. This process of critical reading (rendering) unfolds and includes constructs, theories, types, challenges, and connotations of IOL. Lastly, the literature will shed light on the reciprocity and structure-agency theories and explore the possibility that they serve as proxies for learning.

This part provides a literature review on organisational learning (OL) with emphasis on interorganisational learning (IOL), knowledge sharing, and reciprocity in networks. Part one includes six chapters. The first chapter is an introductory note that comprehensively sets the grounds for the research’s importance. The second chapter addresses the nature of networks. The third chapter investigates the reciprocal relations in networks and presents how they are linked with OL, which in turn is investigated in the fourth chapter. Finally, the fifth chapter presents the research methodology of the thesis that has been refined following the findings of the pilot study that was incorporated through lessons learnt in the sixth chapter.

This is how the literature review chapters work. The chapter is divided into several sections, each of which includes several interconnected subsections. Each chapter ends with a concluding note that summarises key points.
Thesis in brief

Problem
• Incomplete accounts of IOL.
• Failure of networks to achieve set targets

Question
• How does reciprocal exchange influence IOL in learning networks?

Aim
• Develop a conceptual framework of the reciprocal, temporal and agential elements of learning in organisational networks

Methods
• Qualitative
• Semi-structured interviews, observation
• Interpretive perspective

Findings
• Network benefit organisations through its agency
• Social Exchange Theory better explains IOL

Contributions
• Networks has agential role
• 4D framework for reciprocity was developed
Chapter 1  AN INTRODUCTION

1.1  Rationale and Context

In order to stay competitive, organisations rely on their existing resources. The demand for newer types of knowledge is realised but the resources are scarce. To fill this knowledge gap, organisations have traditionally used internal resources such as life-long learning (Wall and Ahmed, 2008, Saks and Haccoun, 2010) and external resources such as management training organisations and consultants (Adrienne, 2003). However, these resources are usually expensive and more importantly do not result in the desired learning outcomes. More recently, networking is becoming a more popular trend to fill the knowledge gap (Huggins, 2010).

Lack of knowledge sharing is found to be a central factor of failure in supply chain management (Ke and Wei, 2007). Organisations are beginning to understand the complete advantages of networking and utilise the resources available to them more effectively. Subsequently, organisations have realised that the desired learning outcomes from networks are being under-utilised and the benefits from networks are not being fully realised (Ramírez et al., 2011, Abokhdair, 2007, Senge, 1999, Méhaut, 1999).

The “The Gulf Oil Disaster” report, published in relation to the BP Deep Water oil spill, strongly suggests that BP did not learn from the industry’s (network’s) previous experiences. However, the report fails to give guidance on how the organisation (BP) should have learned, although the report indicated that this disaster would have been prevented had sufficient considerations of learning been practised (Graham et al., 2011).
Knowledge-based businesses are highly engaged in different forms of networks which aim generally at creating or leveraging knowledge (Podolny and Page, 1998, Nieminen and Kaukonen, 2001, Contractor and Lorange, 2002). Networks may link organisations together (inter-organisational networks) or be teams within the same organisations (intra-organisational networks). Those networks could be strategic alliances, learning networks, or joint ventures. It is now natural to see many supply chains engaged in inter-organisational relationships that go beyond the dyadic relationship which previously dominated the study of market relationships (Love et al., 2002). One interesting form of organisation is the project-based organisation (PBO). PBOs are characterised by centring their activities on projects rather than traditional hierarchical forms (Whitley, 2006). Projects are characterised by specificity in goals, pre-defined duration, life cycle, and teams that are created at the project’s start and dissolved at the project’s end. This poses particular risks to the concept of learning, especially in the transfer of knowledge (DeFillippi and Arthur, 2002).

The current literature assumes that networks are advantageous for knowledge and creates a learning environment for businesses that otherwise they could not find. The network literature suggests that accessibility to knowledge varies within networks in accordance with diversity of members (network range) (Campbell et al., 1986), the hierarchical position of network members in their organisations (network status) (Lin, 1981), the tie strength between members (Granovetter, 1973) and the similarity of network members in socio-demographic and behavioural attributes (homophily) (McPherson et al., 2001). While such dimensions have provided a deeper understanding of the structural concerns of networks, our understanding of the nature of networks is still insufficient because firstly, the aforementioned dimensions were studied using quantitative measures and secondly they overlooked the agentiality of networks. There have also been other dimensions that have been overlooked, such as reciprocity between network participants, as reciprocity is often assumed to be a given and is therefore under-examined. Research studies that tackled reciprocity in IOL did so as two distinct constructs and
in some instances reciprocity was only employed to infer that it is important to IOL. However, those studies did not explain adequately how reciprocity mediates IOL and why certain IOL dynamics were more successful than others.

Learning networks were mainly created to advance learning and knowledge sharing, but started to receive criticism as to whether they effectively achieve set goals. Network participants may not reciprocate because of concerns about knowledge leakage and/or power differentials (Donahue et al., 2003). The field of IOL needs to be investigated in detail to establish why, contrary to others, some organisations are not able to benefit from networking (Beeby and Booth, 2000, Child, 2001, Zaheer and Bell, 2005, Waring and Currie, 2009, Lampela and Kärkkäinen, 2009, Alawamleh and Popplewell, 2010). Furthermore, the diverse literature on OL contributed to the theoretical knowledge of the field (Cyert and March, 1963, Argyris and Schön, 1978, Argote et al., 1990, Crossan et al., 1995, Argyris and Schön, 1996, Benkard, 2000, Child, 2001, Holmqvist, 2003, Holmqvist, 2009, Argote, 2011, Easterby-Smith and Lyles, 2011), but failed to contribute sufficiently (Tsang, 1997, Easterby-Smith, 1997, Drejer, 2000, Argote and Miron-Spektor, 2011) to the practice literature.

This thesis responds to calls for more research on IOL (Easterby-Smith and Lyles, 2011) while acknowledging the difficulty of conciliation of the vast and disparate research on OL. Therefore, the focus will be on learning within social theory and more specifically social exchange theory. Fitted within the interpretive perspective, this thesis maps social exchange theory onto IOL, setting out to contribute to the understanding of IOL dynamics in a learning network environment. The methodological approach therefore sits on a qualitative perspective, seeking to understand learning dynamics without overlooking a predictive space that informs how organisations may seek to learn across their boundaries.
1.2 Research problem

While the theoretical aspects of reciprocity have developed over the last few decades, there are still several theoretical and methodological limitations. For the theoretical limitations, there has been a lack of research on reciprocity in organisation and network theories that explains how reciprocity plays a role in networks and what this role is. For the methodological limitations, the majority of reciprocity studies focused on quantitative methods that are mainly based on the Prisoner Dilemma (e.g. Nowak and Sigmund, 2005, Riolo et al., 2001, Dufwenberg and Kirchsteiger, 2004). Moreover, the context of the studies was generally local communities (i.e. anthropological studies) and there was much less focus on professional and organisational settings. In principle, the main purpose of these studies was to study the behaviour of players in economic theory. So far, evidence of theoretical explanations of how reciprocity organises networks and how it mediates IOL is lacking. In other words, it was not clear in the literature how the norm of reciprocity was embedded in networks as a mechanism and as a norm that fosters or hinders learning. The respective studies which investigated who knows who, who knows what, and who knows where tell us nothing about how reciprocity was “there” and how it organises a network. Therefore, a conceptualisation of how reciprocity organises networks is necessary to deepen our understanding of IOL.

1.3 Research Aim

The main aim of this research is to develop a conceptual framework of the reciprocal, temporal and agential elements of learning in interorganisational networks.

1.4 Research objectives

In order to achieve the above aim, the following objectives had to be maintained:

1. To conduct a comprehensive literature review of IOL that draws on social exchange theory in the network context.
2. To identify the reciprocal, temporal and agential elements that constitute learning dynamics in interorganisational networks.

3. To examine how the reciprocal, temporal and agential elements interact to create learning outcomes.

4. To analyse how the reciprocal, temporal and agential elements contradict or complement one another.

5. To discuss and recommend practical implications of reciprocal, temporal and agential elements of learning in the context of interorganisational networks.

1.5 Research Questions

As this section strongly relates to the rigour of the thesis, I shall elaborate sufficiently to show how the research questions developed throughout the process of producing the thesis.

The literature review of OL and IOL explains that those two areas had been studied extensively, however, they had been criticised for being dispersed over multiple disciplines and for therefore suffering from a lack of theoretical coherence. From the other side, this dispersion had a positive impact on the field of inquiry, which was granted the authority to study the interaction between organisational learning and the various theories that tackled it, and it therefore forms the grounds for more research to be conducted using different theoretical lenses.

In this sense, I looked at IOL in learning networks for the reasons I mentioned earlier in introducing this chapter. Inexorably, the main question borne in my mind was pressing and unfolding: how does organisational learning occur in learning networks? I found theoretical legitimacy for my question, for it was raised before in a different way; how do organisations learn? I paid attention in the formulation of my question not to delineate who does the learning; organisations or individuals, which the wording of the latter question may implicitly indicate. I consequently avoided the extant debate on the subject of learning. By doing this, I escaped the ontological to the epistemological debate of who learns.
I joined the network in order to explore how organisational learning occurs. This, through observation and informal conversation with network participants, paved the way for two other questions to evolve. Those questions were: What is the role of reciprocity in organisational learning? What is the role of the network as an agent in organisational learning? From these two questions emerged the objectives of the research, as instruments to shed light on the theories of reciprocity and structure and agency. What interested me in the networks I had joined was that some of them gathered competitors who decided to join to discuss current debates in their industries, which compelled me to inquire how they could discuss and share knowledge inside the network boundaries while competing outside. How could they maintain this ambidexterity? From this line of inquiry came the theoretical landscape of reciprocity. The immersion in the networks drove me to question the role of the network itself on directing or influencing the way those competitors behave outside the network. Subsequently, I questioned the role of the network as a structure and at the same time as an agent. In its role as structure, I contemplated the hierarchy, ties, centrality, and embeddedness qualities of networks, while in its agential role, I contemplated those qualities of the network as one subject in relation to the members that it encapsulates. In conclusion, the questions draw upon the trail of thought throughout the PhD journey. Those questions can be summarised as follows:

**1.5.1 Main research question**

What are those factors that mediate IOL in networks?

**1.5.2 Subsequent research questions**

1. Why do organisations join and exit learning networks?
2. To what extent are network participants influenced by network consequences?
3. How do those consequences of the network mediate IOL?
4. How do social exchanges between network participants influence IOL?
5. What are those particular qualities of social exchanges that relate to IOL?

It is important to mention that those sub-questions formulate two different contributions, which will appear in part two of this thesis. Those sub-questions govern the flow of thought in the three chapters of analysis and findings and therefore will produce several sub-questions that comprise the backbone of each chapter.

### 1.6 Summary of Research Methodology

The research methodology adopted in this research comprises five stages as follows:

**Stage 1: Literature Research**

This stage utilised various sources to determine the research focus. These sources include journal articles, books, eBooks, the university library system, PhD theses, conference papers, and website content. The literature search attempted to achieve three objectives as follows:

1. To define terms such as network, organisational learning, inter-organisational learning, reciprocity, structure and agency.
2. To review the literature on organisational structures, organisational agency, organisational learning, inter-organisational learning and networks, and reciprocal exchange theory.
3. To investigate current research gaps in inter-organisational learning and networks from the theoretical lenses of reciprocity and structure and agency.
4. To determine an appropriate research methodology that will maximise understanding of inter-organisational learning in networks.
Stage 2: Research purpose

An exploratory study was used in the research to enhance the understanding of the nature of the problem and develop a theoretical framework for the research. Moreover, the exploratory study helps to gain familiarity with the phenomenon of inter-organisational learning in networks before the development of a concrete design for a comprehensive investigation of the problem.

Stage 3: Research design

The research is qualitative and used an interpretive approach.

Stage 4: Research method

The research strategy used is mainly interviews supported by ethnographical observation.

Stage 4: Data analysis

Data were analysed using interpretive analysis.

Stage 5: Writing the thesis

This stage involves writing up the thesis by following the researcher’s stream of thoughts in compliance with the prescribed university standards. The thesis will be divided into two parts; namely problematisation and reconceptualisation.

Scope of the thesis

The scope of the research is to explain how IOL occurs at the inter-organisational level. This thesis will be limited to theorists, practitioners, consultants and academics working in the field of Management Learning.
Thesis Structure

The thesis is divided into eleven chapters, which can be summarised as follows:

Chapter 1: Introduction
This chapter includes the statement of the problem, the research questions, aim, and research objectives.

Chapter 2: The rise of networks
This chapter explains the importance of networks in business while shedding light on their different types and challenges in light of structure and agency.

Chapter 3: Reciprocity
This chapter explains how reciprocal exchanges evolve, their typologies, and mechanisms. Specifically, this chapter draws on social exchange theory.

Chapter 4: Organisational learning
This chapter explains organisational learning, inter-organisational learning, learning types, and major watersheds in the literature.

Chapter 5: Research methodology
This chapter presents an overview of the research philosophy, methodology, and philosophical stance. Importantly, it critically describes the research method adopted.

Chapter 6: Pilot study
This chapter presents the pilot study and how the lessons learnt were incorporated into the thesis' development, especially with regard to amending the data collection process and re-formulating research questions.

Chapter 7: Network as agency
This chapter presents the first outcome of the research depicting networks as agency and how this agential role shaped how organisations learn across their boundaries.

**Chapter 8: Dimensions of reciprocal exchanges**

This chapter presents the second outcome of the research by designing a framework that enables better understanding of inter-organisational learning as a series of reciprocal exchanges.

**Chapter 9: IOL as reciprocal dynamics**

This chapter presents the third outcome of the research by presenting the dynamics of IOL through the lens of reciprocal exchange.

**Chapter 10: Conclusion and future research**

This chapter concludes the thesis, focusing on main findings, contribution to knowledge, limitations and future research.

**Chapter 11: Bibliography**

This chapter alphabetically presents the resources used to theoretically underpin the research journey.
Literature review

Thesis’s Objective 1

To conduct a comprehensive literature review of IOL that draws on social exchange theory in the network context.

The literature review in this thesis comprises of three chapters (2, 3, and 4). Chapter 2 sheds light on network literature for it is the space where the research will be conducted. Chapter 3 critically evaluates social exchange theory and its synergies with IOL. Finally, chapter 4 lends itself to articulate theoretical landscape of IOL debate.

For the purpose of conducting this thesis and resolve the tensions pertaining the subject matter, the literature review aimed to:

- Crystallise thesis’s main constructs and develop researcher’s comprehension of those constructs. This will consequently inform the data collection and develop comprehended research questions.
- Identify researchable knowledge gaps in the fields of OL, learning networks, and reciprocal exchanges.
- Justify why this subject of thesis is important and should be researched.
- Establish a stronger argument for avenues of research (i.e. SET and structure/agency).
- Identify appropriate research methods and questions to elicit data on how organisations learn across their boundaries.
Chapter 2  THE RISE OF NETWORKS

Objectives of this chapter:
1. Introduce a structure/agency view of network literature.
2. Establish the typology and refine the understanding of levels of network.
3. Identify research domain and establish argument for selecting learning networks as research space.

2.1 Introduction

We live in a networked society, asserts (van Dijk, 2012), where almost everything around us is networked; the internet, our work, and our lives. The term “network” now indicates several things. It could mean an organisational network that gathers people from the same organisation together or an inter-organisational network that gathers different people from different organisations together (Ebers, 1999). It could also mean a learning network established so that people, formally or informally, organisationally or inter-organisationally, can share their experiences and learn from their counterparts (Hiltz and Wellman, 1997), a social network on the internet (e.g. Facebook, Twitter and LinkedIn) that gathers friends, family and professionals together, or a computer network that connects several computers together (Ellison, 2007).
The importance of networks in delivering organisational objectives has been stressed over the past few decades (For a review see for example, Ahuja, 2000, Arya and Lin, 2007, Beeby and Booth, 2000, Borgatti and Foster, 2003, Brass and Krackhardt, 2012, Huggins, 2010, Raab et al., 2013). This can be seen through the increasing amount of research on networks and most recently, especially social networks (Plickert et al., 2007, Powell, 1991). In business, almost every organisation relies on networks (van Dijk, 2012) to a degree that makes us wonder how businesses managed to survive without them. Networks of suppliers replaced the dyadic supply-chain relationships (Perry-Smith, 2006). The network has become a method of analysis and a level of analysis too (Marin and Wellman, 2011).

The last two decades witnessed more reliance on clustered and interconnected forms of organising than disparate and disconnected forms (Thorelli, 1986, Powell, 1991, Powell, 2003). Organisations have realised the importance of formal and informal networks to explore and exploit knowledge and to foster innovation (Orlikowski, 2002). This has led the practice of ‘networking’ to intensify and diversify in several ways. For example, temporary and strategic networks for learning within and across organisations were formed. Interorganisational networks have also been established to exchange knowledge and expertise across organisations. However, such networks have created tensions inside and outside the organisation (Provan and Milward, 1995, Gulati and Gargiulo, 1999). Challenges of knowledge leakage and knowledge centralisations are amongst other challenges going to and coming from networks (Easterby-Smith et al., 2008). This has prompted the need for organisations to look for practices that could bring the best benefits of networks while on the other hand alleviating the challenges that such networks pose.

The reasons for the rise of networks could be linked to the benefits those networks were thought to bring to individuals and organisations that could not be found elsewhere (Powell, 2003, Castells, 2011). Organisations create or join networks they think will enhance their capabilities. Because this network context is so important
for understanding how those organisations learn from each other, I believe the point of departure for this journey starts by finding definitions for network. Then this journey moves on to find out why those networks exist. The typology of network then comes to diversify the way we look at networks. The chapter then later moves to shed light on the functions and structural qualities of networks. The chapter culminates with a concluding note.

2.2 What do we mean by Network?

Perhaps there has not been a term as diverse as networks, and this may reflect its nature as a gathering device (Araujo and Easton, 1996). One can talk about networks as a selection of organisations, or individuals. Another may talk about the network as a network of relationships across organisations. Provan et al. (2007) mentioned that many scholars use the term “network” so vaguely as to cause theoretical and methodological flaws in their research. Therefore, it is important before defining a network to set the boundaries of the study to ensure the definition in this thesis is relevant and controlled. For the researcher in networks, (Nohria and Eccles, 1992, Araujo and Easton, 1996) suggested a criteria of seven dimensions to identify network approaches before embarking on the inquiry. Those criteria are: goal of research, nature of actors, nature of ties, disciplinary background, methodological orientation, structure or process, and cross reference with other network approaches.

This thesis has employed this criteria into the research inquiry and consequently is concerned with learning networks that gather several organisations in one place; i.e. interorganisational networks. For this purpose, we consider the network as an exogenous structure (Spencer and Brander, 1983) that encapsulates organisations and individuals together. The literature points to networks as organisational networks when a network gathers individuals from within the same organisation, while interorganisational networks are those which gather individuals from several organisations (Ebers, 1999). More clearly, Jones et al. (1997) defined
interorganisational networks as an interorganisational collaboration that works under an informal social system in contrast to hierarchical and bureaucratic structures. This collaboration is a series of long term and recurrent exchanges (ties) that results in interdependencies (across nodes) which require reciprocity, trust, reputation, and mutual interest (Larson, 1992).

More recently, (Van Wijk et al., 2011) categorised the network as a structure that embeds mechanisms to create, share, and diversify knowledge into three perspectives as follows:

2.2.1 Social network perspective

This perspective looks at networks as a group of nodes and ties. Nodes represent actors as individuals or organisations while ties represent the relationships that link those nodes to each other. In social network research, the focus is on how actors move through the ties and how the ties facilitate the transfer of knowledge between the actors.

Van Wijk et al. (2011) have suggested that the social networks perspective originates from sociology and anthropology, stemming from the notion that "the structure of any social organization can be thought of as a network" (Nohria and Eccles, 1992). This has extended the understanding of the social network perspective twofold; the first by looking at a social network as being embedded within an single organisation (intra-organisational network) and the second by looking at a social network as being a network between actors from different organisations (inter-organisational network) (Van Wijk et al., 2011).

This has introduced some ambiguity to the study of social networks, which can be traced to two mutual causes (Borgatti and Foster, 2003): (1) utilising networks as a governance mode and (2) utilising networks as an analytical tool used by
researchers. Therefore, it is important to define clearly the level of analysis and the particular theoretical lens when studying social networks.

### 2.2.2 Alliance network perspective

The focus of this perspective was mainly on network organisation as a governance mode which Van Wijk et al. (2011) stated is “interjacent to market organization and firm organization”. Alliance network research intercepts two main watersheds; transaction cost theory and the knowledge-based view of the firm theory.

From the transaction cost theory of the firm, organisations enter into alliances when costs incurred in contractual relationships are lower in the alliance than in a standalone organisation. This means that organisations network in an alliance to “reduce risk, to share costs, to enjoy economies of scale, and to block competitors” (Van Wijk et al., 2011). On the other hand, from a knowledge-based view of the firm, organisations enter into alliances when the knowledge required for their existence and/or competitiveness is far beyond reach within organisational boundaries (Podolny and Page, 1998). Thus, organisations network in an alliance to (1) gain access to the knowledge of their alliance partners (Huggins, 2010) and/or (2) to internalise the knowledge within their organisation (Grant and Baden-Fuller, 2004).

### 2.2.3 Organisational network perspective

This perspective is widely used in management fields, especially in studying the international business environment, where the main parameter of studying organisational networks is organisational design (Van Wijk et al., 2011). In this, strategy and structure are important determinants in shaping the context of the work environment for both processes and people (i.e. ability and motivation) (Van Wijk et al., 2011).
In social network analysis, a network is a web of nodes and ties (Laumann et al., 1978). In an organisational network context, network means a group of people connected together with a specific purpose or purposes. A computer network means a huge web of data that is communicated within a place or milieu. No matter the meaning, it indicates the structure or the way in which the network is organised, and this depends on the nature of the study on networks (Emirbayer and Goodwin, 1994). The social network analysis context heavily leans on the structure of the network; a structuralist view. On the other hand, the organisational network analysis focuses on how people deliver specific purposes, thus stressing the function of the network; i.e. a functionalist view.

In sociology, the structuralist view assumes that networks are structures that contribute to the formation of an individual’s behaviours (Emirbayer and Goodwin, 1994). This draws upon the view that social phenomena such as organisations and networks can be explained based on their structure (Cook and Whitmeyer, 1992). The main contribution of Cook and Whitmeyer (1992) is their distinction between exchange theory and network analysis in viewing a social structure. Cook and Whitmeyer suggested that both social exchange theory and social network analysis presume social structure as organising social relations and positions. However, they maintain that social exchange theory stresses the importance of exchanges (ties) between nodes in a network no matter the nature of that exchange or its direction, contrary to social network analysis (Cook and Whitmeyer, 1992). On the other hand, they argued that network analysis holds a “Catholic” view on the nature of ties between nodes in a network. However, they submit to the structuralist view in the importance of the role of actors in a network.

Despite the advancement of research on network structure, the evolutionary trajectory of network structure is still debated, probably due to parallel sociological debate on structure and agency. Recently, (Ahuja et al., 2012), in an attempt to alleviate the debate on network structure, suggested that understanding networks may not be sufficient without understanding how the structure of the network
emerged and evolved in addition to an appreciation of the interplay between structure and agency.

2.3 Structure and agency

By network structure here, this thesis means how the network is composed of nodes and ties. Previous studies have tackled the network as a structure that provides a hub for shared activities (knowledge sharing and practice improvisation) to take place. Brass et al. (2004) conducted a multilevel literature review on networks and defined the network as a set of nodes and a set of ties that connect nodes. The conglomeration of those sets capitalises on their individual strengths, which in a structuralist view reflects the ideas of Karl Marx about society in which he stated that “Society does not consist of individuals, but expresses the sum of interrelations in which individuals stand with respect to one another” (Mayhew, 1980). Connectionists may advocate this, as it perceives the network as a collection of ties rather than nodes.

The research on networks has two fundamental dimensions. The first concerns the causes or antecedents of network structure (i.e. how did networks evolve?) and the second relates to the consequences of network structure (i.e. what did networks result in?) (Brass et al., 2004). Borgatti and Foster (2003) clarified that most of the research has tackled the structural role of networks. Strength of ties, embeddedness, centrality, and so on are dimensions that have been studied in network research. Such dimensions are conditions that shape the structure of the network. In the wake of the debate on structural qualities of the network, the role of such a network as an agency that plays in shaping and reshaping organisations began to raise questions (Keck and Sikkink, 1998, Kahler, 2009), but still lacked theoretical and empirical evidence. In fact, the prominent questions that influenced network research - “why do organisations network?” and “why do individuals join networks?” - should shift to “how do networks shape and reshape organisations?” This comes as an effort of this thesis to address the shift of network thinking from
structure to agency and to portray the agential role that networks play in interorganisational learning.

The debate between the structure and agency, micro and macro, and so on is what makes sense in social theory (Barnes, 2001). The debate on the complex relationship between structure and agency is a mere exemplification of the debate on the relationship between structuralism and individualism (Elder-Vass, 2010). The debate was mainly split between structuralists and individualists, which lent itself to the question of “Are [structuralists and individualists] to be concerned with explaining social phenomena purely in terms of the contributions of individuals, or are there characteristically social forces that affect social phenomena?” (Elder-Vass, 2010). Accordingly, Elder-Vass (2010) summarised that the debate on structure and agency could be divided into two main streams as (1) structure and agency are separable (e.g. methodological collectivism, methodological individualism, emergentism and (2) structure and agency are inseparable (e.g. structuration theory).

Social structure may refer to normative institutions, organisations, or gender as Elder-Vass (2010) exemplified. The same author then summarised that social structure could be seen as (1) structure as wholes and (2) structure as relations. However, despite the variety of definitions and explanations of social structure, (Elder-Vass, 2010) claimed that they are “riddled with failures of ontological clarity”. Agency has always been thought of as human agency by critical realists (e.g. Elder-Vass, 2010, Harvey, 2002, Reed, 1997). This assumption could be put under scrutiny by borrowing the question of (Elder-Vass, 2010), “what made humans owners of the power of action?” Bandura (1989) conceptualised the nature of human agency into three types: (1) autonomous agency, (2) mechanical agency, and (3) emergent interactive agency. Bandura (1989) then concluded that the self is partially shaped by continuous application of self-influence, thus rejecting the idea of autonomous agency. Elder-Vass (2010) epitomised agency as political agency (power could be
exercised by the group) and individual agency (power could be exercised by the individual).

2.4 Why are networks formed?

Since the 1980s, the number and scope of interorganisational networks has grown. This growth is still continuous nowadays to the extent that it is becoming rare to find an organisation without network links with another organisation or group of organisations (Ebers, 1999). For example, in the car manufacturing and construction industries, it is common to witness two or more organisations forming a consortium to achieve a specific goal (e.g. Toyota and General Motors in the late 1990s). In the non-profit sector, organisations network to increase their capacity to reach diverse marginalised areas and/or to enhance social values (for example, in the merger between InWEnt, DED and GTZ in Germany in 2011). Furthermore, in the public sector, partnerships between public sector organisations and the profit or non-profit sectors were also noticed (for example, partnership between the Government and the voluntary and community sectors through The Compact agreement in the UK).

Early studies of networks indicate that they were formed as a new organisational form to meet the ever-pressing requirements for competitive advantage and as a response to turbulent markets (Miles and Snow, 1996). During the last two decades, the world economy has experienced an extraordinary transformation marked by intensified global competition and reorganisation of economic boundaries, which have significantly shortened the product and process lifecycles (Srivastava and Frankwick, 2011). These conditions are forcing organisations to develop a continuous stream of innovation, of which creating networks is an example. Likewise, Halinen and Törnroos (2005) described the world economy as turbulent and rapidly changing, marked by globalisation and the new economy creating an urgency for networks to evolve. They described “globalisation” and the “new economy” as being based on three tiers, as follows:
- Continuously changing.
- The increasing use of information and communication technologies.
- Complex networks of relationships between firms.

Early research on the origins of capabilities in the Resource Based View (RBV) and Knowledge Based View (KBV) of organisations focused on those within the organisation. McEvily and Marcus (2005) extended the research to include a view of capabilities as externally embedded in an organisation’s network of interorganisational relationships. Particularly, organisations do not acquire their capabilities in isolation, but as stated by McEvily and Marcus (2005), those organisations rather “discover, evaluate, and learn how to implement capabilities in the course of interacting with key exchange partners”. However, the work of McEvily and Marcus (2005) did not imply how learning across organisations in a network takes place, but rather they concluded that competitiveness depends on the type and quality of embedded ties an organisation cultivates interorganisationally. A more recent work on the embeddedness of ties by Huang and Chang (2008), drew upon McEvily and Marcus (2005) by stressing that embedded ties with interorganisational partners enable informal coordination mechanisms (for example trust, joint problem solving, and commitment) which sustain knowledge transfer between partners of a dyadic network.

Organisations, in order to remain competent in the face of this turbulence and rapid change, need - as a responsive action - to have continuously significant competencies such as business models and strategies, access to professional labour, technical capabilities, and access to new markets. Obtaining or accessing those competencies represents a challenge to organisations, which have subsequently found the network to be one possible way of confronting this challenge. This direction towards networking presents an increased influence of networks on organisations. This influence was explained in the seminal work on networks by Inkpen and Tsang (2005), who studied how social capital influenced knowledge transfer in networks. They summarised the major benefit from networks to organisations as their provision of necessary access to knowledge, resources,
markets, or technologies. Likewise, Van Wijk et al. (2011) stated that “networks benefit firms in gaining access to knowledge, in facilitating learning processes, in transferring knowledge, and in fostering knowledge integration and creation”.

In the same stream, there have been several research studies tackling networks and their influence on organisations. A great number of those studies addressed many benefits to firms such as access to knowledge and other resources. However, the study of networks naturally has its own difficulties that should be taken into consideration. Halinen and Törnroos (2005) distinguished four major challenges as follows:

- Problem of network boundaries: e.g. dealing with content or context
- Problem of complexity: e.g. defining the level of analysis
- Problem of time: e.g. dealing with cross-sectional temporal research
- Problem of case study comparisons: e.g. uniqueness of networks

Further on, the challenges networks face are goes beyond research methodologies; i.e. theory and practice levels. Such challenges may pose risk to organisations that have chosen to network. These challenges in general are said to hinder an organisation’s capability and competitiveness (Larsson et al., 1998). Jarillo and Stevenson (1991) summarised two well-known challenges to networks; (1) competitive edge of a partner could be appropriated by another partner and (2) networks may lead to the diffusion of an organisation’s strategic assets such as key technology learned by third parties. Following those two common challenges, Beeby and Booth (2000) argued that networks create inter-dependency relationships leading to a narrowing of expertise and to limitations to creativity and competitiveness of organisations in a network. Opportunistic behaviour between partners may also hinder the trust on which networks are established (Alawamleh and Popplewell, 2010). For example, partners may feel reluctant to share knowledge but in the meantime, may be keen to acquire knowledge from their partners and internalise it.
2.5 Types of network

The researcher on types of network will find a plethora of types which have been construed from different perspectives or contexts. For example, based on formality, there are two types; formal and informal networks. Whereas based on structure, network forms varied from structured forms such as contractual joint ventures and hierarchical supply chain to less structured forms such as regional industrial districts, industrial associations, and community business (Besser and Miller, 2011).

Inkpen and Tsang (2005) presented a typology of networks according to their degree of structuring and extended those types of network to include “intracorporate business units, strategic alliances, franchises, R&D consortia, buyer-supplier relationships, business groups, trade associations, government sponsored technology programs, and so on”. Figure 2-1 shows the typology of networks where the X-axis represents the level of governance structure (varying from structured to unstructured). The Y-axis shows the vertical-horizontal dimensions which represent the extent to which network members occupy different positions along the network’s value chain (Inkpen and Tsang, 2005).

For example, intracorporate network indicates a group of subsidiary organisations that are operated under the identity of the controlling company. Intracorporate network may also indicate departments or teams across departments from one organisation. This network has a clear structure of governance contrary to industrial district network (an example of industrial district network is Silicon Valley (Inkpen and Tsang, 2005)). An industrial district is defined as “a network comprising independent firms operating in the same or related market segment and a shared geographic locality, benefiting from external economies of scale and scope from agglomeration” (Brown and Hendry, 1997).
Fundamentally, Inkpen and Tsang (2005) based their proposed forms of network on the work of Podolny and Page (1998), who defined networks from a sociological rather than an economic point of view as follows:

“We define a network form of organization as any collection of actors (N ≥ 2) that pursue repeated, enduring exchange relations with one another and, at the same time, lack a legitimate organizational authority to arbitrate and resolve disputes that may arise during the exchange.”

To elaborate more on their definition, it is worth adding that Podolny and Page (1998) were debating that a network may be considered a superior organisational form. They used that conceptualisation to explain why organisations are inattentive to network problems. In other words, the ambiguity of level of analysis, whether it is a network or an organisation, led to difficulty in drawing attention to the network
problems. (Brass et al., 2004) classified how the level of analysis of the network when compared to the network life cycle has an explanatory power concerning network constructs (Table 2-1).

Table 2-1: Classification of network on three different levels

<table>
<thead>
<tr>
<th>Level of network</th>
<th>Interpersonal</th>
<th>Interunit</th>
<th>Interorganisational</th>
</tr>
</thead>
</table>
| **Antecedents**  | ▪ Actor similarity  
▪ Personality  
▪ Proximity and organisational structure  
▪ Environmental factors | ▪ Interpersonal ties  
▪ Functional ties  
▪ Organizational processes and control mechanisms | ▪ Motives  
▪ Learning  
▪ Trust  
▪ Norms and monitoring  
▪ Context  
▪ Equity |
| **Consequences** | ▪ Attitude similarity  
▪ Job satisfaction  
▪ Power  
▪ Getting a job  
▪ Performance  
▪ Getting ahead  
▪ Turnover  
▪ Leadership  
▪ Unethical behaviour | ▪ Performance  
▪ Innovation and knowledge activities | ▪ Imitation  
▪ Innovation  
▪ Firm survival  
▪ Performance |

In Table 2-1, focusing on the antecedents of networks, (Brass et al., 2004) highlighted the importance of studying motives, learning, trust, norms, and context at the interorganisational level. Such dimensions may inform of network...
consequences such as imitation innovation, and an organisation’s survival and performance.

2.5.1 Formal and informal

In the early thinking of networks, whether formal or informal, began considering the network as an embedded structure rather than an overarching structure; in other words, the network was thought of as the internal relationships of an organisation. Krackhardt and Hanson (1993) defined an informal network as the collective of internal relationships between employees across departments or functions of an organisation. The importance of such informal networks is that they are used as a vehicle to cut cross processes, find faster solutions, and provide a pool of knowledge for easier access (Nohria and Eccles, 1992). Network analysis emerged as a consequence of the rise of networks and especially informal networks, where organisations felt the need to see the benefits of such networks and how they could achieve organisational goals faster and better than formal structures (Krackhardt and Hanson, 1993). Following this line, Krackhardt and Hanson (1993) focused on trust and communication as a means of analysing networks. From trust and communication, networks were mapped to enable identification, leveraging and management of those networks.

Networks may be either formal or informal, or in other terms “prescribed” or “emergent”. Formal networks are those that are officially sanctioned and created from a top-down hierarchy. They include superiors and subordinates whose relationships are pre-regulated in order to achieve specific goals (Ibarra, 1993). Members of formal networks may include colleagues, seniors, subordinates from work and also friends or family members as long as the structure of the network is regulated and officially sanctioned. One difference from an organisational hierarchy and one benefit at the same time is that formal networks are more fluid and more focused (Schoonhoven and Jelinek, 1990). On the other hand, informal networks are discretionary structures (Ibarra, 1993) that are regulated on an ad hoc basis.
where networks are continuously evolving and changing to meet sessional expectations of participants.

Informal networks have been recognised for their impact on knowledge management and organisational learning (Prusak and Borgatti, 2001, Davenport and Prusak, 2000, Borgatti and Foster, 2003, Fisher and White, 2000, Inkpen and Tsang, 2005). From a structuralist view, research on networks was divided into two main streams. The first focussed on the nodes and the second focussed on the ties. Researchers on nodes praised the role played by network participants in fostering networks and leading network goals (Davenport and Prusak, 1998, Owen-Smith and Powell, 2004, Powell and Grodal, 2005). Nodes can play the role of a central connector (participants holding a central position in a network), boundary spanner (participants connecting their network to other networks), or gatekeeper (participants protecting their network boundaries) (Awazu, 2004). On the other hand, researchers on ties focused on the quality of ties and how they influenced the processes and management of the network (Granovetter, 1973, Marsden and Campbell, 1984, Fogel and Nehmad, 2009, McEvily and Marcus, 2005). Ties can play the role of a channel for communication, reciprocity, trust, and so on.

2.5.2 Learning networks

Ajmal and Koskinen (2008) defined learning networks as networks that embody lifelong learners who voluntarily (Blindenbach-Driessen and van den Ende, 2006) engage in learning activities in the network. Learning activities range from discussing topics within a shared domain of knowledge to working on joint ventures. Learning networks attract learners from different multidisciplinary levels of knowledge and expertise, but who usually share the same knowledge domain. Learning networks, whether real-life or virtual, comprise three interconnected entities (Ajmal and Koskinen, 2008): (1) participants: people who seek to learn and share knowledge, (2) learning activity: a topic that participants collectively discuss, and (3) goal: which describes the result of discussing the topic. Rosmalen et al.
(2006) defined a learning network as “a self-organised, distributed system, designed to facilitate lifelong learning in a particular knowledge domain”. In their work on online learning network, Rosmalen et al. (2006) suggested that the two main drivers for the rise of learning networks are the emergence of knowledge economy and individualised society. Knowledge economies centre organisational activities on creating and sharing knowledge, which requires various methods and tools to seek knowledge.

Learning networks received criticism stemming from the way they are formed and run. Drawing upon Hallpike (1975), who studied learning networks used by organisations to disseminate knowledge and cultivate experience, such networks tend to be flexible in their composition of participants; i.e. members are not the same every time. Network participants usually have their own organisational identities coupled or blended with their own social identities (Sennett, 1998). In addition, participants of learning networks are usually competitors outside their network boundaries; a situation which poses challenges to trust among members (Carney, 1998, Adler, 2001). The learning network concept is similar to that of a learning organisation but it is different from network learning and interorganisational learning (Knight, 2002). In network learning, the whole network is purposefully learning as one unit to improve the core competencies (Knight, 2002). This comes from Crossan et al. (1995), who suggested that learning occurs on four levels; individual, group, organisational and interorganisational. Interorganisational learning, however, means that organisations within a network learn from each other (Knight, 2002).

Moreover, and needless to say, in learning networks, members usually meet on a regular basis, ranging from monthly to semi-annual meetings. The time intervals depend on the network goals and recency of issues under discussion. In such settings, the disparity of meetings over wide intervals prompts us to revisit the definition of tie strength in (Granovetter, 1973), which stressed the importance of “combination of the amount of time” to generate a strong tie. According to the
latter thesis and coupled with the conception of mobility of learning network members, it becomes valid to argue that learning networks do not infer strong ties. To that end, and reflecting on the work of (Fritsch and Kauffeld-Monz, 2010), how would knowledge (either redundant or non-redundant) be exchanged in learning networks?

2.5.3 Network dynamics

Whereas the type of network is important in order to establish why networks can result in certain consequences, network dynamics are equally important in broadening our understanding of why and how certain networks produce certain results (Ahuja et al., 2012). As such, network dynamics refer to the processes that networks undergo in order to produce certain results. In other words, it is the method and actions by which network participants operate. Ahuja et al. (2012) explained that network dynamics denote changes of sources, types, and implications in network structure over time. However, such changes would be ineffective unless they resulted in expected network consequences, either partially or fully. In this regard, Provan and Kenis (2008) define network effectiveness as the achievement of certain network level results that could not otherwise be achieved.

Borgatti and Halgin (2011) made a distinction between “network theory” and “theory of networks”. In the former, Borgatti and Halgin (2011) place network processes that interact with the network structure at the centre of network theory. Along the same lines, Brass (2002) sees network theory as the outcomes from network variables. On the other hand, theory of networks indicates why certain network dynamics lead to certain network structures (Borgatti and Halgin, 2011). In this sense, structure means those network properties such as tie strength, centrality, connectedness, betweenness, and so on.
2.5.4 Concluding note

In conclusion, this complex nature of networks shapes the way in which those networks operate, especially when learning takes place in networked organisations at different levels of analyses, which will be discussed in the following chapter. While there are many definitions and typologies of network, the social networks perspective of Van Wijk et al. (2011) will be used as the domain of research. There are many challenges that may exist side by side with the benefits of networks. What is important is how the balance between these challenges and benefits is managed (Grimshaw and Rubery, 2005).

The main difference between network studies and organisation studies is that in the latter, actors are considered on their own while in the former, actors are considered in relation to their relationships. In organisation studies, what is important is the actor’s attributes, qualities, and how they perform accordingly (Brass et al., 2004). In network studies, the context in which the actor is found is important because the actor is connected through relationships to other actors. Studying the quality of such relationships and how they influence the actor is the main focus of network studies.

Summary of findings from Chapter 2

- This chapter informed the researcher of network types that will be researched (i.e. learning network) and its related constructs.
- The literature on networks is mainly positioned within structuralist domain.
- Subsequently, the researcher adopted the definition of network as a collection of nodes of people and ties of relationships (Van Wijk et al., 2011).
- However, the researcher has taken the stance that network is more than a structure and this suggests that current methods of studying network as a structure needs to be re-thought.
• Consequently, the researcher adopted a qualitative approach to conduct the research contrary to the prevalent quantitative approach used to study networks.

• The nature of learning network as informal network with a mixture of mainly weak ties and less strong ties informed the criteria upon which the researcher sieved the networks to be researched (presented in the Methodology chapter, Section 5.4 below).
Chapter 3  RECIPROCITY

Objectives of this chapter are:

1. To introduce and critically evaluate the social exchange theory (SET)

2. To establish the typology and refine the understanding of types of reciprocity.

3. To contrast direct and indirect reciprocity and demonstrate how each is linked to IOL

4. To determine and critique resources of social exchange.

3.1 Introduction

Deeply rooted in religions and culture, it has been granted a universal name, ‘the golden rule’. Reciprocity as a human practice is embedded in society (human and animal) since ancient times, and it is difficult to trace its origins (See for more details, Gensler, 2013). However, because it was linked to ethics, religion and philosophy, it became part of day-to-day life (Butler and Murphy, 2007). Reciprocity in its simplest form is the feeling of gratitude toward others (Gouldner, 1960). This conception is embedded in most social systems and religious beliefs, which makes the human tendency to reciprocate a hypothesis of wide consensus in the social science literature (Fehr and Gächter, 2000, Gouldner, 1960, Perugini et al., 2003).
Reciprocity is one norm that constitutes social capital (Chan et al., 2005) for its qualities to socially connect people (Berends et al., 2003). It has frequently been coupled with altruism in the broad literature (Oakley et al., 2011). However, it is important to make a clear distinction between the two to keep focused on the reciprocal exchanges in context. Reciprocity fundamentally indicates the mutual feeling of obligation between multiple parties to take and give benefits (Berends et al., 2003) while altruism indicates benefits for others at the cost of the altruistic person (Bakker et al., 2011).

Reciprocal exchanges in which individuals exchange material and immaterial “things” such as gift exchange and knowledge exchange are ubiquitous in social and economic life (Levi, 1996, Nowak and Sigmund, 2005). Networks that are created to exchange knowledge and advance experiences require reciprocal exchanges to sustain themselves (Nowak, 2006). Interaction amongst network participants is therefore vital to enrich knowledge and experience exchange (Tsai and Ghoshal, 1998). Interaction takes different forms. It could be discussions over certain topics, mutual admiration of a participant’s work, or - in advanced forms of interaction - the agreement on joint work. This suggests that considerable attention should be paid to network dynamics; i.e. the ways in which networks evolve and work over time.

Reciprocal exchanges rely on endogenous and exogenous variables (Gouldner, 1960, Uehara, 1995, Flynn, 2009). Those variables include for example, purpose of the exchange time and space in which exchanges occur, direction of reciprocation, symmetry of exchanges. This indicates to how various those exchanges are. Especially from a network perspective, we can see that with varying types of networks reciprocal exchange will vary accordingly in addition to indigenous variations due to such dimensions. This has prompted organisations to seek different ways to evaluate how to engage or establish networks (Molm et al., 2007).
With the journey of literature review taking off at Chapter 2, this chapter relates to it and explores the concept of reciprocity in learning networks. The chapter will firstly shed light on social exchange theory and position reciprocity in the discipline of social science. The chapter unfolds to define reciprocity, its typology, and synergies with learning across organisational boundaries.

### 3.2 Social exchange theory

The theory of social exchange may well provide a framework with which to understand the nature of interorganisational relationships (Cropanzano and Mitchell, 2005) in networks and therefore this thesis will employ this framework and specifically the reciprocal exchange to explore interorganisational learning in networks to explain the antecedents, dynamics and consequences of learning.

The early work on social exchange theory (SET) goes back to Blau (1964), who defined social exchange as “actions that are contingent on rewarding reactions from others”. Simply put, SET suggests that if one participant benefits from others, this participant will feel obliged to return the favour to those others (Griffith et al., 2006). SET is concerned with what is exchanged between people or organisations in a social setting and how this occurs (Cook and Whitmeyer, 1992). As such, the importance of SET is that it can be used as a frame of reference to illustrate various areas of organisational studies such as, for example, networks (Brass et al., 2004), leadership (Wayne et al., 1997) and knowledge transfer (Muthusamy and White, 2005).

Despite its prominent position in various disciplines such as sociology, psychology and anthropology, the theory has been criticised for its vagueness by scholars such as (Cropanzano and Mitchell, 2005), who proposed a theoretical framework to strengthen its explanatory power by clearly setting the foundational tenets of SET as (1) rules and norms of social exchange, (2) resources exchanged, and (3) relationships that emerge from the exchange.
Molm (2001) introduced SET as comprising four elements that are necessary for this exchange to occur: actors, resources, structures and processes. As such, SET is split into two broad streams of research: (1) negotiated exchange and (2) reciprocal exchange (Molm, 2003). In negotiated exchange, parties negotiate the rules of exchange for which they hope to sustain a beneficial arrangement (Molm, 2001). On the other hand, in reciprocal exchange, negotiation is minimised and the motive to exchange stems from the feeling of giving a valued resource, which provokes an exchange relationship that continues over a period of time through a series of reciprocal giving (Cook et al., 2013). Actors in a reciprocal exchange can be human only or human and non-human together (Homans, 1961). This can be noticed in the loyalty of humans to other humans or to non-humans such as an organisation, a product, or a brand. The resources exchanged can also be material, such as money and gifts, and/or immaterial such as love, gratitude, and acceptance.

Calling on systems theory, SET from an economic lens may be delineated as a process that is preceded by costs and produces rewards. The cost incurred during the exchange and rewards resulting from this exchange may include two types: (1) tangible and (2) intangible. Things exchanged may include material items such as goods and products and immaterial items such as information and emotions (Homans, 1961). The theory places heavy emphasis on social structure as both “product and constraint” (Cook and Whitmeyer, 1992). The early accounts of the theory were grounded on endeavours to study social processes (Homans, 1961) such as power relations, social fairness, and cooperation and competition in small social groups.

Along the same lines, Blau (1964) proposed that those social processes that govern our daily lives at the micro-level inform those that govern the social structure at the macro-level. For Blau, the basic assumption was that society could be understood by firstly understanding its tiny components. This has informed us with two main
contributions. The first is that the macro-level organisation (social structure) exists in the relationships between its entities rather than the qualities of those entities. Secondly, relationships between those entities do not change over varying levels of organisations (micro or macro). Both Blau (1964) and Homans (1961) argued that such relationships are mainly dependent on the reciprocal exchange of rewards between entities.

Revisiting the three explanatory tenets of the framework of Cropanzano and Mitchell (2005) in detail may provide a deeper understanding of IOL:

### 3.2.1 Rules and Norms of Exchange

Exchange participants follow certain rules - “guidelines” - that make exchanges happen. Those rules follow normative definitions each of which Emerson (1976) described as “…a normative definition of the situation that forms among or is adopted by the participants in an exchange relation”. While management and economic research focus on reciprocity and negotiated rules, less important rules were also used in such research (Cropanzano and Mitchell, 2005).

#### 3.2.1.1 Reciprocity rules

The most well-known exchange rule is reciprocity or repayment in kind without negotiation or bargaining (Cropanzano and Mitchell, 2005), which was explained by the seminal work of (Gouldner, 1960) who classified reciprocity into three main concepts:

- reciprocity as contingent exchanges

Under this conceptualisation of reciprocity, participants may have three postures towards reciprocity (Emerson, 1976, Cropanzano and Mitchell, 2005): (a) independent participant; which means the outcomes of reciprocation depend entirely on a participant’s own efforts, (b) dependent participant; which means the
outcomes depend entirely on the other’s own efforts, and (c) interdependence; with means the outcomes depend on the efforts of both participants of reciprocation. Those postures also imply that absolute independence or dependence may not be considered social exchanges contrary to interdependence, which stands as a prominent feature of social exchange (Molm, 2001).

- reciprocity as a norm

This conceptualisation deals with reciprocity as a social mandate which implies that those who reciprocate are rewarded and those who do not are punished (Malinowski, 1926). The norm as such acts as an enforcing power over the participant which invokes in them a feeling of having to participate (Cropanzano and Mitchell, 2005). Although (Gouldner, 1960) and many other scholars described it as a universal value, the enforcement of the norm of reciprocity decreed on participants does not mean that participants share the same degree of adherence to or belief in reciprocity.

- reciprocity as a folk belief

This conceptualisation delineates reciprocity as participants’ cultural expectations of what they deserve to receive from a social exchange (Gouldner, 1960). Those expectations are mutually contingent on the folk belief that participants of reciprocation will feel (1) the exchanges over time have reached a fair level of equilibrium, (2) that those who help others will be helped in the future (positive reciprocity), and (3) that those who do not help others will be punished by not being helped when they need it (negative reciprocity) (Cropanzano and Mitchell, 2005). The difference between folk belief and social norm in this sense is that the latter has a sense of enforcement.
3.2.1.2 Negotiated rules

At the other extreme to reciprocity come the overtly negotiated rules where participants negotiate to maximise the social exchange (Emerson, 1976). In this sense, negotiation is explicitly reinforcing the *tit for tat* and thus ruling out the reciprocal exchange. Negotiated rules are observed more in economic relationships such as negotiating the pay between incumbents and employers, however, certain social relationships may adhere to negotiated rules such as a team member working on an assignment negotiating the number of tasks they need to carry out individually (Cropanzano and Mitchell, 2005). Negotiations may take either a short or long time and may produce short term or long term agreements.

The two forms of relationships are ubiquitous in social life and may in some instances overlap in the same exchange relationship, however, people tend to appreciate the reciprocal exchange over the negotiated one in social life because of the expressive values that this reciprocal exchange brings (Molm et al., 2007). However, reciprocal exchange cannot escape the risks of non-reciprocity between partners of exchange for the lack of explicit negotiation of benefits (Molm et al., 2000). Risks are dependent to some extent on the amount of expectation that either party has concerning the exchange. Escaping form the binary view of exchange, Meeker (1971) considered the exchange as an individual decision and consequently she concluded that social exchange is composed of six dimensions: reciprocity, rationality, altruism, group gain, status consistency, and competition. This provided more dimensions to look at social exchanges and showed that little is known about those social exchanges (Cropanzano and Mitchell, 2005), especially in the field of organisational studies (Molm et al., 2007).

3.2.2 Resources of exchange

Research on resources of social exchange goes back to the work of (Malinowski, 1926) on resources of economic exchanges. The economic exchange focused primarily on materialistic goods, which was then followed by various research that
considered symbolic values of the resources exchanged (Cropanzano and Mitchell, 2005). While economic and social exchanges seem to be borrowing each other’s theoretical explanations, the mere difference between the two is in the level of analysis – ahistorical individual decisions versus longitudinal exchange relations (Emerson, 1976). In fact, (Foa and Foa, 2012) presented six types of resources in social exchange that included both materialistic and symbolic values: love, status, information, money, goods, and services. What is exchanged may sometimes be a formula of who is exchanging and where and how the exchange occurs. (Cropanzano and Mitchell, 2005) organised those types (or benefits as Cropanzano and Mitchell (2005) envisaged) into two dimensions: (1) Particularism (or worthiness) and (2) Concreteness (or tangibility). Particularism indicates whether the resource’s properties lean to particularism or universalism. Particularism means that the resource becomes worthy with regard to particular properties and not solely for its value (Foa and Foa, 2012). For example, money has relatively low particularism because its value is sustained regardless of who owns it, while gifts have relatively high particularism, which means their value depends on who presents them. Concreteness delineates how the resource ranges between concreteness and symbolism.

Relying on an organisational science perspective, (Foa and Foa, 2012) conceptualised resources of exchange to be either: (1) economic, or (2) socioemotional. The economic resources are tangible outcomes such as financial rewards while socioemotional resources are intangible outcomes such as satisfaction and loyalty (highly particularistic). Participants in networks and people in general vary in how they appreciate those two types of resources. Participants may appreciate economic values in relation to their performance but appreciate socioemotional resources equally, regardless of performance (Bowling et al., 2005, Mitchell et al., 2012).
3.2.3 Exchange relationships

Fiske (1992) summarised exchange relationships as falling into four psychological models: (1) communal sharing: participants deal equally with each other in the same category, (2) authority ranking: participants deal with positions in a linear order which means any participant can compare his/her rank with everybody else’s, (3) equality matching: a qualitative and relational structure where participants can quantify and compare their imbalances with others (score keeping), and (4) market pricing: participants are proportionate (calculative using cost benefit ratios) in their social relationships.

It is useful to associate exchange relationships with the polarisation of sociological theory and economic theory, mainly inherited in the abstractions of Adam Smith (Homo Economicus) and Emil Durkheim (Homo Sociologicus). Economic theory ascribes humans as self-interested (Henrich et al., 2001). Homo economicus means that the relationship between two participants is entirely governed by self-interests, which is mainly exhibited in customers’ desire to maximise utility and producers’ desire to maximise profit (Bowles and Gintis, 1993). On the other hand, homo sociologicus means two parties are entirely governed by social motives, not self-interest (Fehr and Gintis, 2007).

3.3 Reciprocity

Reciprocity is widely understood to be a universal norm (Gouldner, 1960, Plickert et al., 2007) that forms one of the basic foundations of social theory. It is the reason why we love, hate and interact with people. Reciprocity in its simplest form is the feeling of gratitude toward others (Gouldner, 1960). It is the norm that makes a person reciprocate with other people to whom he/she feels a sense of gratitude. Reciprocity as a norm was earlier explained by Gouldner (1960), who summarised it as the tendency of people to help those who have helped them and not to harm those who have helped them. This conception is embedded in most social systems and religious beliefs, thus making the human tendency to reciprocate a hypothesis
of wide consensus in the social science literature (Gouldner, 1960, Fehr and Gächter, 2000, Perugini et al., 2003). Grounded on that social conception, reciprocity could be defined as a reciprocal behaviour of “mutually contingent exchange of gratification” (Gouldner, 1960).

The seminal work on reciprocity marked by Gouldner (1960) was grounded on functional theory which focuses on the consequences of social systems. The main contributions of Gouldner (1960) amongst others were: (1) explaining the difference between reciprocity and complementarity; and (2) explaining the difference between reciprocity as (a) a transactional pattern of exchange, (b) folk belief, and (c) social norm. According to Gouldner (1960), a social group or network is more willing to reciprocate with others that benefit them but not with those who do not benefit them. For example, reciprocity is seen as a two-way transaction where Participant A would help B if Participant B has already helped A. The accumulation of a history of reciprocity could be explained as the reason for A helping B (Berg et al., 1995). With the absence of such a history, how and why would Participant A help B?

### 3.3.1 Power relations

In specific cases, Participant A would reciprocate with B even though Participant B did not benefit A at all. This case was explained through power differentials (Gouldner, 1960) and social history theories (Berg et al., 1995). A significant contribution sits with Gouldner (1960), who explained this case within power relations theory, where Participant B in such cases is more powerful than A, and thus Participant B requires that A reciprocates, with Participant A receiving very minor benefits, if any. In imbalanced power relations, when powerful organisations recognise the benefits of knowledge that they can receive from another organisation, they require their counterpart organisations to share their own knowledge (Ke and Wei, 2007). A powerful organisation may share knowledge with another organisation, and consequently, force the receiving organisation to “pay
back” their proprietary knowledge in order to maintain the stream of knowledge sharing. Does this seem like reciprocity? A considerable amount of literature has addressed similar conditions and explained how reciprocity could be misunderstood in general accounts (Gouldner, 1960, Uehara, 1995, Valaski et al., 2012, Hallpike, 1975, Nowak and Sigmund, 2005). This question remains open.

3.3.2 Trust profile

Berg et al. (1995) have studied reciprocity with trust by means of an experiment. They explained the above case concerning why Participant A would reciprocate with B. According to their accounts, Participant A reciprocates with B because Participant B has a reputation for reciprocation. Participant B gained this reputation or “image score” through reciprocating with strangers whom he/she does not know (Phelps, 2013). Participant A provides services or benefits to people whom he/she does not know, which leverages those peoples’ level of confidence in him/her. In fact, Participant A needs several social transactions of reciprocal exchange in order to build a trust profile (Araujo, 1998, Poppo et al., 2008, Khaire, 2010). In this sense, trust is a psychological state through which participants accept being vulnerable (Rousseau et al., 1998). Consequently, people do not see or feel the trust, but rather they are attached to its discernible attachment; namely, the reputation which is the means by which the trust becomes able to make Participant A reciprocate with B. Therefore, Berg et al. (1995) concluded that time or “social history” is indispensable in the creation of trust, reputation and reciprocity.

3.3.3 Ego and Alter

Revisiting social theory, the social system is fundamentally based on the social interaction between two people; “Ego” and “Alter” (Parsons et al., 1951). This interaction occurs recursively on the grounds that acts of ego depend primarily on the ego’s expectations of the acts, intentions or expectations of alter. Parsons et al. (1951) portray this interaction as necessary for the stability of the social system and consider this interaction as a reciprocity or complementarity. It is noticed here that
Parsons et al. (1951) did not differentiate between reciprocity and complementarity, but rather considered them synonymous. Gouldner (1960) criticised this mixing between reciprocity and complementarity, but he admitted that complementarity is an ambiguous term and subsequently explained that complementarity has four meanings, as shown in the following cases:

- **C 1**: A right (x) of Ego against Alter implies a duty (-x) of Alter to Ego
- **C 2**: A duty (-x) of Alter to Ego implies a right (x) of Ego against Alter
- **C 3**: A right (x) of Alter against Ego implies a duty (-y) of Alter to Ego
- **C 4**: A duty (-x) of Ego to Alter implies a right (y) of Ego against Alter

*Figure 3-1: Four meanings of complementarity.*

Source: (Gouldner, 1960)

**Legend:**
- C: complementarity
- x and –x are rights of the same kind
- y and –y are duties of the same kind

Figure 3-1 shows that complementarity indicates that what is a right for one participant is seen as an obligation of the other and vice versa, while reciprocity indicates that each participant has rights and duties (Gouldner, 1960). Accordingly, this implication means that it is possible to quantify rights and obligations. This introduces equity theory, which explains the mutual satisfaction between participants and how they perceive fair and unfair resource allocation (Adams, 1966). Earlier, Malinowski (1926) considered reciprocity as a pattern of the exchange of “equivalent services” and he stressed that “most if not all economic
acts are found to belong to some chain of reciprocal gifts and counter-gifts, which in the long run balance, benefiting both sides equally”. Grounded in equity theory, some valid questions would be, How would x and y be quantified? Would either equal zero for example? What would happen if either Ego or Alter was not satisfied with whatever right or duty? What would be the case if either right or duty was negative (illegal or unethical)?

### 3.3.4 Economic versus socioemotional values

Malinowski (1926) exemplified reciprocity in a relationship between farmers and fishermen. He studied two cases; an inland village where the inhabitants plant vegetables and a coastal village that survives on fishing. Neither village could do both jobs. The farmers go to the shore waiting for the fishermen to bring fresh fish. Farmers receive the fish from the fishermen and offer vegetables to the fishermen in return. Malinowski (1926) considers this arrangement as an economic one; namely barter. In the barter system, it is difficult to quantify items exchanged. Until divisible money was invented, people who used barter did not feel the problem of quantification and thus duties and rights were not seen as operating equally. In this sense, Malinowski (1926) writes: “Neither partner can refuse, neither may stint, neither should delay.” While this could be explained through equity theory that people were satisfied with whatever benefit they received in return for obligations they paid, Gouldner (1960) suggested that people believe that in the long run, the reciprocal exchange of items will “balance out”. Therefore, equity is sustained in the long run. However, in the big picture, one would question why people would believe that the mutual exchange of items would balance out. One answer could be in what Malinowski (1926) considered as “existential folk belief”. Such beliefs imply to people that if they do not help people in need, they could be penalised, while those who were helped would be helping them or others (Gouldner, 1960).

Referring to the anecdote of fishermen and farmers, Gouldner (1960) deemed Malinowski (1926) explanation as lacking the “value element”. The question is still
valid; would people believe that the mutual exchange of items would balance out? Gouldner (1960) concluded that the exchange was justified by the division of labour and because those people share in common high moral norms which make people pay back benefits against the rights they received. In summary, Gouldner (1960) has made a significant contribution to the theoretical differentiation between reciprocity as a pattern of exchange and as a moral belief, and especially that moral belief dictates the pattern of exchange in reciprocity. Uehara (1995) revisited the concept of moral norm that Gouldner (1960) discussed and summarised that moral belief induces the sense of obligation in those who have received benefits from others to return the favour. However, contrary to evocations grounded on equity theory and utilitarianism, Uehara (1995) concluded that people are more inclined to appreciate under-benefiting rather than being equally benefited or over-benefited. This again resonates with what Gouldner (1960) suggested, that moral norms are governing the exchange pattern. People are happier to give rather than to receive.

When reciprocity is defined as a reward for people’s good behaviour and a punishment for bad behaviour (Perugini et al., 2003), it already indicates that reciprocity could be mainly divided into two broad categories; one being rewarding reciprocity and the other punitive reciprocity. This categorisation seems to be a behavioural one which reflects one nature of reciprocity as a behavioural pattern of mutual exchange. However, this could expose reciprocity to a break-down categorising manner. In other words, reciprocity has been studied under many disciplines, which means that the typology of reciprocity could be as diverse as the number of disciplines under which it has been studied. For example, reciprocity has been researched from the perspectives of economics, psychology, sociology, anthropology, political science, social networks, and computer science. This thesis will focus on the typology of reciprocity within sociology in particular, because this fits within the research scope. However, psychological accounts are not separable from the explanation of reciprocity in many instances.
3.4 Types of reciprocity

When Gouldner (1960) has sought to distinct between types of reciprocity, his taxonomy was based on the conceptualisation of reciprocity as a norm. Kerr et al. (1997) suggested that norms could be either social or personal. That is, people think they should act according to either what the social norms or their socially internalised norms dictate.

3.4.1 Positive versus negative reciprocity

Kerr et al. (1997) proposed that reciprocity could be either positive or negative. Fundamentally, both positive and negative reciprocities fall within the boundaries of equity theory. To that end, the outcomes of positive and negative reciprocities will balance out throughout the course of mutual exchange between reciprocating parties (Kerr et al., 1997). To dichotomise the two terms, positive reciprocity refers to the pattern of exchange of rewarding actions where reciprocators will be more inclined to respond positively to positive behaviour contrary to negative reciprocators who will be more willing to respond negatively to negative behaviour. This conceptualisation is important in holding reciprocity separate from altruism, but brings it very close to accounts of complementarity as explained by Gouldner (1960).

3.4.2 Things versus actions

Hallpike (1975) argued that reciprocity could be divided into what he called (1) “prestations of things” and (2) “prestations of actions” or, in other words, “gift exchanges and cooperation”. He exemplified this divide using two societies (the Konso of Ethiopia and the Tauade of Papua New Guinea) as examples of why such a divide exists and should exist. Konso is described as a society which has the following characteristics; (1) high stability of group membership, (2) high demarcation of social group from the outside cities, and (3) high moral norms of cooperation. Thus, as Hallpike (1975) suggested, reciprocity grounded on those
three characteristics dominates the society of Konso. Therefore, Hallpike (1975) argues that the culture of gift exchange does not exist in Konso society. This reason may be explained in the case of the other example society.

On the contrary, Tauade society is fragmented and characterised mainly by (1) groups scattered geographically, (2) small, isolated social groups, (3) being dominated by a family system (both cognatic and affinal social groups) and (4) a nomadic style of life (instable dwelling both in time and space). This type of society, Hallpike (1975) argues, depends largely on gift exchange as a mode of reciprocity coupled with a culture of vengeance. The main contribution of Hallpike (1975) to reciprocity literature could be summarised as follows: (1) gift giver is superior to receiver while (2) service provider is inferior to receiver. To conclude; gift exchange dominates in fragmented, mobile, and isolated societies, whereas cooperative exchanges dominate in stable, connected, and enduring societies (Hallpike, 1975).

Implications from Hallpike (1975) could be linked to informal learning networks used by organisations to disseminate knowledge and cultivate experience. Usually networks are mobile in their composition of members; i.e. members are not the same every time. Network members usually have their own organisational identities coupled with their own social identities. In addition, members of learning networks are usually competitive outside their network boundaries; a situation that poses challenges to trust amongst members (Carney, 1998, Adler, 2001). The lack of inter organisational reputation, which stems mainly from social history and trust, means reciprocal exchange will be challenged as well. As such, would reciprocity still exist in such networks? If so, how could one make sure such reciprocity is good for knowledge sharing? Hallpike (1975) described the case of the Tauade culture as reciprocating in “the negative form of vengeance” which implies, if you are good to me, I’ll be good to you, and if you are bad to me, I’ll be bad to you too. If this is the case for learning networks, would IOL occur in a way that leverages the knowledge repositories of networked organisations?
3.4.3 Direct versus indirect reciprocity

The division of the taxonomy of reciprocity into two broad types; (1) direct reciprocity, and (2) indirect reciprocity has been the focus of research for a long time; e.g. (Nowak and Sigmund, 2005, IIASA, 1998, Brandt and Sigmund, 2006, Nowak, 2006, Boyd and Richerson, 1989, Panchanathan and Boyd, 2004, Nowak and Sigmund, 1998). However, the majority of those researchers focused on indirect reciprocity in the growing line of debate regarding its advantages and/or disadvantages. Direct reciprocity is a dyadic exchange between two individuals where A gives a benefit to B and consequently, B directly gives a benefit to A (Molm et al., 2007). The term “direct reciprocity” was also explained as “reciprocal altruism” by Trivers (1971), who then implied direct reciprocity is an exchange of altruistic acts. Trivers (1971) then defined direct reciprocity such that a participant A provides to B a benefit that could be costly or detrimental to participant A.

Nowak and Sigmund (2005) have conceptualised indirect reciprocity as a moral norm based on reputation. That is, a participant A would be reciprocated to by another, B, based on the reputation of A, although A might not have provided any benefit to B previously. Thus, indirect reciprocity could be exemplified as follows: a Participant A provides benefit to B, but Participant B does not directly benefit A but rather Participant B would benefit C and Participant C would either provide benefit to A, or to D, who will provide another to Participant A. Alexander (1987) suggested that this type of indirect reciprocity dominates the reciprocal transactions on the large scale of societal exchange and thus indirect reciprocity is a key driver in sustaining moral norms in that particular society. However, research is divided on how such collective exchange develops (Panchanathan and Boyd, 2004). The divide is mainly caused by the existence of, for example, the problem of free riders (Panchanathan and Boyd, 2004); those who take but do not give, scorekeeping (Yamamoto and Tanaka, 2009); participants who calculatively reciprocate with others, and hypocritical cooperation (Heckathorn, 1989), thus posing a risk to the
development of indirect reciprocity as a moral norm in organisational settings, i.e. networks.

Because a social conflict is expected to evolve between those who believe in reciprocity and those who do not, many researches have attempted to address this conflict and have suggested ways to alleviate that conflict or in extreme cases to socially punish the free riders in an attempt to seek stability of the social norm. Molm et al. (2007) argued that indirect reciprocity does not have written or specific rules but rather that participants reciprocate with others without knowing what, when, where and by whom they will be paid back. As such, free riding contrasts with that social action of indirect reciprocity in that free riders tend to take benefits without intending to give back and thus they are not essentially concerned about sustaining the moral norm. Learning networks, fundamentally, are open to the public; subscription is available for any organisation wishing to join. Consequently, this will encourage free riders to join such networks where they can absorb knowledge without allowing their own knowledge to flow. This also not only poses a risk to reciprocity, but will also reduce the trust environment and consequently, the network will lose its reputation, which is essential for the reciprocation of knowledge.

When Nowak and Sigmund (2005) interpreted reciprocity as a form of altruism driven by the work of (Trivers, 1971), that interpretation drew attention to two points of concern. The first point was that if reciprocity is accepted to be considered as another form of altruism, then it – reciprocity – will be cornered into a narrow frame of conceptualisation. Taking into consideration the account of reciprocity as an exchange that may be equal (equity theory), instrumental (over-benefiting), or altruistic (under-benefiting), then this taxonomy would be rejected. In other words, stressing that reciprocity is a form of altruistic exchange (under-benefiting) denies the other two taxonomies; (1) equal exchange and (2) instrumental, let alone other accounts that include reciprocity as either negative or positive, direct or indirect, and giving things or giving services.
The second point of concern was that studies hypothesising altruism could be pathological (Seelig and Rosof, 2001, Oakley et al., 2011, Lumpkin and Brigham, 2011); which could in the long run be detrimental to the altruistic individuals, who could consequently be demotivated and discouraged from continuing to be altruistic. Thus, despite the benefits that the altruist receives in the short run, such as self-esteem and satisfaction, a significant negative effects, in the long run, may be incurred (Becker, 1976). Those effects may include erosion of the incentive to work and/or the concept of individualistic society becoming entrenched. Although this thesis does not tend to deny or confirm this hypothesis, if it is arguably assumed to be valid, this therefore leads to questioning the effects of that hypothesis on reciprocity, both in the short run and in the long run. That is to say, this hypothesis questions whether reciprocity is beneficial or detrimental in the long run, in particular to organisations, and that detrimental reciprocity would, in the long run, affect IOL dynamics in networks.

### 3.4.4 Online Reciprocity

Reciprocity in the online environment was also a concern and provoked a new research stream that sought to examine whether reciprocity was necessary for the stability and development of online social networks (Barak and Gluck-Ofri, 2007). Aviv and Ravid (2005) analysed reciprocity in 75 online learning networks and found that reciprocity, despite being a requirement in online learning networks, is nevertheless lacking. They justified this because participants thought that the best way to receive social capital was not to respond or reciprocate at all. Thus, Aviv and Ravid (2005) suggested that in online learning networks without a mediator (a tutor perhaps), learners would not reciprocate. The concept of online reciprocity is challenged by many issues. For example, the face to face collaboration that holds people more inclined to be liable to their social actions is minimised in online networks because the medium of communication influences the interaction between participants (Curtis and Lawson, 2001, Dede, 1996). Grounded on the reputation studies, Dellarocas et al. (2004) studied the relationship between self-
participation and reciprocity in online communities (eBay customer reviews). They discovered that the majority of customer feedback did not stem from altruism, but rather from their intention to increase their reputation which would later facilitate the development of the indirect reciprocity processes.

3.5 Learning from and learning with

Despite the fact that there is a good amount of literature on the concept of reciprocity in organisational studies, there are few studies on how reciprocity influences and is influenced by IOL processes. Lubatkin et al. (2001) examined IOL in a distinctive learning environment; an alliance that aims at creating rather than acquiring or transferring knowledge. Grounded on network research, the difference is that knowledge creation networks require that the partners of an alliance have different knowledge domains and are not competitors (Das and Kumar, 2007). In knowledge acquisition and transfer networks, organisations are usually competitors and share similar knowledge domains. In their research, Lubatkin et al. (2001) have identified four types of IOL processes that underlie alliance formation as follows:

- vicarious learning alliances: knowledge transfer through learning by watching,
- knowledge absorption alliances: a more complex form of knowledge transfer which requires a strong absorptive capacity,
- knowledge grafting (Merger and Acquisition): OL through merger with or acquisition of another organisation, and;
- reciprocal learning alliances: knowledge creation by non-competitive partners whose knowledge domains are heterogeneous.

The reciprocal learning concept introduced by Lubatkin et al. (2001) is important for innovation environments but is limited to organisations that are not competitors and whose knowledge domains are heterogeneous. In this case, two organisations are learning together, creating knowledge that will leverage their innovative processes, and are thus collaborating to build an integrated knowledge repository.
Challenges such as knowledge leakage are minimal in such organisational settings (Nonaka and Toyama, 2003), which would result in maximum levels of reciprocal exchange. However, this means that the reciprocal learning theorised by Lubatkin et al. (2001) falls short of explaining the reciprocal learning that occurs amongst organisations which are competitors and share similar knowledge domains; learning networks being an example. Learning networks (learning from) could face challenges that result from the similarity of knowledge domain, which could vary in breadth and depth and thus pose a risk of knowledge leakage. As such, reciprocity is considerably challenged.

### 3.6 Concluding note

Research on reciprocity began to grab the attention of scholars in the early 1900s. Reciprocity is “one of the human rocks on which societies are built” (Mauss, 1954). It has been studied quite extensively in social sciences and economics (See for example, Gouldner, 1960, Berg et al., 1995, Fehr and Gächter, 1998, Gintis, 2000, Uehara, 1995). There have been different endeavours to define its meaning, form, structures, and motives within different disciplines such as sociology, psychology, anthropology, and biology. Social exchange theory (SET) has innumerable potential research avenues to follow in organisational theory, both theoretically and methodologically (Cropanzano and Mitchell, 2005).

It was noticed that research on reciprocity is highly dependent on quantitative methods deeply entrenched in mathematical modelling, game experiment, and social network analysis. Little research is conducted using qualitative methods. This calls for more research to be conducted on reciprocity using qualitative methods to broaden our understanding of the quality of exchange relations in real life cases. Moreover, the perplexing characteristics of human agency pose risks to any generalisation sought through quantitative research (Burns, 2000). Insights obtained from qualitative research would enrich the research on reciprocity.
grounded on the high involvement of the researcher in data collection and interpretation.

Reciprocity research is still growing and needs more investigation with regard to how it perpetuates OL in learning networks. This subject is under-researched and requires more investigation, especially the issue that reciprocity is taken for granted as a social norm that facilitates exchange. This concept is challenged when network participants are highly competitive and have similar knowledge domains. The value reciprocity gives to learning networks is poorly questioned in research, as it has been taken for granted (Molm et al., 2007), especially when organisations joining the network are usually competitors and consider knowledge their main competitive advantage.

Summary of findings from Chapter 3 are:

- This chapter informed the researcher of the social exchange theory and especially reciprocity. The researcher adopted the definition of reciprocity as contingent exchanges (Gouldner, 1960).
- The differentiation of reciprocity from altruism enabled the researcher to sharpen interview questions so that they focus on reciprocal interactions that are contingent on other parties be it direct or indirect (Interview questions are in Section 5.4.3.5 below).
- Since the majority of literature has been done quantitatively, reciprocity in organisation studies has not been comprehensively considered if at all researched.
- Hence, this thesis will employ qualitative approach to identify and formulate a framework to understand the interplay between reciprocity and IOL.
- Reciprocity as norm was taken for granted and therefore its relationship with IOL was poorly questioned in literature.
- Majority of reciprocity research has been done quantitatively in economics literature. Less focus was on organisation studies.
- Reciprocity was linearly studied from a cross-sectional perspective without taking into consideration social construction view.
- Resources of exchange can be material such as “explicit knowledge” or immaterial “tacit knowledge” which are communicated through IOL.
Chapter 4 ORGANISATIONAL LEARNING

Objectives of this chapter are:

1. To introduce and critically evaluate organisational learning.

2. To critique interorganisational relationships and learning dynamics across those relationships.

3. To synthesise and identify challenges in IOL in learning networks.

4.1 Introduction

Organisational learning (OL) and knowledge management (KM) have been the focus of much research because of the direct relationship between learning and new organisational forms (Rubery et al., 2002, Tselekidis et al., 2003). It is important to distinguish between the two terms – OL and KM – and especially to point out that the literature in the two fields is diverse in terminology (Vera and Crossan, 2006). OL is concerned with the process through which organisations seek to pursue knowledge and develop their experiences while KM is concerned with the content of the learning process (Easterby-Smith and Lyles, 2011). OL has drawn the attention of researchers for two decades, which has led to the production of hundreds of research papers in the field (Easterby-Smith et al., 2009). The field of KM has also grown in size and diversity since the mid-1990s (Maryam and Denford, 2011), but the major turning point in the field of knowledge management was after Nonaka and Takeuchi (1995) published their seminal book “The Knowledge-Creating
Company: How Japanese Companies Create the Dynamics of Innovation”. In their book, Nonaka and Takeuchi (1995) explained that innovation is the result of combining both tacit and explicit knowledge. This combination has come to rule out the conception that stressed explicit knowledge as the major source of knowledge.

### 4.2 Definition of Organisational Learning

Argyris and Schön (1978) defined organisational learning as the organisation’s ability to detect and correct errors. This definition emerges from the two notions of single loop and double loop learning which were introduced by (Argyris and Schön, 1978). In single loop learning, organisations detect then correct their actions through learning without questioning the governing rules of those actions. In double loop learning, the organisation moves beyond being bound to correcting the action to questioning the governing rules. In other words, single loop learning deals with organisational actions, while double loop learning deals with organisational objectives. Bateson (1973) introduced a third loop (sometimes called deutero-learning or transformative learning). Figure 4-1 shows synergies of the first, second and third levels of learning. Swieringa and Wierdsma (1992) summarised the three levels by envisaging the single loop to question rules (what to do), the double loop to question insights (learning what to do) and the triple loop to question principles (learning how to learn).

![Figure 4-1: Learning loops](image-url)
Lyles (1994) defined OL as both action outcomes and changes in the state of knowledge. This holds that OL is a process of change in individual and shared thought and action, which is affected by and embedded in the institutions of the organisation (Vera and Crossan, 2006). It is important to note that the starting point of studying OL is inexorably studying individual learning despite the prevailing notion that OL is not a collective process of individual processes (Wang and Ahmed, 2003). Specifically, OL is more than the sum of the individual learning of people within the organisation (Cohen and Levinthal, 1990). As the field grew exponentially, the definition evolved over time as shown in Table 4-1.

Table 4-1: Definitions of OL over time.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational learning is a change in behaviour in response to a stimulus</td>
<td>(Cyert and March, 1963)</td>
</tr>
<tr>
<td>Organisations learn through the collective capability of their members to learn. There is no organisational learning without individual learning and that individual learning is a necessary but insufficient condition for organisational learning</td>
<td>(Argyris and Schön, 1978)</td>
</tr>
<tr>
<td>Organisational learning includes both the processes by which organisations adjust themselves defensively to reality and the processes by which knowledge is used offensively to improve the fit between organisations and their environments</td>
<td>(Hedberg, 1981)</td>
</tr>
<tr>
<td>Organisational learning means the process of improving actions through better knowledge and understanding</td>
<td>(Fiol and Lyles, 1985)</td>
</tr>
<tr>
<td>Organisations are seen as learning by encoding influences from</td>
<td>(Levitt and</td>
</tr>
</tbody>
</table>
4.3 Levels of learning

Crossan et al. (1999) developed a framework consisting of three hierarchical levels of learning; (a) individual level, (b) group level, and (c) organisation level. Table 4-2 shows the levels and relevant processes, inputs and outcomes.

Table 4-2: Learning/Renewal in Organisations

<table>
<thead>
<tr>
<th>Level</th>
<th>Process</th>
<th>Inputs/Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Intuiting</td>
<td>▪ Experiences&lt;br&gt;▪ Images&lt;br&gt;▪ Metaphors</td>
</tr>
<tr>
<td>Group</td>
<td>Interpreting</td>
<td>▪ Language&lt;br&gt;▪ Cognitive map&lt;br&gt;▪ Conversation/dialogue</td>
</tr>
<tr>
<td></td>
<td>Integrating</td>
<td>▪ Shared understandings&lt;br&gt;▪ Mutual adjustment&lt;br&gt;▪ Interactive systems</td>
</tr>
</tbody>
</table>
Individual learning according to Crossan et al. (1999) holds intuitive processes like experience, images and metaphor. Thus, it is a basic level which contributes towards sustaining group level learning and subsequently the organisational level. In this regard, Barlow and Jashapara (1998) considered an organisation’s infancy in organisational learning as synonymous with individual learning. In addition, they stressed that partnering (networks) could lead to a higher level of individual learning in terms of size and diversity (Barlow and Jashapara, 1998).

Lately, the work of Jones and Macpherson (2006) has advanced the model of Crossan et al. (1999) from three levels to four levels by adding the inter-organisational level. Jones and Macpherson (2006) studied three cases to examine the learning levels and introduce new perspectives of learning. The case studies included organisations that created inter-organisational links to solve their problems. Table 4-3 shows the extra level as follows:

**Table 4-3: Organisational Learning and Renewal**

<table>
<thead>
<tr>
<th>Level</th>
<th>Process</th>
<th>Inputs/Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-Organisation</td>
<td>Intertwining</td>
<td>• Customer requirements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Supplier suggestions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• After-sales service regulatory environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Knowledge providers</td>
</tr>
</tbody>
</table>

Source: (Jones et al., 2006)
It is important to mention that Jones and Macpherson (2006) grounded their work on the understanding that knowledge is embedded within organisational processes and systems rather than in the heads of individuals. Furthermore, Jones and Macpherson (2006) described learning in organisations as occurring in reaction to “some crisis or critical incident rather than as a result of a careful strategy to acquire new knowledge”. This seems to be a reactive strategy rather than a proactive one, which will pull the organisation towards a strategic drift and consequently may threaten the organisation’s existence after a short period in an increasingly competitive environment (Johnson et al., 2014).

The study of Jones and Macpherson (2006) focused empirically on three case studies from SMEs and from a dyadic perspective. It is important to further extend the understanding of learning in proactive strategies and explain how organisations would adopt such a learning perspective in a network setting.

Research on organisational levels did not stop at that point of four levels. Rather, major contributions from Knight (2002) have further divided the inter-organisational level into dyadic and network levels, providing more space for analysis of learning processes and outcomes (see Table 4-4).

In Table 4-4, Knight (2002) presents a relational context of learning where the learner moves on from individual to network and the context moves on from individual to interorganisational. As shown, Knight (2002) distinguished between interorganisational and network learning, labelling the context as inter-organisational and labelling the learner as network.
<table>
<thead>
<tr>
<th>Level of learner</th>
<th>Individual (I)</th>
<th>Group (G)</th>
<th>Organizational (O)</th>
<th>Dyadic (D)</th>
<th>Interorganisational (I-O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual (I)</strong></td>
<td>Individual learns ‘alone’</td>
<td>Individual learns within a group</td>
<td>Individual learns within an organization</td>
<td>Individual learns within a dyad</td>
<td>Individual learns within a network</td>
</tr>
<tr>
<td><strong>Group (G)</strong></td>
<td>Group’s learning is influenced by an individual</td>
<td>Group learns through intragroup interaction</td>
<td>Group learns within an organization</td>
<td>Group learns within a dyad</td>
<td>Group learns within a network</td>
</tr>
<tr>
<td><strong>Organisation (O)</strong></td>
<td>Organization’s learning is influenced by an individual</td>
<td>Organization’s learning is influenced by a group</td>
<td>Organization learns through intra-organization interaction</td>
<td>Organization learns within a dyad</td>
<td>Organization learns within a network</td>
</tr>
<tr>
<td><strong>Dyad (D)</strong></td>
<td>Dyad’s learning</td>
<td>Dyad’s learning</td>
<td>Dyad’s learning is influenced by an</td>
<td>Dyad learns</td>
<td>Dyad learns within a network</td>
</tr>
<tr>
<td>Level of learner</td>
<td>Individual (I)</td>
<td>Group (G)</td>
<td>Organizational (O)</td>
<td>Dyadic (D)</td>
<td>Interorganisational (I-O)</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------</td>
<td>----------------------------</td>
<td>----------------------------</td>
<td>-----------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Individual (I)</td>
<td>is influenced by an individual</td>
<td>is influenced by a group</td>
<td>organization</td>
<td>through intra-dyad interaction</td>
<td>network</td>
</tr>
<tr>
<td>Network (N)</td>
<td>Network’s learning is influenced by an individual</td>
<td>Network’s learning is influenced by a group</td>
<td>Network’s learning is influenced by an organization</td>
<td>Network’s learning is influenced by a dyad</td>
<td>Network learns through intra-network interaction</td>
</tr>
</tbody>
</table>

*Source: (Knight, 2002)*
4.4 Interorganisational Learning

4.4.1 Interorganisational relationships

Organisations increasingly consider relationships with other organisations as a source of competitive advantage (Knoppen et al., 2011, Martin de Holan and Phillips, 2004). (Oliver, 1990) defined inter-organisational relationships (IORs) as relatively permanent transactions, flows, and links that occur within or across one or more organisations in the same environment. Those IORs aim at allowing knowledge to flow across organisations in order to approach a desired supply chain system which facilitates the development of organisational and inter-organisational competitiveness (Oliver, 1990, ju Choi and Lee, 1997, Chong et al., 2013). In fact, Oliver (1990) proposed six causes that prompted the formation of IORs: necessity, asymmetry, reciprocity, efficiency, stability, and legitimacy. Synergies between the six contingencies produce diversified IORs (Babiak, 2007) regardless of the cursory discord between some of them (for example, asymmetry and reciprocity).

Relationships in organisations which network to solve problems or achieve mutual goals were examined by van de Ven (1976). He pointed out that a relationship between two or more organisations is a social action because it exhibits the basic properties of any organised form of collective behaviour. There have been many research studies on relationships across organisations. These studies examined how relationships were formed and what enabled or inhibited them. For example, Commons (1950) emphasised that purposes, values, and expected consequences are the grounds for human choices. Consequently, Ring and van de Ven (1994), who examined how cooperative IORs are formed and developed, indicated that cooperative IORs require that individual choices (Commons, 1950) be congruent (i.e., expectations for the cooperative IOR are similar among partners).

Thus, to understand how cooperative IORs emerge initially, Ring and van de Ven (1994) stressed the importance of understanding how people can make present
commitments to engage in uncertain future courses of action. In this regard, Galaskiewicz (1985) suggested that cooperative IORs may emerge out of a wide variety of starting conditions, such as pre-existing friendship ties, an institutional mandate, or resource dependence and a search by one organisation for another party with the necessary resources. In a longitudinal study of the threats which hinder IORs, Van de Ven and Walker (1984) suggested that significant imbalances between formal and informal processes which arise in repetitive sequences of negotiation, commitment, and execution stages over time, increase the likelihood of the dissolution of the cooperative IORs. This could be due to the following reasons (Van de Ven and Walker, 1984): (a) excessive legal structuring and monitoring of the relationship, (b) conflicts between role and interpersonal behaviours of organisational parties, (c) conditions for violations of trust, and (d) escalating commitments to failing transactions. Therefore, organisations in a network of IORs need to be aware of such challenges, especially sometimes those challenges that evolve gradually due to the longevity of the network.

4.4.2 Views on inter-organisational learning

There have been many research studies on OL. Many authors have studied OL at the individual, group and organisational levels of analysis and provided significant perspectives to learning. Those research studies addressed learning levels, learning styles, how learning occurs and many other factors. From the plethora of research studies, conceptualisations were drawn upon OL practices that occur within an individual organisation and consequently theories were developed, albeit they are debated continuously. An organisation generally has a coherent culture through which employees act and react and by doing so, they improvise and institutionalise processes and manage tasks (Freidson, 1988). Within that organisational culture, shared identity and demarcated organisational boundaries of the organisation, many researches have described how OL occurs and theories were built thereupon (Freidson, 1988, Barley and Tolbert, 1997).
On the other hand, after networks had evolved and organisations started to engage in networks (whether formally or informally) accompanied by the blurring of organisational boundaries, an inquiry on how learning across networked organisations (inter-organisational learning) occurs began to evolve. Inter-organisational learning (IOL) research is fuelled by prior research on trust between parties (Ring and van de Ven, 1994), psychological contracts, absorptive capacity (Cohen and Levinthal, 1990, Todorova and Durisin, 2007) and exploration-exploitation (March, 1991, March and Simon, 1993). These implications can be perceived as dimensions within which IOL occurs.

Lane and Lubatkin (1998) studied enablers of IOL in pharmaceutical–biotechnology R&D alliances and discovered some enablers, including the similarity of the partners’ basic knowledge, lower management formalisation, research centralisation, compensation practices, and research communities being positively related to IOL. To simplify the explanation of IOL, Lane and Lubatkin likened IOL to a teacher-student relationship, which is a dyadic relationship (1998). In order to make IOL effective, both teacher and student should have qualifications that enable an effective learning environment. This is important because previous research confused IOL with network learning until (Knight, 2002) explained that they are different, where network learning means the whole network learns as one body going towards one goal while IOL means that each organisation learns from others to achieve their own goals.

Hamel (1991) aimed to develop a theory that draws upon inter-partner learning. He established the groundwork for IOL theory, with the primary unit of analysis being the individual organisation that learns from competitors or is locked in a "race to learn" with its partners. Hamel (1991) analysed nine international alliances and subsequently suggested some determinants of inter-partner learning, as follows:

- Not all partners are equally adept at learning
- Asymmetries in learning alter the relative bargaining power of partners
- Stability and longevity may be inappropriate metrics of partnership success
- Partners may have competitive, as well as collaborative aims, vis-à-vis each other.
- Process may be more important than structure in determining learning outcomes.

Whereas Hamel (1991) used the individual level of analysis, empirical studies of learning in alliances indicated that IOL accentuates the need to consider strategic, interactive, and dynamic elements of this higher-level phenomenon (Lane and Lubatkin, 1998). This is aimed at generalising (Hamel, 1991) the framework and testing its components within multiple levels.

Larsson et al. (1998) indicated that organisations are likely to learn most together when those organisations choose collaborative learning strategies of high transparency and receptivity. More recently, a similar conclusion was approached by Srivastava and Frankwick (2011), who identified transparency, intent, and receptivity as affecting IOL in alliances. It is important to link the increase of learning likelihood to the aforementioned enablers coupled with caution towards the challenges that face IORs.

Gulati et al. (2009) studied IOL in alliances. Their study focused on examining the conditions under which the prior partnering experience of firms contributes to value creation in their new alliances. The study proposed the following considerations (Gulati et al., 2009):

- Prior experience with the same partners, that is, ‘partner-specific experience,’ provides greater benefits than ‘general partnering experience’ that encompasses all prior alliances with any partner.
- Some boundary conditions influence partner-specific experience.
• The effect of partner-specific experience on value creation in alliances is moderated by the extent to which the assets of the new partner differ from those of the organisation’s prior partners.
• The organisation’s own technological and financial resources increase the benefits of the partner-specific experience.
• The value of the partner-specific experience will increase under high levels of organisation-specific uncertainty.

Larsson et al. (1998) explained that IOL occurs by transferring existing knowledge from one organisation to another, as well as by creating completely new knowledge through interaction among the organisations. In a similar context, Srivastava and Frankwick (2011) developed a framework for OL in an alliance context. The proposed framework strongly suggests that in order for OL to occur, top management’s attitude toward learning as well as environmental turbulence will affect the way OL occurs.

4.4.3 Challenges to inter-organisational learning

Friedman et al. (2005) investigated challenges that confine the research on OL, which they described as “Mystification of Organizational Learning”, that is the result of five attributes of OL research as follows:

• OL research is overloaded with conceptual diversity
• The main concept that organisations can learn is still debated by sceptics
• Anthropomorphism: the ability of an organisation to learn similarly to humans
• The reification of many abstract concepts of OL such as absorptive capacity, tacit knowledge, and knowledge creation
• The active mystification of the learning organisation
The propositions of (Friedman et al., 2005) are still valid and can be observed in the wide range of research studies published each year on OL. However, this mystification has also raised many challenges to OL, such as organisational and individual defence mechanisms (Wooten and James, 2005), organisational memory (Walsh and Ungson, 1991, Argote and Miron-Spektor, 2011), absorptive capacity (Rothaermel and Alexandre, 2009), explorative vs. exploitative learning (Andriopoulos and Lewis, 2009) and ontological applications in OL (Valaski et al., 2012) that should be addressed in the OL research agenda.

There is a wide range of definitions of OL that encompass the diversity of disciplines within which it was studied. Child and Rodrigues (2011) defined OL as “the acquisition, conversion, and creation of knowledge aimed at facilitating the attainment of organizational goals”. This definition exemplifies the wide range of definitions that dominated the field of OL over the past two decades and which praised the individual conceptualisation of learning at the expense of collective accounts. Researchers such as (Cyert and March, 1963, Argyris and Schön, 1978, Hedberg, 1981, Fiol and Lyles, 1985, Levitt and March, 1988, Argote, 2011) defined it from the individual point of view. This contributed to the ongoing debate of linking individual learning with organisational learning. This debate has grown as a ramification of research on OL which attempts to avoid the problematic reification of OL (Antonacopoulou, 2006) that dominated early research.

Fundamentally, OL research considers knowledge to be stored in human memory or in epistemological artefacts such as strategies, policies, and plans, while it considers experience to be stored in human actions and reactions (Valaski et al., 2012). This conception poses risk to the viability of knowledge and experiences because those two constructs of OL will otherwise be trapped within the walls of the human body. For this very reason, it will raise either one or both of two organisational challenges. The first is the decomposition of knowledge and experience in such a way that the organisation would not be benefiting from them, thus resulting in complicated losses. The second is that this challenge may be complicated with the centralisation
of the knowledge and experience repository, thus leading to an imbalance in the organisational design evident in the concentration of knowledge and experience on one side of the organisation while the other side lacks it, a state that is closely linked to the effects of power relations (Marengo, 1998). Power in this sense is not an end or goal, and also cannot be reified, but rather it is an instrument where participants can exercise knowledge through dialogue and observation (Foucault and Gordon, 1980). This is if learning is perceived as a process within one organisation, let alone across multiple organisations, which implies the retention of knowledge within one organisation only, without crossing the bridge to other organisations.

Knowledge retention is perceived as being important for competitiveness and as one of the pillars of KM practices (du Plessis, 2005). In a knowledge-dominated business environment, knowledge becomes the firm’s most valuable competitive advantage and asset (Grant, 1996). Knowledge as an asset decides the organisation’s strategy of competitiveness and alliances. Where knowledge as an asset becomes accessible and flexible, organisations will more easily join alliances, since they will not be risking any loss of knowledge (Harrigan, 1985). This signals the risk of knowledge attrition that organisations strive to prevent (Earl and Scott, 1999). Knowledge attrition is explained as being when an employee who has leveraged his/her knowledge in an organisation leaves that organisation with that particular knowledge in his/her mind (Hargadon and Sutton, 2000). There are certain types of experiences and information that are better being disseminated; in other words, the cost of their dissemination is less than the cost of being locked in the human body.

Furthermore, competitiveness might be achieved through the passing on of knowledge and experience from one organisation to another (Penrose, 1959, Nonaka et al., 2000). However, this does not come into reality unless two or more organisations agree to exchange and share certain knowledge through IOL (Dyer and Nobeoka, 2002). Organisations must consider any transaction cost that arises
from such knowledge sharing. Transaction costs that evolve as a ramification of OL might exceed the benefits of OL, especially when considering specific inter-organisational processes (Verwaal et al., 2008). As such, the organisation or the organisations should consider rethinking their IOL strategies. For example, when knowledge repositories of networked organisations are diverse and differentiated (heterogeneity), the risk of unintentional leakage of knowledge is reduced (Sampson, 2004). Likewise, when knowledge repositories are similar, the risk of knowledge leakage increases. To that end, IOL strategies are continuously challenged, especially in learning networks which represent organisations from the same industry and probably of a similar size. Where organisations are trying to balance between knowledge retention and knowledge sharing, how does OL help in retaining knowledge and at the same time facilitate knowledge seeking from external parties without risking knowledge attrition or leakage?

4.5 Knowledge sharing

The extant literature of IOL and KM focuses on IOL and KM strategies to share and protect knowledge. A key question in the extant literature is “What are the factors affecting the organization’s predisposition to share knowledge with a particular partner?” (Ke and Wei, 2007). To answer this question, Ke and Wei (2007) suggested two main streams for discussion. The first is transaction cost and the second is socio-political factors. Knowledge is exchanged or shared based on mutual interest, which means organisation X shares knowledge with organisation Y because organisation Y would do the same with X. This transactional relationship means that both organisations have accepted the risk of sharing the knowledge, especially the organisation initiating the sharing. In other words, the organisation takes the risk of sharing knowledge with another organisation at a price.

IOL processes cannot be confined to one abstract understanding or definition, and IOL cannot be defined only as the exchange of or transfer of knowledge between two or more organisations. Such shorthand definitions keep the door open for
misunderstanding IOL and could lead research on OL towards further divergence. With this in mind, the definition of IOL definition needs to be clearer as to how the learning is taking place. Socio-political factors such as trust, homophily, and reciprocity should be studied to better understand the IOL phenomenon. The concept of reciprocity will be clarified comprehensively later on in this chapter.

Knowledge could also be exchanged on the basis of pure opportunism. Indeed, IOL faces an opportunism cyclic dilemma. Larsson et al. (1998) explained the dilemma that from one end, to be a good learner, an organisation should be able to exploit learning in an effort to maximise their benefits from learning, while at the other end, this behaviour would bar the growth of shared knowledge in the network because network members would feel they were being exploited. To mediate this dilemma, Larsson et al. (1998) suggested a trade-off between the need to expand an organisation’s own learning (integrative learning) and to distribute learning outcomes amongst organisations (distributive learning). Nevertheless, the definition of (Larsson et al., 1998) seems to be curvilinear in the sense that opportunistic behaviour is growing and should be managed. There could be opportunistic learning which is based on forming a temporary medium for learning where organisation X might seek knowledge from another party and then cease this medium after the required knowledge is acquired. This form of OL seems to be opportunistic and unethical.

The recent work of Zhang et al. (2009) introduced opportunistic collaboration as a positive organisational arrangement. They explained that in opportunistic collaboration, “groups form, break up, and recombine as part of an emerging process, with all participants aware of and helping to advance the structure of the whole.” This sense of collaboration, although opportunistic on the surface, can in essence be explained as being reciprocal. This is the only condition which makes this kind of collaboration a good one; the sense of reciprocity. Reciprocal here means that collaborating organisations know and agree on such a form of organisational arrangement which rules out conditions of adhesion of contracts. Such a case of
reciprocity embedded in opportunism calls us to understand how knowledge transfers from one organisation to another, taking into consideration the different contextual localities and intentions of organisations.

Davenport and Prusak (1998) raised a fundamental question in their research as to how an organisation would be able to effectively transfer knowledge to another organisation. Their quick answer was simplistic and sarcastic, in a sense splitting the answer into two by saying “hire smart people and let them talk to one another.” There are many concerns emerging from this concise answer. For example, would people just talk to each other, and by way of this, organisations would perceive that IOL has thus taken place? Another valid question would be to inquire whether the organisation is really letting people talk to each other. (Davenport and Prusak, 1998), in their book, presented the first part of the answer (hire smart people) as the easiest part while the second part is described as being harder to achieve. Organisations do not usually allow smart employees to talk with colleagues in the workplace. Organisations do not directly obstruct such communication, but they might overload the employee with tasks to be performed within a short period of time, thus meaning the employee would have to completely devote himself to these tasks and thus be forced to forgo the second part of the answer (to talk to colleagues) (Davenport and Prusak, 1998).

Another reason that employees do not share knowledge would be recent organisational arrangements that led to changes in human resource practices. The increase of the more fragmented and international business which is represented by the geographic dispersion of businesses posed new challenges to OL (Argote et al., 2011). The geographic dispersion of teams has changed organisational forms and isolated individuals, creating an arrangement that limits the social interaction that Nonaka et al. (2000) suggested is a condition for knowledge creation and sharing. For example, the emergence of “work from home” arrangements increased the geographic and personal gaps between employees, making them look like isolated islands in an ocean. Contrary to that isolated arrangement, there are
organisational arrangements that filled the gap between isolated employees, such as the flat organisational hierarchy (Goh, 1998) where employees work in one place with only a glass partition separating them. This particular arrangement is pertinent to certain industries, jobs, or organisations. For example, call centres are a type of business where the workplace is expected to facilitate OL; however, this does not mean that OL would occur effectively (Houlihan, 2000). On the other hand, small businesses may be isolated due to the nature of their work environment, which implies IOL would be difficult to achieve without networking.

4.6 IOL in learning networks

There has been a marked shift in OL thinking from individualism to collectivism in the research (See for example, Brown and Duguid, 1991, Lave and Wenger, 1991, Crossan et al., 1995, Child and Rodrigues, 2011). The shift has taken the OL from a construct that denoted knowledge “acquisition, conversion, and creation” (Child and Rodrigues, 2011) to knowledge sharing (Dyer and Nobeoka, 2002, Ardichvili et al., 2003, Easterby-Smith and Lyles, 2011). More criticism of the individual OL theories came from their focus on epistemological perspectives (“get to know”) while in the meantime ignoring the ontological perspectives (“come to be”) (Child and Rodrigues, 2011). This called for a new reconceptualisation of OL to embrace the collective quality of learning which can be found in IOL and which developed in light of the rise of networks.

Nonaka and Toyama (2003) developed the SECI model, which represents the knowledge creation cycle. The SECI model, which denotes Socialisation, Externalisation, Combination, and Internalisation, characterised OL thinking within a social phenomenon. This has “revolutionised” the conceptualisation of organisations as “social learning systems” (Chatti et al., 2007). Fundamentally, the model suggests that organisations cannot create knowledge on their own but rather a mix of individual initiative and group interaction would do so (Nonaka and Takeuchi, 1995). Since knowledge is embedded in individuals, knowledge sharing,
however, brings into inquiry the social learning conception. The social dilemma cannot be isolated when IOL is discussed.

The social dilemma that is evident in the socialisation phase encompasses, for example, accounts for trust, mutuality and reciprocity. Cultural complexities are not isolated from the socialisation phase, especially if the networked organisations come from different cultures and are affiliated to more than one social network. In the social learning domain, (Child and Rodrigues, 2011) have brought the concept of social identity; how OL is shaped by and shapes social identity. Social identity is defined as “that part of individuals’ self-concept which derives from their knowledge of membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 2010).

Individual social identity is important in the formation of collective social identity where neither can be isolated from the other (Elliott and Wattanasuwan, 1998, Jenkins, 2008, Child and Rodrigues, 2011). This could be explained through structuration theory (Giddens, 1984) where the individual interacts with the group and the group interacts with the individual recursively. Therefore, discursive interaction should exist between the individual and the group in a network in order for it to be possible to say that individual identity contributes to the development of a collective identity. Yet it needs to be established whether this identity is a new formation of a collective social identity or a reproduction of a combination of individual social identities. From this premise, Coleman (1994) suggested that networks contribute greatly to the creation or the development of new social identities that characterise the network. However, subsequently, conflict could arise between the social identity of the individual and the social identity of the group, or between the organisational identity and the network identity.

Brandi and Elkjaer (2011) argue that “according to social learning theory, learners are social beings that construct their understanding and learn from participation in
practice within the specific socio-cultural settings of an organization”. That being said, learners become a part of the learning process; indeed, an inseparable part. This conception of social learning implies that learning could be seen through an ontological lens in addition to the ever-accepted conception of learning as an epistemological account only. Reframing social identity within OL, it could be noticed that participants construct their collective social identity through processes of social interaction.

Child and Rodrigues (2011) signal the risk of a theoretical focus on individual identity at the expense of organisational identity, which could produce misleading theoretical implications for social identity research. It is argued that the identity impact on OL is so great that it may limit to a large extent the individual’s participation in OL activities (i.e. contributing to or receiving from). Thus, Child and Rodrigues (2011) proposed a twofold solution. First, a psychological security is to be created for the participants as a basis for their participation in the process of IOL. Secondly, common goals are to be found that would lead to the integration of individuals in the learning process.

Powell et al. (1996) argue that when knowledge in an industry is dispersed and diversified, innovation cannot be attained within individual firms, but rather through networks of innovation. Especially in rapidly growing industries such as biotechnology and IT, organisations cannot stay up-to-date with knowledge unless they form or join networks (Powell et al., 1996). The cost of exploring this knowledge individually might far exceed the benefits of attaining such knowledge if success to attain individually is assumed. This introduced the transaction cost which was discussed previously in this chapter.

Many organisations have been warned of this issue and consequently have encouraged the formation of groups and working teams to help individuals contact each other. It is argued that team formation tackles the problem of employee
isolation and sets up an incubator through which the exchange of knowledge can occur, but these teams also face many challenges. The most important of these challenges were power differentials between staff, and social dimensions in addition to personality traits. Power differentials could create a real challenge that would undermine the efforts of the team and may even lead to the collapse of the team itself. Such power relations may be in the form of imbalanced administrative levels, creating tensions that imply a relation between a master and a servant, which was discussed in many parts of the literature (cf. Van Kaam, 2002).

Davenport and Prusak (1998) raised also the issue of closeness in relational ties between employees. The closeness of ties dictates where the employee goes to seek knowledge. For example, an employee would prefer to ask a colleague whom he/she considers a friend and whose ties are stronger rather than one who possesses the knowledge but is not considered a friend (Davenport and Prusak, 1998). The social dimensions of this kind of relationship have many implications with regard to culture, religion and ethnic diversity.

4.7 Concluding note

Viewing OL through the lens of social activity lends itself to investigating IOL processes within networks. It is sufficiently observed that the view of knowledge as a scarce resource is diminishing with the rise of networks. However, it require not only cognitive skills to acquire knowledge, but the individual as well as the organisation should be able to select which knowledge they need and how to judge whether the knowledge is fitting within their scope; that is to learn innovatively (Brandi and Elkjaer, 2011).

OL research is still fertile, and the challenges that face IOL are addressed in several research studies. However, there are many challenges that need fresh reconceptualisation in the rise of the network as a structure and as a methodology.
of study. Issues such as reciprocity, social identity and moral beliefs require revisiting and a reexamination of their relationship to IOL in learning networks.
Summary of findings from chapter 4 are:

- This chapter has informed the researcher of IOL processes to be purposefully seeking to create knowledge, share knowledge, and disseminate knowledge through collaboration.
- Cognitive theories of learning have identified several challenges that posed risks to OL and IOL, however, challenges such as knowledge leakage and free riding yet to be further explored.
- Social learning theories give more insights as how IOL occurs from social and relational contexts. This has informed the researcher to use social theory to underpin the research journey of this thesis.
- Moreover, this has implied that data collection should focus on dimensions beyond the depth and breadth of social interaction such as time and space as a learning stimuli.
- IOL is a social phenomenon and dynamics occur as a result of interaction.
- Dynamics of IOL were investigated linearly without reference to temporal and spatial landscape.
- Influence of reciprocity on IOL is contingent upon various dimensions other than depth and breadth of social interaction.
Chapter 5 METHODOLOGY

5.1 Introduction

The ideas presented in this chapter are a blend of two methodological streams. The first is the literature review of work done in the subject matter of this thesis, which resulted in the emergence of the theoretical conceptualisation upon which the whole work is laid. The theoretical endeavour is a twofold process. In it, I sought to raise the importance of the compatibility of two conceptual frameworks; namely network theory and social exchange theory. Consequently, I sought to operationalise both frameworks in conjunction. The second methodological stream is necessarily empirical and was based exhaustively on data collection using interviews and observation. In it, I endeavoured to stress that we can make sense of those theoretical frameworks by using the lived experiences of subjects. The empirical context in which those two theoretical frameworks were placed was essential to put the contributions of this research to the foreground.

For this chapter to express the substance of the blend of theoretical and empirical assumptions, I intend to present firstly the philosophical commitment that influenced the construction of the methodology and consequently the viability of this thesis. Secondly, I intend to put under focus the methods and data collection techniques used given the methodological footpath that was philosophically posited. In this section, I present how I thought of, shaped, approached and analysed the data. Lastly, I dedicate a considerable effort to ensuring abidance by the ethical considerations that controlled the entire data collection process.

This chapter is influenced and structured by the research process 'onion' (See Figure 6-1), which was developed and introduced to explain the strategy and methodological choices of the research (Saunders et al., 2009). The sub-sections of this chapter will present a detailed view of the research approach, qualitative
research, and the methods used for data collection and analysis. This chapter evaluates the suitability of the chosen research questions and methods based on the literature.

Figure 5-1: Research Process Onion
Source: (Saunders et al., 2009)

5.2 Philosophy

The philosophy that governed my inquiry into this thesis can be explained by highlighting the journey that I have gone through to understand the world. We live necessarily within a complex network system. As everything seems to be networked from the transportation infrastructure to the basic internet services that we use in our own cell phones, networks govern the way we live. However, this network can be defined according to the free will of the researcher (Borgatti and Halgin, 2011) and considering this free will actualises the prospective results of inquiry. Therefore, it is difficult to separate the researcher from the network that he or she wishes to look at.
A researcher who goes to see a network in the business, for example, in order to interview some of the people there, becomes, wittingly or unwittingly, part of the network through interaction with the subjects, no matter how weak or strong this interaction may be. For this, I find it difficult to separate the researcher and the subjects in a philosophical framework for social science research. The aggregation of the researcher and subjects combines overlapping and interacting interpretations governed by a philosophical commitment that allows the use of robust tools to enable inquiry into the subjects.

In this regard, I realised that the philosophical framework that affects in this thesis, which was formed through sustained interaction between me and the outside world, is social constructionism. I should explain exhaustively the philosophical commitment through shedding light on the ontology and epistemology of this thesis and how they interweaved, resulting in the current understanding of the philosophical underpinning of this thesis. The thesis philosophy represents the researcher’s assumptions and perceptions about the way the world is constructed (Saunders et al., 2009). Mastering the knowledge of philosophy in research design is important because it clarifies to the research the information which is to be collected (data collection) and from where, in addition to which research design is valid and why. In this regard, Carson et al. (2001) indicated that a research’s philosophical position has its own implications for what, how and why research is conducted. These implications are deeply rooted in extending the perspective of research in such a way that it clarifies the purpose of the research within a wider context (Carson et al., 2001).

The construction of a research philosophy can be divided into three main paradigms; research ontology, research epistemology and research methodology (Denzin and Lincoln, 2011). Ontology is concerned with the nature of reality while epistemology is concerned with the nature of knowledge. Methodology is concerned with the way to approach that reality. Denzin and Lincoln (2011) labelled ontology, epistemology, and methodology as theory, method, and analysis.
respectively. Having said that, the researcher should position himself within the confines of those two philosophies to provide a clearer pathway for the research inquiry. In the following subsections, I will decode components of those two philosophical strands and show how I position myself accordingly. It is important to reiterate what Saunders et al. (2009) have said, that the subsection on philosophies is not “a shopping list from which you may wish to choose that philosophy or approach that suits you best”, but is to show how the research and the researcher are biased by philosophical stance. According to Saunders et al. (2009), the four research philosophies can be divided into four as shown in Table 5-1.

Each of those philosophies provides a distinctive view on the way knowledge is constructed. It is important for a research process to clearly establish a research philosophy because of the significant impact on the methodological framework applied within the research.
<table>
<thead>
<tr>
<th></th>
<th>Positivism</th>
<th>Realism</th>
<th>Interpretivism</th>
<th>Pragmatism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontology:</strong> the</td>
<td>External, objective and independent of social actors</td>
<td>Is objective. Exists independently of human thoughts and beliefs or</td>
<td>Socially constructed, subjective, may</td>
<td>External, multiple, view chosen to best</td>
</tr>
<tr>
<td>researcher’s view of</td>
<td></td>
<td>knowledge of their existence (realist), but is interpreted through</td>
<td>change, multiple</td>
<td>enable answering of research question</td>
</tr>
<tr>
<td>the nature of reality</td>
<td></td>
<td>social conditioning (critical realist)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or being</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Epistemology:</strong> the</td>
<td>Only observable phenomena can provide credible data, facts.</td>
<td>Observable phenomena provide credible data, facts. Insufficient data</td>
<td>Subjective meanings and social phenomena.</td>
<td>Either or both observable phenomena and</td>
</tr>
<tr>
<td>researcher’s view</td>
<td>Focus on causality and law like generalisations, reducing</td>
<td>means inaccuracies in sensations (direct realism). Alternatively,</td>
<td>Focus upon the details of situation, a</td>
<td>subjective meanings can provide</td>
</tr>
<tr>
<td>regarding what</td>
<td>phenomena to simplest</td>
<td>phenomena create sensations which are open to subjective meanings</td>
<td>reality behind these details, subjective</td>
<td>acceptable knowledge dependent upon the</td>
</tr>
<tr>
<td>constitutes acceptable</td>
<td></td>
<td></td>
<td>meanings</td>
<td>research question. Focus on practical</td>
</tr>
<tr>
<td>knowledge</td>
<td></td>
<td></td>
<td></td>
<td>applied research,</td>
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<td></td>
<td></td>
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</tbody>
</table>

Table 5-1: Comparison of four research philosophies in management research
<table>
<thead>
<tr>
<th></th>
<th>Positivism</th>
<th>Realism</th>
<th>Interpretivism</th>
<th>Pragmatism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Axiology:</strong> the researcher’s view of the role of values in research</td>
<td>elements</td>
<td>misinterpretation (critical realism). Focus on explaining within a context or contexts</td>
<td>motivating actions</td>
<td>integrating different perspectives to help interpret the data</td>
</tr>
<tr>
<td>Data collection techniques most often used</td>
<td>Research is undertaken in a value-free way, the researcher is independent of the data and maintains an objective stance</td>
<td>Research is value laden; the researcher is biased by world views, cultural experiences and upbringing. These will impact on the research</td>
<td>Research is value bound, the researcher is part of what is being researched, cannot be separated and so will be subjective</td>
<td>Values play a large role in interpreting results, the researcher adopting both objective and subjective points of view</td>
</tr>
<tr>
<td></td>
<td>Highly structured, large samples, measurement, quantitative, but can use qualitative</td>
<td>Methods chosen must fit the subject matter, quantitative or qualitative</td>
<td>Small samples, in-depth investigations, qualitative</td>
<td>Mixed or multiple method designs, quantitative and qualitative</td>
</tr>
</tbody>
</table>

*Source: (Saunders et al., 2009)*
5.2.1 Research ontology

Visiting the literature on definitions of ontology (Saunders et al., 2009), it is described as the nature of reality and is usually inquired by questioning what reality is. Ontology can therefore be divided into components or strands which relate to what the nature of reality is. The typologies of ontology are either dealt with as separate positions or a continuum (Tashakkori and Teddlie, 1998). As such positions may usually be separated perfectly, Tashakkori and Teddlie (1998) suggested that ontological positions as a continuum are more appropriate, especially at certain instances where the entities of knower and known must interact.

Saunders et al. (2009) dichotomised ontology into two positions; objectivism and subjectivism. In this regard, it is important to stress that there is a difference between objectivism and objectivity, and between subjectivism and subjectivity. Objectivity means the state of being objective (i.e. true); that is to judge things accurately without risking that this “perception is distorted by [one’s] preferences, biases, and prejudices” (Bruce and Yearley, 2006). On the other hand, objectivism is a philosophical position that maintains that truth is one or in other words, there is one description of this reality.

Subjectivity is the opposite of objectivity and is defined as the condition of being subject. It is the judgment on phenomena, events, or people from a personal perspective that is delineated in biases, emotions, and values (Honderich and Masters, 2005). On the other hand, subjectivism assumes that social phenomena are constructed from the perceptions of subjects who are engaged socially with the phenomena (Saunders et al., 2009). The above explanation of the four terms shows that objectivity and subjectivity cannot be used interchangeably for objectivism and subjectivism.
Apart from Saunders et al. (2009), there are different conceptualisations of ontology. For example, Easterby-Smith et al. (2012) considered ontology as the starting point of philosophical inquiry and subsequently summarised ontological positions that constitute an ontological continuum as follows (Table 6-2):

<table>
<thead>
<tr>
<th>Ontology</th>
<th>Realism</th>
<th>Internal Realism</th>
<th>Relativism</th>
<th>Nominalism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Truths</strong></td>
<td>Single truth</td>
<td>Truth exists, but is obscure</td>
<td>There are many ‘truths’</td>
<td>There is no truth</td>
</tr>
<tr>
<td><strong>Facts</strong></td>
<td>Facts exist and can be revealed</td>
<td>Facts are concrete, but cannot be accessed directly</td>
<td>Facts depend on viewpoint of observer</td>
<td>Facts are all human creations</td>
</tr>
</tbody>
</table>

*Source: (Easterby-Smith et al., 2012)*

Table 6-2 illustrates the continuum of truth from a single truth in realism all the way until truth fades out in nominalism. In a similar behaviour, facts begin to exist in realism and go on to diminish until nominalism, where they are created by humans.

From the blend of literature on ontological positions, the subjects’ tendency to construct reality is evident. Likewise, the researcher constructs his own reality and the participants of the research construct their own reality too. When the researcher undertakes the research inquiry, he should take into consideration the various constructions of reality and the grounds for those different constructions. People differ in their values and thinking devices and these may sometimes conflict with those of the researcher, which generates socially negotiated findings from this blend of contrasting or aligning views (Easterby-Smith et al., 2012).
For the ontological position held by this thesis, I should set out the presuppositions that I have on the subject of the thesis. I believe that people are social learners. When people meet at a network, they wittingly or unwittingly learn from each other; even at those moments when they decide not to learn from someone, they unconsciously learn something. I believe that network participants have different ways to learn and have also different interpretations of how this learning has occurred. I have my own passion and experience with learning networks either in setting up one or participating in many and I maintain that this passion and experience will form part of how I deal with participants in the research inquiry and how I interpret their views on networks. I realise that network participants cannot refrain from their own biases towards those networks from which they benefited or towards those from which they did not benefit, in addition to their own biases towards their businesses that they came to the network to grow or improve. Having said that, I maintain that within the context of this thesis, reality of learning does not exist but rather is constructed in the minds of learners.

5.2.2 Research epistemology

While ontology is centred on the nature of reality, epistemology is centred on what constitutes valid knowledge to approach reality (Easterby-Smith et al., 2012). The importance of having an epistemological stance is that it confirms whether we acted well or badly in constructing that stance (Honderich and Masters, 2005). To do this, we ask ourselves how we reached those beliefs and stances we possess and what those beliefs and stances are that we do not possess. This is summarised in what Hatch and Cunliffe (2006) eloquently stated “knowing how you can know”.

Saunders et al. (2009) categorised epistemology into two extremes: positivism and interpretivism. Positivism, from an epistemological point of view, suggests that the “social world exists externally” and it can be measured objectively without interference from the subjects (Easterby-Smith et al., 2012). That said, positivism holds that reality that can be measured and observed is the only valid knowledge
(Collis and Hussey, 2003). Contrary to positivism, interpretivism considers reality as inseparable from subjects and constructed socially, which may produce several forms of reality according to a person’s sense of reality (Collis and Hussey, 2003).

<table>
<thead>
<tr>
<th>Epistemology</th>
<th>Positivism</th>
<th>Interpretivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Grounds of knowledge’ relationship between reality and research</td>
<td>Possible to obtain hard, secure objective knowledge</td>
<td>Understood through ‘perceived’ knowledge</td>
</tr>
<tr>
<td></td>
<td>Research focuses on generalisation and abstraction</td>
<td>Research focuses on the specific and the concrete</td>
</tr>
<tr>
<td></td>
<td>Thought governed by hypotheses and stated theories</td>
<td>Seeking to understand specific context</td>
</tr>
</tbody>
</table>

(Source: Carson et al., 2001).

I position myself in an interpretive constructionist vein to evaluate network perceptions of learning, which I believe will provide various and rich insights and will inform us of how learning occurs and what constitutes a context for learning in learning networks.

**5.2.3 Social constructionism and interpretivism**

Subjectivism suggests that it is important to study the conditions and context behind the reality under investigation (Remenyi, 1998). The basic assumption of
constructionism is that the human world is distinct from the physical world and therefore needs to be studied separately (Patton, 2005). In this sense, constructionism rejects the objective reality and therefore it suggests that reality is constructed through the social interaction between subjects and the external world (Karataş-Özkan and Murphy, 2010). This interaction is governed by the culture and language within which this interaction occurs, argues (Patton, 2005). In the same vein, Crotty (1998) suggests that reality is constructed and not discovered. Shadish (1995) has taken a slightly different position by arguing that it is not reality that is constructed because this would indicate an ontological stance, but rather it is the knowledge about this reality that is constructed, which denotes an epistemological stance.

Social constructionism is sometimes linked to interpretivism despite the minor variances between them (Schwandt, 2000). Social constructionism suggests that reality is constructed as a product of the social interaction of people which is grounded in the institutional backgrounds held by those people. Interpretivism shares the same concept of constructing reality with social constructionism, however radical versions of social constructionism suggest that social constructionism stresses the role of language and social interaction in the process of construction. Interpretivism introduces emphasis on the cultural context in social construction. As such, actions are socially interpreted, which means the same action may be interpreted in an endless number of ways. Interpretivists believe that motives and actions do not construct reality, contrary to social constructionism, but rather they explain how reality was constructed (Schwandt, 1994). In social constructionism, the world is waiting to be discovered, however, the reality of that world is not there to be discovered, but rather is constructed. Crotty (1998) suggested that the way social constructionists perceive the world as a reflection of our culture and some qualities of the phenomenon is not a differentiated subjective account of the phenomenon, which is what phenomenologists believe.
Interpreted differently, in a research setting, research respondents may see the reality from different perspectives grounded in their cultural and emotional differences (Crotty, 1998), which therefore leads to different constructions of meanings which the researcher is inquiring. This also has its ontological flavour in terms of a worldview. Patton (2005) declares that neither empirical nor common sense data can uniquely determine one single worldview. For example, two research respondents from the same cultural background and context will not have the same worldview. That said, the qualitative research method and especially the interview is the nest for this kind of philosophical stance. In it, the researcher’s aim is to interpret the meaning that respondents hold concerning the world (Creswell, 2012).

5.2.4 Philosophical position of this thesis

This thesis is structured to focus on the ways people perceive social phenomena around themselves and how they share such experiences with others by means of language. It is, therefore, dedicated to using an interpretive-constructionist approach. In this vein, OL is comprehended as a socially constructed phenomenon that is produced and reproduced in learning networks as participants engage and react (reciprocation) to make sense of knowledge and experience. Social constructionism presupposes that reality is constructed in a social setting and meanings of this reality are constructed by people, which suggests that different versions of reality are constructed in a learning network concerning the same social phenomenon. In some cases, however, people from the same or similar cultural backgrounds or spatial-temporal dimension may share similar experiences or constructions of meaning (Burr, 2003). The construction of meaning occurs within language, which offers categories and connotations allocated for meanings (Raskin, 2002).

The network has become a method of analysis and a level of analysis too (Marin and Wellman, 2011). It is therefore essential to define the boundaries of this thesis as using networks as an ontological paradigm through which organisations can be understood and reflected upon.
5.3 Research design

A research design is a plan for qualitative research studies setting philosophical assumptions, a research method, data collection techniques, an approach to qualitative data analysis, an approach to writing up, and planning how to publish research findings (Myers, 2009). Since qualitative research is an iterative approach, research design should never be considered final, which means that the researcher should be flexible in changing the research design as the research progresses (Myers, 2009). Flexibility is not bound to the pilot study phase, but the researcher should be ready to make iterative changes in the data analysis stage as well.

Information and knowledge are currently more accessible than at any other time. They are found, for instance, in books, research studies, technical reports, and storytelling. They can be found easily by means of the internet, libraries and/or organisation’s shelves. Findings from those resources contribute significantly to academia and practice. However, the reliability, relevance and quality of research results depend largely on the particular methodological designs used to carry out the study (Myers, 2009). This has thrust research into the use of scientifically strict methods to develop research findings and subsequently, shifted the research towards theory at the expense of practice (Tranfield and Starkey, 1998). This has resulted in complaints that current management research is becoming too theoretical at the expense of its practical relevance because most business schools require researchers to publish in reputable journals (Myers, 2009).

The journey of research always starts with a research question or research problem (Creswell, 2009). It is argued that research methods in social science are divided into two main streams; qualitative and quantitative (Onwueguzie and Leech, 2005). To that end, (Jupp, 2006) defined qualitative research as a research:

“that investigates aspects of social life which are not amenable to quantitative measurement. Associated with a variety of theoretical perspectives, qualitative
research uses a range of methods to focus on the meanings and interpretation of social phenomena and social processes in the particular contexts in which they occur.”

In the meantime, (Ghosh and Chopra, 2003) cited in (Lancaster, 2005) defined these two types of research as follows:

- Qualitative data are data in the form of descriptive accounts of observations or data, which are classified by type.
- Quantitative data are data which can be expressed numerically or classified by some numerical value.

To elaborate on qualitative research, (Jupp, 2006) explained that “qualitative research is often based on interpretivism, constructivism and inductivism”. Thus, it is concerned with exploring subjectively how people use language to interpret the world within a cultural and lingual context. (Creswell, 2009) described the constructionist researcher as often addressing the “process” of interaction among individuals, the interpretivist researcher interpreting data through developing a description of an individual, and finally, the inductivist researcher generating meaning from the data collected in the field.

The research aims at developing a deeper understanding of how IOL occurs in learning networks with an emphasis on reciprocity and how it affects learning across organisations. The descriptive lived experience of learning network members will be investigated and will thus underpin the primary data on which the research relies. Creswell (2009) suggested qualitative research methodologies are the most appropriate for descriptive and exploratory studies.

For that reason, and to be able to achieve the research aim, this research uses qualitative methodologies with an inductive approach to examine OL across
organisations through reciprocal interactions. The inductive approach is aimed at tackling the research questions of “how” IOL occurs in learning networks and “why” reciprocity is taken for granted to foster the learning process.

5.4 Data collection

There are many data collection methods that could be used in settings similar to this research. For example, the researcher could undertake the research using interviews, observation, or archival research that suits the inductive approach. The following subsections will address the data collection sites and the research methods adopted.

5.4.1 Learning networks

This thesis uses learning networks as a research domain. The reasons for the selection of learning networks as a domain of research are as follows:

- The literature review shows that the majority of research was conducted on strategic networks (e.g. alliances, knowledge creation networks). Few research studies sought to study learning networks and yet fewer attempted to study reciprocity in learning networks, especially with relation to IOL.
- The literature review shows the dominant methodology in network research is qualitative research, i.e. experiment, mathematical games and simulation. Qualitative research methods were lacking.
- Learning networks challenge traditional concepts of strategic management theory, which raises the question of how such networks leverage knowledge through projects (DeFillippi and Arthur, 2002).
- The majority of research used networks of large organisations, but there has been little emphasis on small-sized organisations, which leaves the tenets of OL theory falling short of a comprehensive explanation of its accounts.
5.4.2 Data collection sites

The data were collected from four learning networks across North West England, mainly in Greater Manchester and Liverpool. The first network is called "Photography Network", the second network is called "Women Network", the third network is called "Health Network", and the fourth is called "Construction Network". Table 5-4 provides details on the four networks.

Table 5-4: Details on networks interviewed

<table>
<thead>
<tr>
<th>Networks</th>
<th>Industry</th>
<th>Description of network</th>
<th>Data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photography Network</td>
<td>Media</td>
<td>• Photography network based in Liverpool and Manchester</td>
<td>• 10 Interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Open membership</td>
<td>• Some observation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of participants around 25 at each event</td>
<td>• Archive</td>
</tr>
<tr>
<td>Health Network</td>
<td>Pharmaceutical</td>
<td>• Photography network based in Liverpool</td>
<td>• 5 Interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Restricted membership</td>
<td>• Some observation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Usually 12 participants at each event</td>
<td>• Archive</td>
</tr>
<tr>
<td>Women Network</td>
<td>Miscellaneous</td>
<td>• Training and consulting network in North</td>
<td>• 10 Interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Some observation</td>
</tr>
<tr>
<td>Networks</td>
<td>Industry</td>
<td>Description of network</td>
<td>Data sources</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>West Region</td>
<td></td>
<td>- Open membership</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Usually 15 participants at each event</td>
<td></td>
</tr>
<tr>
<td>Construction Network</td>
<td>Construction Network</td>
<td>- Residential construction managers network in Manchester</td>
<td>- 3 Interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Closed restricted membership</td>
<td>- Some observation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Usually 10 participants at each event</td>
<td></td>
</tr>
</tbody>
</table>

5.4.2.1 Photography Network

This learning network is focused on Chinese photography. It gathers professionals and amateurs who work in or are interested in capturing moments from Chinese scenes, cities, people, and culture. The network was established in 2000 by a group of 6 amateurs who were interested in Chinese photography. The main audience of this network since its establishment is photography enterprises, which meet up in this network fortnightly. The network is registered as a not-for-profit organisation that aims to support photographers whose work is focused on Chinese culture. The network attracts members from all over the UK and also from outside the UK (mainly Europe). The network provides information, advice, opportunities, networking, and events while also trying to promote the ethics of photography amongst photographers. The network also gathers competing companies that deliver media projects in the UK. The network is mainly interested in photography in
China but has also extended their photography activities to those photographers who conduct photography in the UK. Network activities include photographers showcasing their artwork and obtaining feedback or discussion of the latest developments in photography as an art form and as a practice. The network is financed through grant funding, subscriptions, event ticket sales, book selling, and paintings and portrait sale. The network also collaborates with other organisations such as the British Photographic Council to deliver projects, events, and galleries.

5.4.2.2 Women Network

This learning network gathers businesswomen and female entrepreneurs from Northwest England and provides a home for networking and marketing. The network was established in 2008 in Greater Manchester. The main goal of this network is to help newly started and small businesses run by women to achieve their goals through positioning their business and designing effective strategies. A wide range of businesses have joined this network, from such fields as bespoke diamond design, health products, and estate and letting agencies. They deliver small projects to different regions of the UK and also outside the UK. The network’s format is based on a 60 second introduction of each participant, followed by a presentation by one participant to talk about her business or by a guest speaker (either male or female). After the presentation, participants ask questions to the presenter, and they give feedback to each other and sometimes market their products and/or projects to each other. The network is financed by subscription and it works based on member-only access. Networking events are run on a weekly basis early on Tuesday mornings to allow women to meet up before the start of the working day.

5.4.2.3 Health Network

This learning network is very focused on providing guidance and advice to small businesses which work in health product marketing. It was established in 2009 by three women who worked in independent businesses in the field of marketing.
consultancy. The network gathers around 15-20 members and non-member participants monthly. The network is financed by annual subscription from members. Non-members can pay one-off fees for any event in order to attend. The network has two sites; one in London and another in Manchester. The network events begin with an introduction from the guest speaker, who talks for 30 minutes about his or her experience in promoting health products, and specifies 30 minutes for Q&A. Afterwards, the event runs for another hour, including individual discussions amongst participants. The network also has an online platform that integrates with the physical events. The online platform is open for discussion and feedback on events in addition to other activities that are initiated by network members.

5.4.2.4 Construction Network

This learning network was established in 2004 as a social gathering of a group of friends who worked as construction managers and engineers in North West England. In 2006, they decided to change it into an open network dedicated to the construction industry in Greater Manchester. The network is a subscription-based organisation which aims to help construction practitioners through the sharing of experiences. The format of the network sets out over two hours where participants get to introduce themselves, after which two participants will share their experience by telling of a difficult situation they faced. The purpose is either to find solutions if the situation still persists or to provide and obtain lessons learnt. The network offers a space for monthly networking events and also because they have space, this offers subscribers the chance to meet up on network premises. The network board consists of several businesses in the region and they sponsor the events in addition to the running of the premises. Membership is only available to business owners and senior decision makers in businesses.
5.4.3 In-depth Interviews

“Sociology has become the science of the interview….But the interview is still more than tool and object of study. It is the art of socio-logical sociability, the game which we play for the pleasure of savoring its subtleties. It is our flirtation with life, our eternal affair, played hard and to win, but played with that detachment and amusement which give us, win or lose, the spirit to rise up and interview again and again.”

Benney and Hughes

When Benney and Hughes stated that “Sociology has become the science of the interview” (Benney and Hughes, 1956), it is no wonder then to see that interviews dominate as a research tool in social science research. Sims (2008) defines an interview as a process by which one person (the researcher) questions another (the interviewee or stakeholder) through a series of questions seeking to understand a specific phenomenon. The interview could be conducted with more than one person at a time (Demmel, 2005). Interviews could be seen as being similar to conversations or storytelling with the difference that interviews have a pre-set goal and plan, which both parties of the interview know beforehand.

The focus of the interview is the interviewees’ experiences and how they can interpret those experiences in their own words. This comes on the grounds that Vygotsky (1997) emphasised that every word people use in telling their stories is a microcosm of their consciousness, cited in (Seidman, 2006). Sims (2008) stresses that at the interview, it should be at the interviewee’s own discretion whether or not to respond to the interviewer’s questions (Benney and Hughes, 1956). This seems to work smoothly when the interviewer has an agenda and wants the interviewee to prove or deny something. Where the interviewer is exploring a new topic or a topic with open questions, it is the interviewer’s role to let the interviewee express his/her own experience, and especially as the interviewee
could have his/her own agenda (Sims, 2008), here it becomes necessary that the interviewer takes an important role in how to probe the interviewee’s experience. Interview allows the researcher and the interviewee to socially interact and elaborate on the nature of learning through networks, which clarifies the role of reciprocity in a learning context, and builds a rapport between both parties that is necessary for an in-depth inquiry of the research topic (Bouchard, 1976). To that end, I will use semi-structured interviews as one of the primary data collection method in this thesis. Interviews will be accompanied by nonparticipant observations (described in Section 5.4.4 below).

There are three main types of interview, ranging from highly organised to less organised in structure. For example, there are structured interviews (highly organised), semi-structured interviews (moderately organised) and unstructured interviews (informal and unorganised) (Saunders et al., 2009). Similarly, Healey and Rawlinson (1993) categorised the interview based on the degree of organisation into two types; standardised interviews, and non-standardised interviews.

### 5.4.3.1 Structured interviews

Structured interviews include standard and structured questions that the interviewer follows consistently in all of the interviews conducted for the same research to allow for cross analysis and generalisation. Questionnaires and structured interviews are very similar in the way the questions are structured but the difference between them lies in the fact that the questions in the interview are asked to the interviewee either face to face, over Skype or during a telephone conversation, while the questionnaire is a set of written questions. Structured or standardised interviews are favoured over the questionnaire because the interviewer can explain any ambiguity in the questions and they allow the interviewer to explore the questions in depth using iterative questions (Healey and Rawlinson, 1993).
The questions set out in the structured interview must be asked in a structured order to ensure they lead to more explanations of the subject researched by the interviewee. It is important in the structured interviews and semi-structured interviews that the questions are kept consistent across different interviews. Although this would limit interviewees’ freedom to interpret experiences from their lived world (Sims, 2008), it serves the purposes of reliability and validity of the data collection and increases the possibility of obtaining more generalisable data.

5.4.3.2 Unstructured interviews

The unstructured interview aims at understanding interpretations that underpin interviewee actions and decisions. Its nature as unstructured makes it opportunistic in its ability to adapt itself to the flow of information (Bryman, 2006). However, this adaptability poses a threat to the consistency of the data and jeopardises the validity of theory building (Creswell, 2009).

5.4.3.3 Semi-structured interviews

The semi-structured interview is half way between structured and unstructured. The mixture between structured and unstructured allows the semi-structured interview to be grounded on pre-set questions that the interviewer follows flexibly in such a way that generates rich unbiased data. Thus, the purpose of semi-structured interviews is mainly to seek to find a causal relationship amongst study variables. Semi-structured interviews do not only seek to find causal relationships, but also to understand why such relationships exist (Kvale and Brinkmann, 2008). This thesis seeks to understand the relationship between IOL and reciprocity and to establish how reciprocity influences learning in networks. Hence, in-depth semi-structured interviews are adopted. As such, Saunders et al. (2009) stressed semi-structured interviews are the preferred method to use to understand the underlying grounds for a certain behaviour.
5.4.3.4 Interview guide

I have used an interview guide which included a set of questions categorised in order to guide the flow of information from the interviewees. The categories included, for example, general background of the organisation, reasons for joining the network, benefits from networks, and how interviewees reciprocated in networks. It is important to stress that I have used the guide flexibly, which means I did not follow the structure of the categorisation sequentially but instead used all of the categories in the interviews conducted thus far. I avoided the use of jargon during interviews in order to ensure the interviews were not biased. Thus, terms such as “reciprocity”, “organisational learning”, and “social identity” were not used during the interview, but rather, general questions were used, such as “tell me what you do in an event you recently attended”. I conducted and analysed interviews concurrently, which enabled identification of emerging themes from the data analysis. As such, I have amended the interview guide over the course of the research inquiry to align with emerging themes from the interview analysis (Lofland and Lofland, 2006).

5.4.3.5 Interview Questions

Interview questions drew upon “The Personal Norm of Reciprocity” (PNR) questionnaire (Perugini et al., 2003) and “The impact of network structure on knowledge transfer” (Fritsch and Kauffeld-Monz, 2010) Each interview began by requesting the interviewee to sign a consent form following which the interviewees were briefed about the purpose of the interview and ethical issues thereof. Interviewees were then asked to introduce themselves and provide the background of their professional employment. This also allowed interviewees to relax and feel comfortable to speak. Later on, I inquired about how interviewees joined the network and how they would describe their and other participants’ engagement with the network. Other questions included inquiries on why they participated, how they benefited from a network and how they thanked others who have helped them in a network. Lastly, interviewees reflected on the impact that networks have
on their businesses. Table 6-5 details interview questions and how they relate to the research purpose.

Table 5-5: Categorising research questions

<table>
<thead>
<tr>
<th>Category</th>
<th>Purpose</th>
<th>Questions include</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A: Introduction</td>
<td>To introduce the research to the interviewee and obtain personal and professional details related to the research domain</td>
<td>• Can you please tell me about yourself and your work in general?</td>
</tr>
<tr>
<td>Part B: Background</td>
<td>To understand the background of the individual or the organisation that the interviewee represents</td>
<td>• Can you tell me about yourself and the business you do?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Do you go to any network?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What is the most recent network you went to?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Can you tell me about it?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Why do you go to those networks?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What do you take from these networks?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How do you reflect on your business?</td>
</tr>
<tr>
<td>Part C: Belief in reciprocity</td>
<td>To explore what participants get from networks and how they reciprocate</td>
<td>• How do you describe your engagement in these networks?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How would you describe the network?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What do you like most about</td>
</tr>
<tr>
<td>Category</td>
<td>Purpose</td>
<td>Questions include</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>networks?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What do you like least?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Can you tell me any success stories that you would like to share?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Or frustrating stories?</td>
</tr>
<tr>
<td>Part D: Reciprocal exchanges</td>
<td>To examine reciprocal exchanges exercised by reciprocators</td>
<td>• Have you helped any network participant? How?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Did you expect returns from that participant?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If you contribute to the network (any kind of help), do you expect it will be repaid?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What kind of repayment do you expect and why?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Are you willing to invest in a network under unfair conditions and why?</td>
</tr>
</tbody>
</table>

### 5.4.3.6 Sample Selection

This thesis holds three subjects to be dealt with for data collection; namely network, organisation, and individual. These constitute three levels of analysis. Therefore, the sample selection went through three levels of sieving before it was certain who was going to be interviewed. Although dealing with three levels of analysis, this thesis focuses specifically on the inter-organisational level. Convenience and snowballing were employed to help increase the number of participants. I set the first sieve to sift the networks I needed to interview, then from those networks, I approached the organisations that joined the networks.
through the individuals who represent the organisation in the network. The networks were selected based on the following criteria:

- Learning networks: to serve the aim of the thesis
- Based in Northwest England: to facilitate communication and commuting
- Networks are designed for learning best practices and strategies in the sector
- At least 3 organisations participating (because the research investigates IOL where more than 2 organisations should be interacting to avoid individual and dyadic learning)
- At least 3 participants attending regularly (for the same reason as above)
- At least one event conducted in a year (to ensure the viability of the network and thus that an environment of learning exists to be researched)

I searched the internet and collected a number of networks in a spreadsheet and listed their then current activities and ordered them ascendingly starting from the nearest event date. I tried to attend the events -, some of the networks welcomed me and others politely refused my attendance either because it was a networking event for people of the industry or because I had declared my intention of the visit was to conduct research. From the networks I had sorted, I managed to gain access to six networks. Two of those six networks failed to meet the criteria. Although they declared themselves as learning networks, what they did was essentially promotion sessions for products. Therefore, I focused on the four networks that strictly met the criteria.

The second level of data sampling was the organisational sampling, where I gave myself the freedom to select any organisation regardless of their industry if they met one criterion:

- Small business employing between one and fifty employees.
The third level of data sampling was the individual sampling, which was any individual from the organisation who attended the network who met the following criteria.

- Representing an organisation
- The organisation should be a small business enterprise (SME)
- Attended the network that is being studied at least once
- It is preferred that the participant is attending more than one network (this will enrich the discussion and give more insights on cross-network comparison)

5.4.3.7 Conducting Interviews

I started contacting networks in December 2011 and the first interviews were conducted in January 2012. Interviews concluded in February 2013 when the level of data saturation was achieved. In other words, more interviews revealed redundant data. The shortest interview lasted for half an hour while the longest was three hours. The average duration of interviews was an hour and twenty minutes. The researcher asked permission from interviewees before recording and then made a clear statement that the interview was confidential and only the researcher and research supervisor would be able to access the interview transcriptions. All interviewees agreed to their interviews being recorded and transcribed. A total of 36 interviews were secured, including the 8 interviews from the pilot study.

<table>
<thead>
<tr>
<th>Table 5-6: Summary of data collected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Photography Network</strong></td>
</tr>
<tr>
<td>Administrator</td>
</tr>
<tr>
<td>Critic</td>
</tr>
<tr>
<td>Editor</td>
</tr>
</tbody>
</table>
### Data Sampling

Data sampling was grounded on a theoretical basis, which means that I carried out data collection and stopped when the level of data saturation was clearly achieved (Eisenhardt and Iii, 1988). The analysis of networks was based on parameters of the research that were developed through replication logic (Yin, 2009). This means that each pattern generated from analysing networks was dealt with as an isolated experiment that sought either to confirm or disconfirm the preceding experiment (Eisenhardt, 1989).

#### 5.4.4 Non-participant Observation

Observation is linked to longitudinal ethnographic studies where the researcher is required to observe a group or work settings for a long period of time (6-12
months) (Fetterman, 2010). Observation is divided into participant observation and non-participant observation. In participant observation, the researcher is required to immerse himself or herself in the observed group or setting and actively participate in the processes with the group in parallel to his/her observation recording using a diary, camera, journal entries, and so on. (Creswell, 2009). The non-participant observer objectively observes the group or setting without participating in any activity. Non-participant observation allows more time for the researcher to observe the subjects (Dyer, 1995) in addition to making plenty of observation notes because of the low level of involvement in the observed community. Field notes are important in the analysis phase to inform about the subjects of study and are useful in shaping the researcher’s thinking about how the data collection is progressing and creating synergies with interviews.

Observing a learning network that actively attracts participants who come to learn and share knowledge would take longer than usual. The reason for this is that learning networks are conducted usually on a monthly basis, which makes it highly time-consuming and infeasible for the researcher to undertake the research based solely on this research strategy, especially bearing in mind the limited duration of the PhD programme. The immersion into a network includes the time required to join the network and the time required to internalise the researcher within the network before the researcher will be able to or be permitted to observe the network. However, I managed to conduct non-participant observation by attending networking events and exchanging views with participants in these networks.

I observed, without participation, three networks out of the four that I had conducted interviews with. Table 5-7 details how the observation was conducted. All network participants consented to be observed after the network administrator or coordinator announced my attendance and the reason for my attendance.

Table 5-7: Observation in networks
<table>
<thead>
<tr>
<th>Network</th>
<th>Number of sessions attended</th>
<th>Average duration of session</th>
<th>Total number of hours</th>
<th>Dates during which conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photography</td>
<td>6</td>
<td>2</td>
<td>12</td>
<td>December 2011 – March 2013</td>
</tr>
<tr>
<td>Women</td>
<td>4</td>
<td>1.5</td>
<td>6</td>
<td>February 2012 – August 2012</td>
</tr>
<tr>
<td>Construction</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>March 2012 – June 2012</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>20</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The journal entries can be categorised as follows:

- Notes on interviews
- Notes on event observations
- Notes on developing research thinking
- Notes on training courses attended

### 5.5 Data Analysis Methods

Data analysis includes the interpretation of data collected during the research inquiry (Patton, 2005). The data analysis phase usually comes after starting the data collection. In certain instances, researchers may decide not to start data analysis until the data collection has ended. However, it is better practice to start data analysis and collection concurrently (Miles and Huberman, 1994, Saldaña, 2012). Miles and Huberman (1994) described the analysis process as recursive and dynamic because it goes on before, during and after data collection. The benefit of doing so is that the data analysis may inform the researcher to amend and improve
the data collection method, interview questions, refine research boundaries and objectives, and the way the interviews are conducted. Data analysis can be divided into three steps: (1) preparing the data for analysis, (2) analysing the data, and (3) interpreting the data (Marczyk et al., 2010). Preparing the data for analysis includes organising the data, breaking them into smaller units, and sorting them. Analysing the data includes searching for patterns, highlighting similarities and variations, explaining them, and synthesising them. Interpreting data includes connecting themes and codes, linking the data to theory, and writing about the data.

The data analysis dynamics in this thesis mainly draws upon Miles and Huberman (1994), who outline the three main processes of qualitative data analysis: (1) data reduction, (2) data display, and (3) conclusion drawing. In data reduction, methods and data are selected carefully to best answer the research question. In data display, descriptive texts are used and then conclusions are drawn. In particular, data coding and sorting drew upon (Saldaña, 2012).

Inductive thinking underpinned the research inquiry to interpret the data obtained and rigorously structure the research. I started with a basic framework informed by the literature review and research question, which assumed that social learning theory in learning networks falls short of illuminating how learning occurs without including the reciprocal relationship to the concept. My presumption provided a focus for the study and an abstract overview of interrelated variables. However, the conceptual framework extracted from the literature review provided abstract inferential conceptions of what the relationship between reciprocity and learning looks like, what dimensions this reciprocal exchange hold, and how social learning theory engages with reciprocity. The coding system relied to a certain degree on this minimal framework, but the majority of codes came from an inductive approach to the data.
5.5.1 Thematic analysis

Maxwell (1998) classified strategies of qualitative analysis into three types: (1) categorising strategies such as thematic analysis, (2) connecting strategies such as narrative analysis, and (3) memos and displays. Thematic analysis includes coding the data, which initially breaks down the data into smaller parts in order for it to be rearranged into categories which are necessary for within-category and cross-category analysis (Strauss, 1987). The main purpose of thematic analysis is to spot regularities and variations within and across categories (Shank, 2006). Thematic analysis becomes more useful when there is a large degree of textual data (Berg et al., 1995), which makes it suitable for analysing articles, reports, and transcripts of interviews (Boyatzis, 1998). It creates a network of themes, categories, and codes from which a theory may emerge. The researcher’s role becomes more visible in the way this network is presented. This ranges between using tables, figures, and mind maps. Within the various methods of analysis, it is accepted that such methods do not work with all types of interview. Burnard (1991) argues that thematic analysis works best with semi-structured, open-ended interviews.

This thesis explores how network participants learn across organisational boundaries, with the key research problem concerning how reciprocal exchange in networks influences learning. The underlying assumption is that there are different views across social settings. In order to assess this assumption, I have carried out inductive coding to analyse the data extracted from the interviews. I have used NVIVO 10 software to analyse the data and link it to the literature review.

5.5.2 Coding system

Since the thesis relied on inductive reasoning, the coding system is both data-driven and theory driven (Braun and Clarke, 2006). When I started the coding process, I was informed by theory to fit the basic assumptions of research into a scope. Subsequently, the data drove the coding and many inferential patterns evolved throughout the analysis.
The data analysis was conducted dynamically. The interviews were semi-structured, which allowed a series of questions to be raised, but at the same time, many questions emerged as a result of the direction of conversations. After analysis began, more questions emerged from this analysis and they were deployed into the semi-structured interview guide after conducting 30% of the interviews. This allowed yet more patterns to emerge (Patton, 2005). The coding system is based on Miles and Huberman (1994) and Saldaña (2012), who suggested the following three coding levels: (1) descriptive codes: broad, abstract, and requiring little interpretation, (2) interpretive codes: emerging from analysis, and (3) pattern codes: inferential and explaining the higher level codes.

I formulated descriptive codes, which are broad codes based on the literature review, in the form of conceptual categories that included learning, networks, reciprocity, and structure and agency. I assigned a list of keywords that were linked to each descriptive code to be able to detect each code within the masses of data. I subsequently formulated interpretive (analytical) and pattern codes that emerged from the data analysis to explain each category and also to link the categories with each other as appropriate, as shown in Table 6-8. The list of keywords was very helpful in detecting potential categories in the transcripts.

The analytical codes were generated drawing upon the literature review, transcript of interviews, and field notes. I went back and forth between the three sources of data to find fine-grained analytical codes from the main categories. At the final stage of coding (pattern coding), I solely followed Saldaña (2012) mechanics of coding, which consists of two stages: pre-coding and final coding. Table 6-8 shows an example of the progression from pre-coding to final coding.

In that final step, I identified relationships across categories which resulted in pattern codes. For example, I aimed to see how reciprocal exchanges accumulated
to strengthen the tie relationship in a network. I then processed inferential analysis to see how such inter-organisational relationships influenced learning. This also generated fine-grained relationships within the same category. In reciprocity, I found tentative dimensions (i.e. temporal, spatial, directional, and symmetrical) that culminated in the reciprocal exchange. I also found a tentative relationship between network learning and the agential role of networks and between learning networks and networks as structures. An inferential theoretical framework started to emerge from the careful processing of tentative dimensions and relationships. The concluding step of analysis consisted of the iterative comparison and matching of the theoretical framework and quotes from the transcripts, which ultimately made up the architecture of the coding system.

Table 5-8: The process of analytical coding

<table>
<thead>
<tr>
<th>Raw Data</th>
<th>Preliminary Codes</th>
<th>Final Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>..at the same time encouraging the individual to be a participant in the learning process, the support and knowledge they’ve gained so, yeah, I do see all those facets as being stimuli, constant stimuli on the journey, the learning journey.</td>
<td>Learning stimulus</td>
<td>Belief in Reciprocity</td>
</tr>
<tr>
<td>The reason for that is I’m very much interested in Chinese culture and I get a lot from immersing myself in the Chinese community as well as the Liverpool community.</td>
<td>Why people join networks</td>
<td></td>
</tr>
</tbody>
</table>

132
I made notes during and after each interview in the research journal. Handwritten notes taken during the interviews reflected the flow of the interview and allowed an attempt to be made at establishing connections with points that I had marked as important. Handwritten memos carried out after the interview were aimed at summarising the interview and reflecting upon my experience with the interview.

5.5.2.1 The process of coding

I printed out all interview scripts, read them from paper, and made handwritten notes and highlighted quotes from the transcript. I then read through the transcripts from NVIVO to become immersed in the data. I later wrote memos in NVIVO during the analysis phase. Examples of notes from Interview 3 include: “This interview links learning with social being. I can see the social construction of identity in how he looks at learning in networks”.

I coded as I went through the transcript in NVIVO. The process generated a list of analytical codes which included both homogenous and heterogeneous codes. I firstly coded the first level codes; descriptive codes, which meant linking chunks of texts to the descriptive codes. After coding the 28 interview scripts (the main study’s interviews), I conducted a second round of coding in which I re-read the scripts several times to look for analytical codes. Drawing on the literature review, the analytical coding generated a huge list of codes under each descriptive category which needed to be organised (for an example, please see Table 6-9). In the third
level of coding, I carried out an inductive pattern coding, seeking to identify relationships and inferential notes from the transcripts. To reduce the number of codes, I merged those that were similar. This helped when looking at regularities and differences across transcripts. For example, the following codes were merged into “why people join networks”:

a. Motives to join a network  
b. Joining networks for several reasons  
c. I joined the network as part of a service development

In the analytical codes, I noticed that IOL in networks is socially constructed, which is linked to reciprocity. Different codes that supported my presumption emerged (See Figure 5-2 and Figure 5-3). In the pattern codes, I found that reciprocity has four dimensions, namely temporal, spatial, directional and symmetrical. Through the iterative and systematic comparison and cross analysis of data and the literature review, tentative theoretical explanations emerged. Moving from the pattern coding to building theoretical explanations, I inductively developed the theoretical device that explains the relationship between reciprocity and learning and how reciprocity dimensions are an important link to the learning process. I have also looked at the role of networks as agential rather than reciprocal. Those two theoretical explanations formed the contribution of the thesis which will be explained in detail in the following chapters.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
<th>Definition</th>
<th>Semantic descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reciprocity</td>
<td>Types</td>
<td>The various typologies of reciprocity</td>
<td>Direct, Indirect, Positive, Negative, Good, Bad, Equilibrium, Expectation, Free rider, Norm, Belief</td>
</tr>
<tr>
<td></td>
<td>Definition</td>
<td>How reciprocity is</td>
<td>Reciprocity, Exchange,</td>
</tr>
<tr>
<td>Theme</td>
<td>Category</td>
<td>Definition</td>
<td>Semantic descriptors</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>defined in people’s day-to-day life</td>
<td>Bargaining, Altruism, Tit-For-Tat, Scratch My Back, Golden Rule, Gift, Commodity</td>
</tr>
<tr>
<td></td>
<td>Dimensions</td>
<td>Dimensions that control the reciprocal exchange</td>
<td>Temporal, Duration, Time, Timely, Past, Present, Fast, Slow, Future, Place, Venue, Space, Location, Network, Event, Direction, Towards, Symmetry, Power Relations, Hierarchy, Status, Equilibrium</td>
</tr>
<tr>
<td></td>
<td>Payoffs</td>
<td>The direct and indirect benefits that people receive from reciprocity.</td>
<td>Material, Immaterial, Monetary, In Kind, Gains, Psychological, Symbolic, Rewards, Gratitude, Thanks</td>
</tr>
<tr>
<td></td>
<td>Reciprocal exchanges</td>
<td>Actions that are contingent on others’ actions</td>
<td>Reciprocal, Rational, Rules, Norms, Logics, Group Gain</td>
</tr>
</tbody>
</table>
Data from “Network as agency” will be presented and discussed in Chapter 7 while those of “Reciprocity in networks” will be discussed in Chapter 8. The two chapters will be followed by discussion of how agency and reciprocity in networks mediated IOL in Chapter 9.
Figure 5-3: Code Structure for reciprocity in networks
5.6 Validity of qualitative data

The issue of validity is widely witnessed in both qualitative and quantitative research (Creswell and Miller, 2000). However, validity in qualitative inquiry has been the focus of criticism for two main streams: the first comes mainly from proponents of quantitative inquiry who criticised the validity of qualitative inquiry for its lack of standardised criteria of validity and the explicit means of control that are used in quantitative research (Maxwell, 2002). The second criticism is delineated by the confusion over what validity means in qualitative research. Creswell and Miller (2000) indicated the confusion over typologies of validity, which was referred to as “authenticity, goodness, verisimilitude, adequacy, trustworthiness, plausibility, validity, validation, and credibility”. The viewpoint of the proponents of quantitative inquiry is far from reality as it assumes qualitative inquiry accounts are identical to those of a quantitative nature. The numeric nature of quantitative data lends itself to scrutiny and explicit control measures, contrary to qualitative data (Maxwell, 2002). The confusion of typologies should not cause the qualitative researcher to refrain from seeking to validate research data. What is important is how validity is established as a means to ensure that qualitative research is conducted in a manner that defends itself against bias and weakness of argument (Creswell and Miller, 2000, Maxwell, 2002).

Creswell and Miller (2000) suggested that validity can be established through two perspectives: (1) researcher’s lens used to validate the study and (2) researcher’s paradigm assumptions. The researcher’s lens determines the credibility of the research. For example, a research decides that the level of saturation is reached when more than three consecutive interviews reveal minimal codes or themes. Another example is to set validity criteria of interpretation that can be measured by requesting interviewees to endorse the data analysis reflected in their own construction of reality. On the other hand, the researcher’s paradigm assumptions refer to those paradigms of, for example, postmodernism, constructionism and critical realism (Creswell and Miller, 2000). For example, a constructionist may refer
to validity of data as confirmability and disconfirmability of data, stimulation of actions, and transferability.

This thesis will use the criterion of “disconfirming evidence” to validate data. This procedure relies on the researcher’s endeavours to find disconfirming evidence from the data for emerging themes (Miles and Huberman, 1994). The process will rely on the researcher’s own lens. As such, disconfirming evidence is not an easy task because of the inherent human bias to seek confirming evidence in the first instance to theoretical assumption or inferential themes. To minimise bias, I will consider multiple perspectives on a theme, being constructionist, which will later support the research’s credibility (Creswell and Miller, 2000)

5.7 Ethical considerations

There are some ethical issues that may arise from research similar to this thesis. During the interview, sensitive information, which includes personal stories, commercial sensitivity, integrity of data collection, data storage and data analysis, would be disclosed by the interviewee. In general, the interview will not touch on sensitive topics that with which the interviewee might be uncomfortable. However, because reciprocity means that people interact with each other, the interviewee might be asked about other persons whom he or she has interacted with socially for example, have you made any friends outside of the network? Can you name them? Do you mind if I ask them to be interviewed?).

The researcher will contact participants via email or telephone and will arrange for interviews to be conducted following the event attended. Prior to interview, those who are interested and who have supplied their contact details will be sent a participant information sheet and an informed consent form. The purpose of the research will be explained to participants in lay person language so as not to (1) lead to interview biases and (2) confuse them with jargon. The researcher will interview participants at the agreed time and in the agreed place.
Interviews will be recorded on a digital device and will then be transferred to local computers located at the University of Manchester. Original records on the digital device will be destroyed and only those on the university computers will remain, saved in an encrypted folder. The transcripts will also be saved on the university managed computers. All files will be encrypted to the fullest extent of data protection applied by IT services at the University of Manchester. Any published or unpublished work will anonymise the identity of participants. Only the transcripts will show the identity of participants. The transcripts will be kept under lock and key in the filing cabinets supplied by the university and will only be accessed by the researcher and the supervisor. Therefore, any published or unpublished work (for example, journal articles and annual progression reports) will never disclose the identity or any personal details of participants. During the course of the interview, participants will be notified of the possibility of quoting chunks of their transcribed interviews and they will be given their own discretion to agree or disagree.
Chapter 6 PILOT STUDY

6.1 Introduction

This chapter introduces the pilot study conducted after the literature had been reviewed and the potential research problem had been set out. The pilot study aimed to illuminate how IOL occurs in learning networks and whether network dynamics are related to learning processes. The importance of the pilot study is twofold. The first reason is that it helps to validate research objectives and questions and the second is that it sharpens the research methodology adopted (Baker and Risley, 1994). In this chapter, I will describe the methods of data collection and analysis in addition to the inferential results of the pilot study.

The initial research question was “How does IOL occur in networks?” The research objectives were to reveal how IOL processes unfold in a network, and what fosters or hinders IOL. For the pilot phase, I have selected an Entrepreneurs Network (pseudonym) based in Manchester, which included 13 entrepreneurial companies. The selection was based on an educated guess. I have set basic criteria for selecting networks for this thesis which focused on networks of entrepreneurial businesses. It also suggested that at least three organisations had to be part of the network. The Entrepreneurs Network was a heterogeneous business network that gathered organisations, aiming at improving their strategic position. Businesses included an ethical accounting consultancy, fair trade water provider, micro-chip manufacturer, and film production company. I approached the network administrator at a networking event and introduced my PhD project to her. She introduced me to the network and I attended three events where I managed to secure eight interviews. The three months’ experience I gained through the pilot study was very useful in avoiding many problems before embarking on the main study (Quong, 2007).
The following objectives were set out for the pilot study:

- To test the research design and detect any discrepancies in the selection criteria of networks and participants.
- To refine interview questions and remove any misleading questions.
- To familiarise the researcher with interviewing and alleviate potential biases in the main study.

6.2 Planning the pilot study

The pilot study was conducted in North West England to provide easy access for the researcher, who would need to interview various participants from networks in the main study. The pilot study was conducted overtly so that participants were informed about the researcher’s intent to conduct interviews in the network with as many organisations as possible.

6.2.1 A framework for a pilot study

This thesis is positioned in a qualitative vein because I aimed at going beyond the quantification of links between nodes in networks (to be explained in detail in Chapter 5 above). The pilot study maintained this dedication, thus the main data collection instrument was semi-structured interviews. The semi-structured interviews aimed to illuminate how those organisations learn from each other in the network and what hinders and fosters this learning which necessarily occurs in an informal and social setting.

Initially, four interviews were planned for the pilot study, but I continued to conduct interviews because as the interviews unfolded, the objectives of the research were sharpened and its methods were strengthened. The pilot study plan suggested that
the researcher should contact several networks using the snowballing technique. As soon as access is secured to a network, interviews commence and after an interview is completed and recorded on an MP3 recorder, they should be transcribed verbatim. Two interviews would be conducted and transcribed and then analysis would follow before conducting the remaining two interviews to give the researcher the time and space to reflect upon the data and amend as appropriate for the following two interviews. The comparison between the first two interviews and the second two revealed the amount of progress achieved in demarcating the research boundaries and strengthening its objectives and methods. However, it informed me about the need for more interviews to sharpen the thesis’ contributions. As a consequence, I conducted 4 more interviews. The process of the pilot study is illustrated in the following section.

6.2.2 Conducting the pilot study

The initial plan of the research method relied mainly on semi-structured interviews. The interview as a research instrument is one of the main tiers on which qualitative research sits. The importance of semi-structured interviews is that they facilitate direct communication with the participant and allow a thorough understanding of the subject matter. The supremacy of semi-structured interviews over structured and unstructured interviews is that they avoid both the limiting nature of structured interviews, and the uncontrollable nature of unstructured interviews (Easterby-Smith et al., 2012). While it maintains the coherence of data collection, it comforts the researcher and gives space to be creative in soliciting data in an unbiased manner. However, the limitations of interviews in general mainly lie in the decontextualisation of data, especially if interviewees talk about their lived experiences that occurred a long time ago in a different environment than that in which the interviews takes place (Rubin and Rubin, 2011). I will explain in detail how I conducted the interviews and what I learnt from them and then summarise the lessons learnt at the end of this chapter.
The first interview took place on December 16th, 2011, and lasted three hours. I transcribed the interview the following day, revealing interesting research results but indicating various flaws in conducting the interview in addition to the vagueness of the research objectives. For example, I had given the interviewee complete freedom to talk without intervening in the event that the interview strayed too far from the research context. I also used jargon such as “training needs analysis” and “permeable organisations”, which I subsequently found could mislead the interviewees and jeopardise the interview process. Fuelled by the eagerness to obtain quick results, I asked questions that I later found to be too leading. I was filtering the speech of the interviewees waiting for key words to appear. After listening to the recorded interview, I found that I missed many points the interviewee mentioned, skipped over these and not asking the interview to elaborate more.

I began the interview process by introducing myself and the purpose of the research in addition to mentioning any ethical considerations. I then asked some questions (listed below) and let the interview unfold by following the responses of the interviewee but without losing control over the process. A list of the questions follows:

Q1. Can you please talk about your network?
Q2. So, what do you offer to participants?
Q3. What are you planning for the future of the network?
Q4. How many social enterprises joined the network in the last three years?
Q5. Why do social enterprises come to the network?
Q6. How do you think social enterprises benefit from the events they attend?
Q7. How do you measure their benefit?
Q8. What are the challenges that the network faces?
Q9. How do you deal with such challenges?
Q10. What are the things you wish you had done in the network?

Q11. Do you think social enterprises come to the network because they do not have the internal capabilities required to achieve their goals?

Q12. Do you think it is better to invest in internal sources of learning? WHY?

Q13. Can organisations balance investing in exploring outside knowledge and exploiting their internal knowledge?

One week after the first interview, I attended an event at the network and observed how the network was managed and how participants engaged. I managed to secure three interviews from the event, which I conducted in December 2011 and January 2012.

6.3 Lessons learnt

The pilot study revealed many lessons learnt for the main study. I shall detail those lessons in this section as shown in Figure 5-1 on three levels by employing the three learning loops framework (cf. Figure 4-1).
6.3.1 Amendments of interview questions

The four interviews showed that questions could be misleading, therefore I removed the jargon and made questions broader so as to elicit responses from interviewees. I noticed the misleading questions from listening to the recorded interviews and reading the transcripts. Interviewees echoed my thoughts when the question used jargon, which caused their responses to me made in the form of “yeah, that’s right”. For example, when I asked P1 if she used “Training Needs Analysis” before holding events, she replied “Yes, we do” and then she quickly skipped on to a different topic. This may however limit the researcher’s control over the interview process. In the meantime, I revisited the literature and more avenues of research appeared that would sharpen the research focus. I consequently, had to amend some of the interview questions as shown in Table 5-1 below.

Table 6-1: Amending interview questions

<table>
<thead>
<tr>
<th>Interview questions before pilot study</th>
<th>Interview questions after pilot study</th>
</tr>
</thead>
<tbody>
<tr>
<td>• First level</td>
<td>• Second level</td>
</tr>
<tr>
<td>• Second level</td>
<td>• Third level</td>
</tr>
<tr>
<td>Revise interview questions</td>
<td>Revise methods</td>
</tr>
<tr>
<td>Revise research questions</td>
<td></td>
</tr>
</tbody>
</table>

Figure 6-1: Amendments after pilot study
<table>
<thead>
<tr>
<th>Interview questions before pilot study</th>
<th>Interview questions after pilot study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Can you please talk about your network?</td>
<td>Q1. Can you tell me about yourself and your business?</td>
</tr>
<tr>
<td>Q2. So, what do you offer to participants?</td>
<td>Q2. Do you go to any network?</td>
</tr>
<tr>
<td>Q3. What are you planning for the future of the network?</td>
<td>Q3. What is the most recent network you went to?</td>
</tr>
<tr>
<td>Q4. How many social enterprises joined the network in the last three years?</td>
<td>Q4. Can you tell me about it?</td>
</tr>
<tr>
<td>Q5. Why do social enterprises come to the network?</td>
<td>Q5. Why do you go to those networks?</td>
</tr>
<tr>
<td>Q6. How do you think social enterprises benefit from the events they attend?</td>
<td>Q6. What do you take from these networks?</td>
</tr>
<tr>
<td>Q8. What are the challenges that the network faces?</td>
<td>Q8. How do you describe your engagement in these networks?</td>
</tr>
<tr>
<td>Q9. How do you deal with such challenges?</td>
<td>Q9. How do you describe your network?</td>
</tr>
<tr>
<td>Q10. What are the things you wish you had done in the network?</td>
<td>Q10. What do you like the most about networks?</td>
</tr>
<tr>
<td>Q11. Do you think social enterprises come to the network because they</td>
<td>Q11. What do you hate the most?</td>
</tr>
<tr>
<td></td>
<td>Q12. Can you tell me any success stories that you would like to share?</td>
</tr>
<tr>
<td></td>
<td>Q13. Or frustrating stories?</td>
</tr>
<tr>
<td>Interview questions before pilot study</td>
<td>Interview questions after pilot study</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>do not have the internal capabilities required to achieve their goals?</td>
<td>Q14. Why do you think networking is important?</td>
</tr>
<tr>
<td>Q12. Do you think it is better to invest in internal sources of learning? WHY?</td>
<td>Q15. Do you have an online presence? Why?</td>
</tr>
<tr>
<td></td>
<td>Q17. How do your network partners benefit from your participation?</td>
</tr>
<tr>
<td></td>
<td>Q18. To help somebody in the network is the best policy to be certain that s/he will help you in the future. What do you think about this? Why?</td>
</tr>
<tr>
<td></td>
<td>Q19. Is there anything you would like to add?</td>
</tr>
<tr>
<td></td>
<td>Q20. Is there anything you think I should have asked?</td>
</tr>
<tr>
<td></td>
<td>Q21. How did the interview feel to you?</td>
</tr>
<tr>
<td></td>
<td>Q22. Can you speak with other friends or colleagues from industry</td>
</tr>
<tr>
<td>Interview questions before pilot study</td>
<td>Interview questions after pilot study</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>who would like to share with me</td>
<td>their experience in networking?</td>
</tr>
</tbody>
</table>

6.3.2 Amendments of methods

The four interviews revealed the difficulty in obtaining data solely by means of interviews, as it was noticed that network dynamics such as learning take time to observe and reflect upon. Interviews failed to portray why certain learning processes fail while others succeed, despite having been conducted in the same context with relatively similar knowledge repositories. I had to make sure that I interviewed organisations that reciprocated with each other. This put reciprocity to the fore, making it essential to include reciprocity in the study of IOL and consequently the research questions were adapted to align with the change in methods and research focus. However, to study reciprocity, interviews were not sufficient, as I needed to see how people reciprocated. Therefore, participant observation became an essential part of the research methods. This promoted the need to attend more events at the network and interview more people. The result was a pilot study based on eight interviews - four of which were supported by participant observation.

6.3.3 Amendments of research questions

The inclusion of reciprocity became inevitable and as such, I reviewed the extant literature on reciprocity. Reciprocity as a dimension of learning opened avenues for interesting inferential contributions, one of which was the temporal dimension, which will be discussed in detail in Chapter 8. The main research question changed from “How does IOL occur in a learning network of competing organisations?” to “How does reciprocal exchange influence IOL in learning networks?”.
6.4 Concluding note

To conclude this chapter, the pilot study was important in reshaping the research questions, methods and interview questions. The experience I gained in this phase of research can be summarised as being able to deal with various types of interviewees in addition to reshaping the research’s main question, which generated fine-grained contributions. As a result, selecting the networks for the main study was slightly opportunistic, aiming at finding networks where potential observation and interviews could be conducted, taking into consideration alleviation of bias as much as possible.
PART TWO: CONCEPTUALISATION

Introducing Part Two

Part one intended to problematise the concepts under research. In doing so, I outlined the research problem and questions, research objectives, literature review on networks, reciprocity and OL, and methodology. After I reviewed the relevant literature and designed the research objectives, I also articulated how the research was going to be conducted in the methodology chapter.

I found great importance in both the nature of the data and the collection journey. The subjects under research were significantly immersed in the learning network, resulting in live and rich data from observation and interviews during the immersion. There could be certain methodological limitations, but without a doubt, this has enriched the research results and produced new streams of thought that were not part of the main stream of research.

The immersion of research subjects in learning networks and active engagement in interviews, in addition to my observation and close follow up with the networks took around 18 months of attending several network events, and begs careful exploration of the data. My intention therefore is to reflect upon the data in the following chapters.
Chapter 7 NETWORK AS AGENCY

Thesis’s Objective 2

To identify the reciprocal, temporal and agential elements that constitute learning dynamics in interorganisational networks.

Thesis’s Objective 3

To examine how the reciprocal, temporal and agential elements interact to create learning outcomes.

7.1 Introduction

This chapter mainly responds to the first research question “How does the agential role of network mediate IOL processes?” by engaging with the literature review and the collected data. The findings of the investigation of the data have led to promising avenues towards conceptualising the agential role of the network. In this chapter, I draw upon the work of Elder-Vass (2010), who provided a theoretical space that accommodated the inherent complexities of structure and agency. Investigating the agential role of networks does by no means mean pausing the functionality of the network as a structure, but rather this chapter seeks to see the network as an agent while at the same time realising that the network is a structure. This will help to: first escape the never ending debate of supremacy of either structure or agency (Elder-Vass, 2010), and second give more perspectives to the roles of networks in our lives; for example, how networks affect knowledge sharing (Lazer and Binz-Scharf, 2007).

One particular issue with which this chapter is concerned is materiality, which has been well known as problematic in terms of theorising. This chapter takes a pragmatic position in dealing with materiality. The pragmatic position suggests that
objects can be understood through their practical consequences rather than their intentions and intrinsic properties (Peirce, 2001). If a network benefits or harms its participants, how good or bad is that effect on the participants? As such, based on the data collected and the literature review, I inferred that the network can be conceptualised as a material subject that has agency and the implications of this inferential assumption on its agential role will thus be discussed.

Materiality research becomes more complex when it involves arguments and counter arguments by methodological individualists and structuralists. The former conceive that society does not exist and that individuals are effect while the latter conceive individuals to be governed by social structure (Elder-Vass, 2010). The discussion of the data will be presented in the following sections. The data analysis revealed the coding structure for the network agency as depicted in Figure 5-2.

### 7.2 Why people join networks

When people come to a network, they come to learn something. They perceive the network as a place where they can influence and be influenced. Do people know exactly what networks are? Does it make sense to them to establish whether it is a structure or an agent? Actually, to give a short answer: Yes, they do. I maintain here that people sometimes look at networks as agents rather than structures for reasons outlined in this chapter.

The term structure is sometimes misleading. Organisations and individuals may feel obliged to submit to the structure because the properties of a structure are that it regulates and formulates social actions. In this regard, the following paragraph quoted from the seminal work of Sewell Jr (1992) on duality of structure and agency gives important insights into why organisations and individuals could be structured by a structure:
The term structure empowers what it designates. Structure, in its
nominative sense, always implies structure in its transitive verbal sense.
Whatever aspect of social life we designate as structure is posited as "structuring" some other aspect of social existence—whether it is class
that structures politics, gender that structures employment
opportunities, rhetorical conventions that structure texts or utterances,
or modes of production that structure social formations.

Among the variant questions of interviews, the question that ignited the research
on agency of network was “Do people join networks because they are reputable
and prestigious ones or because they do them a favour?” It is what the network
does for them that matters more than the nature of the network. Some people are
deluded by the network appearance (structure) and might think big networks are
always beneficial. However, this time has come and gone after the boom of social
media. As one interviewee (P26) from the Women Network puts it:

Who buys products from eBay without reading reviews of others?

It is important for many customers to build a profile about the product before
pressing the buy button. That said, people socially construct their meaning of the
product and it is similar in networks. Before joining networks, many people search
the internet or ask colleagues or friends who have joined or heard about the
network, especially if the network is subscription-based.

In the Women Network, participant P17 works as a gold and diamond consultant for
her own company. She illustrated how she joined the network as follows:

I didn’t know anything about networks or networking. I even did not
know anything about jewellery before ... I met P15 at dinner and we
talked a lot and enjoyed the dinner. She asked “oh by the way do you
know about Women Network? I said No what is it about? She told me it
is a business network for jewellery and people come to market products
and buy products so why don’t (ya) come with me and you see what it looks like... So after she persuaded me I decided to go because I was eager for customers especially that I moved newly to UK and my social relationships are still limited... and here I am.. I joined the network and met that gentleman who was interested to buy the ring for his wife.. the 400 pounds I paid to join this network did not go for nothing.

From what P17 has said, two main points can be drawn. The first point is that her new friend told her about the network. This was a new friend in the UK and P17’s connections were limited, therefore any new connection counted for her. This socially weak relationship has offered her information that otherwise could be redundant (Granovetter, 1973). However, the weak tie theory may not be adequate in this sense because P17 had no strong ties in the UK. The second point is that her friend provided a description of the network, stressing more the nature of the network and how important it was for P17 to join (i.e. influencing using the structure of the network and agency of actors). The claims made here imply the importance of structure. However, when P17 was asked why she really joined the network, she replied:

    Well, it is what it offered to me as I said. I managed to sell a very expensive ring. I did not care about how nice or well established this network was ..how many people join was the most important thing for me.

P17 was not impressed by network properties but she was interested in what the network did and who joined. This Again, it is important to borrow from the narration of (Sewell Jr, 1992), who criticised structuralists for reducing the understanding of structure to a rigid and immutable reification and consequently ingnoring the efficacy of human agency.
This means that at the inter-organisational level (networks), the conception of favouring network features and not the processes is problematic, for it ignores the function and praises the structure. So the question that is valid in this disposition is: if it were not for the structure, what qualities does the network possess to infer the action of participants? In other words, what form does the network hold to make its role active? To be able to answer this question, it is important to understand what agency means.

From the organisational learning research, Argyris and Schön (1978) suggested that the individual is the agent of learning. This in fact reflected the everlasting debate in organisational learning literature, as to who is the learner; the individual or the organisation. In this regard, the explanations of (Bandura, 1989), which are based on human agency, suggested that the “self-belief of efficacy” is what marks human agency as capable. By this, Bandura (1989) meant that agents need to feel they are capable of imposing actions or exercising control over things. It is a cognitive process where people plan, judge and forecast based on their recognition of their efficacy (Bandura, 1989). Be it cognitive or emotional, what is important is the network being able to influence and to cause actions rather than being described as a rigid structure.

Table 7-1: Quotes from interviews on why people join networks

<table>
<thead>
<tr>
<th>Participant</th>
<th>Network</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>P16</td>
<td>Women Network</td>
<td><em>I go to networking events as an opportunity to reflect on my own learning</em> have got some working events as a reflect on my own learning because it is a good way to be with a room with a load of other people.*</td>
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<tr>
<td>Participant</td>
<td>Network</td>
<td>Quote</td>
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<tr>
<td>P18</td>
<td>Women Network</td>
<td><em>I am not a large company, I'm an SME, so how do I find a mechanism, so potentially the network could be a really good way, network of small businesses and enterprises coming together and we are going to put some themes in on how to improve your performance?</em> We are going to draw a form, things like ISO, people, management and the recorded systems in place, we are what to say in track what’s the return in getting of the business what’s the return that is expected from the possibility and as an enterprise we can tie our learning into those metrics.</td>
</tr>
<tr>
<td>P25</td>
<td>Women Network</td>
<td><em>Because [I] enjoy, [I am] relaxed in the informal venue that we have, they don’t I mean they all some of them do go to the formal ones, but I do know that they do like ours because it is important to get to know the person, and there’s no pressure to sell, that’s another thing...so it works without being pushy, hahaha.</em></td>
</tr>
<tr>
<td>P27</td>
<td>Construction Network</td>
<td><em>[I] gain a lot from coming to the networking group because without having to pay extra [I am] learning</em></td>
</tr>
</tbody>
</table>
Table 7-1 presented some quotes from interviews on why participants joined networks. In playing its role as the agency of its participants, the network mediated reflection upon what participants learnt, improved their performance, and obtained more connections for less money. Observing the networks revealed that discussions in the networks influenced the way participants perceived the network. For example, when P16 was asked why she believed the network enabled her to reflect on learning, she said:

*We've done this for a long time... you can go and ask other fellows and they will tell you the same...*

Elder-Vass (2010) emphasised the role of language in constructing beliefs and dispositions. Network participants used language to expose their beliefs about how the network benefited them. They also used the collective gain that they speculated from the network. In isolation, language can be misleading and therefore the context is relevant to make this language meaningful. For the case of P16, she used the phrase “to reflect on my own learning” because she represented her small consultancy firm. Since the firm was established in 2009, P16 had made every effort to position it in the market and utilise the available resources from networks for this purpose. P16 reflected on her learning by discussing her CPD log with other network participants. From the discussion with network participants, P16 was shaping her organisation’s vision and strategy in a “discursive struggle” (Hardy and Phillips, 1999)
that aimed to refine organisational focus. It is important to stress that this discourse in the network cannot stop the interpretive device of its participants, who interpret concepts, meanings, and relationships based on their personal and social ontologies. This thesis mainly argues that this interpretive device is explained through social exchange theory (SET) and especially its reciprocal rules that will be discussed in Chapter 8.

7.3 Network building network

In the previous section, the discussion focused on why participants joined networks. In this section, the level of analysis will jump to a further level; that is the inter-organisational level. This section focuses on how networks emerge from existing or decaying networks. The data indicated that evidence for this category “Network building network” appeared in two networks. In the Photography Network, P2 is the owner of a photography company and is interested in photography and education. He lectures at university as well as being involved with IT educational materials. He joined the network 12 years ago and his commitment, as he described, is “distinguishable”. When he was asked about the network he replied:

... I’m networked in the photography area, I’m networked in the e-learning community, I’m networked in the health community as well, locally and nationally and internationally ...

P2 is in fact connected to three different networks which he described as “learning networks”. However, I only interviewed him in and observed one network, namely the Photography Network. When P2 mentioned that he was an active member of three different networks, I asked him why he was connected to those three networks, to which he replied:

I like to give a part of me back to the networking people...... I do it as part of my return back to society because what society gives me is an
P2 first joined photography and he was so committed that he attended regularly and sometimes arranged events. He learnt new techniques and sent back his newly acquired knowledge to his business partners. He, however, was a lecturer at university. When he noticed his students struggled in some subjects, he decided to establish a new network similar in principle to the Photography Network. The purpose of the new network was to help students communicate and share their experiences and also overcome difficulties they faced in the module he taught. He was also interested in the health community network in Liverpool. The reason for this was that his best friend was also a photographer and taught health modules at the same university. Although P2 was inspired by the network to which his friend invited him, he failed to convince his friend to join his own network.

P2 was inspired by networks. The Photography network made him create another network and inspired him to join another network (health community). The role that the network played is strong enough to create another network thus expanding the breadth of networks. P2 when asked whether he made personal relations (i.e. friends) out of networks, said later that:

Yeah.. I have four friends who became friends only from the network. We meet up weekly and talk about photography and personal life. We sometimes travel to Scotland and Wales to take photos of the nature.

In this, P2 created a micro network that resulted from a larger network i.e. vertical generation. The purpose of this network was to become more focused on mutual interests. This presents the network evolution as both vertical (smaller networks of the larger one) and horizontal (more networks of the same size are created). “It takes a network to build a network” (Lazer and Binz-Scharf, 2007).
7.4 Agency pays back

In Construction Network, P24 manages a consultancy firm that provides solutions for project management. He was asked in what ways he thought the network benefited him and what he feels about the network. The network to an extent inspired him so that he felt he has always to give back to the network because it reciprocates with him. He said:

\[ \text{...I organised the day, I organised the location and I made sure everybody were in contact with each other and everybody was safe so I looked after people but in exchange for allowing it to take place ...} \]

By taking the stance of the agential role of networks, the network is looked at as an agent that could be reflecting and reflected upon. A recent study of van den Ende et al. (2012) investigated how standard content reacts with standard supporting organisational networks. Not only did the study focus on the impact of the network on the standard, but also on the standard’s impact on the network itself. The study stressed the importance of standard flexibility on increasing network membership and spreading the network’s growth and diversity. This makes the network more genuine in seeking to establish the standard for which reason the network was established (van den Ende et al., 2012). However, the main contribution of van den Ende et al. (2012) was that the network has a co-evolutionary nature. Networks were found to reciprocate with their environment from one side to produce specific outcomes and reciprocate with those specific outcomes from another side to strengthen the network’s position.

Borgatti and Foster (2003) stressed that the majority of network research was dedicated to the consequences of networks, but it was not evident that such consequences were treated as part of the agential role of networks. It is important
to understand what is meant by consequences of networks. The root of “consequences” can be traced back to the cause and effect model. From the causality perception, consequences of networks may not result from the agential role of networks. A network consequence might have occurred because of a force other than the agent (the network). This is framed in the question of how we can make sure a network consequence was linked to the network dynamics, for example. The agential role of a network could have produced a consequence, but it is difficult to claim that this consequence is truly related to the network unless we are knowledgeable about the network’s agential role.

Revisiting the data, P8 commented:

*And you penetrate because of this—this chip you’re bringing to it. So it does sound very mercenary but, you know, as I say, the students I’m working with, I try to encourage them to go to every event that I’m at especially if it’s free. Look, if it’s free, you should go, you know. Why, you know, pay, you know £9,000 a year and go to a lecture to listen to see me, who is relatively nobody, when you can go to a free talk and listen to someone who has got something, maybe an international status. And it sounds like I’m being very generous but I say to them look if you go there, I’m going to introduce you to people. If I introduce you to people, I’m bringing an audience and I become valuable because I’m seen to be bringing an audience with me to the event, which means I will get something else out of it. It’s nasty, isn’t it?*

P8 believes that the payback from networks is the status that is necessary to benefit from the network. This provides a space for a reciprocal relationship where the participant joins a network and reciprocates with others and as a result, this particular participant obtains a status that mediates the maximisation of benefit from the network. Status in this sense becomes a synonym to centrality in the network. This centrality is important to facilitate the flow of information in
networks. However, it poses a risk to the notion of network agency. What benefited P8, the network agency or his network centrality? While centrality indicates the centralisation of relationships in a network, the resultant centrality forces become obsolete without the network being “there”. Centrality is dependent on the network. Structuralists argue that it is dependent on network structure but it is structure that reifies centrality (Burt, 1982). From a pragmatist position, without the network having consequences on its participants, it ceases to exist as a network. Its agential role is what makes the network active and its consequences reify. Those consequences are the result of the network’s activity and the activity of its participants individually and collectively, including centrality as action. Therefore, centrality in this sense is not the only intrinsic action that makes the network active, but it is the sum of those centrality relationships and dynamics of the network in addition to temporal and spatial contexts. This will be discussed in detail in Sections 8.5.1 and 8.5.2).

The work of Wuyts and Dutta (2012) is important in understanding the agential role of networks. They have studied networks in an alliance portfolio and concluded that the diversity of the alliance portfolio is important for innovation. However, this importance does not actualise without the intrinsic knowledge that is also necessary to manage portfolio diversity. This result is congruent with the path dependence perspective that was also studied by van den Ende et al. (2012), who investigated the role of networks in shaping path dependency and concluded that network inflexibility was a result of “diminishing scope of actions” during different phases of the network. For example, van den Ende et al. (2012) noticed organisations join a network because of the network’s flexibility in accepting new entrants, but when that network’s size increased, it became difficult to change the standards that the network was aiming to develop. When the network was small in size, it was flexible and this encouraged more organisations to join, which in turn decreased the flexibility of that network. This discursive relationship may be better explained through Figure 7-1 below.
While defending the agential role of network as being prominent, it is still necessary to acknowledge that the agential role may not operationalise all the time. Agency from a pragmatist position ignores the intrinsic properties of the network and therefore, operationalisation of the agential role is dependent on extrinsic factors as briefly explained earlier in this thesis and which will be explained again in Chapter 8 in detail. An informal chat during a networking event at Women Network reveals that some organisations did not feel the agential role was effective. PO2 commented:

PO2: This network should be scrapped.. it is foolishly designed and meant anything but.. erm nothing to my business..

Researcher: so why do you think it should be scrapped?
PO2: it’s just nonsense, if it failed me when I needed it, if if if it meant to be helpful , sourcing [my company’s] knowledge, but it just failed me, indeed all of us.. so yeah it couldn’t sell …a network must be resourceful, useful, and ..so that it has its reason to exist.
PO2 believed that the network should exist if it had positive consequences that made its agency effective. PO2 spoke for himself at the beginning and then used “indeed all of us” to include all of the network participants. He seems to have wanted to collectively emphasise the importance of the consequences of the network in order for it to exist, although another participant (PO3) who was sitting next to PO2 replied:

*I don’t think a network should be scrapped if it failed to please one or two [participants]... so erm I believe a network is always helpful but it is how far is [organisation] ready to augment on...I mean to receive those benefits of the network. (laughter) luck is.. be ready for opportunities.. isn’t it?*

PO3, in contrast to PO2, believed that the network’s agential role is always there but it is how participants react to it that makes it operationalise. Wuyts and Dutta (2012) acknowledged that organisations vary in how they benefit from networks and explained this variance is best understood through contingency theory. There have been many attempts to explain the variance. For example, Zaheer and Bell (2005) suggested the internal capabilities of organisations as a reason for the varying levels of benefits from networks while Koza and Lewin (1998) underscored the absorptive capacity of organisations. Those attempts, along with many others, focused on the participating organisations to judge whether the network had effective consequences. I have earlier argued that network agency is dependent on the capitalisation of its participants’ interaction. That said, network agency is always there and operationalises. But this operationalisation is not witnessed until organisations have the potential to capitalise on this agency. Put simply, network agency is always there, whether it be negative or positive, but it is how the organisations look at it that makes it visible or invisible.

Bhaskar (1998) argued that the social world could be understood through explanations that are based on emergence. When individuals, who represent
various organisations, agree to establish a network, they mean for this network to operate as a hub for knowledge and experience sharing. It might not be that this network is meant to change the organisations. However, what was really deemed as a viable purpose of networks was to make networks a way to change organisations. Therefore, it is not the structure of the network that will cause or lead to the change, but the consequences of the network; i.e the agency of the network. Organisations and networks do not think primarily of how many network participants are sufficient to change the organisations, but how this number of participants could enable the network to serve the purpose of knowledge sharing and action improvisation (da Cunha and e Cunha, 2001). This being said, the basic assumption of a network when established is argued to be a governing body that takes the form of a social structure that is able to serve its members. However, this inappropriately assumes that I submit that social structures are active, adopting a structuralist philosophical stance.

The emergent causal power is important in understanding what the network is and where it is going. For example, Gulati and Gargiulo (1999) raised emergence as a fundamental question in their research, “Where Do Interorganizational Networks Come From?”. Their research mainly addressed the relationship between multiple networks and discovered that organisations that seek a specific network rely on other networks to enable them to decide with which network they should cooperate. This decision-making procedure was found later on to change the existing network structure. This has caused the internal dynamics between organisational decision-making procedures and network structure to ignite the formation of new inter-organisational networks.

7.5 Agential role

Organisations are organised in networks in such a way that allows their (representative) participants to interact in a way that is specific to those participants. The dynamics of this interaction shape the causal power of those
participants inasmuch as the network as a whole exercises the agency of the sum of its participants. There has been debate over the difference between human agency and non-human agency especially in the technology literature where nonhumans such as computers are accepted as being able to act and create consequences.

With regard to the causal power of the network, I argue that this causality is relational. The network has power from the interaction of its participants (social exchange theory) but this power is peculiar to the interaction of those participants at a certain point in time (temporality) and at a certain space (spatiality). The causal power in this sense means that the effect the network has on the external environment and the internal environment is proportional. Bhaskar (1998) has earlier explained this causal power as an emergent power. The concept of emergence sits on the foundational work of Bhaskar (1998), which suggested that the whole is not only bigger than the sum of its parts but has properties that its parts may not possess. An example of this could be explained from a natural science perspective. The chemistry of water states that a water molecule has two hydrogen atoms and one oxygen atom. However a water molecule has different properties to hydrogen and oxygen separately. Those different properties include, for example, heat and evaporation.

There are instances where this relational agency fails to exercise its causal powers. In such cases, participants in a network do not interact so adequately that this particular network’s agency is operationalised. In the Photography Network, P3 explained that another network of which she was a member was not influential. She explained:

*It was so opportunistic a network that you’ll see that guy sitting down there listening, If there is a free course going he jumps to that and then goes, how much does it help the network?... this disadvantaged others, I mean the network... if something doesn’t hurt it’s like if you are exercising in a gym, if it doesn’t hurt you are not serious about it.*
Agency requires that all participants or a certain number of them interact to sustain this causal power. In addition, this network may not have this agential power without those participants existing in this network. As such, the network’s agency is dependent on its participants, their interaction, and temporal, spatial, directional, and symmetrical dimensions (this will be discussed in detail in Chapter 8).

Carlile and Langley (2013) talked about the return of materiality. Materiality, which had a prominent location in organisation theory half a century ago, regained the sensitivity towards it, but by and large towards the entanglements of human and non-human artefacts. Those entanglements become complicated when social theory comes to the fore, as demonstrated in sociomaterial entanglements (Carlile and Langley, 2013). The introduction of sociomateriality indicates how humans as social actors are mediated by non-human artefacts such as networks. To fully understand how the network holds this agential power, it is important to look at three interrelated mechanisms here: (a) causal mechanisms, (b) morphogenetic mechanisms, and (c) morphostatic mechanisms. Buckley (1967) defined morphogenetic mechanisms as those processes that lead to the emergence of the agency of the network, while morphostatic mechanisms are those that sustain the existence of this network. Those three mechanisms aggregated two philosophical stances; namely critical realism and pragmatism.

Interestingly, this agential nature of network does not emerge at a discrete moment of time, and thus is emergent (Elder-Vass, 2010). It is similar to that of “creative moment”, which cannot be planned but just happens (Shotter, 2013). However, observing the networks and interviewing network participants revealed that the move towards agency could be predicted as shown in Figure 7-2. It is interesting that this agency of network is witnessed in its becoming. Figure 7-2 shows the agency has developed over three phases, namely condensation, capitalisation, and materialisation.
I will present data from two networks, explaining how agency is reified from the Photography network and the Women network. The observation of the two networks inferred interesting results. From observing events and interviewing participants, I collected keywords participants used in their discussions and interaction (Table 7-2). The keywords reflected how participants described their networks and the benefits those networks introduced to them. The keywords were consolidated to portray the three phases of the network morphism from the immaterial to the material entity that participants socially constructed.

Using Nvivo 10, I counted and sorted the keywords in a manner that reflected the change from an amorphous nature to an embellished concrete form (Burrell, 2013). The keywords were then classified into verbs, nouns and adverbs to investigate how participants used them to denote the network.

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Type</th>
<th>Frequency</th>
<th>Phase</th>
<th>Observation</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathers</td>
<td>Verb</td>
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<td>✓</td>
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<tr>
<td>Calls</td>
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<td>Condensation</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Together</td>
<td>Adverb</td>
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<td>✓</td>
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<tr>
<td>Solidified</td>
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<td>Condensation</td>
<td></td>
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<tr>
<td>Evolved</td>
<td>Verb</td>
<td>4</td>
<td>Condensation</td>
<td>✓</td>
<td>✓</td>
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<td>Drew</td>
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<td>Noun</td>
<td>7</td>
<td>Materialisation</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The keywords were than collated so that they reflected the change from amorphous phase (Phase 1) to the miasmic phase (Phase 2) and finally to the concrete form (Phase 3). The usage of verbs and nouns varied across phases however, and it can be noticed that participants used nouns to describe Phase 3 while verbs were heavily used to describe Phases 1 and 2. The keyword order indicates dynamics of change from becoming to being (Burrell, 2013). In “becoming”, the use of verbs reflects the social construction of the reality of objects and denotes instability as subjects seek to stabilise their “being” where they tend to depict it using nouns.
The three phases (as shown in Figure 7-2: The three phases of development of agential role) are isolated yet interrelated, where the first two phases are important in maximising the utilisation of Phase 3 to present the network’s agency. A basic tenet of conceptualising the three phases stems from an interpretive sociological paradigm that posits organisations as socially constructed phenomena (Burrell and Morgan, 1979, Weick, 1979, Brunsson and Sahlin-Andersson, 2000). The three phases are described below.

### 7.5.1 Phase 1: Condensation

This phase has adopted the title “condensation” in assimilation to natural science where the early evolution of matter starts with condensation, denoting the change in state of matter from vapour to liquid (McNaught and McNaught, 1997). This early
phase of the network is crystallised through the process of interpretation by the founding members of the network as to what and how this network should be. During interviews and observation, interviewees used indicative words that urged the use of condensation for this stage. Those keywords included: “Gathers”, “Calls”, “Together”, “Solidified”, “Evolved”, “Emerged”, and “Revolved”. At this stage, purpose, visions, goals, boundaries and management are conceptualised. Conceptualising the network’s evolution into agency may not happen within this stage, but the interpretations are important in envisaging how this evolution will occur.

Interpretations in this phase take on a dialectical activity grounded on the theory of organisational translation (Czarniawska and Joerges, 1996). This activity is depicted in the varying impact on the network according to the capabilities of the founders to debate. Translation, in this sense, means “displacement, drift, invention, mediation, creation of a new link that did not exist before and modifies in part the two agents” (Latour, 1993). In other words, participants interpret the network’s goals, boundaries and expectations to explicitly construct a shared vision about the agency of this network. Czarniawska and Joerges (1996) likened this to a travel journey where ideas travel across human minds through translation to fit into a shared vision that enables the enactment of ideas. Enacting ideas means the network is formed, people join, and participants interact. The condensation phase includes interpretations of participants (metaphorically vapour) that are condensed into a network (metaphorically liquid). Insights from the data collected support this argument.

P19 started off her business in 2008 as a therapist after she had been an insurance manager at another company. P19 firstly introduced herself:

“What do I do? Well, I’m self employed, basically I run a business called [Therapy] (pseudonym) which has two strings... So I’m a holistic therapist and also a yoga teacher. When I’m doing my therapies, I work on a
mobile basis, so I go to people’s homes and give them the treatments...[b]efore that I worked in the insurance industry named [Insurance] (pseudonym) and just started at the bottom and worked up to Credit Control manager and then got fed up and completely changed... I imagined myself working on my own and that was compelling..

P19 found her career boring and because she had to go every weekday to her work she thought that the time had come to quit the job and move to a more relaxed job and be "her own boss". Her business exists to provide therapeutic solutions to people, therefore although she enjoys it she finds it solitary because the relationship in this new business is one-to-one between herself and the customer. She found the network as a space for two purposes, the first was to widen her personal network and the second was to seek advice from peers and provide help to those who need it. P19 commented:

I do go, unless there’s anything that you know I sort of have to do work wise, I will always go, because I find it really useful. The profession that I’m in is although I’m with people all the time, they are clients and so it can be quite solitary. So it’s nice to be able to talk to all the people, not necessarily in the same industry, but who are in the same position. So you can kind of you know, ask for a bit of help, or give a little bit of advice. It’s really done in a very safe helpful environment. So I joined the network and became an active member... I always thought of a network to be sort of.. a family house, bring all together members to talk over tea.

P19 is not keen on talking to people from her industry. She welcomes people from other industries. One of the reasons she joined this network was for the variety of people she envisaged would come to this network. P15, who founded the Women Network, explained how and why she established the network:
“I met a lot of mothers running businesses and I joined a networking group that was focusing on that group but they only met 5 times a year, whereas I found talking to a lot of women they needed more support on a more regular basis and because they worked on their own at home, running a business it’s very isolated, so I decided to start a networking group that ran more regularly, but it’s a different networking group. It’s very relaxed and casual whereas a lot of the other networking groups that I experienced at that time were very formal, and still very corporate; my philosophy is that you don’t need to be really corporate to prove you’re a professional...[b]asic ideas emerged all the time until the business model solidified.. [y]ou prove you’re professional and business-like by just doing the job you do. It’s not required to speak a certain way or to behave in a formal way, and always be you know, like I don’t know, you know what I mean is this type of putting on a sort of persona. My business persona, and a lot of people who come from the corporate world that’s what first you find and it’s not really necessary. So, when people come to [Women Network], they realise that it’s quite relaxed, but it doesn’t really take from the fact that the world the professional individuals, and this echoed what they wanted from a network..”

P15 explained the pressures to formulate a network that can meet participants’ expectations. Her work as branding manager backed the early stage of developing a business model that works for Women Network. Participant interpretations of preset organisational structures grounded their decision to partake in network formulation. P15 explained that after the network was established, “much of the work was rooted from members’ ideas and how they wanted the network to be”. During the formation of the network, participants had contrasting views and debates on how the format should be changed over the year. The network went through a few format changes before it settled down. P15 commented:

“[Women Network] has been going since 2008, so almost 5 years, and we have never rid them. We have changed the format a few times. It’s
very, again, informal, we come together there are many members but not everybody comes every week obviously, so there are lots of members, they brought their impressive ideas, sometimes against what we thought. [t]hey need a different time, and then they need a different format, so I changed the format, and there is an informal get together. So, a different selection of people every week, they informally informed how the network should run.”

Another comment that comes from P10 on how she envisaged the network:

“So the way I am probably is the way I would expect from others, and me to be interested in what they do, that they are interested in knowing how I can help them through referrals and collaborations and joint ventures in my way I think they would expect me to know what I do and they have to explain and I would expect them to follow up; yeah that’s what I expect from people.”

The varying views of participants indicated varying interpretations of what network means that could be linked to contextual variations (Oliver, 1990). Those varying views affected transferability of translation thus creating multiple interpretations of the one concept and therefore maximising the extent to which those interpretations can operationalise.

7.5.2 Phase 2: Capitalisation

The second phase was titled “capitalisation” to reflect participants capitalising on the immediate consequences of networks to obtain organisational gains. In this phase, the capitalisation took two forms. The first is to capitalise on the benefits that participants gained from the network through interaction with other participants. The second is to adopt interpretations of other participants intentionally or unintentionally. This adoption signals the interdependence of
participants in the network. The varying level of benefits participants gained from the network impelled this interdependence of interpretations. A participant who sees fellow participants gaining extra benefits may seek to copy this fellow participant’s interpretations to gain similar benefits. It is important to highlight that the dynamics of interdependent interpretations crystallise in variant forms including “sense impressions, gestures, emotional expressions and responses” (Cunliffe, 2008). Examples of resources that this interpretation may adopt are networking strategies, learning strategies, or knowledge retention strategies. Again, other contextual factors should be borne in mind (for example, temporal, spatial), as these influence this interdependence of interpretations. I observed that participants’ usage of keywords changed slightly from their usage in Phase 1. They used keywords such as: "Capitalises", "Drew", "Strengthened", "Implants", "Sharpened", "Positioned", "Motivated", as will be shown below.

Networks of business and personal relationships may sometimes overlap, and people will try to make the best for both. When P12 joined Construction Network she had two aims, namely to contribute to other businesses in the network by providing help and seeking guidance, and to enrich her personal network by forming good relationships at a personal level with network participants. For either case, the time needed to reciprocate is important but varies for different reasons, among which the type of people engaged and the purpose of the relationship can be named. She commented:

“[It] was not so tempting at the beginning but by the time passing I started to capitalise on my own business. So you can’t just come for one or two events and you say, well the network is resourceful or otherwise.”

P5 described the Photography Network after being a member for more than 2 years:

“I wouldn’t be in the position I am now if it wasn’t for the kind of networks that I have access to and things like that. I have learnt a lot
from network members... It sharpened my business position...And also looking at how other members do business is important. I’ve learnt from their mistakes...”

P7 from the Photography Network commented:

“Yeah, I wouldn’t say I have access to a great number of networks but the ones that I do have access to, such as this one, I do work a lot with them and, you know, I see that as being a very valuable use of my time to go and do that volunteer work and meet people who work in different areas, implants more value in...”

Participant interaction resulted in several joint ventures. In many cases, they were following successful examples of businesspersons. They also learnt from errors and minimised risks. Interdependent interpretations in this phase included both rational and irrational judgement to adopt an interpretation. In a few instances, participants calculatively evaluated others’ interpretations. Participants made sense of other participants’ reputation and history of “good deeds” within the network.

7.5.3 Phase 3: Materialisation

The materialisation phase is the third phase of the evolution of a network. Participants who shared and contrasted interpretations arrived at a level that crystallised the network’s agency. Without those consequences of network that participants made sense of and capitalised on in their businesses, the agential role of the network would remain imaginary. P17 stated:

“I would not have joined and stayed in this network without seeing this network’s benefits.”

P23 replied to a question of how he evaluates the benefits of a network:
“Definitely, without a shadow of a doubt, my work has improved thanks to Photography Network...yeah, leaps and bounds through Photography Network, through Another Network, I would say probably since 2010 until 2012 my quality of work, I would say, has just flown off the chart”

P26 commented likewise:

“In terms of my own personal assessment of it, I mean I wouldn’t like to think what someone like Lewis [pseudonym] or someone ... or some gallery curator would say about that but in terms of my own personal reflection on my work, the past two years have been, yeah, an exponential increase in the quality of my work and that is directly related to the people that I’ve been surrounded by and the ideas that I’ve been exposed to through the networks, definitely, definitely.”

It must be stressed that the agential role of networks does not mutually exclude the structural characteristic of networks. I believe the two qualities of network (structure and agency) are not mutually exclusive in action, nor are they in theory. To synthesise from the data collected and literature reviewed, I would employ the questions of Elder-Vass (2010) to investigate whether a particular network exercises an agential role. The four questions are “(1) What are the parts, and how are they related, that make up human individuals? (2) How does this sort of structure lead to the powers that they possess? (3) And how is this sort of structure brought about and sustained?”. However, Elder-Vass (2010) indicated the difficulty of ontologically discussing the three questions without understanding the nature of human biology which is necessary for human social functioning, in addition to human behaviour that can be influenced by external forces.

In social systems, structure and agency are looked at as binary settings, i.e they are mutually exclusive (Giddens, 1984). Superiority was generally given to structures where agents understand and freely exercise the rules that the structure diffuses
I believe that network structure and agency are two sides of a coin and they exist at the same time. Structural properties of the network infer the agential properties of the same network to take actions. Participants of network have seen the material face of network through its consequences; i.e. its agency.

7.6 Concluding note

Influenced by the question “Why do organisations join and exit learning networks?”, this chapter aimed to present a new perspective of how to study a network’s agency. Network research has to some extent overlooked the debate of structure and agency. Employing the agential role to networks could provide fresh explanations for network practices and network antecedents. Looking at networks as a form of structure may not reflect the purpose for which networks were created. Networks were created to impact and ignite change and improvement in current business practices. Structure is always perceived as a form that is meant to stabilise more than to change. For example, the institution of marriage was not meant to change but to stabilise relationships. The patriarchal institution was also meant to stabilise (not change) the domination of males.

Structures are static rather than dynamic, otherwise they would not qualify for the name “structure”. While on the other hand, agents are not recognised as agents until they create action through their own free will (such as producing and reproducing meaning and norms); that is the change that will lead to stability. The change might be either progressive or regressive but it seeks to create stability that would cause equilibrium with the social structure. For this reason, a network is closer in its behaviour to an agential role rather than a structure.

The main contribution of this chapter is to suggest interpretation as a device to create network agency through the use of Elder-Vass (2010) theoretical lens of structure and agency in inter-organisational settings. This provides a fresh understanding of how networks work and what networks do in order to work.
Another contribution is not only should we appreciate the agential role of networks, but also we should think of agency and structure as being effective at the same time, with each benefiting the other.

This chapter’s contribution is believed to open the door for more research to study networks and how organisations learn across their organisations, employing the perspectives of the structure-agency debate.
Chapter 8  DIMENSIONS OF RECIPROCAL EXCHANGES

Thesis’s Objective 2

To identify the reciprocal, temporal and agential elements that constitute learning dynamics in interorganisational networks.

Thesis’s Objective 3

To examine how the reciprocal, temporal and agential elements interact to create learning outcomes.

8.1  Introduction

This chapter mainly responds to research questions 3 and 4 (How do reciprocal exchanges between network participants influence the process of IOL? And what are those particular dimensions of reciprocity that relate to IOL?). The chapter aims to present perceptions of network participants on reciprocity in order to synthesise results and provide a holistic view of reciprocity and how its dimensions mediate IOL in networks. I will maintain the order of themes and categories generated through the coding process as headings and subheadings of the chapter to illustrate how the coding processes provided inferential results that better inform on how reciprocity provokes or hinders learning.

Grounded on the data collected, Figure 8-1 portrays a processual space that illustrates how this chapter is structured. Reciprocity has to be defined first in order for its modes to be understood. The modes will inform reciprocity dimensions and as result, the payoffs from reciprocity will be clarified. At the end, this chain of processes informs us on how reciprocal exchanges mediate IOL.
8.2 Defining reciprocity

A summary of how participants defined reciprocity in words can be seen in Table 8-1.

Table 8-1: Quotes from participants' interviews

<table>
<thead>
<tr>
<th>Participants</th>
<th>Reciprocity means</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Give back to society</td>
</tr>
<tr>
<td>P2</td>
<td>Exchange knowledge</td>
</tr>
<tr>
<td>P3</td>
<td>Learn from each other</td>
</tr>
<tr>
<td>P4</td>
<td>Communicate</td>
</tr>
<tr>
<td>P5</td>
<td>Return the gift</td>
</tr>
<tr>
<td>P6</td>
<td>Scratch my back, I’ll scratch your back</td>
</tr>
<tr>
<td>P7</td>
<td>Repayment</td>
</tr>
<tr>
<td>P8</td>
<td>Give back</td>
</tr>
<tr>
<td>P9</td>
<td>Returning gift</td>
</tr>
<tr>
<td>P10</td>
<td>Exchanging experience</td>
</tr>
<tr>
<td>P11</td>
<td>Learn from each other</td>
</tr>
<tr>
<td>P12</td>
<td>Do me a favour</td>
</tr>
<tr>
<td>P13</td>
<td>Repayment in kind</td>
</tr>
<tr>
<td>P14</td>
<td>Exchange knowledge</td>
</tr>
<tr>
<td>P15</td>
<td>Learn from peers</td>
</tr>
<tr>
<td>P16</td>
<td>Mutual interests</td>
</tr>
<tr>
<td>P17</td>
<td>Legitimising my level of knowledge</td>
</tr>
<tr>
<td>P18</td>
<td>Share values and resources</td>
</tr>
<tr>
<td>Participants</td>
<td>Reciprocity means</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>P19</td>
<td>It pays off at the end of the day</td>
</tr>
<tr>
<td>P20</td>
<td>Do what people do to me</td>
</tr>
<tr>
<td>P21</td>
<td>Golden rule</td>
</tr>
<tr>
<td>P22</td>
<td>Learning together</td>
</tr>
<tr>
<td>P23</td>
<td>Recognition of reward</td>
</tr>
<tr>
<td>P24</td>
<td>Reciprocate</td>
</tr>
<tr>
<td>P25</td>
<td>Take and give</td>
</tr>
<tr>
<td>P26</td>
<td>Shared interests</td>
</tr>
<tr>
<td>P27</td>
<td>Circle of trust</td>
</tr>
<tr>
<td>P28</td>
<td>It’s the golden rule</td>
</tr>
</tbody>
</table>

Table 8.1 shows how interviewees defined reciprocity. It can be noticed that the majority declared it is as an exchange of knowledge or learning from each other. The definition exemplified how participants believed in reciprocity and accordingly they may behave in such a way that adheres to their beliefs (Uehara, 1995).

### 8.3 Motivation by reciprocity in networks

When I asked interviewees why they joined their networks, I aimed to understand the way they understand and conceptualise reciprocity. My attempts to investigate how interviewees define reciprocity stemmed from efforts to understand how reciprocity can play an important role in IOL. This section was mainly informed by Gouldner’s (1960) definition of reciprocity.
Figure 8-1: How reciprocity implicates IOL

- **Definition**: How participants define reciprocity informs on what mode of reciprocal exchange they adhere to.

- **Modes**: The mode of reciprocal exchange can be better understood through application of dimensions.

- **Dimensions**: The result of studying dimensions informs on what payoffs satisfy participants.

- **Payoffs**: Payoffs that participants "expect" inform how they will behave in a social exchange.

- **Exchange**: The reciprocal exchanges inform how IOL occurs in networks.
Grounded on the extant literature on reciprocity, it was possible to observe the burgeoning debate and/or ambiguity concerning the concept of reciprocity. This ambiguity was clearly observed in the empirical evidence from interviews where interviewees’ perceptions of reciprocity were various and in turn consistent to some extent with the literature. This would invoke further debate on (1) the feasibility of demarcating reciprocity apart from complementarity and altruism, and (2) the feasibility of reciprocity if networks can run in alignment to processes of learning within an inter-organisational setting.

A summary of categories and codes of this theme are listed in Table 8-2. The categories depict how codes instated the definition of reciprocity.

Table 8-2: Description of Reciprocity Theme

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Sub-codes</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Definitions</em></td>
<td>as Norm</td>
<td>Is reciprocity always good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emotional obligations</td>
</tr>
<tr>
<td></td>
<td>as Folk belief</td>
<td>Old belief in reciprocity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inherited from family</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gift exchange</td>
</tr>
<tr>
<td></td>
<td>as Transactional patterns</td>
<td>How people reciprocate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tit for tat</td>
</tr>
</tbody>
</table>
The following quote is from a member of the Photography Network (P1), who explained why he joined the network and decided to volunteer as a network administrator:

I used to join my father when he went to [.....] network. I’m quite lucky that both my parents work in the media. My father is an editor of a newspaper and my mother is a writer and so I did some kind of collaborative work with my mum. We did some stuff together and then through connections that both my parents had, I started to meet other people who were photographers.

P1 is very enthusiastic about this network. This was not the only network he had joined, as he had joined a mix of networks in Northwest England. Those networks focused on photography and film production. He commented:

Yeah, I wouldn’t say I have access to a great number of networks but the ones that I do have access to, I do work a lot with them and, you know, I see that as being a very valuable use of my time to go and do that volunteer work and meet people who work in different areas.

Although the main drive to networks was following in his father’s footsteps, the transactional pattern was evident in P1’s attitude towards reciprocity. He volunteered but after a certain period of volunteering, he felt slightly disheartened because of the lack of material gift (economic reciprocity). He commented:

... I was beginning to get a bit disheartened with it. I was doing lots of volunteer work and didn’t seem to be getting anything back but then last year they commissioned me to do some photographic work for them.

Folk belief in this case institutionalised the feeling to reciprocate because of the belief that this reciprocation is certainly returning “things” to the person who initiated the relationship. If this circle of reciprocation is broken, the belief in this
reciprocity may deteriorate. As Hyde (2006) puts it, “every gift calls for a return gift”. He started to get work out of the network after one year but over time, he again felt frustrated. Despite the efforts he put into the network, the returns he obtained were marginal compared to what he thought he had put into the network. In one of the instances, when P1 was commissioned a contract, he was not satisfied. His reciprocal expectation was snowballing from accepting small contracts to seeking bigger contracts over time. Throughout the interview, it seemed that P1 was defending his position of appreciating reciprocity as a system of life. He first explained that he waited so long until he got paid work from that network, then he tried to show he had networked for voluntary purposes and he insisted that money was not important in many instances.

P2 kept assuring of his belief in reciprocity in different ways and at different times of the interview. He first commented:

*I’m very much a, er, photographer who likes to give back to society.*

In his photography, he felt he did more for society and his eagerness to reciprocate with people indicates an everlasting sense of gratitude towards the society in which P2 lives and a feeling that it has given him many beautiful things.

He later commented:

*I’m probably an individual who’s hungry for knowledge and wants to do something with that knowledge but wants to offer it back to everybody else.*

P2 defined himself as an individual who is "hungry for knowledge" which was a main driver for him to join networks and look elsewhere to acquire knowledge. He wanted people around him to benefit from the knowledge that he had acquired. The hunger for knowledge indicates how P2 looks at himself as an individual who is
becoming rather than being, who is learning all year around, which mirrors his belief that networks are not place to retain knowledge but rather places that diffuse and generate knowledge (not circulating). This perception looks like a widening spiral movement where the knowledge is increased when it is shared. In this regard, P2 commented:

_You know I’m a great believer in that if you can multiply it by five, ten times, you’ve maximised the opportunities and that you’re sharing with the community so ... and I do learn a lot from my own networks, whether that’s outside work or inside work._

In this, P2 gives his knowledge away to the network and what he receives are two forms of payoff: (1) more knowledge and (2) gratitude. It could be either or both that P2 receives from this network. This sometimes depends on the nature of the knowledge exchanged, the nature of the network, and the personalities of the people inside this network and their personal or group expectations.

During an event at the Photography Network in Liverpool which I was observing, an artist was a guest speaker and spoke about her oil painting that demonstrated the post-industrial landscape in Scotland. After she had finished narrating on her art, she asked if anyone was interested in asking questions. Almost no one raised their hand among the 23 people who gathered to see the artistic work. Out of the crowd, P3 raised his hand and asked a question which – to me – seemed very obvious that a photographer would not ask. In the interview, 1 week after the event, I asked P3 why he asked the question, and he replied:

_I have no reservations about asking questions. I do it for the spirit of adding to the event._

P3 has a company that specialises in event photography. He used to be a police officer and decided after retirement to start an entrepreneurial business in photography. He formerly used a camera since he was young; however, he stopped
using it from 1985 until 2004 when he started his photography business. He discovered that he knew almost nothing about photography due to the huge development in IT and cameras in this period. Therefore, he decided to increase his knowledge in his field to compete with existing businesses. He joined many networks to learn new techniques and hints. Social norms may sometimes mandate that people reciprocate. In his case, he felt an emotional obligation towards the artist when he noticed that no one had asked questions, in addition to his eagerness to brainstorm the Questions and Answers (Q&A) session after the event.

When P16 was asked why she is connected to two different networks, she replied:

“It is my commitment to my community. Networks are .. a place where you can exert efforts in, and this enriches the give-take thing...and I do learn. I knew nothing about Aperture Priority before joining the network. It took me shorter than I expected to learn how to set a large aperture to create those creamy smooth backgrounds if you like…”

P16’s moral belief revolves around charity. She strongly believed that returning a gift to the community gives more than she takes which reflects what (Uehara, 1995) concluded; people whose moral belief praises reciprocity are more inclined to favour under-benefiting over either equal-benefiting or over-benefiting. P16 was eager to give back to society, both emotionally and economically. P16 found networks to provide a hub for knowledge exchange that could benefit herself and her organisation (Dyer and Nobeoka, 2002).

P28 from the Photography Network, who runs a small photography company that works nationally and internationally, is a business owner who abandoned photography networks. Thus, P28 has had a contrasting point of view to P2. P28 believes that networks do not benefit him. P28 said:
“I am not interested in talking to people that know less than me because my intention is just to learn. I just want to be a better photographer.”

Initially, interviews indicated that trust amongst network members was greatly influenced (negatively or positively) by reciprocal exchanges. When network participants trusted each other, they were more likely to contribute to the network (e.g. P2 and P4), while on the contrary, and when trust faded out, network participants were less likely to contribute (e.g. P28). Reciprocal exchanges were important to build up a trust profile, although in some instances this failed to materialise because of other factors such as power differentials. It is a two-way relationship between trust and reciprocal exchanges, i.e. social interaction builds up reciprocal exchanges, reciprocal exchanges build up trust and then trust strengthens social interaction.

The Photography network reflected reciprocal exchanges that were the fuel for network dynamics. Participants joined networks to reciprocate with their peers or colleagues with knowledge sharing being the main goal. In some instances, participants reciprocated with the intention to obtain more information about a specific subject from their counterparts, while others refused to reciprocate because of different power levels (i.e. hierarchical organisational levels).

P12 joined the Health Network to participate in the production of a genetic research based product. She said:

“Yeah, I like the network as we .. we produced a different product which I see is great.. We have huge demand and sales increased beyond levels… (Laughing) Ladies are loving our products. …. But was particularly concerned as one of our team members was that type of silent guy. He does not share what he has in his head.. He listens carefully but never spoke to me or.. I feel intimidated now to tell him things I value about my
work. Had he shown an attitude of sharing his experience with us, I’d have loved to discuss many important topics in genetic research...It’s just. it’s just not fair! Yeah..”.

The situation in the Heath Network is different from that in the Photography Network. At the early stages of data collection, my thinking was in line with the positive reciprocity conception in the Health Network (i.e. participants always positively reciprocate), but I remained open to the potential development of this way of thinking as the data were collected. Subsequently, as data collection was rolling, my thinking was challenged when some participants felt reluctant to reciprocate in a network that was purposefully dedicated to produce a common goal. This called for different questions such as why would a participant not reciprocate in an environment grounded on reciprocation?

The abovementioned question inspired another fundamental question: “Is reciprocity always good in networks?”, which challenges the taken-for-granted assumption that reciprocity is always good. The literature on reciprocity suggested that there is an expectation of receiving benefits and not so much on giving benefits. This thesis does not challenge the status quo but it elaborates on what constitutes reciprocal exchanges. The findings show asymmetries of expectations in terms of what reciprocity means. These asymmetries can go some way to identifying why some reciprocal exchanges work where others fail. This will be discussed in detail in Section 8.5.

8.4 Typologies of reciprocity

The way interviewees conceptualised reciprocity is important in understanding what type of reciprocity they deliberately or unintentionally favoured. In examining the typologies, I focused on the directionality of reciprocal exchange; i.e. direct or indirect reciprocity because inferential results indicated its importance in understanding learning while other typologies such as positive or negative were
observed less in the data. Inferential results showed that IOL results vary with the type of reciprocity that network participants naturally adopted. Participants who perceived fewer learning outcomes from networks where those who appreciated direct reciprocation. Participants who perceived more learning outcomes from networks tended to appreciate indirect reciprocation. For example, P9 commented:

*With all of these things, as I kind of think with networking, it’s a very kind of slow process and I don’t think you should ever kind of expect instant returns if you know what I mean.*

P9 expressed his perspective on reciprocity that appreciates indirect reciprocal exchange as what binds communities and maintains the circulation of benefits. P9 has spent more than 2 years volunteering for three media networks. He did this for charity reasons in the first place, but in the shadow of this voluntary work, he was hoping that he would learn from those networks to improve his growing business in film production for children. He joined three networks thinking that “[…] someday, it will pay off”.

P16 owns a small consultancy firm. Her network is a group of businesses with which she engages as a consultant with her associates. This is a kind of informal personal-professional network. When those organisations within her own personal network have some work, they call her in to check her availability to take over. P16 expressed that she felt the isolation of being confined within the walls of her firm all day. However, she sees this as good, although it was not deliberate, but she tries to keep this balance of being confined in industry and connected to academia and practice by engaging with universities. She provides consultancy to student services in terms of enterprise, and joins networks of the profession and subscribes to weekly or monthly professional journals to stay up to date with industry norms.

P16 expressed her appreciation of indirect reciprocity over direct reciprocity. She commented:
“It is also happy for me to think about other events and opportunities that come up. There is a seminar on basket weaving next month, and it is free and I am free and I can get to it, great; is it worth my time going there though. It may not cost me any money and there may not be anyone offering to pay me money in the meantime, but it is still a cost of time and that’s a key learning of the issues of learning as a business, is the time it takes within it. So those are the five structured ways that I do my learning as a small business…”

In this sense, P16 is proactive and goes to networks expecting not to get a job from the "first glance". She engages with the network and is still unsure whether it gives her the opportunity to obtain a contract. She is equally open to the direct and indirect payoffs of joining the network. Although she prefers free sessions or networks, she believes it is not the money that she pays, but that she pays with her own time. This reminds us of the exchange theory in which people may exchange material with non-material gifts. The asymmetry of benefits here is well voiced as the expectation on the grounds of indirect reciprocity is quite promising for P16.

Revisiting the indirect reciprocity literature gives us an opportunity to learn how people reciprocate and why they do so indirectly. The main reason for indirect reciprocity is the feeling of indebtedness rather the indebtedness itself. P16 felt that she benefited from many people elsewhere, so she wanted to pass these benefits on to others in this network because she felt gratitude. She commented:

\textit{Ok, the intellectual property stuff, partly, but then maybe I take a far too radical or enlightened view or foolish view, which is that I recognised I have benefited a lot in previous years from people freely giving their time and knowledge to me and sharing their own experiences and learning and that’s benefited me and the organisations I’ve worked in a lot. It is a nice way to pay it forward; it helps the universe keep moving, oils the wheels of the world a bit more.}
P16 thought of the system as a whole, within society. Therefore, the way to make this society willing and able to live was to keep fuelling it by sharing knowledge through indirect reciprocation. In other words, society cannot evolve unless its basic building blocks (people) go forward (Homans, 1961, Blau, 1964). The micro level reciprocal exchange is the wheel that keeps the macro level reciprocity in motion.

8.5 Dimensions of reciprocity

The move from typologies of network into dimensions is quite important for those typologies of reciprocity that require framing within an encapsulating framework that explains how those typologies mediate IOL. The framework presupposed that reciprocity could be better understood through its dependencies, which provides a theoretical space to link each of those dependencies with learning. To provide a wider understanding of reciprocity, stemming from the research questions I propose four dimensions of reciprocity, which are temporal dimension, spatial dimension, directional dimension and symmetrical dimension. Those dimensions will mark the framework that sets the boundaries of how reciprocity contributes to IOL in learning networks.

8.5.1 Temporal Dimensions

From the extant literature on reciprocity, it was possible to observe the burgeoning debate and ambiguity concerning the concept of reciprocity. This ambiguity mainly stemmed from dealing with reciprocity as a taken-for-granted social norm. Empirical evidence from the interviews and interviewees’ various perceptions of reciprocity tends to clear up ambiguities. Analysis of the interviews reveals a number of key findings. Taking into account the various statements made by interviewees, it seems reasonable to induce a three-dimensional temporal framework that is composed of duration, timeliness, and timescapes (Berends and Antonacopoulou, 2014) that is necessary to study IOL in networks. The focus of the extant literature is on the determinants of reciprocity (e.g. social settings, power
differentials, negative and positive reciprocity, building of trust profile, social history) that can render reciprocity as detrimental or an accelerator to knowledge sharing and sustainability. We propose the 3D temporal framework as a complementary approach to study reciprocity and its detriments in the learning environment. The temporal framework is explained below:

8.5.1.1 Duration

The prominent research on direct reciprocity as a norm indicates that reciprocators receive benefits in the short term from the same person they have already benefited (Gouldner, 1960). On the other hand, the notion of indirect reciprocity suggests that benefits may be received in the long term either from the person who benefited previously or from another who has never benefited from the reciprocator (Boyd and Richerson, 1989, Nowak and Sigmund, 1998, Phelps, 2013). In this regard, P17 commented:

To be honest, I tend to know what kind of network it is. And.. that’s important. You don’t want to put your effort into a new baby network. So I do a bit of Google homework on the network and see if it avails...the problem is that with less time and much work, I wouldn’t waste my time and of course my family time going to networks on weekends that will not add to my skills.

P17, who was a network member of the “Photography Network”, linked time to both work and family and so he referred to them as time gauging machines. He rejected the opportunity to join a newly established network. He stressed the importance of the network being a well-established network in order for it to benefit members. From a linear time point of view, the Photography Network was not a new one as it was established in 2008 (4 years ago at that time). Taking the dichotomy of direct and indirect reciprocity perspectives, P17 had a thirst for establishing good connections with network participants in order to be able to advance his knowledge and experience. He expected the return of his contribution
so soon that he could no longer wait for it and consequently left the network. In this sense, the network was not new, but what was new was P17’s engagement with the network. He explains this as follows:

*It is not a matter of whether I like or dislike the folk. [but] I felt the knowledge and my experience stories that I shared with the group is.. are going nowhere. I invested quite a sufficient amount of time in the network...but.. [Everyone] looked like they’re waiting for me to spell knowledge out. You can’t do that, right?.... if this was an established network, professionals, and you know... this network would not dig a hole to Australia. ..erm professionals would dig it right.*

It was interesting to explore what sufficient time meant to P17, who explained:

*It is [the time] that makes me [get] immersed into the network and receive a satisfying amount of knowledge.. It is building your knowledge block by block.*

For P17, sufficient time meant two months from joining the network. When we asked another network member, P6, about what sufficient time to learn from this particular network meant to her, she replied:

*I’ve joined this network a couple of months ago, and I will wait to see if it will get me somewhere...I can see through .. this network is promising and I know that I wouldn’t be able to judge cost effectiveness before at least one year fades...*

For P6, sufficient time meant 12 months. Through observing the network, I have also noticed that other interviewees from the same network varied in their perception of sufficient time. This variation informs us on why certain people may learn from a particular network while others may not although they have shared
the same resources, the content of learning was distributed fairly and the means of reciprocal exchange were evident. P17 explained that his organisation was short on time to implement a public relations project and he needed to speak to other professionals in the field. P6, on the other hand, joined the network to obtain connections and learn about “new stuff”, and therefore he was comfortable with time.

The importance of the time dimension in our research comes from those two concepts of reciprocity. Indirect reciprocity may require longer to actualise than direct reciprocity. For network participants, it was an acceptable means of direct reciprocal exchange if they discussed a specific subject. Few of them accepted that organisational gains could be achieved from outside the network they joined. The variant views of interviews and observations are documented in the matrix in Table 8-3.

Table 8-3: How learning is influenced by temporality (Sufficiency of time)

<table>
<thead>
<tr>
<th>Intra-organisation</th>
<th>Inter-organisational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less time</td>
<td>Less time</td>
</tr>
<tr>
<td>Inefficient (Box 1)</td>
<td>Semi-efficient (Box 2)</td>
</tr>
<tr>
<td>More time</td>
<td>Inefficient (Box 3)</td>
</tr>
<tr>
<td>Efficient (Box 4)</td>
<td></td>
</tr>
</tbody>
</table>

Box 1 “less-Intra less-Inter” rendered an inefficient temporal environment for learning. When the time was not sufficient in either the organisation or the network, participants gained less from the network. When the time was
compressed in both environments, participants had less appreciation for learning and behaved in an opportunistic way as “free riders” in the network.

Box 2 “less-Intra more-Inter” was a semi-efficient environment for learning because participants indicated that they benefited from the network because they felt attached to it despite the compression of time in their organisations and therefore they contributed more to the network, resulting in more learning outcomes for them.

Box 3 “more-Intra less-Inter” rendered an inefficient environment for learning due to lack of attachment to the networks. Despite the appreciation of time in the organisation, observations and interviews with participants indicated less appreciation of the importance of the network for them.

Box 4 “more-Intra more-Inter” was the most efficient learning environment. Participants felt the appreciation of time because organisations supported this, which caused them to be more attached to the learning objectives set by their organisations. The abundance of time in the network again increased attachment to the network and provided room for more relations to be built.

8.5.1.2 Timeliness

The importance of time in which reciprocity can occur and learning can advance can be noticed in what P2, a member of the Photography Network, explained about his experience with the network and what reciprocity meant to him:

*I’m very much a believer in ... learning just doesn’t take place within a time and space. I’m very much [of the opinion] that the stimulus can take place in its time and space but the experiences afterwards augment that experience. So, for example, individuals may have a teaching session in the classroom and again a lot of material from that classroom, they take*
a lot things into the knowledge in that area but then afterwards it’s what
they do subsequently afterwards, engage with other people to talk about
subjects and materials to make a deeper understanding about what it
means, etc., and the learning ...

It can be noticed that P2 split the time of the experience into two parts. The first is
the time where the experience occurs in real time and the second is where network
participants tend to reflect upon that experience. In the reflection event,
participants stepped back to think about what they had done, how they had done it
and what they could have done better (Cope, 2003, Gray, 2007). However, the
experience is taken out of context (Marx et al., 1938) and this suggests it is
important that the gap between the occurrence and reflection is not too long in
order to keep the sense of such an experience fresh. P12 joined the network to
reflect upon his past experience and listen to new experiences. In the 10 events I
observed, I noticed he was interested to see what other participants think about his
experience in photography and how they would incorporate it in their media
projects. P12 found networks to provide a hub for knowledge exchange that could
benefit himself and his organisation (Dyer and Nobeoka, 2002, Javernick-Will, 2011,
Prusak and Borgatti, 2001).

We asked the same question to other interviewees. The following quote is from
P14, who is a member of the Women’s Network:

yeah if I hadn’t been redundant I don’t think I would be doing what I am
doing now aah...because I think sometimes you get a bit secure in what
you are already doing, that you are afraid to leave because you can’t...
We [build] more contact with the people and new businesses as well. I
decided to join this network cuz I .. I don’t copy people, what the idea is
in the techniques, it’s the techniques that are manipulated into your own
design, especially when you are making jewellery.
P13 established her jewellery business in 1997 and she has 12 designers who work from home and meet up regularly as teams are set up to carry out some projects. Her business had a problem marketing their products worldwide. She wanted to enter new markets in the Americas, but she faced challenges and she was seeking advice from marketing experts who may be network participants. AD was at the time experiencing the problem that she wanted to overcome, as she had some customers from Guatemala and Honduras and thought she must accelerate market entry to the Americas.

From the interviews and observations, we concluded that timeliness appeared in the three networks as shown in Table 8-4 below:

Table 8-4: Correlation between reciprocal exchange and dynamics of IOL in a timely manner

<table>
<thead>
<tr>
<th>Mode of timeliness</th>
<th>Pre-incident</th>
<th>Within-incident</th>
<th>Post-incident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of reciprocal exchange</td>
<td>Indirect reciprocity</td>
<td>Direct reciprocity</td>
<td>Indirect reciprocity</td>
</tr>
<tr>
<td>Dynamics of IOL</td>
<td>Explorative</td>
<td>Exploitative</td>
<td>Explorative</td>
</tr>
</tbody>
</table>

Table 8-4 portrays the correlation between types of reciprocal exchange and the dynamics of IOL (Holmqvist, 2003). We identified three modes of timeliness that organisations are prone to follow in their pursuit of learning avenues. In “pre-incident learning”, organisations join networks to explore opportunities from the network, where indirect reciprocation is more prevalent, i.e. they do not expect quick payoffs. In “within-incident learning”, organisations join the network because they face a challenge that they need to overcome urgently, which makes their learning behaviour exploitative and as such, they wait for direct payoffs of their contributions to the network. In “post-incident learning”, organisations who have experienced a problem recently seek to reflect upon those problems collectively.
8.5.1.3 Past, present and future

Inferences from the data collected conceptualised the phases (timescapes) of time as past, present and future (Berends and Antonacopoulou, 2014, Jiang et al., 2013). Drawing upon the work of Jiang et al. (2013), network participants have necessarily temporal perspectives, which marks the temporal trajectory on three sites; the past, the present, and the future. For Heidegger, those three temporal sites are indicative of ekstatic temporality, namely: (1) the past as “thrownness”; (2) the present as “immersion”; and (3) the future as the “possible”. Future is the temporal place where organisations can see the benefits of the present. Jiang et al. (2013) stated that “we are creatures of the ‘possible’”. In other words, network participants own the future of the network. We have summarised our inferences under temporal phases in Table 8-5.

Table 8-5: Timescapes; Past, Present, and Future

<table>
<thead>
<tr>
<th>Time phases</th>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How organisations position themselves in a reciprocal exchange in a network</strong></td>
<td>Organisations position themselves in a network based on their past experience with networks.</td>
<td>Organisations position themselves in a network based on the dynamics of interaction and level of engagement in the network.</td>
<td>Organisations position themselves in a network based on futuristic expectations from this particular network.</td>
</tr>
<tr>
<td><strong>Dynamics of IOL</strong></td>
<td>Dynamics of IOL</td>
<td>Dynamics of IOL</td>
<td>Dynamics of IOL</td>
</tr>
</tbody>
</table>

Table 8-5 illustrates how organisations position themselves in a network from a temporal perspective. We believe splitting time into three phases enables us to see how organisations reciprocate from a micro level of time which also allows us to see how learning is influenced as a consequence. The relationship between past,
present and future is socially embedded (Langley et al., 2013) while it is
intersubjective in (Bergson, 1913) and (Kaplan and Orlikowski, 2013). Adam (2000)
earlier noted that organisations and individuals live in a past, present and future
continuum as an atomistic entity once and as a social entity. Looking at the past and
finding unusual experiences marks such experiences as landmarks in the history of
the organisation or individual. However, Tsoukas and Hatch (2001) argued that for
organisations to make sense of such experiences, they need to ascribe meanings to
them. Individuals of those organisations may have different interpretations of those
experiences which provides fresh concepts every time those individuals look back to
their past. For this very reason, Garud et al. (2011) argued that it is important to
determine similarities and irregularities of those experiences to cultivate
mechanisms that will enrich the organisation’s present or future.

8.5.2 Spatial Dimension

The importance of space for reciprocity to occur and for learning to advance can be
noticed in what P2 (previously quoted in Section 8.5.1.2) mentioned about his
experience with the network and what reciprocity meant to him, as shown below:

I’m very much a believer in ... learning just doesn’t take place within a
time and space. I’m very much [of the opinion] that the stimulus can take
place in its time and space but the experiences afterwards augment that
experience. So, for example, individuals may have a teaching session in
the classroom and again a lot of material from that classroom, they take
a lot things into the knowledge in that area but then afterwards it’s what
they do subsequently afterwards, engage with other people to talk about
subjects and materials to make a deeper understanding about what it
means, etc., and the learning...

For P2, the two dimensions necessary for learning are time and space. The time that
a network participant dedicates for networking and drawing upon what was learnt
from the network depends on how that member looks at time. Likewise, space is
also important and depends on how the member feels towards space. According to P2, indirect reciprocity may occur outside of the time and space of the network when members reflect upon what they have learnt. For him, space is important in that one space may provide the grounds for learning and another for reflection, as the two processes require time, which cannot be achieved in one single space taking into consideration the short time of a network session. As such, one could argue that the network extends its time beyond that of the duration of the network session and transcends the space as well. The theoretical underpinning of indirect reciprocity stresses that it occurs through a different party than the one being reciprocated to.

P2 first joined the Photography Network and he was so committed that he attended regularly and sometimes arranged events. He learnt new techniques and sent back his newly acquired knowledge to his business partners. He, however, was a university lecturer. When he noticed his students struggling in some subjects, he decided to establish a new network similar in principle to the photography network. The purpose of the new network was to help students communicate and share their experiences and also overcome difficulties they faced in the module he taught. In this sense, he learnt something from a network and disseminated this into another network. The multiple spaces that he occupied as a university lecturer and photography business owner seem to have demarcated two spaces for learning and dissemination.

P25 commented:

*Facebook is like, see what she is doing, what she is working at now, yeah and on Twitter, what conversation, what are they talking about, let me have a look, it sounds interesting, it could be something on telly, it doesn’t have to be about work, you have to be, Twitter is somebody explained something one day and I thought, yeah its exactly like how it is like being at a party, you can either be the pushy one or you could be the*
one that stands at the back of the crowd and does not interact, or you can interact but not be pushy and I think I’m that one, because I don’t go, I’m not on all the time, If I see something, then I join in the conversation, and that’s how you get to know people.

P19 does her work from home but in such a way that both home and work retain their separate places. Her house is used only to receive calls from people who want to hire her as a therapist, then she goes to the client's place. She is keen on the demarcation of boundaries between home and work. She keeps the space clear for each one. Janet commented:

I work from home, and on the side when I’m doing my treatments I work mobile so I have treatment in the back seat of the car and off I go, and turn up and do my bit, and back home again, but yeah, I took that choice because some people do you know work from home, kind of like that. For me my home is my home. You know kind of why we meet here is not because I haven’t anything to get to, but it’s like my home is my home, that’s my personal life. Business is done outside.

Many businesses use the online and offline networking hubs interchangeably or complementarily. P10 mentioned that he was engaged with a network in a University that is based on online interaction similar to LinkedIn groups. However, the network would also offer the opportunity for people to meet up physically 2 or 3 times. This combination was important to build up a stronger relationship. In other cases, some businesses may not feel comfortable communicating in a learning network that is solely based on the internet. This setting gives those types of organisation and/or individuals the opportunity to have online and offline interactions to meet their expectations and keep them somewhat in their comfort zone. P10 commented:

Other networking things, the one that I'm involved with at the moment through [XYZ] University (pseudonym) in terms of enterprise learning,
where the bulk of the deployment of certificates are delivered online, it is all online learning. There are 2 or 3 opportunities for learning enterprises to meet together physically in between but the bulk of it is the relationships are being built electronically with each other, so learning that way is kind of like a LinkedIn discussion group, which is fine but not all businesses or IT are engaged in that way, and some don’t want to be, so as a result there needs to be facilitation for those more virtual learning networks, someone to be constantly moderating the groups to be chipping in to say what’s the issue you’re facing at the moment, and in between contacting people directly by phone or by email, to say haven’t seen you in that forum for a while, is everything okay, to kind of manage it artificially, some kind of enterprise works for learning very well, they come to themselves organically and have seen the benefit and there has been some catalyst of an event where it is going to be done because it’s easy and they’re able to do it.

The nature of interaction on online forums is under question. The reason is that the online presence has given network participants discretion over whether they will show up or not, more so than a physical network does. For example, a network participant appearing as online in the internet group does not necessarily mean that he or she is engaging. The probability that a person who attends a network to participate is higher in physical networks than in online networks.

P22 is a trainer and consultant in business communication who runs a small business for this purpose. His business is solely based on a storytelling technique that helps organisations to present their business better and in a way that grabs the attention of potential customers or collaborators. In his business, he runs sessions for storytelling so that organisations share their experiences and knowledge repositories. P22 believes that large organisations do better than smaller ones in networking. Based on experience, his perception is that those small organisations
find it difficult to attend or join networks because they do not have the money they have to pay for membership of those networks. P22 commented:

*Beyond just facts and what’s being told, so that’s the kind of work we do and it started off where we worked with a lot of smaller businesses. I think any business can get started in this field. You have to use the smaller end of the SME market and where networking is very accessible to almost all of your apprenticeship, it’s where you develop your craft in you, you know you are applying and developing some of the theories, and after a while we realised that the work we were doing would have greater value in a bigger organisation, because it’s the same kind of work but the difference that it makes in the bottom line, is much greater in proportion to the size of the business. So you know we can do a piece of work for a company with five employees, but it will be very difficult for them to pay a significant amount of money for it, because he is not asking... he is making that much difference of dollar value of the business.*

The idea of moving from a small business network to a bigger business network goes back to spatiality. P22 has made a clear distinction between two spaces in which an organisation is willing to invest. One is small business networks where they are more accessible and the second is bigger business networks where access becomes more difficult. Each network has its own particular settings. In the space of small business networks, knowledge could be easier to share as “*those 70 or 80 businesses sat in a room and talked freely about their businesses*”, as P22 explained. In fact, it is not clear whether knowledge is easily shared, because some small businesses are more reluctant to share knowledge that poses a threat to their very identity or growth.

P22 considered moving between two spaces a challenge. The different spaces impose their own structures of rules which have a direct impact on reciprocal
exchange. Payoffs in a small space differ from those in a bigger space according to P22. In smaller spaces, organisations are more prone to reciprocate because of the short distance between the two organisations; an exemplification of the short distance of a tie between two nodes on a social network analysis plot. Therefore, the space is important for deciding how reciprocity is played out. The structure of that space or the social identity of the space is also important according to P22’s comments, where he felt more informal with a small space than he did with a bigger space. This, however, does not inform us about how the space works if those small and big businesses meet on the same field.

Formal structures were put in place to organise the space and settings of the network, but revisiting what P16 said previously, we need to be a little careful when dealing with formal structures, for the purpose of formality is not to organise the space but to organise how people should reciprocate more effectively and reflect upon what they have learnt. This was also evident in P22’s comment that formality is essential to "thrill the people in the room and let them get on with it". P22 expanded:

> When we decided that we wanted to work with bigger organisations that can kind of do networking... So we’re now trying to find more opportunities to network at different levels, I mean in larger companies and that is a bit tricky because there are lots and lots of readily accessible small business networking events, the big ones it is a little bit harder to find and they can tend to be very costly as well, so they may say well look you know we got dinner is 20 or 30 pounds and a lot of small businesses like us you know to pay 20, 30, or 40 pounds for a lunch or 75 pounds for a dinner to meet the business is not a thing that we can do, that offer.

Another form of the blurring boundaries between the online and offline worlds is exemplified in P25’s comment:
“..And the other thing that has happened as well on Twitter is people who’ve never met will actually create a meeting called a Tweet up. ..Yeah, so you can actually get to know people, so you can say, oh there’s a meeting in such a place, in such and such a time, and I can say oh I can come on that day, you know I’ll go meet them, it’ll be nice to meet all the people and it is great because you get to physically meet someone, even though you know them online.”

She finds it interesting to meet up physically with people she knew on Twitter through the "Tweet up". The Space is two dimensional in this situation where one dimension is the online space and the second dimension is the physical world. P25 is ambidextrous when she uses the two spaces to maximise her benefits from networking.

8.5.2.1 Online versus offline spaces

From the data collected, theoretical explanations are offered as to how space mediated reciprocity in IOL. The interviews resulted in summarising three main issues related to IOL in networks; namely learning dynamics, access to knowledge, and knowledge retention. Observation provided a wider space in which to understand how the three issues interplayed with online and offline spaces as shown in Table 8-6.

Table 8-6: Online versus offline spaces

<table>
<thead>
<tr>
<th>Online</th>
<th>Offline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Online</strong></td>
<td><strong>Offline</strong></td>
</tr>
<tr>
<td>Slower learning dynamics</td>
<td>Faster learning dynamics</td>
</tr>
<tr>
<td>Easier access to knowledge</td>
<td>Easier access to knowledge</td>
</tr>
<tr>
<td>Less knowledge retention (Box 1)</td>
<td>More knowledge retention (Box 2)</td>
</tr>
<tr>
<td>Faster learning dynamics</td>
<td>Slower learning dynamics</td>
</tr>
</tbody>
</table>
| Difficult access to knowledge | }
In Box 1, IOL was fundamentally based on online space (e.g. open and closed Facebook groups). Observation of 3 Facebook groups revealed that learning dynamics were slower. Interviewees from those groups indicated that their Facebook interaction with friends while engaging with Q&A discussions in a group distracted them. PO7 commented:

*It’s useless. Had my line manager not asked me to join the group, I wouldn’t have done that. The Danish company insisted that we use the online forum thing to document the solutions we provide. For the documenting erm it’s it’s awesome. Everything is written down although I prefer to speak rather than write, but it’s a really good way. But I don’t feel comfortable to provide a solution for a camera’s shutter on a Facebook group!*  

Another participant, PO8 said:

*The more we write on, the less we remember! Hahah (Laughter). I just think if I sit with you over a cup o’ tea, it will feel more comfortable to learn from each other. I’m a good teacher over a cup o’ tea! Haha (Laughter).*

In Boxes 2 and 3, where emphasis on both online and offline spaces is like that in the Women’s Network, participants were more comfortable with the spatial blend. The online space offered them the width and breadth of engagement with wider connections. P2 uses social networks in order to reach as many people as possible. He aims to show them his photography art in addition to sharing with them the experience he is living when he uses his Smartphone to upload photos immediately.
He considered this as an announcement for his friends to come over to take pictures if there was an event that looked interesting to him. However, P2, on the other hand, admitted that online networks decreased people’s interest in face to face networks. He mentioned the Photography Network had been shrinking over the ten years he had attended, and that the number of members had decreased from 22 to 12.

Subrahmanyam et al. (2008) indicated that online and offline presences are linked to each other. P28 and P27 both have their own Facebook and Twitter accounts in addition to their firm’s account. They also have the website of their firm. They use social networks to show their work and learn from other professionals. They rejected the idea that social media is replacing networks and they concluded that searching for a solution for a technical problem “will never be found on Google”, it is inside the people, and that is why they meet up at weekends to discuss for hours what they faced in photography and experiment with new techniques. Online and offline were used as complementary spaces where one provides a space for knowledge storage and easy access while the other is used for knowledge retention and faster learning dynamics.

In Box 4, where emphasis was put on offline interaction (i.e. face to face), learning dynamics were slower than they were online. Access to knowledge was more difficult because it is retained within organisational boundaries or in people’s heads.

What was important to recall for consideration of the spatial dimension in reciprocity and IOL is that space is “socially produced and socially producing” (Beyes and Michels, 2011). In this sense, the seminal work of (Lefebvre, 1991) on space indicated that space is produced in the following order: (1) representations of space (conceived space), (2) representational space (lived space) and (3) special practices (perceived space). That puts under scrutiny the three IOL issues explained in terms of spatiality (Table 8-6). For example, participants from the online space may try to
enact norms of online interaction onto the physical world and vice versa. There was an informal chat with an interviewee who told an anecdote about a little girl at Heathrow Airport trying to tap, zoom in and zoom out a paper flyer on a bulletin board. Participants conceive the space according to their level of interaction with the space. In this vein, IOL is mediated by a conception responding to spatial tensions of participants in a process that results in an interplay between practices that are incorporated and then inscribed (Edenius and Yakhlef, 2007). That said, IOL starts with conceiving the space and ends with inscribing the practice, which again represents (Lefebvre, 1991)'s trio of stages.

Whereas the extant literature focused on appreciation of tensions between physical space and social space, tensions between online space and offline space are not much different, but what is clearly calling for attention are two facets, namely (1) the contrasting natures of both online and offline spaces, and (2) the blurring borders between them. The extant literature focused on the social construction of space (Lefebvre, 1991, Edenius and Yakhlef, 2007, Beyes and Michels, 2011). The online space is already a socially constructed space where participants through their interaction produce the space that mediates learning dynamics. The reification of online space is a mere exemplification of the materialisation argument that this thesis introduced in Chapter 7. People materialise the online space that is already socially constructed through the amassment of their relationships in that particular space. In fact, the focus is on materialisation rather than materiality where the former introduces materialising as a process and the latter as an object. Participants materialise the online space in a relational vein using their conceptions and practices. This in turn influences the relationship with the offline space, which in many instances has been argued to have become blurred.

8.5.3 Directional Dimension

This section draws upon Levine and White (1961), who conceptualised four dimensions for exchange including the direction of exchange, which they explained
as the direction of the flow of organisational elements. They have differentiated three types of direction as such, namely unilateral, reciprocal, and joint. Unilateral direction indicates the flow from one organisation to another in one direction without expectation of return. Reciprocal direction indicates the direction of flow from one organisation for another return. Joint direction indicates flow from two organisations acting in harmony towards a third organisation. The processes of IOL tend to progress in a certain direction once the starting point of the learning has been set out (Dierkes et al., 2001). In this section, I argue that the direction of the exchange creates tensions and dependency in IOL.

The data uncovered how directional reciprocity mediated IOL. For example, P23 from the Construction Network commented:

“So there was this chap [John] (pseudonym) in the room... he attended so many events at the network but he never participates. He works as a project manager at XYZ company (pseudonym). He is negative in in a way.. I felt he is a free rider but he pays the subscription so he is OK, but it was me who speaks all the time and he’s never spoken and said things that I really count...”

Considering the network’s purpose to create learning opportunities amongst participants, P23 felt intimidated because of the one-way relationship between him and [John]. I attended three events in this network, and noticed [John] listened carefully to discussions and wrote down notes. I tried to interview him but he refused and apologised because he was too busy. One-way reciprocation in learning networks may indicate free-riders; those who opportunistically join networks to gain benefits without deliberately giving benefits back. However, this one-way directional exchange lost its reciprocal meaning for the very nature of reciprocity is to give and take or take and give. In fact, this one-way relationship exists within temporal and spatial veins. The one-way directional exchange can only last a short time because the mere tenets of reciprocity, of expecting return, will soon diminish.
As a result, this one-way relationship will collapse in reciprocal or negotiated rule contexts such as networks.

When P2 was asked why he was connected to three different networks, he replied:

*I like to give a part of me back to the networking people..... I do it as part of my return back to society because what society gives me is an opportunity to network with people and get to know different people, some like-minded people.*

In the network, P2 perceived the direction of reciprocal exchange was from him to the community. Although the community initiated the reciprocation, a sustainable relationship suggests that the community gives back to P2; i.e. the direction is reversed. He was eager to give back to society both emotionally and economically. P2 found networks to provide a hub for knowledge exchange that could benefit himself and his organisation (Dyer and Nobeoka, 2002). The importance of direction is not the amount of knowledge that is transferred, but the maintenance of the relationship that is necessary for knowledge transfer. Taking the wheel and diverting the direction is therefore necessary to strengthen the relationship. Sometimes the direction of reciprocation is a function of the value of knowledge exchanged. P28, who abandoned his network because of the inequality of resources exchanged, commented:

“And telling other people how a shutter works doesn’t teach me anything. I teach, I spend all week teaching, I don’t want to spend my weekends teaching as well.”

When P28 realised that he was no longer learning new things from the network, he froze the direction. The rational judgement based on a cost benefit analysis grounded P28’s decision. The judgement took into consideration the value of knowledge only, contrary to P2, who using the cost benefit analysis appreciated the value of reciprocity on its own. The learning network reflected reciprocal exchanges.
that were the fuel for IOL. Participants joined networks to reciprocate with their peers or colleagues, with knowledge sharing being the main goal. In some instances, participants reciprocated with the intention to become more knowledgeable about a specific issue from their counterparts, while others joined to contribute to the network, believing this contribution to be important to sustain the reciprocal exchange in society and that it would bring back payoffs. Others refused to reciprocate because of knowledge appreciation or depreciation. Therefore, the direction should not be one way in order for the relationship to be sustained; on the contrary, it should be two-way no matter how symmetrical powers are. Another interviewee, P9, commented:

*I'll move on to the next person, something I am going to speak about which is of interest to me or someone I know and I can offer something of interest to them to try and keep that balance, keep to get, get to give.*

P9 stressed the importance of direction and balance between two parties reciprocating in a network. When P9 diffuses knowledge in an indirect reciprocal exchange, she cannot control the direction of this diffusion, similarly to gift circulation. The gift may circulate to several people before it comes back to her, and it may not necessarily come back in the same form, i.e. an asymmetrical gift. The resultant direction of direct reciprocal exchange influences the centrality of the node in a network causing more knowledge centralisation as such. The circulation of the gift cannot ensure the centralisation of power in one node. On the contrary, it may equally distribute the power to nodes that it passes over during its journey until it comes back to the original node.

Hyde (2006), in his stunning work on gift exchange, dichotomised commodity exchange in an economic market with gift exchange in communities and societies. Commodity exchange is founded on rational structures of economic relations to generate economic payoffs for reciprocators while gift exchange is founded on social relationships and aims at empowering or creating new relationships. In
learning networks, organisations seek to learn so that this learning pays off in the future. It is their investment in networks that makes organisations more inclined to join networks and engage with network discourse to build up a trust profile that mediates IOL. We can think of learning as both a commodity and a gift. When learning is dealt with as a commodity exchange, it is likely that people in networks will deal with others based on economic evaluation of the relationship. The chances of a gift exchange being applicable are less likely in such a situation. People may tend to act as free riders (Panchanathan and Boyd, 2004). On the other hand, if learning is dealt with as gift exchange, people will be more likely to establish a relationship that is more genuine than in an economic exchange. Those people believe that a social relationship that is embedded in social structure may generate more payoffs. Yet it is difficult to decide whether learning could be based on solely economic or gift exchange. The overlapping between the two seems inevitable.

P10 described how she uses social media:

“...I have not really done lots of that, but the way I tend to use LinkedIn is that I do status updates quite regularly and you know maybe a couple a day and I try to engage with other people for their status, okay so if somebody wants an award, put a really interesting thing out there, a piece of video or an interesting article they have written I may comment on it or share it around, because I think it’s nice you know in this day and age I think you should not always be promoting your own stuff.”

P10 believes if the direction of reciprocation is one way then the social tie or the relationship will soon diminish and cease to exist. She described this relationship as a "one dimensional relationship". The multidirectional engagement on LinkedIn has capitalised on P10’s resources and capabilities as she worked as a project manager for a construction company and she needed to keep up with industry updates to secure a more senior position in the company. The social media raises issues with regard to directionality. For example, the LinkedIn and Facebook platforms are two-
It is a mutual contract contrary to Twitter which is a one-way relationship where one user can follow another without that user having agreed. In learning networks, participants appreciated the two-way relationships because these are what sustain the reciprocal exchange of knowledge. On Twitter, users are not obliged to follow back their followers despite the increasing trend of “follow me and I’ll follow you back”. In a recent article, Kwak et al. (2011) investigated the fragile online relationships on Twitter. They suggested the relationship is fragile due to its often one-way nature and concluded that users tend to unfollow their “followees” for many reasons, including the lack of a reciprocal relationship. Facebook relationships tend to be stronger because of the mutual agreement to embark on a relationship that creates a social contract. On social media, each type of relationship had its pros and cons. The one-way relationship in Twitter means Tweets travel exponentially in a short time while on the other hand, Facebook statuses reflected stronger reciprocal exchange. P12 commented:

*Definitely. People are much happier or quicker to give feedback than on Facebook whereas Twitter tends to be ... you tend to get a feeling I’m on the run here, I’m just going to do a quick post whereas Facebook you feel almost like someone’s sat down and thought about this. That’s the impression I keep getting all the time.*

IOL dynamics that explore and exploit knowledge benefited the two social media outlets. On Twitter, participants followed sources of knowledge and passively listened while on Facebook, active listening is more noticeable (Dwyer et al., 2007). Lately, Facebook introduced the function of follow and unfollow features on top of the existing two-way relationships to increase users’ reachability without having to actively engage in a social contract with other users.
### 8.5.4 Symmetrical Dimension

The fourth and last dimension of reciprocity is symmetry, which underpins reciprocal exchanges in almost every social system. Data amassed throughout the thesis have shown great emphasis of symmetry for participants to learn from others and make others learn. However, the views of the interviewees varied in describing what symmetry meant to them.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Quotes from interviews and observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>“...so here are the themes, here are the issues, what are your experiences, what are your thoughts, let’s explore those together, and those were really good structured forms for me to think about my learning to date in the context of my contemporaries, so like-minded consultants and like-minded businesses...”</td>
</tr>
<tr>
<td>P2</td>
<td>“We all came on the basis of share and share alike”</td>
</tr>
<tr>
<td>P4</td>
<td>“...and it’s just that they find somewhere where they can actually just chill, and offload, and find somebody else who is similar to them and get help, and advice...”</td>
</tr>
<tr>
<td>P12</td>
<td>I appreciate handling that if a fellow member had the same view as mine to capture the video. The project was gorgeous and needed someone who resonates not contradicts when you are short on time.</td>
</tr>
</tbody>
</table>
| P15         | “..You prove you’re professional and businesslike by just doing the job you do. It’s not required to speak a certain way or to behave in a formal way, and always be you know like I don’t know, you know what I mean, is this type of putting on a sort of persona. My business
<table>
<thead>
<tr>
<th>Participant</th>
<th>Quotes from interviews and observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>persona, and a lot of people who come from the corporate world that’s what first you find and it’s echoing to my persona…”</em></td>
</tr>
<tr>
<td>P16</td>
<td>“I would go to networking events to help me strengthen my professional practice, that’s around the opportunity to reflect on issues and themes and topics, that’s to help me to meet and identify people who could help me plug gaps in terms of programmes that I’m working on.. or things I am looking to develop that I might not know, and I might just as well have a change of pace and change of scene.”</td>
</tr>
<tr>
<td>P24</td>
<td>and it’s just that they find somewhere where they can actually just chill, and offload, and find somebody else who is similar to them and get help, and advice.</td>
</tr>
<tr>
<td>P28</td>
<td>“I am not interested in talking to people that know less than me because my intention is just to learn. I just want to be a better photographer.”</td>
</tr>
</tbody>
</table>

Symmetry does not mean that two participants have exactly the same resources, properties or capabilities, but they should at least establish a threshold of an acceptable level of knowledge similarity which could take different forms; i.e. similarity in width and breadth. Homans (1961) maintained that people seek equal rewards from reciprocal exchanges to the cost they have incurred. Equality in this sense does not mean quantitative equality but whatever the reciprocator is content with. It is the subjective perception of symmetry that matters according to Homans (1961). However, this perception is from one side and does not guarantee that the other participant is seeing the reward as equal to the costs incurred from his side. This participant may not even be looking the same way at symmetry in such relationships. As such, the viability of the relationship is exposed to scrutiny for the
varying subjective perception of symmetry that is also not able to escape collective manufacturing throughout the reciprocal exchange.

What can be noticed from the interviews and observation of networks is that this symmetry did not yield consistent learning outcomes. For some participants, their perceived symmetry with others was useful. The decision to initiate a reciprocal relationship was contingent on the level and the type of symmetry perceived. For example, P12 was looking for an associate for a film production project who would have similar views on the contents of the film. P12 assumed the associate would have sufficient knowledge in the field, but this was less valuable to her than sharing the same or similar views, because this latter factor was essential to establish a film consistent with the scenario set.

Another form of symmetry may be the nature of resources exchanged. P2 appreciated the equal distribution of resources exchanged. His community has benefited him in different ways, including the good education he received, his house, family, and a fulfilling job. What he thought was equal payoff to this community was participating in a network and sharing his ideas on photography with others to enrich his and their knowledge and experience. He included himself as benefiting from the network, as he is part of the community he is paying off. In this example, the symmetry is in the nature of the resource not in the financial value. The appreciation of the value of the resource ignited the reciprocal exchange with network participants. Scholars who publish their research outcomes or lecturers who volunteer as guest speakers exchange their time and effort for self-satisfaction which may be rooted in the feeling of benefiting others directly or indirectly.

Symmetry in reciprocal exchange is distinguished from symmetry in economic exchange. The symmetry of things or values in a reciprocal exchange are not strictly measured or expected by participants, contrary to economic exchange which leans
on cost benefit analysis. Resources in an economic exchange must be calculated to inform decisions to be made by the parties of the exchange. On the other hand, resources in a reciprocal exchange may not be calculated but at least have been rationally evaluated. In other words, economic exchange rests on equilibrium whereas reciprocal exchange rests on momentum (Hyde, 2006).

On the other side of symmetry, there is asymmetry in reciprocal exchange. Some participants appreciated symmetry by stressing asymmetry as detrimental to knowledge exchange. For example, P28 from Photography Network abandoned photography networks because of the asymmetrical resource of knowledge represented in the participant’s status. P28 had a contrasting point of view to other interviewees who remained in the network, such as P2, for example. P28 believes that networks do not benefit him. When I asked him why he thinks networks could not teach him, P28 replied:

“And telling other people how a shutter works doesn’t teach me anything. I teach, I spend all week teaching, I don’t want to spend my weekends teaching as well.”

P28 perceived that learning should be symmetrical in order for it to be beneficial to himself. However, reading between the lines of his statement, while symmetry seems to be important for learning, asymmetry was important too. If P28 had met someone who had a knowledge “reservoir” exceeding his own, he should not embark on reciprocal exchange to resonate his resentment towards asymmetry. Does this not seem to be opportunism or free riding? P28 expressed his intention to reciprocate with someone who is more knowledgeable and experienced than himself. He refused asymmetry when the other party was less knowledgeable than he was, but accepted it when that party had more to give him. P28 implicitly indicates that he considered both symmetry and asymmetry in learning as long as he is the “node” that receives knowledge more than it gives knowledge to another “node”.
In some instances, symmetry was detrimental and resulted in redundant knowledge which echoes Granovetter (1973)’s theory of weak ties. P19 thought that symmetry in businesses makes knowledge and experience redundant. This in her opinion, to some extent, ensures that knowledge leakage is kept to a minimum because of the asymmetry in industry. She found this to be a safe and helpful environment, which implies that where inter-organisational relationships are less competitive, it becomes safer for organisations to communicate. The safe environment is not only helpful for the exchange of knowledge but also for forming personal relationships such as friendships between reciprocators. P19 believed that providing help in the form of advice to others would bring payoffs for her. She would have more advice in her business rather than having clients because she refrains from networks where the focus is on referrals. This could relate to the nature of her business, which is providing therapy to patients where the moral side of the business outweighs other elements.

When I was observing an event at the Women’s Network, P4 was telling a group of women how to make bracelets. P4 had run a business in jewellery since 2007. Her business employs 7 professionals and support administrators. She was speaking enthusiastically to the group and she was engaging with their questions. She concluded at the end of the event by saying to the group: “I learnt a lot today from you, probably more than you did from me”. I asked her in the interview 3 weeks later why she told them about her work secrets. She replied:

I like telling people how to make things as well, because I teach people how to make jewellery at workshops. So, it’s not a secret, I tell how I make things, you want to Google it, you can see online anywhere, you know so why, why keep it a secret, or trying to make it a secret, share the love, you know people want to make things, they don’t want to make a business.
Her belief in reciprocity is quite demonstrable in how she deals with her customers. In the first place, P4 does not keep her business secrets. She explained that she does so because Googling how to make jewellery will show many websites teaching the art, which meant that keeping her work secrets no longer had any value. Another reason is that P4 believed in sharing the love with people because people would return this love. Moreover, P4 was clear about knowledge leakage issues in learning networks and she believes that people want to do things because they love to do them not because they want to do business. This must be linked to the nature of P25's work. Creative arts usually attract people because of their nature. However, her work no longer holds secrets because Google and YouTube show how to make the basic jewellery that she makes. It might be because her work has no major secrets that she does not find it necessary to protect her knowledge pool.

Borrowing the terminology of Hyde (2006), P4 has given away a “gift” i.e. teaching people how to make bracelets, but she expects another “gift” to be returned in the future, by someone else, elsewhere. The gift that P4 has given away can be categorised in three different categories. The first is material gift - a true bracelet she has designed. The second is sample gift - a prototype bracelet that she sends to customers and expects them to send back. The third is immaterial gift - teaching people how to make bracelets. The first and third categories fall under the indirect reciprocity relationship where P4 expects to be paid back in the future by someone. The second category falls under the direct reciprocity relationship as P4 expects the same person to return the same gift within a certain time.

The symmetrical dimension of reciprocity can be seen in the second category of gifts where P4 expects the sample to be returned. The sample is communicated between two parties for a certain time to give the customer the opportunity to see how the prototype bracelet looks. Symmetry here is equality in the substance or the quantity in this sense. P4 was content that the prototype was returned, without questioning the time required to return it or the way it was posted. On the other side, in the first and third categories, the reciprocal exchange was not symmetrical.
in the case of indirect reciprocity. This implies that indirect reciprocity is prone to asymmetry. P4 was not keen to receive back from the same person that she had given to in either category of gift. She had put a message in a bottle, thrown it into the ocean and expected it to reach somebody, somewhere, sometime.

8.6 Payoffs from Reciprocity

In a reciprocal exchange in networks, participants’ expectations vary. Some of them expect material rewards or gains from the reciprocal exchange, some would expect immaterial gains, and others may appreciate both. I dichotomised the payoffs into two broad domains, the first being material and the second immaterial, although this may seem problematic. It may be difficult to label a gain as material or immaterial, as this decision is subjective if taken from a social constructionism perspective. Many network participants referred to knowledge exchanged as a “solid gain” that they valued from an economic perspective. The economic institutionalisation of knowledge reminds us of the knowledge-based view of organisations where knowledge is the most important asset for an organisation’s competitiveness (Grant, 1996). The dichotomy was however necessary for methodological and theoretical reasons. Methodologically, I wanted to explore how participants viewed knowledge while at the same time maintaining the theoretical substance of organisational learning as a reified construct that, as such, could be considered a material gain. In this sense, materiality is not about the object or practice of knowledge, but as Pentland and Singh (2012) put it, that things are not materialised on their own but materialise when they start to create actions, value and influence in a particular context.

8.6.1 Material

When I asked participants P17, P18, P25, and P27 during an informal talk about the benefits they obtained from their network, P17 replied:

_Yeah, yeah. I think it’s just having other people’s input. You know, so getting......sometimes with your own business you get very focused on_
what you want to do and we don’t necessarily always see the bigger picture.

P17’s comment indicates reflections on what she did in her business. As shown in the underlined comment, “see the bigger picture”, P17 was materialising the gain from the network. In the same line, P18 commented:

Don’t ye think it is he input, people input into your record, they add a line to your log....that counts as knowledge gain.

The materialisation of knowledge allows participants to deal with it as a commodity of exchange. This can be done by perceiving the conceptualisation, or symbolising the knowledge as an artefact, which introduces notions such as mental cognitions (Fairhurst et al., 2002), representations (Tsoukas and Hatch), and interpretive schemes (Giddens, 1984). Materialisation does not necessarily indicate explicit knowledge. Knowledge then can be quantified, evaluated and circulated allowing decisions to join a particular network to be more economically rationalised and rather institutionalised. In a scope-keeping environment, this sounds more convenient. However, maintaining the value of knowledge, as a result, will be dependent on the continuity of those mental cognitions, representations, and interpretive schemes in providing explanatory power of knowledge value.

Interpretations cannot sustain the materiality of knowledge as long as network members connect, disconnect and reconnect to a network or networks. Consequently, interpretations may be continuously transforming and reshaping the materiality of knowledge. Moreover, the materiality of knowledge simply means dealing with knowledge as a thing, but it “is imbued with culture, language, imagination, memory”. Materialising knowledge presupposes the distribution of the agential properties of a network (discussed previously in Chapter 7). By this, I mean knowledge will have to be relegated to an agential role on its own. The agential role of knowledge will influence participants’ decision to connect, disconnect, and remain in networks. At the centre of this agentiality, reciprocity comes to the fore,
which will be crucial in sustaining this agential role. As such, knowledge will be ambidextrous by being constituted as an object that participants exchange and as a subject that mediates decisions to join networks. With the varying perceptions, conceptions and interpretations of network participants, reciprocal exchanges incorporate various practices, which consequently cultivate various accounts of materiality. While this poses a risk, it enriches interpretations of knowledge in networks and enriches the dynamics of IOL that have to find distinctive logics of transferring, translating and exploiting this knowledge.

8.6.2 Immaterial

P27 considered immaterial rewards as follows:

“As yet, there’s been nothing come back from there but I think that having those opportunities to speak in front of other people and talk about your work, although that doesn’t give you any finances coming back, it gives you a lot of experience and I notice with a lot of consultants they’re good at taking pictures but they’re absolutely rubbish about talking about their ideas about their pictures.”

But the pattern of reciprocal exchange appeared in what P2 described later as follows:

...I organised the day, I organised the location and I made sure everybody was in contact with each other and everybody was safe so I looked after people but in exchange for allowing it to take place ...

P2 was referring to his role in organising photography network events for his colleagues from different companies. He was passionate about the organisation and all associated with it, from preparing the place, making everything available, putting everyone in contact with other people, and ensuring they are safe. This was all just to ensure the event went well in return. Indeed, this shows an implicit reciprocal
exchange. Hallpike (1975) has presented the taxonomy of reciprocity as being of two types; the first is “prestations of things” and the other is “prestations of actions”. The two ends of this taxonomy, in other words, mean that reciprocity could be in the form of a materialistic gift exchange or a cooperative action exchange. It seems that P2 was exchanging cooperation. He offered his time and effort to buy the success of the event.

When Hallpike (1975) concluded that each type of reciprocity could be linked to a specific society or social system, the reciprocity that P2 was exercising reflects his own social settings. P2 reciprocated the organisation of the event with four colleagues who joined him on a photography day out in North Wales. He described those four colleagues as close colleagues, which resonates with what Hallpike (1975) suggested that for a social system whose members routinely interact, cooperative exchange would be more dominant whereas “a gift can significantly be given to a total stranger, requiring for its effectiveness only that it shall have value for the recipient”.

In the case of P28, the first observed reciprocal exchange was his relationship with his photography business partner (P26). They had known each other for four years, and they enjoyed working together. Their reciprocal exchange was evident in what P28 described:

“But I found when he’s not there, I’ve done some weddings without him, the last wedding I did which is a long time ago, I haven’t done a wedding for a long time, I was really scared and everything was my responsibility but I feel much safer when he’s there because there’s a ... probably at a wedding, I’d probably take 300 items with me probably. That includes batteries and battery holders and straps and de, de, da, there’s probably 300 items and you’re changing things and you’re running ... you put your big bag in a room somewhere, a quiet room and you’re doing all this and so ... but also, erm, just knowing that there’s two of us, erm, it—and it
makes it more fun as well. And what we tend to do with the—on a wedding day is we get there quite early and we have the time for a cup of coffee and sit down and discuss things because sometimes we haven’t seen the venue before or if we have seen the venue there’s still things to discuss and we walk around, we have a look and then we sit down for a cup of coffee and we just discuss tactics.”

In his turn, P26 reaffirmed what P28 had said as follows:

“You take care of the show, you’ll do the talking, I’ll... I take care of the lighting, OK ME, do this with the shutter and try this level. I take the other part of the technique.”

Linking back to the event that P2 organised in North Wales, P2 implied that the direct benefit of organising such an event was the success of that event, which was considered an “underbenefit” that P2 accepted. However, later on in the interview he stressed the indirect outcome or benefit which he and his colleagues received. P2 said:

“I would go out with them, I would say this is what I’ve got of this particular set and everybody else would say the same. We’d be learning from each other on the day. ... we would all say this is what I’ve got and the results and we learned from that. I suppose my significant part is that I organised it all.”

While P2 considered the organisation of the whole event was his significant contribution, he stressed that he and his colleagues learnt all through the day and also stressed that they received benefits when he mentioned the results they had received from learning. The IOL was a medium between event organisation and knowledge and experience gained by the colleagues who represented four different companies. However, the most important point here is that this resonates with what Gouldner (1960) suggested, that reciprocal exchanges in the long run will balance out. Otherwise stated, the equity theory is sustained in the long run.
Observing networks has produced inferential outcomes that explained how the dynamics of IOL varied with how participants dealt with the nature of knowledge i.e. material or immaterial. Participants, who socially interpreted knowledge as a material thing were more opportunistic in the way they employed IOL dynamics. They exploited knowledge over the short term and were more likely to abandon networks than others as soon as they had resolved the problems that led them to join the network or as soon as they had managed to obtain a contract out of the network. On the other hand, participants who socially interpreted knowledge as an abstract notion were more likely to become attached to the network. They were also more inclined towards indirect reciprocal exchanges.

8.7 Reciprocal exchanges

Despite the recent focus on reciprocal exchanges, the majority of the literature is focused on negotiated forms of exchange (Molm, 2003). In the journey to understand IOL in networks, the main concern was to ensure that I focused on networks that had reciprocal exchanges for theoretical reasons. It was not an easy task, because when the main theme of the network was to voluntarily share knowledge, shadows of negotiated and preferential exchanges existed. Within the category of reciprocal exchange lie three sub-categories, as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reciprocal exchange</strong></td>
<td>How people engage</td>
<td>Reciprocal learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reappear at events</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exchange through social media</td>
</tr>
<tr>
<td></td>
<td>Phases of exchanges</td>
<td>Phase 1 (Becoming)</td>
</tr>
</tbody>
</table>
### Category | Sub-category | Coding
---|---|---
| | | Phase 2 (Normalisation mediated by exchange)
| | | Phase 3 (Being)

#### 8.7.1 How people engage

Inferential findings suggested that people engage in networks in three forms: (1) reciprocal learning, (2) frequent appearances in the network, and (3) social media engagement. Amongst the many codes that the data generated, I clustered those that pertain to how people engage with those codes. The clustering was conducted in two rounds. The first round minimised the semantically similar codes and the second minimised the analytically similar codes (Saldaña, 2012).

#### 8.7.1.1 Reciprocal learning

By reciprocal learning, I mean when two participants decide to learn one subject from each other acting as co-workers or co-researchers (Lubatkin et al., 2001). They have agreed that one will do one part of the subject and the other will do the other part. Failure of either of them to prepare for the subject will cause the circle of reciprocation to break and as a result, the reciprocal learning will halt. P16 has her own way of this learning from the Women Network. She commented:

> “I keep a CPD log so I can very simply see the month activity and notes against it, so then go to my dairy what did I do this month in terms of my learning, so not what journals did I read or what qualification did I get; what learning events did I go to, what webinars did I sign up to, to spend with, what conferences did I go to, and then against that why did I go there, so what did I hope to get out of it and what did I actually get out of it, to help me think about and reflect on that learning as well. It is a record of my CPD so again in terms of some of my clients and trade
bodies, in theory they can ask for my CPD log, and if I am employed that is my personal file, so this is a good practice for me to keep. Now in our [Network], I keep track of P11’s CPD, and she [does] of mine. It is important that we keep track, you know.. It’s frustrating when I keep track while P11 does not and vice versa.. This is insane and will get either out of the network.”

P16 is a management consultant who obtained her degree from Cambridge University and travels from Yorkshire to Manchester to attend the Women’s Network that runs formal and informal events in Manchester. The Women’s Network hires a place in the city centre which houses the library of a philanthropist, which makes the environment there very welcoming and warm as P11 and P16 described in their interviews. I was invited by the library manager to attend a few events and I spent some time in the library for the observation. P11 was a management consultant who worked for 13 years helping small businesses prepare business plans and provided coaching as well. P11 and P16 invited me to a closed network that they had created from the Women’s Network. The network consisted of only 3 participants from the Women’s Network, namely P11, P16 and another, PO1 (Participant observed not interviewed).

P16 opened her CPD log on her iPad and showed it to P11 and PO1 using an MS PowerPoint presentation. She explained what she had done over the last month and explained what she had learned from dealing with a client who ran a small printing business in Wigan. P11 appreciated the CPD’s progress and she suggested that P16 should do certain things with her client.

It is important that reciprocators keep the circle of reciprocation active. P23 stated:

“at the same time encouraging the individual to be a participant in the learning process, the support and knowledge they’ve gained so, yeah, I
do see all those facets as being stimuli, constant stimuli on the journey, the learning journey.”

Since those learning networks lacked a formal structure, the organisational routines of how to generate, communicate, assimilate, and reproduce knowledge did not exist. This led to the improvisation of routines that ensured participants maximised their benefits from the network. In the case of P11 and P16, they developed their own way of learning from each other. During observation, I noticed P23 provided feedback to other participants of the network. P23 owns a small beauty product business, and she provided feedback to other participants who wanted to hear about marketing strategies of health products in remote areas. In an interview following the observation, when I asked her why she felt enthusiastic about telling others about good marketing strategies, P23 replied:

“It actually gives me quick access to lots of resources, I mean, errm, I got to know various businesses, I don’t look at ‘em as competitors, but potential collaborators. We learn from each other a lot. Take it from me; I learn a lot from them.”

P23 defined reciprocity as a “recognition of reward”. She appreciated that she learns from this network and probably from those to whom she was giving advice in the first place. Her feelings of need to recognise the reward made her enthusiastic to teach those participants how to strategise marketing. Again with the lack of institutionalised routines of knowledge sharing, participants’ prior routines may dominate. This creates tension at the network levels that allows multiple routines to work in the same institution. The majority of participants were within this institutional arrangement. P18 commented:

“What attaches me to this network is that I am not locked up in my organisational code of conduct or routines… class vanishes here, it is an anti-establishment environment.. I appreciate .. it is grand. Isn’t it?”
Another example is P11. She said:

“I like to be free in the way I learn and seek various pots of knowledge. I don’t like to sit for exams at university, I never enjoyed it and continue to not ...enjoy.”

On the other side of reciprocal learning, P13 believed that reciprocity meant to him to be paid back in kind. He would not accept receiving the same level of knowledge from other peers. He commented:

“...and so to start organising a group, no, I’m—I’m also not really interested in working with people that know less than me because I want to learn. I don’t ... if I’m going to teach people then I have—I have talked to conferences or, erm, symposiums and I’ve—and I gave a lecture last week on photography to people that don’t know about photography and I’ve done a few of those here at the university to different groups”

In P13’s point, he would not reciprocate with those who have less knowledge than him, which creates a circular tension of lack of trust and enforcement of hierarchy. If participants feel less likely to reciprocate with those who have less knowledge, knowledge would not be shared (Lubatkin et al., 2001). One more thing is that expectations play a big role in shaping the way IOL occurs in networks. P1 had a bad experience in terms of expectations where he abandoned a learning network because his expectations were not met. He commented:

“In the end, it wasn’t particularly satisfying because the young person that they partnered me up with wasn’t very motivated and didn’t turn up to the sessions and things like that”

The inferential findings of this category indicated that while reciprocal learning is considered a result of the reciprocal exchange, this reciprocal exchange is also a result of reciprocal learning. Episodes of reciprocation evolved from the act of
learning, especially at the initiation phase of learning. Learners initiated reciprocation without recognition of others’ reputations. These reputations had been built as a result of a series of reciprocal learning dynamics.

In fact, reciprocal learning is different from circular learning. Reciprocal learning (Figure 8-2) means the learning process goes back and forth between two or more reciprocators while circular learning (Figure 8-3) means a kind of viral learning where one initiates a learning process and it evolves exponentially into others, without reciprocation, until it either becomes difficult to control it or it diminishes on its ever-growing circular path.

![Figure 8-2: Reciprocal learning between two participants in a network](image)

In this sense, the difference between reciprocal learning and circular learning is much exemplified in the difference between direct and indirect reciprocity. In direct reciprocity, a network participant “gives” knowledge and may take “knowledge” or any other satisfying reward from another network participant. It is necessary that both participants keep the flow of exchange going to sustain the reciprocal learning.
As soon as one participant stops reciprocating, this risks halting the reciprocal exchange of knowledge or diminishing it over a short period of time.

In circular learning, one participant (for example, Participant 1) exchanges knowledge with another participant (for example, Participant 2), and then participant 2 may exchange with participant 3 and this participant may exchange with participant 4 and so on. For participant 1, the motivator to reciprocate was the feeling that this knowledge would come back sooner or later in a different form or in a different way from a different participant (not participant 2).

8.7.1.2 Frequent appearance in network

Network participants could be frequent participants, or one-off visitors. They could also be either participants with subscription (members), or participants without subscription. P1 is a network administrator and he therefore attends most, if not all networking events. When I asked him if he had obtained any benefits from the network, he enthusiastically replied:

“Definitely, without a shadow of a doubt. When I did the [HH] talk, I was talking about my bookcases project but I talked about the kind of genesis of that project and how I got from where I was at about the time of
doing the [LB] course to where I was when I was presenting the work about HH, the work about bookcases and a lot of that was talking about how being involved with Light Box had developed my ideas and the project that I took part in ... it was definitely very clear steps on the way to my kind of enhanced intellectual thinking about photography. And, yeah, leaps and bounds through Photography Network and Image Network [pseudonym], I would say probably since 2010 until 2012 my quality of work, I would say, has just flown off the chart. In terms of my own personal assessment of it, I mean I wouldn’t like to think what someone like David [pseudonym] or someone ... or some gallery curator would say about that but in terms of my own personal reflection on my work, the past two years have been, yeah, an exponential increase in my quality of my work and that is directly related to the people that I’ve been surrounded by and the ideas that I’ve been exposed to through the networks, definitely, definitely the commitment to the network and being part of it.”

I asked him what he meant by being part of the [network] and he replied:

“Attending each and every event.. exchanging ideas and lots.. more..”

The observation of the Photography Network over 12 months revealed how participants appeared in events. P1, P2, P3, P5, and P17 were frequent faces that I saw in almost all events. I saw P13 only once while P4 appeared on 4 occasions. P1, P2, P3, and P17 were members who paid annual fees to attend events. Table 8-9 shows how network participants engaged with their networks.

Table 8-9: Level of engagement with network (subscription and attendance)

<table>
<thead>
<tr>
<th>Participants</th>
<th>Network</th>
<th>Subscriber</th>
<th>Non-subscriber</th>
<th>Frequent</th>
<th>Rare or once</th>
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</thead>
<tbody>
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<tr>
<td>Participants</td>
<td>Network</td>
<td>Subscriber</td>
<td>Non-subscriber</td>
<td>Frequent</td>
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<tr>
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<td>Network Subscriber</td>
<td>Non-subscriber</td>
<td>Frequent</td>
<td>Rare or once</td>
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<td>P28</td>
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P14 was not a member of the network but she appreciated the learning outcomes in the form of “leveraged business outcomes”. She runs a therapy business in Manchester with 5 other partners. She commented:

“I do go [frequently to network], yeah.. but I’m not a member of of the... I don’t feel like I have to pay annual fees to be committed to attending events..., unless there’s anything that you know I sort of have to do work-wise, I will always go, because I find it really useful. The profession that I’m in is although I’m with people all the time, they are clients and so it can be quite solitary. So it’s nice to be able to talk to all the people, not necessarily in the same industry, but who are in the same position. So you can kind of you know, ask for a bit of help, or give a little bit of advice.”

The nature of her profession necessitates finding a social environment from which to learn. The main drive to join the network was the nature of the job. On the other hand, we find P13 – who is a photography lecturer - was not subscribed to the network and has stressed that he did not learn “that much” from networks and abandoned going to networks because of the nature of his job and knowledge hierarchy. He commented:
“And telling other people how a shutter works doesn’t teach me anything. I teach, I spend all week teaching, I don’t want to spend my weekends teaching as well.”

Table 8-8 shows inferential findings from interviews and observation.

Table 8-10: Influence of subscription and attendance on learning

<table>
<thead>
<tr>
<th>Subscription</th>
<th>Subscribers</th>
<th>Non-subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent</td>
<td>Maximum learning results</td>
<td>Good learning results</td>
</tr>
<tr>
<td>Rare</td>
<td>Poor learning results</td>
<td>Poor learning results</td>
</tr>
</tbody>
</table>

Subscribing in a network was not significant for IOL to produce results. Those who were subscribers but attended the network very rarely perceived learning results to be poor. The social interaction was missing and this influences their reciprocity reputation in addition to hindering their trust profile. What were noticeably important were their expectations (discussed earlier in Section 8.5.1.3) from the network and this influenced how their engagement produced better IOL dynamics and outcomes.

8.7.1.3 Social media engagement

The networks that I used in this thesis were physical networks. They all had websites and some had different accounts on social media such as LinkedIn, Facebook, Twitter, Instagram, and Tumblr. The Photography Network has Facebook and Twitter accounts. The Facebook page features the work of photographers, publishes news of the network and advertises events and online Q&As. P2 expressed how social media was important for him to reciprocate and he desired that direct benefits would come from this reciprocation. He commented:
“And so in terms of my social network side, I do have a Facebook account, I have a Twitter account, I have a MySpace account, I have a LinkedIn account and if I’m out and about ... like last weekend, I was in New Brighton with my family walking the dog and there was a kite festival, a big balloon festival and, er, what I tend to do is take my iPhone, take a picture and Tweet to my community to let them all know that there’s a wonderful experience taking place and hopefully some of them may say, well, I’m going in the car to New Brighton so they can share the same experience as I did. So it is very much about communicating what’s happening in that—in that moment in time so that others can benefit as well. So, yeah.”

P2 appreciated the use of social media because of “timeliness” (discussed earlier in Section 8.5.1.2) and the ability to share experience and knowledge in a timely manner. P2 was driven by the eagerness to share experience with others and the freshness of that experience. He expected direct returns from this reciprocation although he felt satisfied with the one-way reciprocation; i.e. he posts pictures and shares experience without any feedback from others.

P4 prefers online networking to face-to-face networking. Here I feel I need to clarify what she meant by networking. The terminology is important to understand the grounds of her preference for networking. P25 distinguishes between the purposes for networking. For online networking, she uses it for marketing and promoting her products. She clarified:

“On my Facebook page, aah if I’ve made something, I’ve got a picture of them, If I’ve made something for a client I put a little sneak a picture a part of that item and I tease people with it, hahaha because if it’s for a special occasion I don’t put anything on until after the occasion is passed, because otherwise it will spoil it, and it’s always nice you get more interaction that way, you get people say, oh that was interesting, can’t
wait to see what it looks like, so yeah, I don’t go, I’m not on all the time, but I do every now and again, sometimes I just put something on say like you know where I am going to be, at the craft or something or just something to say alright, I do now and again post on say small businesses come and post your link onto my page and I’ll share one of your pictures on my Facebook page, but then they got to return the same, so it’s like for like…”

P25's strategy for online networking is to attract as many customers as she can. She uses marketing techniques to tease out customers to convince them to buy her products. The economo-reciprocator inside P25 speaks aloud online but it is almost muted in face-to-face communication. The space not only separated P25’s two networks but also the reciprocal ethics that she believes in. This might look instrumental, as the person can have two reciprocators inside themselves with each one being voiced based on a formula of space, but what does this tell us regarding the organisational level or the inter-organisational level? No matter what organisational culture there is on the shelves, organisations seek to maximise their profits. Profits include monetary or non-monetary values. We could look at P25's two dichotomies of reciprocity as two levels of organisation. The organisational level is that level where the economo-reciprocator is voiced while on the inter-organisational level, the socio-reciprocator is voiced. On the organisational level, P25 sought to maximise her monetary profits and that is why she looked for customers who would purchase her products. On the other hand, i.e. the inter-organisational level, that is the relationship between herself as an organisation and others as organisations, she reciprocated to establish relationships that went beyond direct economic values. The space of the internet was where the organisational level was voiced, expressing the economo-reciprocator, while the space of the physical networking was where the inter-organisational level was voiced, expressing the opposite, i.e. the socio-reciprocator. Despite the binary relationship between socio- and economo-, the blurred boundaries between those
reciprocities in one organisation is a major source of proliferating research on how
the two co-exist, if they ever do.

P25 expressed that online networking brings more profit to her. She commented:

“Yeah, definitely, definitely, hmm I think, you have to be online, maybe
not so much with the website, because I have to say my website hasn’t
given me any business, one because I don’t work on it and secondly
unless somebody knows who you are, or you can work on the technical
side of it, I don’t have any technical knowledge I’m doing that, well
Twitter and Facebook, interacting with people, posting pictures of what
you are working on, getting to know people, they have, again that’s
again networking online, you could pick up a conversation, and say
oh that sounds interesting and you can actually join in the conversation
and people get to know you as a person and it might have nothing to do
with work, and the person you are talking to is in business and you
get chatting and you find people who have gone through your work,
although they still go on to your Facebook page from Twitter or vice
versa and like your page and then you go on their page, you know and
then somebody will see on...”

P25 is connected to different social networking websites such as Facebook and
Twitter. Her interactions on Facebook are more engaging in the way she shares
photos and posts statuses, likes and shares others’ posts. She expects others would
do the same in return, in what she called "like for like". She does not say this
explicitly to those whose statuses or pages she likes, but she expects it. This direct
form of reciprocal exchange is instantaneous and reciprocators would pay back the
social "debt" to the same person who initiated the reciprocal exchange. There is
more burden on the person who decides to initiate the relationship because the
trust profile is "raw", i.e. not sufficient to establish the reciprocal exchange. The
reputation that helps build the trust has not yet been established or recognised. In
such networks, usually, the people who would lay the first brick of the trust profile
are the neighbouring peers (Wang and Singh, 2006) due to their structural
closeness. Reciprocating certain behaviour is costly because effort is put inward and
neighbours would be encouraged to reciprocate if they feel others recognise their
behaviour.

That is where the tit for tat or "like for like" comes in. However, the case is different
on Twitter. On Twitter, "like for like" is not common, especially as Twitter is mostly
a one-way relationship, contrary to Facebook, which consists of two-way
relationships. On Twitter, a user does not have to friend another to be able to
communicate and engage, unlike Facebook, which requires the two parties to enter
into a social contract on which a friendship is established through a friend request
form. On Twitter, reciprocity goes in a different direction to Facebook. If a user
decideds to follow another user, that user does not have the obligation to follow
back. As such, those followed do not have to reciprocate. P25 recognised those two
peculiarities and described the Twitter relationship as someone who sits at the back
at a party. She subscribed to the Twitter community because it resonates with her
personality. Again, she stresses the demarcation between Socio-reciprocator
"Twitter", and Economo-reciprocator "Facebook".

8.7.2 Phases of exchange

Organisational discourse can be defined as “the structured collections of texts
embodied in the practices of talking and writing ... that bring organizationally
related objects into being as those texts are produced, disseminated” (Wassmer,
2010). What we mean by discursive practices is how discourse through language
(Min and Zhou, 2002) is produced, reproduced and circulated in relation to its
context (Nagurney, 2010). These practices describe the relationship between
individuals, language, and society (Bellamy and Basole, 2012). In networks, member
and non-member participants communicate either verbally or non-verbally to
exchange knowledge. For example, in the Photography Network, P12 describes his
participation and how it developed over time as follows:
“I remember when I first started going to them, I found them really terrifying. You go into a room of people who you don’t feel that you’re on their level. You see them as being on a pedestal or above you and you don’t really know what to talk to them about and things like that and it’s really kind of nerve wracking. But just through going again and again and seeing the same people, those kind of barriers break down and then it feels more ... now I enjoy going to those events because I feel like I’m going to see all my friends, you know, I’m going to see my photographic buddies and they’re people that I might not see in a more social situation but in that situation it is very sociable and you might talk a little bit about TV, you might talk about other things as well and so, yeah, it depends what you want to get out of it.”

P12 described his participation as being incremental over time. If we split his narrative into phases over time, P12’s story can be seen through three successive phases: disharmony, normalisation and harmony as shown in Figure 8-4. I apply a temporal perspective to elaborate on those phases.

8.7.2.1 First phase: Disharmony

In the first phase, P12 did not like the network and he felt “terrified” because he distanced himself hierarchically and socially from participants (at this stage, one might not recognise who is a member and who is not) who he thought were more senior than him and stood on a “pedestal”. It could possibly be that the audience were responsible for that distance, and not him. In either case, the social distance was there and the time taken for it to fade out was yet to be conceived. Perception of time for network participants at this phase is important as for some, it could be too long to cross and consequently they might leave the network, while for others it could be short and a must-go-through period. It is in this phase that many network participants turn down the network and quit for reasons such as that of P12, the
presence of free riders; those who take but do not give, and hypocritical cooperation (Heckathorn, 1989). Network sustainability is highly dependent on member commitment (Chan and Chan, 2010), especially during the first phase.

Figure 8-4: Discursive practices in a network

8.7.2.2 Second phase: Normalisation

The second phase was when P12 tried to normalise himself with the network by talking and reflecting on what others talked about in the network. In this phase, P12’s perception changed through reciprocal interaction. It is important to note that reciprocal interaction takes time to reach a level such that it sustains a network. In the first phase, P12 perceived going regularly to the network and meeting the same people as a “kind of barrier”. After a while, he found the network enjoyable and considered people in the network as “buddies”. That “while” is important, as it was not a piece of time chopped off from the time stream, but a temporal scene within which P12’s emotions and perceptions were configured to the network. From a temporal perspective, I give less importance to how long this change takes but on the other hand, I give more importance to what things changed over time and how they changed. Drawing upon social theory, the social system is fundamentally based on the social interaction between two people; “Ego” and “Alter” (Parsons et al., 1951). This interaction occurs recursively on the grounds that acts of ego depend primarily on the ego’s expectations of the acts, intentions or
expectations of alter. Parsons et al. (1951) portrayed this interaction as being necessary for the stability of the social system and consider this interaction as reciprocity or complementarity.

8.7.2.3 Third phase: Harmony

The third phase represents the harmony that is built between the network and the participant (P12 in this case). In this phase, P12 described the relationship between himself and other network participants as “like I’m going to see all my friends”. P1 did not call the network participants friends but “like friends” as the relationship was spatially confined to the boundaries of the network. He befriended only one participant where that friendship extended beyond the network socially and spatially. This harmony is important, as the third phase could also be as risky as the first phase, especially as the network participant may feel bored or reluctant to commit to the network, or their network ties may become so strong that the network brings no benefit to them (Granovetter, 1973, Krackhardt, 1992) and as a consequence the network “may atrophy” (Chan and Chan, 2010) or cease to exist. P12 has also explained what the third phase means to him and others when he provided examples of the harmony, such as sharing talks on subjects other than photography (the main subject of the network). The dichotomy of network subjects is interesting as it implies that those networks that managed to sustain themselves are those that focused not only mechanically on the network’s fundamental subject, but extended to other subjects, which kept the fabric of the network harmony similar to that of organisational discourse (Wassmer, 2010).

P12 described his engagement with the network through three phases with a temporal taste. He never mentioned time in the extract, but constructed the meaning of reciprocity and temporality so eloquently that the reader of his extract can see and feel his lived experience going through time and a temporal dimension together. Bergson’s philosophy of time is centred around change and movement (Kadefors, 2004). In this, social change such as P12’s change from hate to
engagement can be better understood through thorough reflection on “pure duration”; i.e. a change from time dimension into temporal dimension.

When reciprocal exchanges are discursive practices, this implies they are experienced repetitively by network participants in a manner split into three phases. This stretches the possibility to argue that reciprocity can therefore be predicted. The ability to forecast reciprocal exchanges can open the way for reciprocators to recognise the anticipated results in the future. This has two implications. First, it enables networked organisations to realise the importance of reciprocity as a norm (Gouldner, 1960) that facilitates the development of mutual visions and actions in networks in addition to recognising that networks are more than just a place that combines more than one organisation. Second, it enables them to recognise the importance of reciprocity as a practice (Gouldner, 1960) that facilitates the predictability of network benefits and the management of both practices and their resulting benefits.

8.8 Concluding note

Preliminary analysis of the interviews amassed reveals a number of key findings. Taking into account the various statements made by interviewees, this chapter concludes that IOL dynamics are strongly related to reciprocal exchange demonstrated within the four dimensions of reciprocity. However, the focus of interest is the types of determinants of reciprocity (e.g. social settings, power differentials, and negative and positive reciprocity, building of trust profile, social history) that can render reciprocity as detrimental or an accelerator to knowledge sharing and sustainability.

This chapter was motivated by the question “**how do social exchanges influence inter-organisational learning in a learning network?**” which sought to investigate avenues of how organisations learn across their boundaries in a network context. I did this by problematising the reciprocal exchange in networks and employed the
multi-dimensional framework to see how reciprocity plays an important role in advancing or hindering IOL. Appreciating the time as an inextricably important dimension of reciprocal exchange to evolve, I found the relationship between the temporal dimension and reciprocal exchange to be correlated. For reciprocal exchange to initiate and evolve, time must be there in the form of duration (objective time) and temporality (social time). The social time as such is context-dependent time, which makes the construction of meaning and attributes of time a function of culture, context, and historical location on time (Adam, 2013). The two streams of time pass, allowing the reciprocal exchange to unfold. However, those two streams race against one another. In some instances, put simply, social time might be quicker than objective time or vice versa.

The temporality of reciprocal exchange yielded a three-dimensional framework that illustrated how the temporal dimension of reciprocity is correlated with IOL dynamics. The three elements of the temporality-imbued framework are duration, timeliness, and timescapes. Duration of an IOL session or a set of sessions was correlated with inter-organisational learning and intra-organisational learning. Employing duration in reciprocity research suggested that IOL has its best results when a sufficient amount of time is allowed by the organisation and the network while the least efficient case is when network time is limited regardless of the time allowed by the organisation. Timeliness showed a correlation between types of reciprocal exchange and IOL dynamics. Learning before a problem occurs appreciated indirect reciprocity, which is imbued in this sense with explorative learning. Learning throughout a problem appreciated direct reciprocity because urgent solutions are sought and this indicated exploitative learning. Learning after the problem is solved is correlated with indirect reciprocity and tends to be reflective learning which is, in this sense, imbued with explorative learning. Timescapes (time phases) suggested that organisations are positioned in a network based on their conceptualisation of time. Organisations may be past-oriented and therefore seek to learn from networks based on their experience with networks. Organisations may be present-oriented and therefore seek to learn from networks
based on the dynamics of interaction and level of engagement in the network. Finally, organisations may be future-directed and therefore seek to learn from networks based on the level of expectations from a particular network.

The second dimension is spatiality, which dichotomises the online and offline spaces. This dichotomy, although spatial, cannot escape presuppositions of social space and physical space. Network participants varied in their perception of space, influenced by their culture and language embedded in social interactions within the network. The space influenced the way that organisations employed IOL dynamics in learning networks. The chapter offered an inferential matrix that correlated space to IOL dynamics. Organisations that relied completely on IOL across online platforms experienced slower learning dynamics, easier access to knowledge, but less knowledge retention. Organisations that diversified their reliance to both online and offline space experienced faster learning dynamics, easier access to knowledge, and more knowledge retention. Organisations that relied completely on IOL across physical networks, ignoring the social online space, experienced slower learning dynamics, difficult access to knowledge but more knowledge retention.

Another dimension of reciprocity is the directionality, which is concerned with the direction reciprocity is heading towards. In the directionality dimension, I maintain that the direction is important in identifying the benefits and payoff of reciprocity: the payoffs that lead to or are generated by reciprocity. In directionality, it is important to know who initiated the reciprocal exchange and to establish the resultant direction of that reciprocation. The resultant direction is linked to the symmetry dimension. In a network context, directionality signals centrality and betweenness. The network or tie cannot be maintained as long as it is a binary directionality, i.e. a zero one type. If either direction is zero or one, one party is not reciprocating at all, a situation similar to free riders who make use of networks without paying a tiny effort to benefit in return.
The fourth and last dimension of reciprocity is symmetry, which underpins reciprocal exchanges in almost every social system. Symmetry in reciprocal exchange is distinguished from symmetry in economic exchange. The symmetry of things or values in a reciprocal exchange is not strictly measured or expected by participants, contrary to economic exchange. Some participants appreciated symmetry by stressing that asymmetry was detrimental to knowledge exchange. In some instances, symmetry was detrimental and resulted in redundant knowledge. Participants perceived that learning should be symmetrical in order for it to be beneficial, i.e. the resources exchanged or the source of those resources have to be symmetrical in any way. There was no strong correlation between symmetry and the improved dynamics of IOL as the social perception that was carried out collectively implied both symmetry and asymmetry were important to IOL.
Chapter 9  IOL AS A RECIPROCAL DYNAMIC

Thesis’s Objective 4

To analyse how the reciprocal, temporal and agential elements of IOL contradict or complement one another.

9.1  Introduction

This chapter argues that IOL dynamics - including absorptive capacity, trust, knowledge exchange and learning from and with partners - are found within a reciprocal vein. Reciprocal exchanges as such socially construct an environment that mediates, facilitates and in fact encourages IOL. Such exchanges over time strengthen social proximity which is necessary to create selective learning strategies (Greve, 2005) and outcomes as a consequence. The inferential outcomes of this chapter are presented in the following sections.

9.2  Learning from and with participants

Knight (2002) made a distinction between network learning (organisations learn together towards an end) and IOL (organisations learning from each other). The data indicated that networked organisations experienced network learning and IOL concurrently. For example, P25 explained:

Hmm, I’ve been to a network meeting it happens fantastic where there is different businesses and you actually sat down and did like the person running it had questions, it’s like a brain storming session and that, I loved it, because you’ve actually sat down and it was like a boardroom, which was like 15-20 out of a thing,
P25 made no distinction between learning a skill or learning "people". The learning she was looking for was to get to know business people or people on a personal level because she expected future payoffs from them in the form of, for example, business contracts in the long run. Learning about business opportunities is achieved through the weak ties for which this network provides a nest. Trust can be built by knowing the quality of the business that a certain participant is capable of. The trust is not linked to what the participant’s character looks like, but mostly to how that participant exchanges, and how the agentiality of his character acts in a wider social setting such as a community and a narrower level such as the network.

Another network participant, P4 commented:

> You don’t need to know the person I mean personally, and you have to know how he does the things, how he manages to work that’s the most important, otherwise 60 seconds it gives nothing.

Trust takes time to build. Indeed, it is a function of time, although the passage of time does not ensure that the trust profile will be built and sustained without reciprocal exchange. The causal relationship between time and trust is uncontroversial (Konovsky and Pugh, 1994, Cox, 2004, Jiang et al., 2013), but what P4 meant is that trust cannot be built in a shorter time. Again, this does not ensure that a long time will be adequate to build trust. This again points to the temporality of time discussed in Section 8.5.1 above. P4 perceived 60 seconds to be insufficient to build trust. This judgement was grounded on one or two sessions she had attended.

P4 was happy to have been made redundant from Gas Company and started her own business as this has given her the freedom to manage her time. P4 commented:

> “is this your business, surely you can make your own times up, yeah, you don’t have to work 9-5, sometimes I work, when I’m not I do temping
work in between because it gets me out of the house, you slowly be on your own sometimes and it makes, it gives me more contact with the people and new businesses as well, so that’s another way of networking hahaha.”

The freedom of time helped to diminish the boundaries between work and personal life. She worked from home and this has given her a "time" and "space" to build her network of friends and family. The retreat from formal structures to less formal structures has helped her to strengthen the ties with her "nodes", and this has also increased her networks with new businesses. P4 added:

“You know absolutely, I mean when I’m working for myself when I am not temping I will actually maybe work from you know 9 o’clock in the morning to say to 3 in the afternoon and then I’ll take a break for 2-3 hours but then I’ll work again from like 6-12 in the evening, but that means I don’t have to get up at 3 o’clock to go out to work, if you have got a business meeting that’s fine, you know you got to meet a client, then surely being in business it doesn’t mean you don’t have to do a 9-5 and it’s your business, nobody is going to dictate. Hahaha well nobody dictates to me hahaha”

Working from home isolated P4 from direct contact with work colleagues. While this was convenient and provided her freedom of time, it created tensions of isolation well depicted in the lack of synergies with innovative colleagues. As a result of P4 lacking people to learn from, she decided to join the network to fill this gap. This provided her with a social space where she could interact with others and learn from and with them. P4 was glad to have learnt from network participants from different professions or industries. For example, she learnt from them how to market products, how to brand and how to internationalise. She also learnt with those participants and worked on a project to provide online courses on how to design beads and bracelets. Diffraction of IOL dynamics has also resulted in a
differentiated value of knowledge in reciprocal exchanges, which will be discussed in Section 9.3 below.

### 9.3 Value of knowledge in reciprocal exchange

Hyde (2006) mentioned that reciprocal exchange of gifts becomes increasingly important when circulated between more than two parties. Anthropologists such as Sahlins (1972) believe that the value of a gift does not increase if exchanged between two parties but it does when the exchange expands. Hyde (2006) explained the ‘increase’ in the gift as a natural, spiritual, or social increase. In either form of the ‘increase’ perception, the circulation of the gift increases the bond between the reciprocating parties. This bond may be economic or social. When we look at knowledge exchange in a reciprocal community such as a learning network, I found two contrasting inferential results. The first is that knowledge was exchanged and caused the reciprocating parties to become more bonded, such as the case of P11 and P16. On the other hand, P13 and P17 have shown contradicting behaviour. The knowledge exchange created power tensions and as a result, they abandoned the Photograph Network. Data has shown that knowledge can also accumulate and optimise through the reciprocal exchange but this depends on two things: (1) strong reciprocity reputation and (2) trust. Without both of these things underpinning knowledge exchange, the success of this reciprocal exchange to yield the expected learning results becomes more dependent on the reciprocity dimensions mentioned in Section 8.5.1 above. Symmetrical reciprocal exchange allows reciprocators to learn from each other. In symmetrical exchange, hierarchies diminish. When two organisations join a network, there are presumptions of trust and reputation, which encourage IOL to initiate knowledge exchange. Knowledge accumulation comes in the form of agreeing to do projects together, share information on specific issues, exchange strategic resources, and shared learning objectives. From observation, knowledge exchange, although present, was slower in the Women’s Network. This has challenged the presupposition that suggests knowledge exchange will be observed more in networks of differentiated organisations and that those which have similar sources of knowledge and compete in the market will be less inclined
to reciprocate. The Photography Network gathers professionals who share similar knowledge repositories and are competitive by nature. However, despite creative industries being competitive, in this learning network they were less so and shared many experiences. The reason for this may be that creative industries are not easy to copy and as a result, hiding knowledge from competitors may not be efficient all the time (please refer to anecdotes from P4 and P25 in previous sections).

This redresses one of the basic research questions: Is reciprocity always good? Now I reissue this question in line with the learning phenomenon. Dealing with knowledge in the networks that I have researched implicated the following:

### 9.3.1 Knowledge sharing

The Photography Network focused on knowledge sharing and creation. The reciprocal exchange of knowledge was observed in how participants learn from each other. The learning entered episodes of exchanges. In an open network event, participants were focused on sharing their experiences and knowledge on certain issues regarding photography. A guest speaker may talk on a hot topic or present artwork and expects participants to reciprocate through questions, appreciation, debate, feedback, and so on. Reciprocal exchange was important in knowledge sharing in this network because it was necessary for knowledge to circulate and magnify (magnitude, depth and breadth), which was important for branding, as P1 and P2 stressed. The necessity for magnification stems from the keenness of participants to maximise their gains from the network. Those gains could be at the organisational level or at the inter-organisational level, and these gains were different at the two levels. On the organisational level, organisations tended to exploit the knowledge shared. In the case of P13 and P26 who represented their organisations in this network, they focused on capitalising on their own knowledge assets and ignored other organisations’ gains. The only condition they imposed for sharing the knowledge was that reciprocating organisations had a vast amount of knowledge which was greater than theirs. However, this was problematic as P13
and P26 risked being free-riders or opportunistic organisations, which in either case will remain in a shallow situation and their knowledge assets will not develop. At the inter-organisational level, we have to make a distinction between IOL and network learning. As such, the focus here is on gains that organisations will receive individually while at the same time not attempting to marginalise others’ endeavours to capitalise on their knowledge as well. In group gains, all organisations will try to collectively advance their knowledge levels further, creating an advantage that could not be gained otherwise. In inter-organisational gains, I argue that organisations seek to gain knowledge “individually”. This knowledge is not collective and is gained at the same time that others are pursuing it. While I appreciate this management of knowledge portfolio is not easy to sustain taking into consideration the varying goals and expectations of organisations, I maintain that this inter-organisational gain is greatly important for organisations in sustaining their competitive advantage.

In inter-organisational gains, organisations have to set boundaries of expectations and appreciate other organisations’ boundaries. In the Photography Network, although organisations shared similar knowledge assets which implied that they were competitors, their reciprocal exchange overlooked the traditional routines of competitiveness and continued to advance their knowledge by creating a new set of inter-organisational routines that ensured maximum benefits from knowledge sharing and at the same time ensured that this knowledge was not exploited by individual organisations in an opportunistic way.

### 9.3.2 Knowledge creation

P16 believes in enterprises being competitive to make the best of learning. Reciprocal exchange can be improved if competition between network participants is put in a place such that it encourages them to make more out of the network. P16 commented:
You might spot an opportunity, something clever that I think the ways to those performance indicators that impact management performance in a network but share them with each other so for example what staff absentees for whatever reason, you don't have to say it's because of illness or because of whatever, because we can benchmark that so within a network if all members say it is on average 4 days per employee per year, all enterprises in that network can look at that figure and go you are 4 I'm a 9, what are they doing that I'm not, so because I'm part of this network.

Participants perceived that setting performance indicators may improve learning within a network and this is in line with social exchange theory (Blau, 1964) where payoffs are the main driver for the reciprocal exchange. The payoffs can be material or immaterial benefits. From P16’s experience when they used performance indicators (immaterial benefits), it worked out. In this sense, competitiveness was not hindering learning or retarding reciprocity. This cannot be generalised to competitiveness outside the network. This is interesting as competitiveness can be divided into several typologies. Two competitors can come to the same network and benefit from the network if they compete on achieving learning objectives. Their reciprocal exchange will be augmented by this competitiveness, contrary to them coming to the network with competing strategies from outside without setting competitive learning objectives. As a result, learning will be difficult because the grounds for social exchange were shaky. Therefore, it is not the competition that hinders learning in inter-organisational networks, but the type of reciprocal exchanges that dictate or better indicate whether learning will be better in that certain network. P17 commented:

“We actively start on a project with different participants. I embarked on a project with an industry competitor and gladly it was grand.. I know this incurs cost..cost of losing your competitiveness in my area but from cost benefit analysis I found it more rewarding.”
The data indicated that costs were incurred with knowledge creation through industry competitors however, this cost was minimised when this competition remained at the industry level without approaching the regional level. Those who sought knowledge creation from competitors found that this resulted in diminishing returns due to the elevated number of trade-offs they had to put in (Owen-Smith and Powell, 2004).

9.3.3 Knowledge leakage

Knowledge leakage in a network is costly for a small company. P22 commented:

“Okay and we made one of the challenges, when you move from working with smaller businesses to targeting bigger business, because you cannot be networking in the same place. So when we began it made sense to network at very accessible places you know this for example if we go simply networking, which is very well established in the North West of England, its run by [M. G.] it is a kind of 70 or 80 small business, so it is only in a room and let them talk you know. There is very little formality to just thrill the people in the room and let them get on with it. And that is a very quick access way to people who run small businesses who were keen to meet other small businesses but it is too risky for innovative businesses... their ideas may be exposed to copycats”

P22 found that the network provided access to invaluable sources of knowledge including small and big businesses. However, he found the risk of knowledge leakage to be prominent, especially with the attendance of copycats and free riders. P22 explained that a riskier issue is when a network participant finds his or her ideas have been manipulated and used in a way he or she had never thought of, when the time to rethink continuing in the network will come. In this sense, P23 made a point:

“No no, it’s not about someone copies my ideas..that’s fine.. Problem is that you cannot control where your ideas are going to. Especially when
you speak and you know that what you’re talking is related to your business secrets, the probability that a word will be spelled out is high. So you won’t know even if you’ve said something you didn’t want to share, yeah..”

P23’s comment expresses the unintentional knowledge leakage that participants may not be aware of during the social interaction in a network. Even if an organisation is knowledge protective, they may still fall into “a social trap”, as P22 described it. P23 then suggested that they have developed strategies to protect knowledge when they attend events in the network. Those strategies were important to protect the organisation’s competitive advantage.

P16 was not worried about her resources of knowledge leaking mainly because of society’s need for reciprocity, but there were other valid grounds for this, which P16 explained:

“There is also something that knowledge is one thing, applying is something very different, so all the qualifications that I have base of knowledge and I have learning but anyway looking at that, how you apply it, how you reflect on it, the nuances, the subtleties, the way you can walk alongside someone and ask them questions individuality afterwards, that’s the benefit, that’s where the value is which you can’t really do properly in networking events, it is too vague and general by definition.”

The application of knowledge is more important than copying it. The main purpose of knowledge sharing is not to store it in boxes or drawers, but the importance lies in the ability to make use of this knowledge, apply it, and integrate it into business practices. P16 does not see this as happening all the time. On the contrary, organisations are rarely able to reach this level of effectiveness and often use this
knowledge improperly. Thus, her worries are alleviated by those two reasons in addition to another reason that she appreciates, which she explained as follows:

So I'm not concerned about sharing my thought processes, because inevitably what comes out of it is maybe one or two people afterwards will come up to me and say would you be interested in exploring this a little further and there is a bit of work that comes out of it, but again it is about me having the opportunity if I am invited as a speaker, it is an opportunity for me to reflect on my own my knowledge and learning and be challenged by the audience and by the other participants to challenge my thinking about my own learning, but I do know there is something precious and I didn’t want somebody else to find out this, find it out, they give for us individually our approaches, our values to that engage the people with the structure the way questioning the examples of the stories that we can share that’s not easy to convey in presentations.

P16 believes that knowledge is augmented by sharing, which is similar to the concept of gift circulation that (Hyde, 2006) introduced, where in less capitalist communities, the value of the gift increases with circulation. This, as P16 puts it, can be achieved when people, one person or two, may come to the knowledge sharing participant and request more information or seek to discuss specific points that could be the point of departure for a contract.

9.4 Concluding note

IOL can be viewed as a reciprocal exchange dynamic amongst several organisations where the substance of knowledge exchanged in addition to organisational reaction to it are determined by reciprocity dimensions. Analysing IOL as a product of reciprocal exchange is vital for establishing a more responsive theoretical model of learning across organisational boundaries. This chapter is inspired by the question “What are those particular dimensions of reciprocity that relate to IOL?” which relates to preceding questions that were tackled in Chapter 7 and Chapter 8 above.
The literature on reciprocity suggested that there is an expectation concerning receipt of benefits and not so much regarding giving benefits. The findings indicated how knowledge sharing, knowledge creation, and knowledge leakage were mediated through IOL dynamics.

The chapter argued that organisations seek to gain knowledge “individually”. This knowledge is not collective and is gained at the same time that others are pursuing it. In inter-organisational gains, organisations have to set boundaries of expectations and appreciate other organisations’ boundaries. In their pursuit of knowledge creation, organisations may collaborate with competitors but this was found to have resulted in diminishing returns due to the elevated number of trade-offs they had to put in. While there were concerns of knowledge leakage, the application of knowledge was more important than copying it. The main purpose of knowledge sharing is not amassing knowledge but rather making use of this knowledge, applying it, and integrating it into business practices.
Chapter 10  CONCLUSION & FUTURE RESEARCH

Thesis’s Objective 5

To discuss and recommend practical implications of reciprocal, temporal and agential elements of learning in the context of interorganisational networks.

10.1 Introduction

This chapter mainly synthesises the concluding notes of the main findings introduced by the preceding three chapters. In particular, it synthesises IOL dynamics in learning networks. This chapter presents, discusses, and relates the main findings of this thesis with each other and against the extant literature. In this concluding part of the thesis, my intent is to focus on the main theoretical themes that were drawn from empirical evidence in addition to revising the main aims of this thesis. This shall be followed by the theoretical contributions and implications for industry in addition to limitations and future research.

10.2 Main aims revisited

This thesis investigated how inter-organisational learning occurs in learning networks. The main purpose was to explore the dynamics that made this learning a successful experience for organisations by questioning why and how organisations joined networks and why and how they exit from those networks. The extant research has exhaustively explained learning as a phenomenon that is either psychologically or socially embedded. Psychological theories were employed to explain learning as cognitive or intuitive processes that are mainly situated in the heads of those who learn. Practice theory explained learning as experiential learning where organisations learn from the experience of their members. Social
theory explained learning as being socially constructed, which illustrated learning to be a sum of social interactions. The research attempting to explain learning from social exchange theory was limited to focusing on how IOL may be conceived as a competitive advantage in strategic alliances (cf. Muthusamy and White, 2005). Throughout the endeavour to investigate how IOL occurs, this thesis used social exchange theory to explain IOL as a phenomenon that is socially constructed and oriented. Specifically, this thesis concluded that reciprocity is a robust device that has explanatory power to theorise learning dynamics. This, however, indicated the agential power that a network has over organisations through IOL. Not only did networks foster organisations to learn through them, but also they played a role of agency that effectuated the way organisations learned.

10.3 Synthesising key findings

The complex nature of networks shapes the way in which those networks operate, especially when learning occurs in networked organisations at different levels of analysis. While there are many definitions and typologies of network, the social networks perspective of Van Wijk et al. (2011) has been used as the domain of this thesis. This has provided the grounds to study network characteristics and seek to investigate how such characteristics interplayed with IOL. This could not have been actualised without the appreciation of reciprocal exchanges that occur on the network’s various levels. This has suggested examining the notion of reciprocity in light of network studies. This intriguing blend infused the use of the empirical device that mainly drew upon interviews and participant observation, which was preceded by a pilot study. This has yielded inferential findings that will be presented in the sections below:

10.4 Agential role of networks

Extant research on networks dealt with the network as a structural notion that resulted in innumerable studies on the structural properties of networks including centrality, embeddedness, and proximity. While appreciating this stream of
research, it overlooked other properties of networks that needed fresh insights in order to be investigated. Structures are static rather than dynamic; otherwise, they would not qualify for the name “structure”, while on the other hand, agents are not recognised as agents until they create action through their own free will (such as producing and reproducing meaning and norms); that is the change that will lead to stability. The change might be either progressive or regressive, but it seeks to create stability that would cause equilibrium with the social structure. For this reason, a network is closer in its behaviour to an agential role rather than a structure.

Borrowing from the theory of structure agency (Elder-Vass, 2010), Chapter 7 has rather shifted the way we look at networks from structural to agential. This shift formulated the questions, what do networks do? how do networks reproduce and challenge the logics of organisations (Vaast and Walsham, 2005)? As such, it posited the network as the agency of its participants. In other words, the immaterial stands as an agency of the material. In order for this agency to reify, the causal powers of the network can be split into three. The first is that which results from the existence of participants within the network, the second from the relationships of those participants and synergies, and the third from the roles those participants enact during their interaction with the network.

This thesis reified the three phases within which the agential role of the network mediates IOL. The first is the condensation phase; where participants, through translations of their expectations from the network, shape the role of the network. The second is the capitalisation phase; where participants use the network resources to capitalise on their knowledge resources. The third is the materialisation phase; where participants reify the network and interpret network materiality into consequences from this network.
10.5 Reciprocal exchanges

The extant research on IOL sparingly employed social exchange theory to study its dynamics. Recognising that the thesis in Section 10.4 above explained how the agential role of networks differentiates how organisations learn across their boundaries; this section is more interested in depicting how IOL dynamics do this from a reciprocal exchange lens. The extant research focused on four dynamics of IOL, namely power relations, trust and risk, structures and mechanisms and social ties (Easterby-Smith et al., 2008). However, the field still lacks a holistic understanding of how this IOL initiates, unfolds and concludes. This thesis’ explanatory power lies in its explanation of how IOL unfolds from a reciprocal exchange lens using an interpretive approach. This has yielded a framework with which to understand IOL dynamics. This framework suggested that the reasons for the network, organisation an individual that mediated IOL dynamics either succeeding or failing to learn across their boundaries were related to different ways of managing IOL. The framework that this thesis introduces is composed of four dimensions; temporal, spatial, directional and symmetrical.

The temporal dimension was depicted in a three-sub-dimensional framework that illustrated how the temporal dimension of reciprocity is correlated with IOL dynamics. The three sub-dimensions are duration, timeliness, and timescapes. The duration of reciprocal exchanges in an IOL session or event had implications on the success or failure of learning objectives on both intra-organisational and inter-organisational levels. Learning has its best results when a sufficient amount of time is allowed by the organisation and the network while the least efficient case is when network time is limited, regardless of the time allowed by the organisation. Another sub-dimension is timeliness, which indicated a correlation between types of reciprocal exchange and IOL dynamics. Learning before the organisation faces a problem was linked to indirect reciprocity, which is imbued with explorative learning. Learning throughout a problem was linked to direct reciprocity because urgent solutions are sought and this indicated exploitative learning to mitigate the problem. Learning after the problem is solved was linked to indirect reciprocity and
tended to be reflective learning which is, in this sense, imbued with explorative learning. The third sub-dimension was timescapes (time phases), which suggested that organisations are positioned in a network based on their conceptualisation of time. Organisations that are past-oriented were inclined to seek to learn from networks based on their experience with those or other networks. Organisations that are present-oriented sought to learn from networks based on the dynamics of interaction and level of engagement in the network. Finally, organisations that are future-directed sought to learn from networks based on the level of expectations from a particular network.

The second dimension is spatiality, which made a distinction between the online and offline spaces while appreciating their inter-relatedness. This distinction, although spatial, cannot escape the presuppositions of social space and physical space. Network participants perceived the space in different ways, influenced by their culture and language embedded in social interactions within the network. The space influenced the way that organisations employed IOL dynamics in learning networks. This thesis offered an inferential matrix that correlated space to IOL dynamics. The dichotomy in the matrix shows that organisations that relied completely on IOL across online platforms experienced slower learning dynamics, easier access to knowledge, but less knowledge retention. On the other hand, organisations that showed inter-reliance on both online and offline space experienced faster learning dynamics, easier access to knowledge, and more knowledge retention. Those organisations that conservatively relied completely on IOL across physical networks, and at the same time ignored the social online space, experienced slower learning dynamics, difficult access to knowledge but more knowledge retention.

The third dimension of reciprocal exchanges is directionality, which is concerned with the direction in which reciprocal exchange heads. In the directional dimension, this thesis maintains that the direction is important in identifying the benefits and payoff of reciprocity: the payoffs that lead to or are generated by reciprocity. It is
not only important to recognise how a reciprocal exchange initiated and unfolded, but it is also important to know who initiated the reciprocal exchange and to establish the resultant direction of that reciprocation. The resultant direction is linked to the symmetry dimension, which will be illustrated in the following paragraph. In a network context, directionality signals centrality and betweenness. The network tie cannot be maintained as long as it is a binary directional, i.e. a zero/one type. If either direction is zero, one party is not reciprocating at all, a situation similar to free riders who make use and benefit from networks without giving anything in return.

The fourth dimension of reciprocity is symmetry, which underpins reciprocal exchanges in almost every social system. Symmetry in reciprocal exchange is distinguished from symmetry in economic exchange. The symmetry of things or values in a reciprocal exchange is not strictly measured or expected by participants, contrary to economic exchange. In some instances, symmetry was detrimental and resulted in redundant knowledge, while in others it was not. The thesis suggested that this symmetry is heavily socially produced and this resulted in variances in how network participants conceived of it. Participants perceived that learning should be symmetrical in order for it to be beneficial, i.e. the resources exchanged or the source of those resources have to be symmetrical in some way. There was no strong correlation between symmetry and the improved dynamics of IOL, as the social perception that was carried out collectively implied both symmetry and asymmetry were important to IOL.

Finally, the thesis suggested that the reciprocal exchange that mediates IOL initiates, unfolds and concludes through three phases; namely disharmony, normalisation and harmony. The disharmony phase indicates the phase where the participants join a network and are fuelled by their variant aims and strategies to seek to establish social ties with others. This phase may be depicted as chaotic because participants are busy finding their social or professional “matches”. The second phase is normalisation, where reciprocal exchanges take the form of
episodic exchanges until a social tie is created that is able to differentiate knowledge gains from the network. The third phase is harmony, where the network settles and its concrete or material consequences are widely acknowledged by participants.

10.6 Contribution to knowledge

This thesis has enabled the researcher to investigate and understand how IOL occurs in learning networks from both theory and practice worldviews. As a result, the thesis has theoretically, methodologically and practically contributed to a better understanding of IOL in learning networks by employing social exchange theory for an in-depth reconceptualisation of IOL. Fitted within the theoretical lens of reciprocal exchange, temporality and structure and agency, and how social interactions contribute to fostering/hindering learning, paved the way for the thesis to develop and unfold to produce consistent theoretical and applicable implications as follows (depicted in Figure 10-1):
10.6.1 Implications for theory

- The main contribution of this thesis is bringing to the fore the agentiality of networks and reciprocal exchange within networks.

- This thesis suggested interpretation as a device to create network agency through the use of Elder-Vass (2010)’s theoretical lens of structure and agency in inter-organisational settings. This provides a fresh understanding of how networks work and what networks do in order to work.

- While the extant literature on networks studied qualities of the network structure such as proximity and centrality, this thesis suggested studying a network’s agency. This will help to investigate inter-network research.

- Not only should we appreciate the agential role of networks, but we can also think of agency and structure as being effective at the same time, with each benefiting the other.

- Another key contribution would be to broaden understanding of reciprocal exchanges in IOL by employing social exchange theory (SET), which produces a four-dimensional framework to understand reciprocity as mediating IOL.

- A key contribution would be to broaden understanding of reciprocal exchanges in IOL. The extant literature has voiced the importance of the norm of reciprocity in economic relationships but little theoretical progress has been made to study it within the learning and organisation literatures. The thesis filled this gap with theoretical and empirical evidence that are aimed at progressing to a meta-theory of organisational reciprocity in the future.

- This thesis indicates the importance of time to manage IOL dynamics. For example, extant research suggested reciprocity is important for understanding and managing IOL however it overlooked how time can play an important role in deciding how such dynamics can be accelerated or decelerated. This thesis provided the notions of duration, timeliness and timescapes to understand and manage IOL dynamics.
• The thesis suggested space is also important to understand and manage IOL dynamics by bringing into the fore the notions of online and offline spaces to increase effectiveness of IOL dynamics.

• The thesis provided a lens to differentiate knowledge from learning, as they are commonly misunderstood as synonyms. From an SET perspective, we can conceptualise a learning network as the rules and norms of social exchange, knowledge as the resources exchanged, and IOL as the relationships that emerge from the exchange.

• The network as a structure was not immune from challenges when, for example, learning networks attracted polar knowledge comprised of competing organisations. This thesis suggested that in the face of this challenge, networks may continue and sustain and organisations may not disengage from those networks because of reciprocal exchanges.

• Contrary to methodological tensions of network research that sit heavily on social network theory, this thesis suggested that qualitative research using an interpretive approach is useful in explaining why IOL fails to produce expected results and more than that, the theory is useful to explain why some IOL alliances (for example learning networks) fail.

• This thesis has enriched social learning theory by providing SET as a lens to study learning dynamics, especially where behavioural theories fell short of explaining certain phenomena such as knowledge leakage in a social setting.

• Alliances are created to advance distinctive capabilities and resources. Through employing SET, this thesis provided a theoretical basis from which to suggest that not only does IOL advance distinctive capabilities, but it is also a distinctive capability on its own.

• The thesis suggests that learning occurs not only in a time and space but also in a direction and symmetry.
10.6.2 Implications for practice

- In line with theoretical contributions, this thesis provides implications for practitioners. The thesis practically informs decision makers in organisations on how to select networks that achieve their learning objectives.
- The implications for practice could be to inform stakeholders on how to create a better environment in which to exchange and sustain knowledge.
- Especially in small businesses, challenges such as how to sustain knowledge within the organisation could be alleviated by understanding how reciprocity plays a role in IOL.
- Organisations should realise the power of networks to create a sustained competitive advantage and that this power can be depicted by interpretations of an organisation’s members of what constitutes a network’s agency.
- By employing the temporal dimension, organisations should give a sufficient amount of time for its members to learn from others. Organisations should know their temporal orientations (e.g. future oriented or past oriented) so that they understand how they are going to benefit from certain networks.
- Organisations should use online and offline spaces to maximise their benefits from networks. It is not sufficient to attend physical networks, nor is it sufficient to engage with online networks.
- Organisations can align their training programmes in light of how people learn from social exchange theory, especially looking at the temporal and spatial dimensions of learning.

To make this thesis more practical to practitioners, the following section summarises the contribution that practitioners may be interested in.
10.6.3 Implications for practitioners

The importance of this thesis for practitioners is that it presents a framework that better inform organisations on when and where are the optimum time and space for IOL dynamics to occur.

The following framework introduces four dimensions (time, space, direction and symmetry) of IOL dynamics:

**Dimension 1: Time**

Time dimension is composed of three facets:

**Duration**: The duration provided by the organisation to learning sessions against that provided by the network is important in defining the efficiency of learning processes as follows in Table 10-1.

<table>
<thead>
<tr>
<th></th>
<th>Intra-organisational</th>
<th>Inter-organisational</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less time</td>
<td>More time</td>
</tr>
<tr>
<td>Less time</td>
<td>Inefficient</td>
<td>Semi-efficient</td>
</tr>
<tr>
<td>More time</td>
<td>Inefficient</td>
<td>Efficient</td>
</tr>
</tbody>
</table>
Timeliness: Choosing the right time for learning is important in defining the learning strategy that an organisation wishes to employ as shown in Table 10-2 below.
Table 10-2: Correlation between reciprocal exchange and dynamics of IOL in a timely manner

<table>
<thead>
<tr>
<th>Mode of timeliness</th>
<th>Pre-incident</th>
<th>Within-incident</th>
<th>Post-incident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of reciprocal exchange</td>
<td>Indirect reciprocity</td>
<td>Direct reciprocity</td>
<td>Indirect reciprocity</td>
</tr>
<tr>
<td>Dynamics of IOL</td>
<td>Explorative</td>
<td>Exploitative</td>
<td>Explorative</td>
</tr>
</tbody>
</table>

Orientation: Time orientation indicates how organisations position themselves in a learning environment. This position indicates dynamics of learning as shown below in Table 10-3.

Table 10-3: Timescapes; Past, Present, and Future

<table>
<thead>
<tr>
<th>Time phases</th>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>How organisations position themselves in a reciprocal exchange in a network</td>
<td>Organisations position themselves in a network based on their past experience with networks.</td>
<td>Organisations position themselves in a network based on the dynamics of interaction and level of engagement in the network.</td>
<td>Organisations position themselves in a network based on futuristic expectations from this particular network.</td>
</tr>
<tr>
<td>Dynamics of IOL</td>
<td>Explorative</td>
<td>Explorative</td>
<td>Exploitative</td>
</tr>
</tbody>
</table>

Dimension 2: Space

This dimension summarises how IOL dynamics are impacted by the space within which learning takes place as shown in Table 10-4 below.
Table 10-4: Online versus offline spaces

<table>
<thead>
<tr>
<th>IOL dynamics</th>
<th>Online</th>
<th>Offline</th>
<th>Both online and offline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slower learning dynamics</td>
<td>Slower learning dynamics</td>
<td>Faster learning dynamics</td>
<td></td>
</tr>
<tr>
<td>Easier access to knowledge</td>
<td>Difficult access to knowledge</td>
<td>Easier access to knowledge</td>
<td></td>
</tr>
<tr>
<td>Less knowledge retention</td>
<td>More knowledge retention</td>
<td>More knowledge retention</td>
<td></td>
</tr>
</tbody>
</table>

**Dimension 3: Direction**

Organisations should be aware of the direction of knowledge exchange. In Figure 10-2 below, it is noticed that if organisation is persistent in encouraging their employees to exchange knowledge with others they do not know or other employees than the ones they had previously shared with, this will make knowledge unfold and generate more knowledge. This is important for knowledge dissemination.

![Circular learning in a network](image)

*Figure 10-2: Circular learning in a network*
**Dimension 4: Symmetry**

Contrary to Dimension 3, this dimension stresses the importance of sharing knowledge with the same participant, which is important for knowledge accumulation and knowledge creation. As shown in Figure 10-3, learning symmetrically occurs across two participants.

![Diagram of reciprocal learning between two participants](image)

*Figure 10-3: Reciprocal learning between two participants in a network*

### 10.7 Limitations

Several limitations of this thesis merit discussion. One of the main limitations is methodological. Although this thesis employed interviews and participant observation, it largely relied on semi-structured interviews for the collection and analysis of data. The researcher acknowledges that reciprocal exchange that is heavily based on social interaction necessitates the employment of a more ethnographical observation. That being said, the time constraints to accomplish data collection for the PhD project might be an obstacle. The reason for this is network specific. Network events span long periods of time ranging from one event
fortnightly to one event bi-monthly, and therefore it would take longer than usual to conduct such longitudinal research.

Another limitation stemming from the nature of networks is that contrary to organisations, their number of participants is limited (usually ranging from 5-30). Therefore, access to data was limited in addition to the timespan between events which made data collection rather difficult. While acknowledging that context is important for the data collected, this rather limited its generalisability. The data were only collected from learning networks, and it may be necessary to collect data from strategic alliances to provide fresh insights into how IOL occurs in those alliances through the lens of SET. Learning networks were heavily based on reciprocal exchanges. However, as the literature suggests, strategic alliances rely heavily on negotiated rules of exchange which may invoke different explanations of IOL.

In the Photography Network, there were some participants who joined and attended several events. This thesis could not provide plausible explanations for why such a network was sustained despite having socially inactive members, as there was a lack of sufficient supporting data.

The thesis overlooked several macro factors that influenced reciprocal exchanges such as gender, culture, and economy. On the micro level, factors such as trust and power relations were not the focus of this thesis, although some inferential outcomes from the data indicated these factors, they had to be ruled out due to the thesis’ size limitation.

The two dimensions of reciprocity, namely directionality and symmetry, were not adequately discussed and comprehended due to insufficient supporting data, contrary to the temporal and spatial dimensions. Lastly, the four dimensional framework of reciprocity needs to be examined in different networks to polish its
plausibility. This having been appreciated, the dimensions themselves are not yet deemed causal due to the cross-sectional nature of this thesis.

10.8 Future research

This thesis has contributed reciprocal, temporal and agential perspectives to IOL; however, there remains the opportunity for further research in order to enrich our understanding of IOL. Future research projects may include the following list:

1. This thesis assumed that participants had a common understanding of reciprocity under (Gouldner)’s accounts. Little research has been done to identify how network participants understand reciprocity. Endres and Chowdhury (2013) studied the role of expected reciprocity on knowledge sharing. It is necessary that future research shed light on how participants expected and perceived reciprocity in more detail. A quantitative research may help in refining or suggesting new avenues to study reciprocity and its typologies. The objective of this research project would further the debate on reciprocal exchanges in learning from traditional accounts of reciprocity to tackle issues pertaining to expected and perceived reciprocity. Conclusions from this research project may draw on how reciprocal exchanges that are socially constructed implicate IOL. Another conclusion may show how perceived reciprocity is differentiated from expected reciprocity in IOL taking into consideration the temporal gap between the two.

2. Future research should comprehend reciprocity’s 4-D framework and especially focus on organisational space. The thesis has developed an advanced level of understanding of how temporal element of reciprocity implicated IOL. The spatial element however was under-developed and therefore future research project should aim to investigating space and analyse its implications on IOL. The thesis dichotomised space into online and offline space. There are other typologies of space that need to be studied specially that research shows that space is also socially constructed
(Lefebvre, 1991). This implies that participants’ views on what space is and how it impacted learning outcomes will vary. A qualitative study should critically evaluate social theory of space and how this implicates IOL. Contributions of this research project would argue that space is a social production of reciprocators and its implications on learning outcomes are immense.

3. Since this thesis focused on learning networks type of interorganisational networks, further research needs to be conducted on strategic alliances to allow cross comparisons with learning networks. This consequently may provide a holistic understanding of IOL in interorganisational networks. It is important that future research project investigate how reciprocal, temporal, and agential elements of learning play out in strategic alliances. In addition, this cross comparison not only may synthesise understanding of IOL interorganisational networks but also may allow learning outcomes under each type of network to be tested in a quantitative approach.

4. This thesis focused only on reciprocal exchanges of SET. Drawing on Cropanzano and Mitchell (2005) further research on other facets of SET is vital for understanding IOL. For example, research should focus on negotiated exchanges that contrast with reciprocal exchange. This thesis has mainly contributed to reciprocal exchanges. Abovementioned research avenue promised to further breaking down reciprocity into expected and perceived where learning network participants do not negotiate their gains and costs from the social exchange. However, this research project crosses another level of SET theory and discusses negotiated exchange where participants negotiate gains and costs of exchange prior or during the exchange. This project aims at analysing how IOL outcomes are implicated.

5. Further research on inter-network learning is vital in light of the agential role of networks. This will better depict how a network may learn from another network, which pushes up the level of learning from network to inter-network; i.e. 6th level of learning (See (Crossan et al., 1999) for learning levels). The thesis contributed to network debate arguing that network may
work as agency of its participant organisations. Consequently, a research project should aim at examining learning across networks moving away from learning across organisations. This necessitates studying several learning networks from the same industry or from a supply chain.

6. It is also vital to study how reciprocal, temporal and agential elements of IOL mediate, and are mediated through, different processes of knowledge. This is especially important when competitors learn from each other in a learning network despite the knowledge leakage dilemma. Extant IOL literature overlooked implications of differentiated types of knowledge on IOL. Although literature discussed acquisition, dissemination, exchange, and sharing of knowledge, yet it overlooked how each process particularly implicated IOL, let alone those elements that this thesis studied (i.e. reciprocal, temporal and agential).

7. Finally, further research may examine reciprocal exchanges as constituting organisations, i.e. an organisation is depicted as a series of episodic reciprocal exchanges. Specifically a research project may examine how reciprocity is viewed as backbone of an organisation or a network, drawing upon the concept of communicative constitution of organisations (CCO). The contribution sought from this research project is twofold. The first contribution is made towards network and organisation studies in general by providing fresh concepts on how reciprocity organises networks (not a result of network) taking into consideration that networks participants may include competitors and collaborators. The second contribution is to discuss the relational and interactional dimensions of reciprocity in learning networks.
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