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The MNE as a network of dynamic intra-organisational relationships:
The temporality and multiplexity of subunit triads

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Abstract

For over four decades, International Business scholars have been conceptualizing and empirically examining the organisational structure of the multinational enterprise (MNE). However, the intra-organisational relationship is still treated as secondary to the dyadic actors involved in the relationship (e.g. headquarters and subsidiaries) and outcomes (e.g., knowledge transfer, performance, relationship quality). It remains unclear what characterises such relationships have beyond subunits’ roles, motivation, or control mechanisms and how they are structurally dynamic. In this thesis, I take the MNE intra-organisational relationship as the unit of analysis and ask: What constitutes the dynamic nature of MNE intra-organisational relationships?

To answer this question, I extend the concepts of temporality and multiplexity in the business network perspective of the MNE in the International Business discipline. I do so by borrowing network theory extensions from the two scholarly fields of Industrial Marketing and Purchasing and Organisational Studies. I offer a conceptual framework that takes a processual and pluralistic view of the networked MNE relationship and positions a subunit event-based triad as a significant structural component. I use a qualitative single case study approach with multiple embedded sub-case studies and triangulate data from 44 semi-structured and un-structured in-depth interviews, 66 network pictures, field note memos (including photographs), and secondary data (organisational documents and social media). I also develop analytical procedures to triangulate between textual and visual data.

This thesis offers three contributions to the International Business scholarly conversation on the MNE. First, a view of the MNE as a network of dynamic intra-organisational relationships. Second, a pluralistic understanding of the networked relationship that includes a diversity of content, type, and its event-based nature. Third, configurations of the MNE subunit triads that permutate over time based on event triggers and subunits types. Types of subunits include global service organisations that create a bridge between heterarchical and hierarchical network structures. My conclusions develop, theoretically and empirically, a processual understanding of the MNE and how it is distinctive from other International Business related phenomena. Ultimately, such insights allow practitioners to understand how they may respond to critical events within the MNE to garner organisational efficiency and resilience.
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Chapter 1. Introduction

1.0 Introduction

1.1 Motivation for the study

*A small number of giant companies are once again on the march, tightening their grip on global markets, merging with each other to get even better, and enjoying vast profits [...] all of them have learned how to combine the advantages of size with the virtues of entrepreneurialism.*

*The Economist (September, 2016)*

*The multinational company is in trouble [...] for many industrial, manufacturing, financial, natural-resources, media, and telecoms companies, global reach has become a burden, not an advantage.*

*The Economist (January, 2017)*

In a special issue on giant companies, *The Economist (2016)* noted that multinational organisations have successfully captured and exploited the advantages that come from their supra-normal size and cross-border business relationships. Less than six months later, the same publication described such multinational enterprises as burdened by these advantages (The Economist, 2017). This disparity in the reporting on the phenomena of the multinational is interesting because both statements are correct in terms of the form of the contemporary multinational and its increasing level of organisational complexity given managerial processes (Cantwell & Brannen, 2011; Cheng, Henisz, Roth, & Swaminathan, 2009; Kostova & Hult, 2016). The multinational as an organisational form has ‘many faces’ (see Aharoni, 2015). Focusing the analytical lens on the multinational to one that emphasises the importance of the multinational’s inner processes and structures can illuminate its dynamic and complex nature.

The UNCTAD (2016, p. x) reports that a large growth in FDI flows is due to multinationals implementing large corporate reconfigurations and restructuring processes and highlights the increasingly complex nature of their internal ownership structures. In addition, these internal processes are dynamic and long-term in nature; previously the UNCTAD found that intra-firm trade accounted for 30% of total trade within the international production networks of transnational corporations (UNCTAD, 2010). An additional view of the contemporary multinational, one that explores its intra-organisational subunit relationships, would explicate
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its dynamic and complex nature as well as what makes it distinctive from other related IB phenomena (Michailova & Paul, 2014). This thesis is on the contemporary multinational and its intra-organisational relationships as the focal unit of analysis. My research aims to contribute to the theories of the multinational enterprise (MNE) within the scholarly field of International Business (IB).

A significant stream of IB research studies the roles and motivations of MNE subunits to create and share resources through organisational relationships (Birkinshaw & Hood, 2000). Scholars within this research stream consider the role of subunits, such as headquarters (HQs) and subsidiaries, and how their decisions affect the quality of value-adding relationships. Initially, scholars viewed HQs from a traditional ‘parenting’ role, directing and instructing subsidiaries to perform certain activities. Currently, this perspective has shifted to emphasise the primacy of subsidiaries as strategic centres (Harzing, 2000). Subsidiaries are studied as ‘centres of excellence’ as they create value competencies through external relationships while the influence of the HQs is minimised to a support function (Andersson & Forsgren, 2000; Gnyawali, Singal, & Mu, 2009).

Recently, there has been a call for a better understanding of how HQs can be conceptualised as a partner rather than as a parent (Ambos & Mahnke, 2010; Ciabuschi, Dellestrand, & Holm, 2012). Kostova, Marano, and Tallman (2016) draw a parallel to the theories of the MNE and the evolving conceptualisation of the HQs-subsidiary relationship. Although a contemporary view of the MNE as a diversified inter-organisational network underscores the role of the subsidiaries as ‘centres of excellence’, there is a lack of current literature on the internal relationships within MNEs beyond specific relationships, such the HQ and subsidiary relationships or those between peer subsidiaries. Within the IB literature on intra-organisational networks, the focus on the role or motivations of a focal subunit has masked the importance of considering the intra-organisational relationship as a unit of analysis.

A contemporary perspective on the MNE organisational form highlights the importance of considering the relationships between its subunits and their roles for creating value for the organisation. The MNE is considered a heterarchical network of internal relationships, such as those with subsidiaries, and external relationships, such as those with strategic partners (Djodat & Knyphausen-Aufseß, 2016; Ghoshal & Bartlett, 1990). Researchers from this perspective view relationships as a conduit for resource flow or exchange and categorise them according to their content, such as knowledge, and their influence, such as friendship.
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(Brass, Galaskiewicz, Greve, & Tsai, 2004). In addition, such researchers highlight that relationships have varying stages of interaction, such as formation and termination (Cui, Calantone, & Griffith, 2011; Jones & Khanna, 2006; Kang & Kim, 2010). This research focus is on how the focal unit could influence such relationships for increased performance. Zander and Mathews (2010) maintain that heterarchical approaches to managing MNEs have become widespread. However, they argue for a more fine-grained approach to discussing the MNE’s dynamic responses to turbulent business environments.

Notwithstanding the importance of current IB research on the role of subunits and their relationships - some important and under-researched areas present themselves for further study. A key implicit assumption underlying this stream of research is that relationships do not change over time. Even within business network research on MNEs, the majority of researchers have simplified the relationships to immutability (Soda, Usai & Zaheer, 2004). Nevertheless, it is acknowledged that relationship formation is influenced by prior interactions and may can decay over time (Alnuaimi, Singh, & George, 2012; Andersson & Forsgren, 2000; Gammelgaard, McDonald, Stephan, Tüselmann & Dörrenbächer, 2012). In support of this, some research on HQs-subsidiary relationships shows that relationships change over time. For instance, the direction of resource transfer can reverse depending on the value and characteristics of the resource (Ambos & Ambos, 2009; Björkman, Barner-Rasmussen, & Li, 2004; Yang, Mudambi & Meyer, 2008).

Furthermore, prior interactions can build relational capital that influence the quality of the relationship and can even lead to negative effects due to its path-dependent nature (Abreu & Camarinha-Matos, 2010; Ahuja, Soda, & Zaheer, 2012; Baum & Rowley, 2008; Borgatti & Cross, 2003; Doz & Prahalad, 2007). An example of a negative effect is when subsidiaries with a higher bargaining power exercise their unwillingness to cooperate or contribute to the MNE (Mudambi & Navarra, 2004). More positively, IB scholars have recently argued for a more fine-grained and pluralistic conceptualisation of time and process (Haley & Boje, 2014; Welch & Paavilainen-Mäntymäki, 2014; Welch, Nummela, & Liesch, 2016). Therefore, my research focusing on MNE subunit relationships and their dynamic and temporal nature is justified given the lack of sufficient attention to MNE-related research. I look at how the idea of temporality may be conceptualised and studied within the MNE and its subunit relationships. I also explicitly link temporality to a processual perspective to study the MNE and its processes in a more rigorous manner (Bizzi & Langley, 2012).
In addition, not only are MNE subunit relationships often conceptualised as static in nature, but scholars also treat them as homogenous. This leads to a fragmented and sometimes limited understanding of the pluralistic and integrated nature of such MNE subunit relationships (Shipilov & Li, 2010). For example, relationships between subsidiaries are examined by scholars based on a particular context, such as knowledge sharing between subunits for cooperative projects while competing for organisational resources (Tsai, 2002) or the context of global value chains (Cano-Kollmann, Cantwell, Hannigan, Mudambi, & Song, 2016). An outcome of this treatment is that different contexts are represented by different streams of research. This is not an inherently negative outcome and borrowing from many different disciplines can be beneficial if they are not compartmentalised (Gioia & Pitre, 1990; Van de Ven & Poole, 1995). Examples of skilful aggregative treatments of previously disaggregated IB phenomena include Michailova and Mustaffa’s (2012) work on subsidiary knowledge flows and Kostova, Nell, and Hoenen’s (2016) work on headquarters-subsidiary relationships. There have been positive outcomes from such treatments such as an increased clarity of the concept under study, for example, Michailova and Mustaffa’s (2012) work offers clarity on different types of knowledge flows and options for future conceptualisations, and Kostova, Nell, et al. (2016) argue for the theoretical expansion of headquarters-subsidiary research.

Therefore, I take a heterogeneous view of MNE subunit relationships to present a more pluralistic understanding by borrowing the concept of multiplexity. Drawing from network research, using the concept of multiplexity allows me to explore MNE subunit relationships in a more fine-grained manner, conceptually and analytically. Multiplexity has been conceptualised in a variety of ways in organisational research, for example, as a mix of new and old ties (Baum & Rowley, 2008), social and economic ties (Ferriani, Fonti, & Corrado, 2013) or even between different types of organisational networks (Shipilov & Li, 2014). Within network research, ties are conceptualised as a type of relationship between actors, usually at a multi-level of analysis, such as individuals within a group (Moliterno & Mahony, 2011). Within IB literature, scholars prefer to concentrate on the embeddedness of actors within networks, such as local subsidiaries embedded within inter-organisational MNE networks. However, this conceptualisation still focuses on the subunit as the unit of analysis and its position in different networks (Ferraris, 2014). In contrast, multiplexity in HQs-subsidiary relationships has been conceptualised in terms of differentiated content ties (Ciabuschi, Martín Martín, & Ståhl, 2010). I explore this concept within the MNE intra-
organisational network as a whole and aim to determine if MNE subunit relationships are multiplex in that they encompass a number of sub-relationships that can differ in both temporality, content and type.

By taking an intra-organisational network perspective to the MNE and conceptualising its subunits’ relationship in terms of temporality and multiplexity, I hope to present ‘interesting’ research to my scholarly field of IB (Alvesson & Gabriel, 2013; Bartunek, Rynes, & Ireland, 2006; Davis, 1971). I extend some of the assumptions of IB research on the MNE, for example, subunit network relationships are multiplex, not monoplex. I also offer a polymorphic approach to the research objective in line with Alvesson and Gabriel (2013) by amending research methods, such as network pictures, for the IB context and taking seriously its emergence during data collection as a method beyond working as a tool for elicitation.

1.2 Research questions and objectives

A review of the literature on MNE subunit relationships and their processes suggests that IB scholars have not conceptualised their dynamic natures in terms of temporality and multiplexity, either separately or in tandem. There are a few exceptions in the form of conceptual studies that argue for a more pluralistic and processual view of the MNE. For example, Hoenen & Kostova’s (2015) work on the use of agency theory to examine multi-tier and nested structures within HQs-subsidiary relationships, and Welch and Paavilainen-Mäntymäki’s (2014) work on the internationalisation process as a temporal IB phenomena. However, very few empirical studies look at the intra-organisational network relationships within the MNE as the unit of analysis, choosing instead to focus on its contents or the behaviour of the dyadic actors engaged in the relationships process. To address these limitations, this study presents an overarching research aim to examine the dynamic nature of relationships between subunits within the MNE, specifically the influence of temporality and multiplexity on such relationships.

For my literature review chapter (Chapter 2), I present two literature search processes. The first positions my conceptual and empirical thesis contributions by exploring what conceptualisations IB scholars use when discussing the dynamic nature of the MNE and its relationships. The first literature search suggests that IB scholars use the concept of time and dynamism interchangeably. In addition, IB scholars do discuss subunit relationships within the conceptualisation of the MNE as a diversified and complex inter-organisational network
leading to the network concept of multiplexity. These two key concepts form the basis of my key research questions,

*RQ1.* How does temporality influence the relationships between MNE subunits?

*RQ2.* How does multiplexity influence the relationships between MNE subunits?

After determining my key concepts of temporality and multiplexity, I performed another literature search that included the adjacent scholarly fields of Organisational Studies (OS) and Industrial Marketing and Purchasing (IMP) to develop the key concepts. From the two literature searches, I developed research objectives explicitly linked to my intended conceptual and empirical contributions to the IB scholarly discipline. First, the identification of time (chronological), as well as temporal (kairological), influences on MNE intra-organisational subunit relationships as well any interactional effects that may be present in the empirical data. Second, the identification of the content and types of intra-organisational sub-relationships those MNE subunits have with each other as well as any interactional effects. This identification adds another conceptual perspective to the current literature on inter-organisational MNE business network relationships. Lastly, exploring the organisational MNE network structure at an elementary level involves taking steps to develop a conceptualisation of the dynamic MNE that captures its processual and complex nature. Table 1 summarises the research aim, research questions, and their links to research objective.

*Table 1 Research aim, questions, and objective*

<table>
<thead>
<tr>
<th>Research Aim: to examine the dynamic nature of relationships between subunits within the MNE</th>
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<tr>
<td><em>RQ1.</em> How does temporality influence the relationships between MNE subunits?</td>
</tr>
<tr>
<td><em>RQ2.</em> How does multiplexity influence the relationships between MNE subunits?</td>
</tr>
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</table>
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1.3 Definitions of key concepts

*Multinational Enterprise (MNEs)*

In general, MNEs can be conceptualised as organisations that develop their competitive advantage through accessing resources in foreign markets (Michailova & Mustaffa, 2012; Vahlne & Johanson, 2013). Bartlett and Ghoshal’s (1989) transnational corporation can be viewed as a type of MNE – one that has an integrated business network with highly interdependent subunits, some of which contribute unique assets and capabilities due to their location in foreign markets. I define the MNE in my thesis as *an organisation that gains competitive advantage through developing value-creating network relationships inside and outside the boundaries of the firm and in different countries.*

*Subunit Relationships*

The relationships of focus for this thesis are interactions between subunits, such as headquarters, regional headquarters and subsidiaries, which include sales and service organisations. IB scholars tend to conceptualise subunit relationships in terms of their content and the characteristics of the actors. Borrowing from related fields that study business network relationships, such as IMP, I integrate a temporal perspective into my definition of subunit relationships (Chou & Zolkiewski, 2012). I do this by integrating the concept of networks as processes that reconfigure according to critical events. Therefore, I define subunit relationships as *a series of interactions that evolve between two subunit actors that have the primary aim of pursuing an activity and exchanging or transforming a resource.*

*Change in relationships: Dynamics or temporality?*

Although the concepts of dynamism and temporality (as change over time) are used interchangeably in common nomenclature, they are two distinct concepts in IB literature. The term ‘dynamic’ is often used as an adjective in IB literature and scholars often link it to a process or system that undergoes change or progress. This change process can also be bounded by a time period or described as evolving. In addition to the time boundary is the issue of correct timing of activities for critical events (Medlin, 2004). From this perspective, a kairiological perspective of time can be taken in addition to the traditional chronological perspective. The kairiological view conceptualises time in terms of events or as a “sequence of qualitatively heterogeneous events” (Araujo & Easton, 2012, p. 313). Therefore, I define the concept of temporality as *how the process of qualitatively heterogeneous events between two MNE subunits affects the development of their relationship.*
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*Multiplexity*

Multiplexity is used as a concept to describe a number of heterogeneous relationships in social network research. More specifically, multiplexity in networks is “multiple ties with different contents between the same set of actors” (Ahuja et al., 2012, p. 438). I amend this definition to develop my thesis definition of the MNE subunit relationship multiplexity as the *multiple co-existing sub-relationships that differ in content and type.*

1.4 Overview of research methodology

The broad aim of my research is to study the networked MNE subunit relationships and how they are influenced by temporality in terms of critical events and complexity in terms of multiplexity. Given that such concepts are nascent within IB literature and particularly in the study of the MNE organisational structure, I employ a qualitative approach to data collection and analysis. More specifically, I follow a process perspective methodology developed from IB literature and extended using conclusions on studying business network processes from OS and IMP disciplines (Bizzi & Langley, 2012; Langley, Smallman, Tsuokas, & Van de Ven, 2013). The research objectives of identifying the influence of temporality and multiplexity on MNE subunit relationships is applied through a single case study of an MNE with multiple embedded subcases and the collection of data using a number of methods. The methods used include traditional techniques such as semi-structured and unstructured in-depth interviews and document analysis of organisational documents. In addition, I adapt and extend the use of network pictures from IMP research by focusing on critical event MNE subunit triads influenced by critical organisational events (Halinen, Törnroos, & Elo, 2013). I also go beyond the use of network pictures as a graphical elicitation approach to one that is sense-making in nature for the collection of richer data from participants (Garreau, Mouricou, & Grimand, 2015).

I also used an analytical framework that structures the analytical procedures to capture textual and visual data from a number of sources. Following this framework, I was also able to develop a proportionally based triangulation of data approach to highlight the convergence, divergence, and lacunae in my analysis and so instil a higher level of rigour when dealing with a mixture of textual and visual data.
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1.5 Contributions of the thesis

The thesis advances scholarly research on the MNE and its intra-organisational subunit network by, a) taking the relationship as the focal unit of analysis, b) investigating the dynamic and complex nature of relationships through the concepts of temporality and multiplexity, and c) extending the business network perspective of the MNE using findings from a qualitative investigation into its subunit processes and relationships (Berthod et al., 2016; Reinecke & Ansari, 2015; Shipilov, Gulati, Kilduff, Li, & Tsai, 2014). I also contribute theoretically to the business network perspective of the MNE studying the concept of event triads and Simmelian dyads. This presents a meso-level of analysis that differs from those from a dyadic perspective.

I also offer a methodological contribution through a) the use of network pictures beyond their traditional use as an elicitation tool, b) an analytical framework that integrates textual and visual data and analyses strategies, and c) a proportional framework for presenting a weighted perspective for data triangulation. All three decisions contribute to implications of taking taking a network and processual perspective in the thesis.

The managerial implications of the thesis are targeted at executive level managers, such as those that head country subunits, geographic product lines and functional lines. All three types of managers can use the event triad concept to focus and analyse the critical organisational events affecting their teams. In addition, non-managerial employees can use the concept of multiplexity to analyse their interactions as bundled micro-processes of the subunit relationship.

Lastly, a conceptual framework offers a starting point for executives involved in MNE global strategies to map out what organisational network structures may be best suited to critical organisational events. By using the concepts of temporality and multiplexity and network pictures as an analytical tool, they can also gain some insight into orchestrating the processes within the MNE as a network of relationships.
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#### Table 2 Link between the thesis research questions, theory, methods and analyses

<table>
<thead>
<tr>
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<th>Thesis concepts</th>
<th>Theory utilised and thesis contributes to</th>
<th>Methods and analysis</th>
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<tbody>
<tr>
<td>How does temporality influence relationships between MNE subunits?</td>
<td>Temporality: Chronological and Kairological concepts borrowed from IMP and OS to extend current IB interpretations</td>
<td>Theory of the MNE: A process view of the organisational network structure of the MNE</td>
<td>Multiple embedded case study – examining intra-organisational MNE network relationships and focussing on critical event triads within the MNE</td>
</tr>
<tr>
<td>Key Literature</td>
<td></td>
<td></td>
<td>Primary Data: Semi-structured interviews and Network Pictures</td>
</tr>
<tr>
<td>How does multiplexity influence the relationships</td>
<td>Multiplexity – Diverse content and types of intra-organisational relationships borrowed</td>
<td>Theory of the MNE: A meso-level understanding of the organisational network structure of the MNE</td>
<td>Critical Event Triad Analysis using Network Pictures: – Process perspective and retrospective data: Temporal patterning through examining triadic permutations over time</td>
</tr>
<tr>
<td></td>
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<td>Key Literature</td>
</tr>
</tbody>
</table>
### Chapter 1. Introduction

between MNE subunits? from current IMP and OS interpretations

<table>
<thead>
<tr>
<th>Key Literature</th>
<th>Key literature</th>
</tr>
</thead>
</table>
Chapter 1. Introduction

Table 2 outlines the conceptual and theoretical underpinning of core elements of the thesis, starting with the research question and continuing through to the key concepts of temporality and multiplexity, the parts of the Theory of the MNE that the thesis contributes to, research methods and analysis techniques. Underneath each element, I have highlighted significant literature I draw from. My first research question focusses on the influence of temporality on MNE sub-unit relationships. This thesis concept is conceptualised through extending extant IB literature on temporality with conclusions from IMP and OS literature in order to examine and later contribute to an IB processual view of the MNE intra-organisational network. I use extensions from IMP and OS to develop a framework for collecting data and analysing critical event triads within the MNE that also takes a processual perspective. My second research question focusses on the influence of multiplexity on MNE sub-unit relationships. This thesis concept is conceptualised through integrating extensions from IMP and OS in order to develop a meso-level understanding of its dimensions within the MNE intra-organisational network. Similarly, I analyse critical event triads to examine multiplexity within intra-organisational MNE network relationships. Taken together, answering both research questions contributes to the IB perspective on the MNE and its organisational network structure through putting the relationship as the focal unit of analysis and by examining its temporal and multiplex aspects.
1.6 Organisation of the thesis

In this thesis, I first explore the perception of the dynamic nature of the MNE and its subunit relationships through the concepts of temporality and multiplexity. I develop these key concepts into a conceptual framework by borrowing relevant extensions from IMP and OS. This framework is then used to analyse data and develop a process perspective of the MNE as an internally networked organisation. The structure of the entire thesis is outlined in Table 3 below.

Table 3 Structure of the thesis

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1: Introduction</td>
<td>Motivation for the study, research aim, questions and objectives. Key concepts outlined and methodology overview presented.</td>
</tr>
<tr>
<td>Chapter 2: Literature Review</td>
<td>Explores the concept of dynamism in IB literature on the MNE and its relationships, leading to the development of research questions. Extends key concepts through borrowing extensions from the related field of IMP and OS.</td>
</tr>
<tr>
<td>Chapter 3: Conceptual Framework</td>
<td>Outlines the theoretical background and conceptual framework used to analyse the data collected. This includes the use of a subunit triad approach to understanding the network components of a networked MNE.</td>
</tr>
<tr>
<td>Chapter 4: Research Methodology</td>
<td>Justifies the methodology followed and the data collection methods including the research paradigm, the qualitative single case study approach with multiple embedded sub-cases and the process methodological perspective. Details the analytical framework used to analyse data that is textual and visual in nature and gathered from a number of sources. This framework includes the different cycles of data coding and analysis as well as the triangulation method.</td>
</tr>
<tr>
<td>Chapter 5: Analysis and Findings</td>
<td>Offers key conclusions on the types of subunits within the participant MNE and their triadic configurations, the multiplexity and temporality of subunit network relationships as well as positioning Simmelian dyads and triads as the building blocks of an evolving networked MNE.</td>
</tr>
<tr>
<td>Chapter 6: Discussion</td>
<td>Discusses the significance of the findings in relation to the research questions and offers an amended conceptual framework of the MNE as an internally networked organisation.</td>
</tr>
<tr>
<td>Chapter 7: Conclusions and Future Research Directions</td>
<td>Presents conclusions and contributions to the scholarly field of IB, the business network perspective of the MNE, and practitioners. Outlines limitations and offers avenues for future research.</td>
</tr>
</tbody>
</table>

References | Publications cited in this thesis. |
Appendices | Includes supporting documents, such as detailed literature search processes, the interview guide, and research ethics documentation. |
Chapter 1. Introduction

1.7 Chapter summary

This Chapter introduced the thesis by first discussing the motivation for the study on the MNE and its subunit relationships. The key concepts of temporality and multiplexity were explained, followed by the research aim, questions, and objectives. Significant aspects of the thesis research approach were outlined using network concepts, a processual methodology and multiple sources of textual and visual data. Lastly, I presented the overall structure of the thesis. The next chapter discusses methods for conducting the literature search and relevant literature on the dynamic nature of relationships within MNEs.
2.0 Review of the literature and borrowing concepts from related fields

The purpose of this Chapter is two-fold, and its overall structure is presented in Table 4. First, I outline the development of my primary research questions from a literature search on MNE network relationships in the IB discipline. Included in this process is the initial literature scoping activity that determines the concepts of temporality and multiplexity as my key concepts on the dynamic nature of intra-organisational network relationships within the MNE. Second, I explore related scholarly research fields to advance and conceptualise my key concepts. I first look to organisational network studies in the management field (OS) to develop insights into temporality and multiplexity, such as the role of time and interaction content in organisational relationships tie development, latency, and decay. I then turn towards the Industrial Marketing and Purchasing (IMP) discipline to extend my thesis perspective of the MNE as a network of intra-organisational relationships. I perform an exercise in ‘meta-theoretical triangulation’ by using a theory mapping technique (Lewis & Grimes, 1999; Möller, 2013). A key part of this exercise is determining the dimensions for disciplinary proximity and compatibility between the IB and IMP fields. The outcome of this exercise is an intra-organisational business network perspective on the MNE, which in turn sets the key assumptions for my theoretical framework and conceptual model.

Table 4 Chapter 2 section headings and content

<table>
<thead>
<tr>
<th>Section headings</th>
<th>Section content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 International Business research on the MNE and its relationships</td>
<td>Literature search to determine key concepts that represent the dynamic nature of MNE intra-organisational network relationships. Presents the research questions in terms of the influences of temporality and multiplexity.</td>
</tr>
<tr>
<td>2.1.1 Literature search and the MNE as a networked organisational structure</td>
<td></td>
</tr>
<tr>
<td>2.1.2 Development of the research questions</td>
<td></td>
</tr>
<tr>
<td>2.2 Borrowing conceptual insights from related fields</td>
<td>Borrowing conceptual extensions from related fields: Presents insights from organisational studies in the management discipline on the concepts of temporality and multiplexity. Gives the rationale for turning to the Industrial Marketing and Purchasing discipline and its concepts for extending the business network perspective in IB.</td>
</tr>
<tr>
<td>2.2.1 Temporality of organisational network relationships</td>
<td></td>
</tr>
<tr>
<td>2.2.2. Multiplexity of organisational network relationships</td>
<td></td>
</tr>
<tr>
<td>2.3 Extending the IB perspective on business networks: the MNE as an intra-organisational network</td>
<td>Extends the business network perspective in IB using concepts from IMP literature.</td>
</tr>
</tbody>
</table>
Chapter 2. Review of relevant literature and borrowing concepts from related fields

2.3.1 The MNE as a network of relationships
2.3.2 Conceptual proximity and the compatibility between IB and IMP: close areas of research with compatible underlying assumptions

Presents the MNE as a network of intra-organisational relationships
Exercise in ‘meta-theoretical triangulation’ through a conceptual combining of IB and IMP
Presents the close areas for combining IB and IMP due to compatible underlying assumptions

2.1 International Business research on the MNE and its relationships

A key scholarly conversation within the IB literature is dedicated to the MNE and specific relationships and interactions between its subunits, such as resource sharing ties between HQs and subsidiaries, or between peer subsidiaries (Michailova & Mustaffa, 2012). The majority of this literature is devoted to the inter-organisational interactions of the MNE, such as the embeddedness of subsidiaries in local networks. However, there appears to be little work done on the MNE network of intra-organisational relationships as a focal unit of analysis. This state can be attributed to the evolution of theories of the MNE. After an intensive phase of conceptual development on the networked MNE as an organising form in the 90s and early 2000s, IB scholars have chosen to concentrate on disparate parts of the MNE and its interactions with external actors and environments (Bartlett, Doz, & Hedlund, 2012; Forsgren, 2013). Consequently, an equally fragmented picture of the MNE as a whole has emerged. However, to my knowledge, such fragmented streams of research overlook updating the internal conceptualisation of the contemporary MNE from a business network perspective. In this section, I present the current perspective on the MNE and its relationships as an intra-organisational network. My research questions are derived from the dynamic nature of such relationships.

2.1.1 Literature search and the MNE as a networked organisational structure
Two significant outcomes became apparent during my literature search (see Appendix A) on the MNE and its intra-organisational relationships. First, IB scholars use and develop a business network perspective to understand the MNE as a networked organisation (Ahuja et al., 2012; Djodat & Knyphausen-Aufseß, 2016; Doz & Prahalad, 2007; Tsai, 2002). Second, IB scholars segregate MNE subunit relationships according to subunit types, for example, the HQs-subsidiary relationship (Björkman et al., 2004; Tran, Mahnke, & Ambos, 2010; Yamin, Tsai, & Holm, 2011). Both outcomes evolve out the discussions on the theories of the MNE and its organisational structure.
Initially, the organisational structure of the MNE was conceptualised as a strict hierarchy with the HQs taking the role of commanding and coordinating subordinate businesses using formal lines of control (Ambos & Mahnke, 2010; O’Donnell, 2000). In time, the MNE’s structure and processes grew in complexity to meet the demands of its similarly complex external operating environments (Forsgren, 2013; Ghoshal & Bartlett, 1990; Westney, 2014). This gave rise to a network perspective of the MNE that highlighted subsidiary roles and HQs entrepreneurship (Ambos & Mahnke, 2010; Dunning, 1995; Holm & Pedersen, 2000; Lundan, 2002; Verbeke, Tavares-Lehmann, & Van Tulder, 2011). The primary advantage of the network perspective is that it relates a firm’s performance to its ability to control and coordinate the development of its organisational networks rather than its growth or size (Vahlne & Johanson, 2013).

The network perspective also positions the relationships between peer subsidiaries as being as significant as the HQs-subsidiary relationship and therefore the notion of the networked MNE assumes a hetararchical form (Forsgren, Holm & Johanson, 2005; Hedlund, 1986, 1994, 1999). Hedlund’s (1986, 1994, 1999) hetararchical model of the MNE explains why HQs can have trouble controlling highly embedded foreign subsidiaries with their centralisation strategies. Instead, HQs are encouraged to use collaborative decision-making with their subsidiaries that rely on their local business networks for organisational performance (Harzing & Van Ruysseveldt, 2003).

The networked MNE has been conceptualised in terms of the transnational (Bartlett & Ghoshal, 1989), diversified multinational (Doz & Prahalad, 2007), inter-organisational network (Ghoshal & Bartlett, 1990), and differentiated network (Nohria & Ghoshal, 1997). These conceptualisations characterise the MNE as an interdependent network of diffused expertise and subsidiaries as strategic centres (Harzing, 2000). As a result, a significant stream of research concentrates on the role of subsidiaries as the relevant unit of analysis (Andersson & Forsgren, 2000; Birkinshaw & Hood, 2000; Birkinshaw & Morrison, 1995). Key themes include subsidiaries as centres of excellence (Holm & Pedersen, 2000), role typologies (Paterson & Brock, 2002), reverse knowledge flows (subsidiary back to HQs) (Ambos & Ambos, 2009; Rabbiosi, 2011) and linkages between subsidiaries and external network partners in host economies (Giroud & Scott-Kennel, 2009; Scott-Kennel, 2007).

Central to the value of such roles and relationships is the ability to transfer and apply subunit knowledge elsewhere in the MNE (Egelhoff, 2010). This ability is determined by the
Chapter 2. Review of relevant literature and borrowing concepts from related fields

caracteristics of the knowledge, the actors and the relationships between actors (Michailova & Mustaffa, 2012). There is a dearth of literature on the actors and organisational knowledge exchanged. However, a similar in-depth treatment of the subunit relationship itself is missing. The relationship is often simplified to a one-way dyad of (assumed) beneficial knowledge flow (Ambos & Ambos, 2009; Michailova & Mustaffa, 2012). Very little IB research focuses specifically on the relational or structural aspect of MNE intra-organisational relationships as a unit of analysis. This is problematic as the subunit relationship is a core mechanism for adding value within the MNE.

In addition, Egelhoff (2010) critiques the business network theoretical perspective of the contemporary MNE, arguing that the hierarchy is still a prominent organising structure. In his discussion on Andersson, Forsgren, and Holm’s (2002) use of the business network perspective, he asks when and where the heterarchical MNE organising structure is relevant (and more useful) than alternative organising structures. Following Egelhoff (2010), I take a conceptualisation of the MNE as not a fully diversified network but as a heterarchy with embedded hierarchies.

A critique I offer on the IB literature gathered from my literature search on intra-firm subunit relationships is that the term relationships is often used in a reified manner. The term relationship is often equated to resource transfer and very rarely defined in the extant IB literature. In addition, the majority of literature adopting a relational perspective to MNE intra-organisational interactions often relegated the relationship secondary to issues such as power and trust. As a result, it is not clear what exists beyond the subunits’ motivations or control mechanisms. The reason for this reification is due to IB scholars often using traditional social network assumptions and measures, such as the concept of embeddedness, at the firm level. This may be problematic as such measures were originally developed at the individual to group level and underlying assumptions may need to be interrogated so they can be implemented at the firm and MNE level of analysis. For example, so far, only a few IB scholars have amended the original social network measure of embeddedness (see Andersen, 2013) instead choosing to use it metaphorically (Rašković, 2014).

In summary, calls to address the ‘black box’ of MNE relationships at the firm level have led to the clarification of subsidiary-level embeddedness and the measurement of resource flows, transactions, exchanges, and interactions. However, much of this research focuses on inter-organisational or institutional linkages rather than relationships between subunits themselves.
Chapter 2. Review of relevant literature and borrowing concepts from related fields

(Andersson, Forsgren, & Holm, 2007; Gammelgaard et al., 2012; Giroud & Scott-Kenell, 2009; Heidenreich, 2012; O'Donnell, 2000; Santangelo, 2012; Scott-Kenell & Enderwick, 2004). Given that the IB conceptualisation on intra-firm subunit relationships lacks an internal focus, I relax my literature search to include an inter-organisational level of analysis criteria to develop my thesis concepts and research questions.

2.1.2 Development of the research questions
To understand the contribution of past research on MNE relationships, articles were selected that focus on specific relationships, such as those between HQs and subsidiaries and peer subsidiaries. Once journal articles and book chapters were identified the search was widened to include other journals articles in adjacent fields such as the *Journal of the Academy of Marketing Science, Decision Support Systems* and *Industry and Innovation*. At this stage, 186 articles were identified for their considerations of the relationships between subunits or organisations. From these, 45 used subsidiaries as the unit of analysis, 28 articles considered the HQs and nine looked at the whole organisation – 82 articles in total. The rest of the articles considered organisations as networks and the transfer of knowledge at the individual level, such as between employees. As I aim to examine relationships between subunits within an MNE, individual-level research was omitted if there was no discussion about the relationships between subunits. Furthermore, the articles that considered the network approach in-depth and put social capital and social network research as the primary research areas were put aside for later analysis (see Section 2.2).

The key concepts that arose from the 82 articles that focused specifically on MNEs and the dynamic relationships within them were, how relationships change over time and how they are complex. In the group of articles selected, the dynamic nature of relationships between subunits was conceptualised as part of the dyadic element of relationships, the influence of prior interactions on relationships and how relationships can change over time. HQs and subsidiary relationships were understood as dyads (a pairing of two actors, such as MNE subunits), whereby any transfer of resource is affected by the willingness and ability of the partner to share and absorb that resource (Yamin et al., 2011; Yang et al., 2008). The relationship is a ‘mixed motive’ dyad, where the probability of sharing resources is affected by the motives of both subunits, which may be headquarters or subsidiaries. In this case, the dyad is conceptualised as the basic component within a business network (Yamin et al., 2011; Yang et al., 2008).
Chapter 2. Review of relevant literature and borrowing concepts from related fields

In addition, Bjorkman et al. (2004) argue that prior interactions and relationships influence the quality of the current relationship. Such prior interactions also affect the probability of forming future relationships (Andersson & Forsgren, 2000; Foss & Pedersen, 2002). When subsidiaries are considered ‘centres of excellence’, their “firm-specific competencies originate from on-going interactions in embedded relationships” (Andersson & Forsgren, 2000, p. 346). At the organisational level, prior interactions build cumulative relational content that can be conceptualised as ‘network memory’ (Ahuja, et al., 2012). This lends more credence to the significance of time for the relationships process between two subunits. These articles and their conclusions on the dynamic nature of relationships are listed in Table 5. Not directly discussed in the literature is the issue of how relationships are at different stages of formation and decline, that is, their temporality. For example, although it is acknowledged that relationships exist at different stages, such as formation and termination, there is little on the relationships process as a whole. Rather segments of the relationship process are examined such as the importance of prior interactions determining relationships formation. Therefore, the first research question is:

RQ1: How does temporality influence relationships between MNE subunits?

**Table 5 Key conclusions on the temporal nature of relationships within the MNE.**

<table>
<thead>
<tr>
<th>Subunit Relationships</th>
<th>Relationships Change Over Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headquarters to Subsidiary</td>
<td>Relationships change over time. Prior relationships and interactions influence the formation of new relationships and their usefulness.</td>
</tr>
<tr>
<td>Key Articles</td>
<td>Björkman, Barner-Rasmussen &amp; Li, 2004; Tran, Mahnke &amp; Ambos, 2010; Strutzenberger &amp; Ambos, 2014.</td>
</tr>
<tr>
<td>Subsidiary to Headquarters</td>
<td>Relationships change over time.</td>
</tr>
<tr>
<td>Key Articles</td>
<td>Rabbiosi, &amp; Santangelo, 2013; Strutzenberger &amp; Ambos 2014.</td>
</tr>
<tr>
<td>Subsidiary to Subsidiary</td>
<td>Relationships can also decay over time and are influenced by prior interactions with the headquarters.</td>
</tr>
<tr>
<td>Key Articles</td>
<td>Alnuaimi, Singh &amp; George, 2012; Andersson &amp; Forsgren, 2000; Foss &amp; Pedersen, 2002; Gammelgaard, McDonald, Stephan, Tüselmann &amp; Döørenbicher, 2012.</td>
</tr>
<tr>
<td>Organisational Relationships</td>
<td>Relationships are dynamic and their state changes over time; they may even decay. Prior interactions can build relational content that influences the quality of the relationship. However, this can lead to the negative effects of path dependency.</td>
</tr>
</tbody>
</table>
The issue of time and how relationships are not static emerges from the literature listed in Table 6. Tran et al. (2010) argue that the timing of the transfer of resources, such as knowledge, affects the outcome of the relationship and whether future relationships between the two subunits are considered. Furthermore, the age of the subunits and their relationships affect the quality and ease of resource transfer. For example, Rabbiosi and Santangelo (2013) argue that adequate time must be taken to cement relationships between subunits. Additionally, they argue that older subsidiaries can create more value for the MNE as they have developed cumulative relational capital and can transfer resources more easily than newer subsidiaries. Alnuaimi et al. (2012) argue that such relational capital can decay over time. Tsai (2000) emphasises the dynamic and evolving nature of intra-organisational relationships and argues for further research on how such relationships are formed.

When considered together, researchers indirectly offer an understanding of the different trajectories that relationships may take; for example, the decay of relational capital may allude to a relationship that may be declining. Alternatively, established subsidiaries can support growth-orientated relationships more than new subsidiaries that do not have a developed resource base. However, a key theme is the emphasis on prior interactions and how they specifically influence the formation of relationships. Prior interactions can build relational capital before a formal relationship between MNE subunits starts. If this is the case, the age of the relationships is significant. For example, the death of a relationship between subunits may take longer as there is a buffer of goodwill developed from prior interactions. It would take longer to negate this buffer and for the relationship to gradually terminate.

The second theme to emerge from the chosen articles is the concept of *multiplexity*. This is conceptualised in a number of ways within literature listed in Table 6. The majority of articles see relationships as differing in content. This is because the key outcome of such relationships is value-addition; to the subunits and the organisation as a whole. Tran et al. (2010) argue that the quality and quantity of resources transferred affects the performance of the subsidiary. This argument also holds for research that looks at inter-organisational network linkages (Giroud & Scott-Kennel, 2009). Additionally, Ciabuschi et al. (2010) argue that HQs-subsidiary relationships are complex. From a network perspective, such relationships can be defined in terms of a number of interactions that *differ in content* and are therefore *multiplex* in nature. In Ciabuschi et al.’s (2010) study, HQs can allocate decision-making rights and resources to subsidiaries for successful knowledge and innovation transfer. HQs-subsidiary relationships can also differ in content depending on whether the interactions
between the two are formal, such as job rotation, or informal, such as friendships (Chiao & Ying, 2013). Ferriani et al. (2013) argue that relationships can encompass social and economic ties, for example, the social interactions outside of the workplace between employees. The relational trust that develops is then utilised inside the workplace to meet organisational goals.

In addition, temporality plays a part in multiplexity; subunit relationships can also be a mix of new and old ties (Ahuja et al., 2012; Baum & Rowley, 2008). Provan, Fish and Sydow (2007) go further by outlining that multiplexity is a better predictor of relationship strength and durability because the dissolution of a tie (e.g. a sub-relationship) does not necessarily amount to the dissolution of a relationship. Shipilov, et al. (2014) draw together the key literature around organisational relationships under the umbrella of ‘relational pluralism’, arguing for a more heterogeneous perspective on multiplex relationships. The second research question is:

*RQ2: How does multiplexity influence relationships between MNE subunits?*

*Table 6 Key conclusions on the content categorisations and multiplexity of relationships within the MNE*

<table>
<thead>
<tr>
<th>Subunit Relationships</th>
<th>Content Categorisations</th>
<th>Multiplexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headquarters to Subsidiary</td>
<td>The content of the relationship is based on how it adds value to the MNE.</td>
<td>Each relationship is multiplex, encompassing sub-relationships that differ in content.</td>
</tr>
<tr>
<td>Subsidiary to Headquarters</td>
<td>Relationships can be formal, such as job rotation; or informal, such as friendships.</td>
<td>No direct conclusions.</td>
</tr>
<tr>
<td>Article</td>
<td>Chiao &amp; Ying, 2013.</td>
<td></td>
</tr>
<tr>
<td>Subsidiary to Subsidiary</td>
<td>Relationships between subsidiaries can be based on cooperation and competition.</td>
<td>No direct conclusions.</td>
</tr>
<tr>
<td>Article</td>
<td>Tsai, 2002.</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 2. Review of relevant literature and borrowing concepts from related fields

<table>
<thead>
<tr>
<th>Organisational Relationships</th>
<th>The content of the relationship is relevant to its ability to add value to the MNE.</th>
<th>Each relationship is multiplex, encompassing ties that differ in content. In addition, the multiplexity of relationships can be a mix of new and old ties.</th>
</tr>
</thead>
</table>


As far as I know, the majority of IB researchers do not integrate both concepts of temporality and multiplexity seriously within MNE or organisational relationship research. Some scholars include the call for understanding the dynamic nature of relationships in their future research recommendations (Shipilov et al., 2014). A notable exception is work by Ferriani et al. (2013) who utilise longitudinal research and conclude that relationships in multiplex networks evolve. However, although a number of scholars do acknowledge the influence of time on all aspects of forming and maintaining relationships, they do not specifically integrate time into their study as a key concept (Jones & Khanna, 2006). An example of this is the acknowledgement of the path dependency of partner selection (Ahuja et al., 2012; Baum & Rowley, 2008). In this instance, a prior interaction is understood to affect the current and future formations of relationships. However, most studies do not go as far to include historical variation to understand the long-run effects of organisational phenomena (Jones & Khanna, 2006).

A reason for this lack of clear focus on MNE subunit relationships is that the relationships themselves are not the unit of analysis within any of these articles. Of the few exceptions is Giroud and Scott-Kennel’s (2009) work on MNE inter-firm linkages (analogous to relationships) with foreign-owned MNEs. A similar conceptualisation of intra-organisational subunit relationships is not apparent in IB literature. In addition, Ahuja et al. (2012, p. 437) argue that within the related field of organisational networks, the “basic factors that drive or shape the formation, persistence, dissolution and content of ties in the network” are not explored. They are careful to note that these basic factors are not at the individual level, but occur at all levels of the network, such as inter-organisational and intergroup.

I use such conclusions to motivate further enquiry into the basic dynamic factors of subunit relationships within MNEs. Giroud and Scott-Kennel (2009) offer three linkage attributes
Chapter 2. Review of relevant literature and borrowing concepts from related fields

derived from previous research - scope, quantity and quality. The quantity and scope of linkages refer to number and value of the different types of linkages to the firm. In my conceptual framework, I conceptualise this as the multiplexity of intra-organisational relationships. Within the MNE, relationships between subunits differ in content, such as informal and formal ties, and in scale, such as relationships between local country subsidiaries, HQs and host country subsidiaries. In addition, intra-organisational MNE relationships are multiplex because they differ in number and value depending on the subunit and its activities.

Giroud and Scott-Kennel (2009) also present linkage quality in terms of the depth of interactions, their duration and the transfer of tacit and codified knowledge. To drive my conceptualisation on the dynamic nature of subunit relationships within the MNE, I focus on the temporality of intra-organisational MNE relationships. Beyond the duration and intensity of interactions, I focus on the basic factors of the relationships process. Such basic factors on the formation, persistence, dissolution and differing content of subunit relationships within MNEs need to be conceptualised and examined empirically. Doing so allows the exploration of organisational mechanisms that drive MNEs to structure their intra-organisational relationships in an optimal manner.

A point of clarification is needed before going further. From my preliminary scoping literature search, it is apparent in IB research that there is a coherent literature stream on the role of trust and shared perspectives on subunit motivation and behaviour. However, those selected articles investigated subunit characteristics – not the structure of the relationships themselves. Furthermore, there is some concern about the validity of considering trust and social capital (as it is often operationalised as trust and a shared cognitive perspective) in MNE research. Kostova and Roth (2003) argue that a core assumption of social capital is that it emerges due to a firm’s social norms, cohesion and network closure. However, MNEs lack the ability to establish network closure through creating a strong, shared set of values and norms. This is because spatial, cultural and language barriers give limited opportunities for MNE employees to interact and develop social capital as a public good. For this reason, I focus my conceptualisation on the intra-organisational subunit relationship process and structure.

Scholars may have chosen to focus on the role of social capital and its related concepts because of the problems inherent in determining the optimal organisational design for MNEs.
Chapter 2. Review of relevant literature and borrowing concepts from related fields

Following Hedlund (1986), Bartlett and Ghoshal (1989) and Nohria and Ghoshal’s (1997) conceptualisation of the heterarchical MNE, the ideal structure of an MNE is the transnational as it can be highly responsive, globally and locally. However, this typology is abstract and does not specifically outline how managers may achieve this structure and therefore derive its benefits (Murtha, Lenway, & Bagozzi, 1998). Therefore, I offer a conceptualisation of relationships between subunits within MNEs that can offer a way to explore organisational mechanisms for subunit relationship management utilised by MNE managers.

2.2 Borrowing conceptual insights from the field of organisational studies

To develop the concepts of temporality and multiplexity further, I look to literature in related scholarly fields that share underlying theoretical assumptions and study similar business phenomena. Some conclusions from the discipline of economic geography explore the nature of collaborations between subsidiaries, but only in relation to spatial dimensions. For example, Alnuaimi et al. (2012) examine the long-term benefits of cross-country collaborations between inventors on knowledge outcomes and whether these collaboration activities can be internalised by subsidiaries. Other scholars examine mergers and acquisitions (M&A) and industrial marketing offers developed conclusions on business networks and the types of relationships that may exist. For example, in their review of M&A literature, Haleblian, Devers, McNamara, Carpenter and Davison (2009) argue that the drivers of acquiring behaviour are based on the prior and current relationships managers have with their peers in the acquired organisations. Bergenholtz and Waldstrøm (2011) in their review of inter-organisational relationship studies argue that relations between organisations vary in content, for example, competition, coordination, or interlocks.

Although these relationships are explained at the inter-organisational level, they can be amended and applied to the intra-organisational MNE level. This is analytically possible because they take a process view of relationships. Anderson, Anderson, Havila, and Salmi’s (2000) conference paper offers some relevant areas for exploring structural connectedness in business networks: the evaluation of relationships (relationships as investments), the termination of relationships (relationships are not static and may need to be actively terminated) and the maintenance of relationships (how to create enduring and resilient relationships). Similarly, relationships between MNE subunits can be seen as a process of
forming relationships, maintaining and perhaps managing an exit strategy for one or both partners.

A coherent stream of literature in organisational and strategic management research explores the nature of relationships within organisational networks. Provan et al. (2007) point out that the term network is used interchangeably with terms such as partnerships, strategic alliances, cooperative arrangements and agreements. They classify organisational network research into two levels, one level at the impact of individuals on a network and another level at whole-network interactions. As outlined previously, there is a lack of conceptualisation of interactions within an MNE intra-firm network that would allow the exploration of organisational mechanisms for managing the dynamic nature of relationships themselves. Brass et al. (2004) offer a multi-level perspective on networks within organisational research but only categorise inter-unit network relationships as formal or informal. A possible explanation is that they draw on past literature, the majority of which has only considered relationships as dyadic conduits for resource transfer, such as knowledge exchange and personnel transfer. This has led to a focus on innovative activities and knowledge transfer as an outcome of organisational subunit performance. In addition, their discussion is still limited to the individual level of analysis, such as the influence of power differentials between individuals and motivations for individual relationship formation. Such conceptualisations do offer some ideas on the content of relationships, such the informal/formal categorisation between MNE subunits, but again do not focus on the relationship as the unit of analysis or explore its dynamic nature.

Within organisational studies, Ahuja et al. (2012) offer a more developed view of organisational network dynamics. They follow Soda et al.’s (2004) argument that networks contain memories of past interactions. These memories are available as subunits’ accumulated relational content that evolves as a process. Also, McEvily, Jaffee and Tortoriello (2012) argue that bridging ties experience tie decay and therefore the benefits from relationships that are time-bound. Shipilov and Li (2010) argue that relationships between organisations (and actors) encapsulate multiple types of ties. This multiplexity may explain why some actors choose to pair with an actor with whom they have no prior formal interaction. For example, two actors may have no previous formal economic ties but instead, share informal social ties. The majority of research in this vein integrates advances in social network theory into organisational network theory. Given that the MNE structure can be conceptualised as a network, it would be useful to utilise similar concepts to examine the
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processes that create MNE subunit relationships (Kostova & Roth, 2003). Furthermore, there are some conclusions about the influence of the timing of relationships in organisational research.

2.2.1 Temporality of organisational network relationships
Within the related field of organisational studies, the dynamics of organisational structure have been explored in relation to the evolutionary nature of firm growth (Greiner, 1997; Phelps, Adams, & Bessant, 2007; Volberda & Lewin, 2003). The life-cycle concept has gained traction with scholars, offering some conclusions on the influence of time on organisational networks such the different trajectories of network relationships.

Hasenfeld and Schmid (1989) offer a simplified model of the organisational lifecycle. In their article, they extend previous literature by adding ‘decline’ and ‘death’ stages (Phelps et al., 2007). They argue that organisations are entrepreneurial in their formation stage as internal and external resources are uncertain and undeveloped. There is little coordination and communicating and the structure is largely informal. At the development stage, sources of key resources are identified and groups within the company work collaboratively on projects. This may be problematic for the MNE intra-firm network context, as most MNEs tend to have a formalised organisational structure due to their size and have business networks in multiple markets.

The conceptualisation of the maturation and formalisation stage of an organisation is more in keeping with the MNE context. At this stage, the organisation becomes steadily more bureaucratic and reactive to external influences. This sets the organisation to lead into the decline and death stage, where they become lean and increasingly defensive to external pressures. The conceptualisation of organisational change and its life cycle has progressed from this perspective. Quinn and Cameron (1983) pre-empt current perspectives on the organisational life cycle by arguing that researchers have focused on identifying different types of existing organisations or static characteristics that exist at different stages. They argue that the criteria used to identify organisational processes in one stage of development differ from those at another stage. Similarly, Phelps et al. (2007) argue that the life-cycle perspective that perceives growth as not linear, sequential or invariant is useful for determining how managers can grow businesses through varying stages. However, the literature on the organisational life-cycle of the firm has developed from exploring how organisations react to external environments and pressures. As a result, descriptive ‘stages’, such as market entry, obtaining finance and people management (Phelps et al., 2007), and
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configuration aspects, such as knowledge dimensions and architecture (Ambrosini, Collier, & Jenkins, 2009) are examined. As the stages are highly dependent on their context – similar stages would have to be developed for the MNE.

Within IB literature, the idea of a life-cycle has been explored in a variety of contexts, including strategic international human resource management (Milliman, Von Glinow, & Nathan, 1991), firm innovation (Koberg, Uhlenbruck, & Sarason, 1996) and board composition (Lynall, Golden, & Hillman, 2003). Lynall et al. (2003) argue that organisations do not grow at the same rate and suggest that the complexity should be utilised as a criterion for assessing the life cycle development. This is echoed indirectly by research on the relationships between subunit MNEs. The formation of a relationship may be more complex if there are prior interactions. For example, informal ties may exist from prior collaborative projects and can augment current formalised relationships. Such ties and relationships are diverse in terms of content, and so are multiplex in nature. However, literature that specifically investigates the influence of the life cycle on HQs-subsidiary relationships focuses on the individual level and therefore subunit outcomes in terms of power asymmetries (Schotter & Beamish, 2011). It is problematic to fully utilise the life-cycle concept for understanding and linking intra-firm network dynamics to relationships that change over time. However, there are ideas from the life-cycle concept that can help explain how multiplexity can be used to examine relationships.

During the growth trajectory, the number of sub-relationships may increase, therefore creating a more resilient relationship. For example, during a positive collaboration between subunits, more sub-relationships would be developed as the subunits work closer and more effectively on the current projects. During the maintenance trajectory, the multiplexity of relationships may stay constant. The relationships between subunits may be largely unchanging as there is no impetus to increase or decrease the number of sub-relationships. The declining trajectory would have a declining multiplexity of relationships and would at some point end in death with the relationship terminated. For example, the HQs may reduce access to resources for a non-value adding subsidiary that is ultimately either sold or closed. In Figure 1, the differing levels of multiplexity (a more accurate conceptualisation for relationship strength and complexity) are represented by the number of lines, where each line represents a sub-relationship. However, some limitations occur when using the life cycle concept to see the role that multiplexity plays in relationship strength and complexity.
Utilising the concept of multiplexity does not restrict the relationship progression to a pre-determined pathway as the life cycle concept does (Zerbini & Castaldo, 2007).

Figure 1 Changes in the multiplexity of relationships at different life-cycle trajectories

In addition, an issue with utilising the life-cycle concept is that analysis would become a form of ‘comparative statics’ (Pettigrew, Woodman, & Cameron, 2001). Analysing a process that evolves cannot be accurately understood if the process is segmented into static states and then compared. Furthermore, process research is about “appreciating […] temporal patterning” (Bizzi & Langley, 2012, p. 225). In addition, research that examines the influence of time must consider that the “current interaction is loaded with the past and linked to the future” (Chou & Zolkiewski, 2012, p. 248). The life-cycle metaphor suffers from considering time as a linear progression as distinct from a sequence of critical events (Langley et al., 2013). Life cycle models often do not consider that relationship can start at a ‘different’ stage, for example, a critical event can retreat a relationship back to the growth stage (Zerbini & Castaldo, 2007).

In summary, although IB and management literature calls for research that considers the dynamic nature of relationships within MNEs, it goes largely unchallenged. There appears to be little within IB that considers the relationships between two MNE subunits as a process over time. Relevant concepts from organisational studies can be used to conceptualise the relationship process between MNE subunits further. However, the life-cycle concept has a
number of drawbacks, the most prominent being the issue of ‘comparative statics’ (Pettigrew et al., 2001). Furthermore, the multiplexity of sub-relationships needs to be explicated to understand relationships over time. There is literature in adjacent fields, such as industrial marketing, which offer a process view of relationships within a network. However, the majority of IB research concentrates on the influence of network structure on inter-organisational design, such as strategic alliances, international joint ventures and M&As (Lane, Salk, & Lyles, 2001). By engaging in these inter-organisational alliances, the focal firm can hope to acquire new knowledge to convert to a source of competitive advantage.

Furthermore, scholars like Gupta and Govindarajan (2000) have argued that internal (within MNE) knowledge sharing also provide equally significant benefits. Ghoshal and Bartlett’s (1990) conceptualisation of the network MNEs adapts concepts from inter-organisational theory and argues that network concepts can be used. Using conclusions from Provan’s (1983) work on the similarity of independent federations and divisionalised firms, they remark that Granovetter’s (1985) work on the density of network ties and socialisation can be applied to the intra-firm context. Yet, Ghoshal and Bartlett (1990) preface their extension with the warning that at that time network theory was a still burgeoning research opportunity and that there are dangers inherent in simply adapting theories from inter-organisational theory. Following this line of reasoning, it is relevant and timely to consider the current extensions to social network theory and network ties to understand intra-organisational relationships further.

2.2.2 Multiplexity of organisational network relationships
Some researchers, including those within the organisational studies discipline, examine relationships within organisations and MNEs by borrowing concepts from social capital and social network theory (Inkpen & Tsang, 2005; Kostova & Roth, 2003; Nahapiet & Ghoshal, 1998). Social capital theory has been adopted by a number of disciplines due to its use for understanding how benefits are gained from being part of a group. Researchers have explored the concept of social capital in a number of contexts and at different levels of analysis (Inkpen & Tsang, 2005). Initially, the concept of social capital extended previous neoclassical understanding of economic resources, such as land, human and physical capital. Traditionally, individuals were thought to access resources through the structure of their relationships (Burt, 1992; Coleman, 1988). Exchange theory from the economics discipline was integrated into sociological discourse to explain this access. The benefits of such resources were conceptualised as social and psychological. Originally studied in the 1930s
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(Borgatti, Mehra, Brass, & Labianca, 2009), sociologists conceptualised the benefits at the individual level and emphasised the importance of trust and reciprocation. Putnam’s (1993) work explored the role of social capital at the group level on political engagement by civil society. Bourdieu (1989) extended the concept by introducing its links to symbolic capital and therefore power relations. Granovetter’s (1985) work focused on the structure of social networks, extending his doctoral work on how participants gained employment through interpersonal relationships. Coleman (1988) argued that simply integrating ‘exchange theory’ into sociology had theoretical limitations and theorised how social capital could have economic and non-economic outcomes. He conceptualised social capital as embodied in the relations between individuals, rather than within the individuals themselves. As a result, social capital theory has been a rich source of interdisciplinary research (Borgatti et al., 2009).

Social capital theory has been utilised in a wide range of organisational research, including the role of trust, culture, social exchange and social networks (Adler & Kwon, 2002). Furthermore, it has been studied at the individual and group level with few articles that consider the multi-level aspects (Moliterno & Mahony, 2011). Nahapiet and Ghoshal (1998, p. 243) define social capital as “the sum of actual and potential resources embedded within, available through, and derived from the network of relationships possessed by individuals or social units”. This definition recognises that social capital occurs at different levels and the importance of the level of embeddedness of the actor.

Adler and Kwon’s (2002) conceptualisation of social capital likens it to ‘goodwill’ and argues that its development is not measurable. However, Nahapiet and Ghosal’s (1998) work offers commonly accepted dimensions of social capital that are linked to intellectual capital, offering a discussion on how value creation can be achieved in an organisational context. The social capital dimensions are structural, relational and cognitive (Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998). The structural dimension concerns the connections between individuals for knowledge access. These connections can be clarified as ties within networks and network configurations (Kleinbaum, 2012). For the relational dimension, the role of trust, norms and identification in activating knowledge sharing activities (and therefore supporting the creation of value) between individuals is significant. The cognitive dimension represents shared common understanding through language and vision (Van Wijk, Jansen, & Lyles, 2008). However, these concepts are developed on the individual level of analysis, such as the
cognitive aspect of social capital. This is expected, as sociologists still focus on the individual within groups. However, the conceptualisation of ties as parts of relationships is useful to examining subunit relationships. Although relationships between MNE subunits are not a simple aggregate of individual-level relationships, subunit relationships are still developed through the interaction of relationships between individuals within MNEs.

Concepts from social network theory are often utilised to understand relationships within MNEs and are discussed in tandem with social capital concepts (Kilduff & Brass, 2010). For example, examining the positive outcomes a subunit gains from its intra and inter-organisational MNE network (Kostova & Roth, 2003; Maurer, Bartsch, & Ebers, 2011; Nahapiet & Ghoshal, 1998). This is because social capital and social network theory are developed from the sociological assumption that economic activities are influenced by social activities. However, both social network theory and social capital are different in their focus. Social capital is often viewed as a resource that is accrued by an actor through relationships with others. As a result, research still concentrates on the attributes of the actor and conceptualises the relationship as path for resource transfer. Social capital theory is useful for considering the social aspects of relationships, such as trust and shared goals and perspectives for relationship formation and building. In contrast, social network theory stresses “the primacy of relationships over attributes” (Kilduff & Brass, 2010, p. 320). Social network theory specifically considers the structure of nodes (actors such as MNE subunits) and ties (relationships). By utilising extensions in social network theory, in particular, the multiplexity of ties, I can examine the dynamic nature of relationships within MNEs in a more detailed manner.

Organisational networks have been studied at the macro-level concerning strategic alliances (Gulati, 1999), network governance (Jones, Hesterley, & Borgatti, 1997) and inter-firm relations (Zaheer & McEvily, 1999). At the micro-level, they have been studied in terms of leadership (Balkundi & Kilduff, 2006), employee performance (Mehra, Kilduff, & Brass, 2001) and power (Brass & Burkhardt, 1993). In relation to the dynamic nature of networks, Kilduff and Brass (2010) argue that the social network paradigm is going through a phase of development. Researchers are addressing a past standard critique of social network research, which is the neglect of network change. The individual level of analysis has been active for a number of years as traditional social science theories focus largely on the individual (Borgatti et al., 2009). More recently, inter-organisational level alliance network data is used to explore
network change and how structural holes and closures are valuable at different points in time (Soda et al., 2004).

Kilduff and Brass (2010) contrast advances in social network research with those gains from the organisational context. While the authors do not specifically refer to IB research, some of the conclusions they reach are relevant for research on the MNE. The core concepts of social network theory in organisational research are the relations between actors, embeddedness, the utility of network connections and structural patterning. The relations between actors concept parallels the relevant and timely research gaps identified earlier from literature on relationships within MNEs. Utilising social network theory allows the investigation of relationships as the unit of analysis as it conceptualises relationships and sub-relationships as ties. Embeddedness is understood as the preferences that network members have for repeat transactions with other network members and how these ties are forged, renewed and extended (Ciabuschi, Holm, & Martin Martin, 2014). Hence, the dynamic nature of relationships is brought to the fore. Prior interactions (as a suggestion of the influence of time) between MNE subunits influence the formation, development and quality of current relationships.

A note must be made about why I choose multiplexity instead of embeddedness. Embeddedness is a significant and popular concept within IB MNE business network literature, largely due in part to the emphasis it has given to geographic space. Geography plays an important part in IB because of the location of MNE subunits, such as subsidiaries and HQs, is significant for key concepts such as country-specific advantages and organisational learning behaviour (Ferraris, 2014; Forsgren, 2016; Rašković, 2014). However, the conceptualisation of multiple embeddedness is not the same as multiplexity (Barden & Mitchell, 2007). Multiple embeddedness still conceptualises subunit relationships as a package of monoplex dyadic relationships. Multiplexity, on the other hand, acknowledges that there are emergent outcomes from a bundle of sub-relationships that differ in content and age (Gimeno & Woo, 1999; Shipilov & Li, 2012).

Of relevance are also Kilduff and Brass’s (2010) emphasis on the significance of the Simmelian dyad. A Simmelian dyad is considered a more useful conceptualisation of a basic building block of a network as it is a “dyad that is embedded in a triad” (Krackhardt & Kilduff, 2002, p. 323). Triads are more stable and have higher levels of trust and reciprocity than a dyad. To apply this to the relationships within MNEs, a Simmelian dyad may be a
relationship triad that has two subsidiaries and an HQ. Simmelian dyads are argued to have better predictive power as an actor within a triad has less bargaining power and a stronger formation of shared interests and goals (Batjargal, 2007; Krackhardt & Kilduff, 2002; Tortoriello & Krackhardt, 2010). The utility of network connections considers how relationship can constrain or facilitate desired outcomes. Although I do not explore power differentials, the number of relationships that a subunit employs can influence the desired outcomes. This is because a subunit can only handle a certain number of relationships, after which the management becomes overly complex (Levin, Walter, & Murnighan, 2011).

Lastly, structural patterning refers to analysing the configuration of networks, such as structural holes, clustering, and centralisation (Borgatti et al., 2009). Researchers are not only interested in existing relationships but also where there is a lack of such relationships. However, due to this focus, relationships are assumed equivalent, even though they differ in content. These relationships or ties are aggregated to understand relationships between groups or organisations. It is worth reiterating that relationships are not simply aggregations of ties, but have their attributes at the relationships level not found at the individual level.

Granovetter’s (1973) seminal work on ties and how they differ is often used in social network research. His work considers the strength of social ties as a combination of time spent, emotional intensity and reciprocal services. Kilduff and Brass (2010) state that the resiliency of networks and the influence of tie decay are emergent research fields. This is echoed in MNE research. As outlined in a previous section, the relationships between MNE subunits can be seen as multiplex. The strength, or more accurately, the resiliency (given temporality) of a relationship maybe determined by its multiplexity. That is, the number and differing types of sub-relationships it encompasses.

Kilduff and Brass’s (2010) conclusions on organisational network research offer some useful conceptualisations of past research and avenues for future research. The authors argue that it is useful to examine ties themselves. Ties can be explored in terms of similarities (e.g. location, attributes), social relations (e.g. roles and cognition), interactions (e.g. advice to, shared knowledge with) and flows (e.g. resources, information) (Borgatti et al., 2009). Ties exist between nodes, which can be understood as individuals (Burt, 2002), groups (Putnam, 1993) or organisations (Inkpen & Tsang, 2005). Ties can also be strong or weak in strength. A traditional measurement of tie strength is the frequency of tie interactions.
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However, Levin et al., (2011) argue that relying on interaction frequency is problematic for two reasons. First, the frequency of interaction does not measure emotional closeness. For instance, strong friendships can lie dormant for years and be reactivated at short notice. Second, interactions are highly variable, differing in length and relational impact. To abstract this concept to the intra-organisational level (the MNE); the frequency of interactions between subunits may not be a useful measure of a relationship. From this perspective, HQs may devalue the worth of a largely silent subsidiary that is in reality highly productive. Furthermore, the relationships may be dynamic, ebbing and flowing according to the frequency of interaction. Letting a relationship become latent allows for the conservation of resources and the reduction of hazardous interventions. Therefore, the integration of a temporal dimension that includes latency can elucidate the dynamic nature of relationships within the MNE.

In summary, through a review of the IB literature on MNE subunits and insights from the related field of organisational studies, I present two key research questions. However, as outlined previously, the life-cycle concept has issues with integrating a process-based ontology and the social network concept has issues due to its granular conceptualisation of relationships between actors within a network. Furthermore, organisational studies ‘use’ social network theory rather than ‘borrow’ or integrate two research areas. During the initial scoping literature search, I found that articles from Industrial Marketing and Purchasing (IMP) integrated network concepts into their theorising and conceptualisation of business networks. Further inspection found that IMP has similar underlying assumptions on the business network perspective in IB and can be used to extend the IB perspective on intra-firm networks and relationships. In the next section, a meta-theoretical analysis of the two research areas is offered to determine the conceptual fit between the two disciplines. From this, a conceptual model is offered in Chapter 3 that that focuses on the dynamic nature of relationships between MNE subunits.

2.3 Extending the IB perspective on business networks: The MNE as an intra-organisational network

Good theory should explain, predict, and delight (Sutton & Staw, 1995; Weick, 1995). It presents a perspective for studying phenomena and therefore careful consideration is needed when choosing theories to utilise. Theories from other research areas can be employed to extend the conceptualisations used in the primary research area (Gioia & Pitre, 1990).
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However, for this to occur, there must be theoretical fit. Theoretical fit implies that the two fields must have similar underlying assumptions (Klein, Dansereau, & Hall, 1994) and proximity (Okhuysen & Bonardi, 2011). Following these considerations, I opt for utilising concepts from IMP to understand relationships between MNE subunits as suggested in the previous section.

Both IB and IMP literature examine dynamic and multi-layered business phenomena and utilise a variety of perspectives, ranging from macro-level economic perspectives to meso and micro-level theories of social networks. In particular, the business network perspective in IB literature highlights the significance of value-creation relationships within MNEs for competitive advantage (Forsgren, 2013; 2016). However, extant research suggests that conceptualisations of relationships between subunits have been rather preliminary. To extend concepts derived from the initial IB literature scoping activity, current conclusions on relationships can be integrated from IMP literature. In particular, industries themselves form networks and have relationships that can be compared to those between MNE subunits. Furthermore, current research on business network relationships has explored the organisation as the level of analysis. Arguments for extending the business network perspective in IB with conclusions from IMP literature is offered in this section. A meta-theoretical analysis is utilised to understand the sources of these streams of research and how they may be integrated to advance theoretical conclusions on business networks. First, the basics of meta-theoretical analysis will be offered and then performed on the two literature streams of business networks from the IB and IMP perspective. Finally, arguments will be made for a framework that examines the relationships between MNE subunits.

2.3.1 The MNE as a network of relationships

Although Okhuysen and Bonardi (2011) argue for developing theoretical perspectives through multiple lenses within the management research stream, their arguments for such can be utilised to understand how theory extension can be performed in adjacent disciplines such as IB and IMP (Möller, 2013). Additionally, it is suggested that IB researchers are tackling the challenge of using a more interdisciplinary than multidisciplinary approach since Dunning’s (1989, p. 411) “plea for a more interdisciplinary approach” to IB (Cheng, Birkenshaw, Lessard, & Thomas, 2014; Verbeke, Von Glinow, & Luo, 2017). Möller and Halinen (2000) argue for theoretical comparisons in certain instances for a multi-paradigm perspective on theory extensions. Multiple perspectives can be linked and compared as each research tradition sheds light on a particular component of the focal phenomenon. However,
these perspectives have their own underlying assumptions that must be considered before any theory extension on the focal phenomenon can occur.

Okhuysen and Bonardi (2011) also offer that multiple-lens explanations are useful for highlighting sites of complementarity and contradiction between theoretical areas. Such sites of complementary and contradicting underlying assumptions of two different fields can be examined to show how their conclusions can be integrated for a richer understanding of a topic such as business networks. To do so, Okhuysen and Bonardi (2011) offer two dimensions to examine sites of complementarity and contradiction. The first dimension, proximity, refers to “the conceptual distance that exists between the phenomena that the lenses address in their original conception” (p. 7). Möller (2013) extends this concept by describing proximity as not only the phenomena but the “empirical domain the theories address or research traditions under investigation” (p. 3).

The second dimension is the degree of compatibility of the underlying assumptions of the combined lenses. Okhuysen and Bonardi (2011) explain this as “the degree to which theories that are brought together rely on similar or dissimilar individual decision-making processes, organisational mechanisms, or other properties in the development of their explanations” (p. 7). Möller (2013) extends this concept to the idea of congruence. Congruence is explained as the “permeability of paradigmatic boundaries” (p. 7). Indicators for congruence include points that describe “the theory’s underlying meta-theoretical assumptions”, such as ontology, epistemology and methodology. Möller (2013) offers some ways to assess the meta-theoretical assumptions by examining the disciplinary background, ontological views of relevant concepts, context of the focal phenomena, epistemological views and general methodologies.

However, before these areas can be outlined, the root theories and mapping of research streams need to be understood. In the next section, a theory map of IB and IMP research and literature with a focus on business networks is offered. After this, the dimensions of proximity and compatibility are applied to the IB and IMP streams of research.

*Business networks from an IB perspective*

As outlined previously, relationships within MNE business networks have been explained at the inter-organisational level. However, to understand how one may combine key theoretical ideas from two related research fields, such as IB and IMP, theory maps can be constructed similar to Möller’s (2013) theory map of the theoretical roots of relationship marketing and
business networks in IMP literature. Figure 2 is a business theory-focused map of IB research. The top part of the theory map focuses on the primary scholarly disciplines that IB borrows from and filters down to the bottom part that explicitly considers the business network perspective in IB.

Figure 2 Business network focused theory map of IB literature

Note: Dashed arrows denote minor influence; Solid arrows denote strong influence
The overlap of internationalisation and internalisation (and inter-organisational and intra-firm networks) research areas means that these two areas share overlapping concepts.

Although primarily a phenomena-driven field (Doz, 2011), IB theories primarily develop concepts from related fields such as neo-classical economics (Grosse & Behrman, 1992; Vahlne & Johanson, 2013). Two broad areas within IB are the phenomena of the internationalisation of firms and the mechanisms of internalisation within large firms such as MNEs and transnationals (Vahlne & Johanson, 2013). The research interest in the
internationalisation of firms stems from economic thought that examines the influence of cross-border trade and Foreign Direct Investment (FDI).

Similarly, research on cross-border trade and FDI can be viewed as the research area antecedent to IB research that studies the internationalisation of firms. Key theories used in studying cross-border trade, FDI and their effects are international economics theories that study the flows of goods and services between economies (Inkpen & Beamish, 1994). International economic theories are developed from classical economists that viewed the country as a unit of analysis. For example, Smith’s (1776) absolute advantage and Ricardo’s (1817) comparative cost advantage between nations. This led to the development of neo-classical economics, whereby transnational corporations could achieve similar advantages. Initially, Hymer’s (1979) perspective advocated for understanding market failures as imperfections stemming from structural issues. In contrast, transaction cost economics (TCE) argued that market imperfections are the inherent attributes of markets that transnational corporations and MNEs have the opportunity to bypass. Transaction cost theory, developed by Coase (1937), has been utilised as a basis for theoretical development of a number of IB theories and their respective streams of research. These include Dunning’s (1988) eclectic paradigm and the ensuing OLI Model (ownership, location and internalisation advantages), theories of FDI, Hymer’s (1979) monopolistic advantage theory and the Uppsala model of internationalisation (Vahlne & Johanson, 2013).

TCE, and Dunning’s (1988) OLI model or IB’s eclectic paradigm integrates concepts to describe the internationalisation and internalisation of transnational firms (Dunning, 1995). The internalisation of transnational firms is an area of research that also utilises theories that extend concepts and theories from neo-classical economics, such as transactional economics (Dunning, 1999). However, this stream of research is interested in the ‘inner workings’ and the structure of value creation of the MNE or transnational (Rugman, 1980; Rugman & Verbeke, 2003). As a result, many researchers borrow from management and sociological concepts depending on the level of analysis pursued. At the MNE level, the organisational structure has been conceptualised as a heterarchy (that may encompass many hierarchies at the subunit level) as explained earlier. Such research often borrows key concepts from social network theory, such as network closure and embeddedness (Mäkelä & Brewster, 2009; Phelps, Heidl, & Wadhwa, 2012). At the individual or group level, the majority of research borrows from sociology, such as social capital and the influence of trust and norms (Ashleigh & Nandhakumar, 2007; Marloes, Roger, Shaul, Jan, & Jo, 2006; Tsai & Ghoshal, 1998).
Chapter 2. Review of relevant literature and borrowing concepts from related fields

The theory map proposed in Figure 2 focuses on the use of business network perspective in IB and so represents only one filter to understand IB research. The second part of the theory map focuses specifically for a clear indication of how IB research on business networks can borrow from the IMP business network field.

Looking at business network literature, the majority of research is on the internationalisation’ area whereby networks are understood as inter-organisational in nature. Research conversations within this stream are as varied as the adjacent fields from which they borrow. The Uppsala model is often used to understand the process of internationalisation and value creation in transnational collaborations, such as strategic alliances and R&D partnerships (Forsgren, 2016). In contrast, there is less research on the internalisation aspects of transnationals. As explained earlier, although transnationals and MNEs are understood to be heterarchical networks, there is little current research on their organisational structure and the relationship between subunits. The majority of internalisation research is at the micro and meso level of analysis, such as the influence of trust on knowledge-sharing intention at the individual and group level (MacDuffie, 2011). As I am looking at business networks in particular: the field can be roughly delineated into research that looks at organisational behaviour, such as the influence of trust on knowledge-sharing intention; and the influence of network structures on MNEs/Transnationals, such as research that looks at the role of HQs and the level of subsidiary embeddedness.

**Business networks from an IMP perspective**

Figure 3 presents an adapted business network focused theory map of IMP literature. The impetus for developing such theory maps is to address the recent call for structured theory development in both disciplines (Thomas, Cuervo-Cazurra, & Brannen, 2011). Similar to IB, marketing is seen as eclectic in nature, drawing from a number of scholarly disciplines. Therefore, to develop a coherent paradigm at a greater level of abstraction, the underlying ‘world-view’ assumptions need to be understood.
Chapter 2. Review of relevant literature and borrowing concepts from related fields

Figure 3 Adapted business network focused theory map of IMP literature (adapted from Möller (2013))

Note: Dashed arrows denote minor influence; Solid arrows denote strong influence
Overlap of internationalisation and internalisation (and interorganisational and intra-firm networks) research areas means that these two area share overlapping concepts.

Möller (2013, p.2) focuses on two areas in IMP – the dominant view of relationship marketing and the business network perspective as it forms “the [evolving] core of the value creation theory of marketing”. Therefore, Möller (2013) has highlighted that the more nascent business network perspective is complementary to the established Service-Dominant Logic of marketing. Möller (2013) then presents a theory map of relationship marketing and business networks showing that both areas overlap and share root theories. For example in marketing, business networks are understood from research on buyer-seller interaction and industrial networks (Andersen & Kumar, 2006; Choi & Wu, 2009; Gaski & Ray, 2001; Hawkins,
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Wittmann, & Beyerlein, 2008; Johnsen & Ford, 2008; Kamp, 2005; Kim, Choi, Yan, & Dooley, 2011; Roseira, Brito, & Ford, 2013; Stanko, Bonner, & Calantone, 2007). The core theories underlying these areas of research are social exchange theory and resource dependency theory – similar to the root theories offered for the internalisation research area in IB.

I adjust Möller’s (2013) theory map to match my thesis arguments and focus on the root theories and research areas at the intra-organisational level. However, some research at the inter-organisational level of relationships can be integrated carefully when conceptualising the MNE as a diversified intra-firm network. This is done through matching the underlying assumptions between the inter- and intra-organisational network perspective and focusing on phenomena that occur in both situations. Therefore, the focus on the IMP literature theory map can shift away from service marketing, which borrows from cognitive psychology, and towards channel systems and markets-as-networks literature that explores and examines channel member relationships and network-actor relationships.

**Relationships, temporality and multiplexity in IMP literature**

Appendix B outlines my second literature search process to target my thesis concepts of relationships, temporality and multiplexity. The literature search found 64 articles that specifically examined thesis concepts, such as the definition and conceptualisation of relationships and networks, types of relationships networks, the relationship process in terms of formation and end, dyads and triads, multiplexity and the influence of time/change/process. These concepts are outlined next.

**Relationships**

Of the original search on relationships in the IMP literature, the majority of the articles are at the individual level of analysis and have covered issues such as actor perceptions, trust and emotions, and the influence of ‘power’ on actor relationships. These articles were put aside after determining that their conclusions could not be used at the subunit level as subunit relationships are often transactional in nature (Hawkins et al., 2008). However, there is a cogent stream of literature that looks at meso and macro-level relationships in buyer-supplier dyads and industrial networks. This stream of literature can be categorised according to the areas outlined in Figure 3: buyer-seller interaction and industries-as-networks. In these fields, scholars offer models for conceptualising and analysing buyer-seller relationships according to notions borrowed from social capital theory (Choi & Wu, 2009; Kim et al., 2011; Laaksonen, Pajunen, & Kulmala, 2008; Pilbeam, Alvarez, & Wilson, 2012; Stanko et al.,
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2007) and cover the role of actor trust and power (Andersen & Kumar, 2006; Ekici, 2013; Gaski & Ray, 2001; Geiger et al., 2012; Hawkins et al., 2008; Herbst, Voeth, & Meister, 2011; Johnsen & Ford, 2008; Jüttner, Christopher, & Baker, 2007; Laaksonen et al., 2008).

Relevant concepts for my research have related to the conceptualisation of relationships embedded in networks (Corsaro & Snehota, 2012; Holmlund, 2004; Kleinaltenkamp & Ehret, 2006; Mitrega, Forkmann, Ramos, & Henneberg, 2012; Möller & Halinen, 1999). In contrast to the traditional market view, businesses and their subunits are placed within “networks of on-going business and non-business relationships, which enable and constrain [their] performance” (Ritter, Wilkinson, & Johnston, 2004, p. 175). Originally, relationships were perceived as dyads or interactions between two actors (Iacobucci & Hopkins, 1992) and developed within research on M&As (Anderson, Havila, & Salmi, 2001; Degbey & Pelto, 2013; Öberg, Henneberg, & Mouzas, 2007). However, research in supply chain networks has adapted the concept of triads to reflect more accurately the building blocks of the network phenomena and its inherent dynamism (Hartmann & Herb, 2015; Nätti, Pekkarinen, Hartikka, & Holappa, 2014). Within a supply chain network, considering the buyer-supplier and supplier-supplier dyads in isolation is not a coherent picture of the network (Choi & Wu, 2009). This conceptualisation is useful for my thesis, even though it has been primarily used in inter-organisational network studies and is not prominent in IB literature (Bergenholtz & Waldstrom, 2011; Ferriani et al., 2013; Phelps et al., 2012). In addition, the IMP literature conceptualisation of relationship progress and the influence of time are more fine-grained and relevant for my work.

In IMP, relationships are understood to go through different modalities, similar to conclusions from the life-cycle concept (Zerbini & Castaldo, 2007). Further, relationships are also seen as path-dependent where prior interactions influence consequent relationships (Gammelgaard et al., 2012). However, where IMP extends the idea of the relationship between actors is through a thorough integration of the network perspective. Prior interactions do not simply influence future interactions with others. However, even an actor’s initial relationship with another develops their ‘network status’ and therefore the quality of all future affiliations in the network (Milanov & Shepherd, 2013). In addition, relationships are seen to end, rather than enjoy, a continuous growth trajectory. The end of a relationship is not always a failure and is understood to be an inevitable process that should be managed in some cases (Havila & Medlin, 2012; Havila & Salmi, 2000; Havila & Wilkinson, 2002).
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In addition, IMP scholars see relationships as complex phenomena with inherent tensions within the relationship and its position in the network. Business networks are in a constant flux of stability and change (Easton, Brooks, Georgieva, & Wilkinson, 2008; Tidström & Åhman, 2006). Business relationships in aggregate can be seen as constant but the sub-relationships within are constantly developing and decaying (Håkansson & Snehota, 1995). The influence of time, change, and process is more apparent and developed in IMP literature.

**Temporality and Time/Change/Process**

IMP literature appears to have gone through three stages when integrating the idea of temporality into the conceptualisation of relationships within networks. The first stage involves a time perspective on business relationships whereby interactions occur in an environment of ‘time’ and are influenced by human perceptions of time (Ang, Leong, & Teo, 2000; Medlin, 2004). Relationships, such as dyadic partnerships, are seen to develop over a period of time and follow the traditional evolutionary path of a life-cycle (Eggert, Ulaga, & Schultz, 2006; Ellram, 1993). Halinen, Salmi and Havila (1999) pre-empted more current conceptualisations by linking dyadic change to business network change. In the second stage, the concept of change became more prominent with scholars moving past the chronological concept of time to the kairological concept, which emphasises critical events and their timing in business relationships (Degbey & Pelto, 2013; Edvardsson & Strandvik, 2009; Kamp, 2005; Medlin, 2004; Tidström & Hagberg-Andersson, 2012). The third and current stage focuses on further extensions to conceptualising time, with temporal research linked to the case study method (Quintens & Matthyssens, 2010) and the processes and longitudinal case study method (Aaboen, Dubois, & Lind, 2012). Temporality is now directly linked to process and derives study methods at various levels, such as business networks and events (Araujo & Easton, 2012; Bizzi & Langley, 2012; Chou & Zolkiewski, 2012; Corsaro & Snehota, 2012; Guercini & Runfola, 2012; Halinen, Medlin, & Törnroos, 2012). Furthermore, process research is seen to have its own epistemological and methodological choice (Bizzi & Langley, 2012) that have been echoed by scholars in related fields as evidenced by the recent *Academy of Management Journal* issue devoted to the issues of process studies (Langley et al., 2013).

**Multiplexity**

Due to the integration of the network perspective in IMP literature, the concept of multiplexity is also more developed than in IB literature. Originally, the term came from social network analysis, referring to the concurrent connection of actors in a network through
a number of different types of interactions (Lazega & Pattison, 1999; Verbrugge, 1979). Relationships are seen as “complex interactions that cover a wide range of functions and activities in the firms” (Holmlund, 2004, p. 280). Similar to IB research, the idea of multiplexity of relationships at the organisational level has been extended from strategic management studies (Zerbini & Castaldo, 2007), which suggest that the multiplexity of ties is a more consistent measure of relationship strength than counting interactions between actors (Ferriani et al., 2013). Some IMP scholars argue that multiplexity “contributes to the total strength of a tie and increases the number of ways one can reciprocate favours” (Ansari, Koenigsberg, & Stahl, 2011, p. 714).

2.3.2 Conceptual proximity and compatibility between IB and IMP: close areas of research with compatible underlying assumptions

After establishing the root theories and specific research areas relevant to the thesis, underlying complementary assumptions were identified between IB and IMP. As explained previously, the proximity of the two scholarly research areas can be deduced when comparing primary goals, empirical domains and disciplinary backgrounds (Möller, 2013). Proximity refers to “the conceptual distance that exists between the phenomena that the lens address in their original conception” (Okhuysen & Bonardi, 2011, p. 7). Compatibility can be examined when comparing ontological assumptions of key concepts, such as relationships, temporality, multiplexity, and epistemological views and methodology (Möller, 2013). The degree of compatibility is based on “similar or dissimilar […] properties in the development of their explanations” (Okhuysen & Bonardi, 2011, p.7). Proximity and compatibility between IB and IMP literature are summarised in Table 7.

Table 7 Summary of the Business Network Perspective in IB and IMP literature

<table>
<thead>
<tr>
<th>Dimensions for Proximity and Compatibility</th>
<th>International Business</th>
<th>Industrial Marketing and Purchasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Goals and the Empirical Domain</td>
<td>Examining internationalisation and internalisation advantages and processes. Relationships are intra and inter-organisational. Empirical domains include research on FDI, MNE subsidiaries and headquarters</td>
<td>Relationship marketing and business network perspectives on markets and inter-organisational relationships. Empirical domains include interactive and service marketing, and channel systems research.</td>
</tr>
</tbody>
</table>
Chapter 2. Review of relevant literature and borrowing concepts from related fields

<table>
<thead>
<tr>
<th>Disciplinary Background</th>
<th>Classical economics, neo-classical economics, sociology</th>
<th>Political science, neo-classical economics, sociology, resource dependence theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epistemological View and Common Methodologies</td>
<td>Multidisciplinary: a large range of research epistemologies and methodologies (post-positivist to interpretivist). Quantitative (such as statistical modelling) and qualitative methods (such as interviews) are common.</td>
<td>Relationship management: reductionist; uses techniques such as structural equation modelling; casual modelling frameworks. Business network perspective: qualitative case analysis.</td>
</tr>
</tbody>
</table>

As outlined in Table 7, IB scholars examine internationalisation and internalisation as two key organisational processes using the business network perspective (Vahlne & Johanson, 2013). IB is primarily a phenomenon-driven research area (Doz, 2011) and so processes are studied in a variety of contexts. For example, FDI research uses country-level and industry-level data (Werner, 2002). Internationalisation research looks at how domestic organisations become internationalised or how companies can be ‘born-globals’ (Madsen & Servais, 1997). Research that looks at the network structure of MNEs examines the embeddedness of subsidiaries in local markets (Andersson, Forsgren, & Holm, 2007; Gammelgaard et al., 2012; O’Donnell, 2000; Santangelo, 2012). The disciplinary background of IB research draws primarily from neo-classical economics and sociology and uses theories such as TCE (Ghoshal & Moran, 1996) and social network theory.

In IMP, scholars are more network theory-focused with regards to their primary scholarly goals (Möller, 2013). The theoretical goals of business networks, in particular, examine the
inter- and intra-organisational relationships and markets to understand how they evolve. Specifically, business network research aims to understand actor relationships within a network for more effective management process. Similar to IB, IMP is also a phenomena-driven research area and uses TCE, social exchange theory and resource dependency theory.

Empirically and methodologically, IB and IMP are also similar. Although IB is more diverse in its research contexts, both have a variety of research epistemologies and methodologies with a heavy lean towards quantitative methods. However, IMP scholars are less reductionist when exploring network phenomena, choosing to take a sense-making process view and using qualitative methods such as qualitative case study analysis (Ramos & Ford, 2011). In addition, examining the ontological assumptions between the thesis concepts of relationships, temporality and multiplexity highlights where the best opportunities lie for IB scholars to borrow from IMP.

Within IB literature, there is a varied understanding of relationships from a number of different contexts (Chiao & Ying, 2013). Thus, there is no similar research stream echoing the focus of IMP’s research areas of relationship marketing and business networks. Relationships are often conceptualised as a conduit for resources transfer or sharing, such as knowledge (Brass et al., 2004) and employee interactions (Barner-Rasmussen & Björkman, 2007; Chow & Chan, 2008; Marloes et al., 2006). As a result, willingness is often examined in terms of the role of trust and shared perspectives for resource sharing (Ashleigh & Nandhakumar, 2007; Li, 2005). As this area often borrows from social capital and social network theory, relationships are seen in terms of dyads, embedded in networks and measured in terms of levels of interaction (Abreu & Camarinha-Matos, 2010; Chiu, Hsu, & Wang, 2006; Huggins, Johnston, & Thompson, 2012; Maurer et al., 2011). Relationships are also path-dependent and influenced by prior interactions. Also, although not explicitly stated, relationships are aggregates of sub-relationships that differ in content/substance, such as between formal and informal relationships (Chiao & Ying, 2013).

Within IMP literature, business network relationships are viewed as reciprocal and a variety of resources are exchanged through a variety of actor types, such as firms, individuals and government and research agencies. Relationships are value-adding – accessing and controlling or transforming resources. Relationships can be dyadic or triadic (Gassenheimer, Hunter, & Siguaw, 2007; Iacobucci & Hopkins, 1992; Pilbeam et al., 2012; Roseira, Brito, &
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Henneberg, 2010). Relationships are also embedded in a network and are influenced by past interactions (Corsaro & Snehota, 2012; Wilkinson & Young, 2002).

Concerning temporality in IB, time is often used as a control variable (Reeb, Sakakibara, & Mahmood, 2012). Although not often explicitly stated, time does influence the process of relationships as evidenced by studies on the influence of prior interactions on present relationships (Alnuaimi et al., 2012; Gammelgaard et al., 2012). Studies that borrow from the life-cycle concept suffer from problems of ‘bracketing’ time, often reducing the process of relationships to ‘comparative statics’ (Langley et al., 2013). Furthermore, time is often seen as chronological, which is problematic as it does not emphasise critical events within a specific process (Medlin, 2004; Tidström & Åhman, 2006). For example, Levin et al.’s (2011) argument that strong relationships entering dormancy can be reactivated quickly for an event, such as gathering resources for a current organisational project.

In contrast, temporality and time appear to be taken more seriously in IMP research than in IB. Temporality is linked to viewing the relationships, particularly across networks, as a process. Thus, a stream of research aims to develop theories to inform an understanding of time in business networks (Edvardsson & Strandvik, 2009; Halinen et al., 2012; Peters, Vanharanta, Pressey, & Johnston, 2012). In contrast to IB, time can be chronological or kairological in nature.

Lastly, concerning multiplexity, the majority of IB studies on relationships did not explicitly consider multiplexity beyond pointing out that relationships may differ in content or substance. In IMP, relationships are seen to exchange a variety of resources and the concept of multiplexity is more developed and explicitly explored. Understanding multiplex relationships are part of the focus on “understanding and predicting patterns of interactions and relationships among network members” (Ansari et al., 2011, p. 713).

2.4 Chapter summary

There are two advantages when combining theories from different disciplines. Firstly, borrowing from a related field can “develop new insights and […] novel hypotheses” (Okhuysen & Bonardi, 2011, p. 6). Secondly, phenomena are complex in nature and may need a number of different perspectives to understand it. The most successful type of combination is ‘Close Areas of Research, Compatible Underlying Assumptions’ (Okhuysen & Bonardi, 2011). My meta-theoretical analysis shows that the fields of IB and IMP are close areas of research and have compatible underlying assumptions. Both share similar
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disciplinary backgrounds in neo-classical economics, such as transaction cost economics and forms of social exchange theory, and social capital and social network theory. Both also have streams of research that subscribe to the business network perspective on relationships within organisations. However, IMP has a more nuanced view on network relationships and their structure, temporality and multiplexity.

In the next chapter, a theoretical framework is presented to examine MNE subunit relationships from a process perspective and focus on how they are influenced by temporality and multiplexity. This is followed by a conceptual model that focuses on the basic building block of an intra-organisational MNE network, the triad.
Chapter 3. Conceptual framework

3.0 Conceptual Framework

In this chapter, I outline the thesis conceptual framework, which includes an explanation of the key conceptualisations on the MNE network organisational structure from IB literature, and dynamic network processes from IMP literature. I synthesise the core elements of my conceptual framework on the MNE as a network of dynamic intra-organisational relationships: temporality, multiplexity and triads (Imenda, 2014). In particular, I outline the components of the MNE subunit triad, such as the concepts of Simmelian dyads and group triads. In addition, I conceptualise a processual understanding of a triad as a network structure that permutates according to critical events.

I use a conceptual framework, as distinct from a theoretical framework or conceptual model, for three key reasons. First, I develop concepts that are neither clearly delineated nor theorised within the IB discipline by borrowing conceptualisations of my key concepts from IMP and organisational network studies. I do not use a conceptual model because the key concepts are not yet developed into constructs with clear components and measurements (Anderson, 1979). Lastly, using a conceptual framework also offers the opportunity not only to conceptualise the logic of linking them together in a coherent manner but also to generate approaches to exploring these linkages (Wicker, 1985). Therefore, this chapter ends with some generative questions derived from the framework that sets the context for the thesis research methodology.

3.1. Key concepts

MNE organisational structure

The traditional conceptualisation of the MNE organisational structure is a configuration that allows for the coordination of subunits in different countries to develop and utilise competitive advantage (Forsgren, 2013; Vahlne & Johanson, 2013). There are some theoretical perspectives of the MNE that examine the structure’s various elements and are relevant. One that is useful for my thesis is Bartlett and Ghoshal’s (1989) analysis of the transnational corporation that uses network theory to conceptualise its organisational structure. Bartlett and Ghoshal’s (1989) transnational is presented as a type of ideal MNE organisational structure (Djodat & Knyphausen-Aufseß, 2016). A transnational is conceptualised as an integrated business network with highly interdependent subunits, some of which contribute unique assets and capabilities due to their location in foreign markets.
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Nohria and Ghoshal’s (1997) concept of differentiated transnational networks builds on Bartlett and Ghoshal’s (1989) work by emphasising the role of informal relationships (more specifically social capital) to coordinate subunits that are differentiated by social context. However, I focus on intra-firm organisational network relationships that are not just found within informal social ties at the individual level of analysis. Further, scholars argue that these earlier conceptualisations of the MNE business network are descriptive rather than prescriptive and need to be updated (Rašković, Brenčič, & Jaklič, 2013).

Vahlne and Johanson (2013) argue for apprising IB theories and concepts by updating their economic assumptions. Following this line of reasoning, they argue for a perspective that explains the network organisational structure of relationships within an MNE. They reason that MNEs build and develop “value-creating business networks in and between foreign countries both inside and outside the boundaries of the firm” (Vahlne & Johanson, 2013, p. 194). Such a network perspective of the MNE puts managing network relationships to the fore by focusing on business networks and value-creating relationships. To reiterate, the definition of an MNE is an organisation that gains competitive advantage through developing value-creating network relationships inside and outside of the boundaries of the firm and in different countries.

Relationships between subunits within the MNE

Following the conceptualisation of the MNE as an intra-organisational network, I focus on interactions between subunits including global HQs, regional HQs and subsidiaries. IB literature on relationships between subunits suggests that relationships are defined by the resources they share or transfer (such as knowledge) or the type of relationship (such as formal versus informal) (Ambos & Birkinshaw, 2010; Michailova & Mustaffa, 2012). The majority of IB scholars choose to conceptualise relationships using social capital and social network theory. As a result, relationships are often equated to analogous terms from sociology, such as bonds or ties. From social network theory, the organisation of any network is from three elements – actors, ties and the overall structure of the ties (Ahuja et al., 2012). An actor is what a network is comprised of; for example, in an intra-firm network, the actor is a subunit such as a subsidiary. A tie is what connects actors – in this case, a subunit relationship. The structure of these connections is the structure of the intra-firm network, which may be the whole network, part of the network, or a building block, such as a triad.
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IMP scholars have integrated and extended network theoretical concepts beyond the current understanding in IB. IB business network scholars describe the architecture of the network generally in terms of the location, content, or strength of relationships (Geppert, Becker-Ritterspach, & Mudambi, 2016). Meanwhile, IMP scholars utilise the ARA framework, where the relationship between two actors differs regarding activity, resources and the actor (Freytag & Clarke, 2012; Håkansson, 1989; Möller & Wilson, 1995; Snehota & Håkansson, 1995). Activity links are actions that are coordinated between two actors, such as logistic systems. For example, the activity link between two subsidiaries may be a planning system for the delivery of a good to customers. Resource ties are how resources between two actors may be adapted or transformed; for example, a knowledge-sharing relationship between two peer subsidiaries for developing an innovative service. Actor bonds refer to the social exchange that occurs between two actors, such as problem-solving and learning.

This is the perspective I integrate into my conceptual framework. Relationships between subunits within the MNE are fashioned based on organisational processes and activities, the resources exchanged and the subunits as actors.

IB scholars also use the measures of social capital and social network theory to determine the strength of relationships. The most common measurement is the level and number of interactions between the two subunits (Feraris, 2014). However, Levin et al., (2011) argue otherwise, noting that interactional frequency may not be a reliable measure as there is an upper limit to the number of relationships that are actively managed by an individual. Although their arguments are at the individual level of analysis, some underlying assumptions may be abstracted to the subunit level. Levin et al., (2011) argue that individuals put relationships in a state of dormancy that is reactivated when needed. Such dormant ties are efficient, as they require little time investment. Additionally, relationship experiences decay, further emphasising the influence of temporality on the relationship process. These conceptualisations are mirrored at the intra-organisational level, for example, in the scholarly literature about aligning HQs and subunit interests (Hoenen & Kostova, 2015). In IMP, network scholars conceptualise relationships as situated within event-based networks. This is the view I take in my thesis, relationships between subunits are conceptualised as “time-based connected event relationships” that reconfigure according to event triggers (Chou & Zolkiewski, 2012, p.247).

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*Dynamic change in network relationships: temporality*

As outlined previously, relationships are dynamic and change over time. However, dynamism and temporality are two different concepts. The term ‘dynamic’ is often used as an adjective in IB literature – it is often linked to a process or system that undergoes constant change or progress, for example, dynamic capabilities for international business expansion refers to the ability to deploy and continuously create new resources and knowledge (Luo, 2000). With business network relationships, network dynamics “simply connotes changes in networks” (Chou & Zolkiewski, 2012, p. 248). Therefore, dynamism is a generic concept that denotes an environment or process that is in a constant state of change. However, the concept of change can be boundaried by a time dimension to understand dynamic relationships at a more granular level. This also falls in line with the conceptualisation of the relationship that includes interactions between two actors that evolve. Rather than examining the generic dynamics of relationships, such as how actors deal with an ever-changing business environment or activity, it may be more meaningful and feasible to examine the influence of time on the relationship process. However, the concept of time does have ontological issues.

Chou and Zolkiewski (2012) argue that a key challenge with analysing temporality in the process of relationships is the conceptual tools used to analyse changes in such processes. Research on inter-organisational relationships accept that time plays a role in the development of a relationship and that the history and future expectations of the actors affect the relationship (Anderson et al., 2001). If this is the case, the actor’s experience of time is an issue. How do MNE subunits, as actors, segment time according to history, present and future? Is the timing of activities for intra-firm coordination significant rather than the interaction itself (Medlin, 2004)? A kairological view of time should be taken to understand its event-based nature. The kairological view conceptualises time in terms of events or as a sequence of qualitatively heterogeneous events (Araujo & Easton, 2012). Furthermore, this ties in with the previous comment on the measurement of the strength and resiliency of a relationship. It is not necessarily the duration of the relationship or the frequency of interaction that leads to relationship strength, but the development of shared perspectives through ‘critical events’ (Levin et al., 2011).

*Multiplexity*

Any issues that arise when examining the changes in relationships within a network cannot be properly explained when researchers simplify relationships to one activity (Ferriani et al.,
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2013). Unlike the previous terms discussed, multiplexity is a term well defined. Multiplexity is often used to describe some heterogeneous relationships in social network research. More specifically, multiplexity in networks is composed of “multiple ties with different contents between the same set of actors” (Ahuja et al., 2012, p. 438). Multiplexity can be understood from a variety of different angles, such as actors engaging in multiple roles, different types of exchanges, and as a mix of old and new relationships (Baum & Rowley, 2008; Ferriani et al., 2013). Therefore, multiplex relationships are “multiple relationships of different types on a common set of actors” (Ansari et al., 2011, p. 713).

Simmelian dyads and group triads
Both IB and IMP scholars conceptualise most relationships within networks as dyads, particularly when investigating the phenomena of mergers and acquisitions (Anderson et al., 2001; Degbey & Pelto, 2013; Öberg et al., 2007). However, for the MNE context, a different conceptualisation of the basic building block of the network may be more useful. Within IMP and taking the markets-as-networks perspective, some scholars take the triad as a more accurate reflection of relationships within the network (Vedel, 2016). In contrast to a dyad, a triad occurs when three actors are connected either directly or indirectly to one another. The actors are relatively independent but work together towards a business goal. Therefore, within the MNE, an example of a triad would be relationships between the HQ, the subsidiary and another peer subsidiary.

Furthermore, triads may function as a ‘serial-like’ or ‘group-like’ triad (Havila, Johanson, & Thilenius, 2004). A group-like triad is one whereby the three actors work unitarily towards a common goal. For example, a triad of three subsidiaries may act as a group when coordinating on a shared services project. A serial triad is one that encompasses two dyadic relationships where one precedes the other in terms of predetermined tasks (Havila et al., 2004. For the MNE context, an assumption is that triads would indeed act as groups as they are embedded within the MNE intra-organisational network. Furthermore, MNE subunit triads would have open and closed triadic structures. An open triad is one with a null relationship between two actors. A closed has relationships between all actors. They are studied at the inter-organisational and inter-personal level in organisations (Baum, McEvily, & Rowley, 2012). However, as far as I know, it is unclear from the literature whether both structures exist at the MNE subunit level. Nevertheless, logically, there would be tensions between the subunits due to non-collaborative behaviours or the presence of competition
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(Luo, 2005). Therefore, I utilise the conceptualisation of a Simmelian dyad that is embedded within a triad (Krackhardt & Kilduff, 2002).

A Simmelian dyadic tie changes the relationships among other actors in the triad through reducing conflict, bargaining power, and individuality (Labianca, Brass, & Gray, 1998). Therefore, there would be triadic forces at play that are not apparent at the dyadic level of the MNE intra-organisational network. For example, a HQs can act as a resource gatekeeper; orchestrating relationships between two subunits without letting them interact directly (Havila, et al., 2004). Alternatively, a HQs may have only a limited amount of attention to give to subunits and so chooses to focus on one rather than sharing the attention equally between the triad. The influence of the other subunit will not be apparent if a strictly dyadic perspective is taken. Taking the triadic view allows for examining any emergent properties of MNE subunits that take the conceptualisation of MNE subunit relationships beyond that of simple aggregates of lower-level relationships.

In Figure 4 and 5, I outline the permutations of group triads and those with embedded Simmelian dyads that can arise within the MNE intra-organisational network. These permutations can be constructed by utilising three different strengths and complexity of relationships – strong, weak and null (lack of a relationship). In Figure 4, we can see that group triads would have either all strong relationships, weak relationships or permutations of one strong and two weak and two strong and one weak. The strength of the relationships is depicted through the line width.
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All strong/high complexity relationships

All weak/low complexity relationships

Two strong/high complexity and one weak/low complexity relationships

One strong/high complexity and two/low complexity weak relationships

Figure 4 Permutations of the MNE subunit group triad

Note: A thick line denotes a strong/high complexity relationship; a thin line denotes a weak/low complexity relationship.

Triads with embedded Simmelian dyads are not closed, that is, there is a null relationship between two subunits. Therefore, in Figure 5, there are Simmelian dyads with two strong/high complexity relationships and one null, two weak/low complexity relationships with one null and one strong/high complexity with one weak/low complexity relationships. All null relationships represent the termination of the triad. The possibility of a terminated triad is in line with the IMP scholars who argue that relationship success is not reliant on constant growth and needs to be a managed process (Havila & Medlin, 2012; Havila & Slami, 2000; Havila & Wilkinson, 2002).

For the thesis, triads themselves need to be conceptualised in terms of time. Triads and their subunit relationships may be temporary, constant or terminated as they change over time (Baum et al., 2012). Triads may exist for a temporary period, such as a short-term project between peer subsidiaries. They may have a long-term goal of heading towards termination, such as the end date of a contractual arrangement between subunits. Lastly, they may be constant with no end date in view – such relationships may only change substantially due to ‘critical events’. Triads during these types of phases may permutate through the triad structures outlined above, for example, a triad may occur whereby a HQs sets up an arrangement between two subsidiaries that do not have a relationship with one another. After some critical events, such as successfully meeting project deadlines, two peer subsidiaries
may develop a weak relationship. As a result, they are less reliant on the HQ and their relationship with the HQ may reduce one that is weak.

![Diagram showing permutations of the Simmelian dyad and termination]

*Figure 5 Permutations of the Simmelian dyad and termination*

Note: A thick line denotes a strong/high complexity relationship; a thin line denotes a weak/low complexity relationship.

### 3.2. A conceptual framework of MNE intra-organisational relationships

A conceptual framework of MNE intra-organisational relationships that I develop is grounded in IB concepts and extensions from IMP. These points of departure from IB literature are outlined in Table 8.

*Table 8 Points of departure from the established IB conceptualisations of key concepts*

<table>
<thead>
<tr>
<th>Key Concepts</th>
<th>At First Glance from IB</th>
<th>Points of Departure from IMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNE Subunit</td>
<td>Dyadic</td>
<td>Dyadic and triadic</td>
</tr>
<tr>
<td>Relationship</td>
<td>Monoplex in composition</td>
<td>Multiplex in composition</td>
</tr>
<tr>
<td>Structures</td>
<td>Interactions as</td>
<td>Multiplexity as another</td>
</tr>
<tr>
<td></td>
<td>measurements of</td>
<td>measurement of relationships</td>
</tr>
<tr>
<td></td>
<td>relationship strength</td>
<td>strength</td>
</tr>
<tr>
<td></td>
<td>Network structures</td>
<td>Networks as flows of activity</td>
</tr>
<tr>
<td></td>
<td>measured at certain</td>
<td>and in continual states of</td>
</tr>
<tr>
<td></td>
<td>points in time</td>
<td>transformation</td>
</tr>
<tr>
<td>Temporality</td>
<td>Path dependency and prior interactions</td>
<td>Latency and relationship termination as a managed process/inevitable</td>
</tr>
<tr>
<td></td>
<td>Static, such as the lifecycle concept</td>
<td>Dynamic, temporality</td>
</tr>
</tbody>
</table>

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- Age-less or controlled empirically
- Time, process and age of relationships is a significant issue

<table>
<thead>
<tr>
<th>Multiplexity</th>
<th>Resource based</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Properties are an aggregate of lower level interactions</td>
</tr>
<tr>
<td></td>
<td>Focuses on social capital and the concept of embeddedness for multiple network structures</td>
</tr>
<tr>
<td></td>
<td>Network structure, actor, activity, and resource based</td>
</tr>
<tr>
<td></td>
<td>Emergent properties at the subunit level different from aggregates of lower level interactions</td>
</tr>
<tr>
<td></td>
<td>Focuses on social network and business network perspective and a diversity of network concepts</td>
</tr>
</tbody>
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<tr>
<th>Process View</th>
<th>Focus on variance-based models and comparisons of process stages</th>
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<tr>
<td></td>
<td>Process view of relationships and networks</td>
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</tbody>
</table>

In summary, the concept of time and temporality in IB literature is either conceptualised as path-dependent, treated as an exercise in comparative statics or empirically controlled for. In contrast, IMP scholars conceptualise relationships as dynamic and as processes that experience latency, reactivation and termination, and argue that the age of the relationships should be taken into consideration as they change over time. In IB literature, subunit relationship structure was originally understood as dyads, monoplex in composition and resource based. In contrast, IMP scholars extended their network conceptualisations by studying triads, Simmelian dyads and view relationships as multiplex and not wholly resource-based in nature. Furthermore, relationships are not seen as simple aggregates of lower level sub-relationships but enjoy emergent properties when taken in aggregate. Finally, they take a processual view of networks as a whole and conceptualise them as networking processes under a continual state of transformation. Using these extensions, I present my conceptual framework in Figure 6.

To the left of Figure 6, I outline the basic building block of an MNE network as the subunit triad and its relationship processes. The MNE subunit triad consists of three types of subunits, which may be global HQs, regional HQs, subsidiaries and other types found from data collection and analysis. These are represented as circles. The lines between the subunits represent their relationships. It is assumed that there are strong/highly complex, weak/less complex or null relationships between the three subunits. To the middle of the figure is the conceptualisation of multiplexity. The multiplexity of relationships is treated as a better predictor of relationship strength and complexity. From current IB research, it is assumed that the content of sub-relationships will follow organisational processes and knowledge flows.
Chapter 3. Conceptual framework

Data analysis will show if this is the case and what other content and types specific to temporality and the intra-organisational MNE context are awaiting discovery.

Figure 6 The temporality and multiplexity of the MNE subunit triad relationships

The conceptual framework also overcomes the current IB understanding of time and temporality as stage-based or an exercise in comparative statics. Temporality is depicted in Figure 6 in two ways. First, relationships can change over time in terms of strength and complexity (and as measured by multiplexity). Second, the configuration of the triad can change in response to ‘critical events’ between subunits. Using this conceptual framework will allow the examination of the structure of relationships between subunits in the MNE context. What is the content and substance of the sub-relationships that make up the multiplexity of subunit relationships? What types of critical events trigger changes in multiplexity and triad configurations over time? Analysing these questions will allow the elucidation of how MNE managers may chart and manage the value-adding relationships at the subunit level. Managing such relationships can lead to the more efficient use of connections between subunits and the internalisation processes of the MNE and ultimately improve the orchestration of overall MNE network design and operation.
Chapter 3. Conceptual framework

3.3. Chapter summary

In this Chapter, I outlined the key conceptualisations and situated them within a framework to investigate the MNE as a network of intra-organisational subunit relationships. While doing so, I present the subunit triad as the building block of the MNE network. I also explained how I conceptualised the triad in terms of temporality and multiplexity. In my next Chapter, I explain my research methodology choices in line with the process perspective.
4.0 Research Methodology

In this chapter, I present the justifications for the thesis research design, data collection and analytical methods. These are presented as two sections. The first on the research design and the second on the analytical procedures.

In the first section, I cover the research paradigm and arguments for pursuing qualitative research. This includes my decisions for pursuing a qualitative research design within an *ex-ante* multiple embedded sub-case study approach. I outline the process perspective and the challenges of using retrospective and network data. I then outline the data collection methods, beginning with an overview of the selected MNE, the data collection timeline and the participants. I also discuss two key topics, layered access and my failure to access global headquarters. I end the section with comments on exiting the field, how I mitigated the limitations of my chosen research design and lack of access to global headquarters, followed by the consideration of research ethics. In the second section, I outline my analytical procedures, including steps taken to integrate and manage a range of data types and sources, the analytical framework, and the process of triangulating themes.

4.1 Research paradigms, qualitative research, and context

Scholars differentiate between research design choices according to whether their aim is to develop concepts or theory (inductive) or test theory (deductive) (Myers, 2013). I followed an inductive path, as my goal is to explore and develop concepts according to insights gathered from fieldwork (Edmondson & McManus, 2007) and my focus is on understanding my participants’ reality, rather than presenting a strict facsimile of reality. To instil rigour in my data collection process, I collected data beyond traditional mediums, such as transcribed interviews, and included network pictures. I also used sources of extra-contextual information, such as reflexive field notes and paralanguage, in the interview setting. Choosing where and when to collect rigorous and relevant data was aided by my ontological and epistemological stances.

There are a number of paradigms that guide my research design, which include elements such as epistemological stances, shared beliefs within a community of researchers and exemplars of research (Alvesson & Sköldberg, 2009; Creswell, 2009; Guba & Lincoln, 1994; Morgan, 2007). Prevalent research paradigms are derived from the positivist, post-positivist,
constructivist and critical theory and participatory traditions (Creswell, 2009; Lincoln, Lynham, & Guba, 2011; Popper, 1957).

I follow the social constructivism paradigm that argues reality is subjective (Creswell, 2009; Hoon, 2013) as it is constructed socially and historically through interactions with others (Bourdieu, 1989; Patton, 2002). For the thesis objective, I assume that the reality of research participants is “pluralistic, interpretive, and contextualised” (Lub, 2015, p. 4). The community of researchers that I join argues for the use of qualitative methods that follow a social constructivist paradigm as IB phenomena is often complex, dynamic and multidimensional (Doz, 2011; Fletcher & Plakoyiannaki, 2011; Tsang, 2013).

Table 9 outlines the ontological and epistemological stances that guided which research procedures I chose to apply (Crotty, 1998; Huff, 2009; Myers, 2013). I clarify the link between my paradigmatic stance to my methodological choices to create internal consistency and logic and position my research as a contribution to the IB scholarly conversation on the MNE and its organisational network structure (Cunliffe, 2011). I did this for two reasons. First, I borrowed conceptual extensions from the related field of IMP to offer insights on MNE network relationships from an IB perspective. To integrate these insights, I made sure the extensions had compatible underlying assumptions. Second, I catered for the inbuilt biases in network-based studies and retrospective data (Cox & Hassard, 2007; Halinen & Törnroos, 2005). Halinen and Törnroos (2005) argue that researchers should be vigilant when studying networks and their related concepts within a case study structure because it is inherently difficult to ascertain the boundary of networks and their outcomes. The biases of retrospective data are well-known, but I mitigate these with careful research design (Cox & Hassard, 2007). For example, retrospective data may suffer from incorrect recall, but the triangulation with organisational documents allows for fact-checking.

Table 9 Methodological fit according to my paradigmatic stances

<table>
<thead>
<tr>
<th>Paradigm</th>
<th>Methodological stances and assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inductive</td>
<td>Explore and develop concepts through fieldwork</td>
</tr>
<tr>
<td>Social Constructivism</td>
<td>Reality is subjective and constructed socially and historically through interactions with others</td>
</tr>
<tr>
<td>Ontology</td>
<td>Subjectivism: Meaning comes from experience</td>
</tr>
<tr>
<td></td>
<td>Constructivist structuralism: Individuals are constrained by the social structures they are a part of, e.g. participants have agency, but they belong to formal organisational structures</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Epistemology</th>
<th>Interpretivism: Reality is context-dependent and based on the participants’ perception of reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Belief in the Scholarly Community</td>
<td>Argues for more qualitative research as IB phenomena are complex, dynamic, and multidimensional</td>
</tr>
<tr>
<td>Research Question</td>
<td>Open-ended enquiry with key concepts of temporality and multiplexity to examine the MNE as a network of dynamic relationships</td>
</tr>
<tr>
<td>Prior Work</td>
<td>Nascent theoretical basis for key concepts of temporality and multiplexity in organisational network structure</td>
</tr>
<tr>
<td>Contribution to Literature</td>
<td>Borrowed network concepts from IMP to offer insights into MNE network relationships from an IB perspective</td>
</tr>
<tr>
<td>Methodology</td>
<td>Qualitative: Look for the meaning of concepts not the measurement of constructs and their variables. <em>Alternative to quantitative network metrics:</em> collect qualitative data on network relationships based on sense-making concepts</td>
</tr>
</tbody>
</table>

Source: Adapted from Edmondson & McManus (2007), Hoon (2013) and Morgan (2007)

As I gather data on intra-firm MNE network relationships from individuals, the idea that meaning is co-constructed occurs at two levels. I utilise Bourdieu’s (1989) *constructivist structuralism* perspective that argues that although individuals have agency within a phenomenon, they are also constrained by social structures that they have no control over. In an MNE, relationships between subunits are situated within “nested hierarchies across multiple organizational layers” (Hoenen & Kostova, 2015, p. 104). In this sense, although the research participants presented their subjectivist perceptions of the phenomenon under study to me, they also operated under formalised intra-firm networked social structures that they had little control over. Therefore, the data I collected from participants on intra-firm MNE network relationships was constructed not only through their schemes of perception and action but also through the formalised social structures they belonged to, such as their subunit organisation. This, in turn, is nested within hierarchical and heterarchical network organisational levels within the MNE.

I aimed for a methodological fit between the components of my thesis, the type of data collected and the collection procedures I performed (Edmondson & McManus, 2007). The nature of my research questions was open-ended enquiry, whereby I examine the constructs of multiplexity and temporality in the development of intra-firm network relationships. As these constructs are under-developed and the state of prior research is nascent, I selected a qualitative research methodology so that I could study these constructs in-depth.
In line with the field of IB, I embrace Van Maanen’s (1979, p.520) definition of qualitative research that focuses on the understanding of “meaning, not the frequency” of social phenomena. Traditional network conceptualisations of the MNC use quantitative techniques that rely on the assumption that a high frequency of interactions is a strong indicator of relationship strength (Birkinshaw, Brannen, & Tung, 2011). However, since I conceptualise the multiplexity of relationships as an explanation for relationship development, I cannot collect relevant data using traditional network metrics. Therefore, I rely on the IMP scholarly assumption that the meaning of networks and their processes can be conceptualised from a sense-making perspective and are suited to a qualitative methodological approach (Cosaro, Ramos, Henneberg & Naudé, 2011; Henneberg, Mouzas & Naudé, 2006).

Qualitative research is also uniquely suited to examine the “black box of organizational processes […] [and] collective organized action as it folds under time in context” (Doz, 2011, p. 583). Qualitative research occurs as the natural setting of the organisation, gives ‘voice’ to the research participants, is reflexive in data collection design and analysis, and the methods or tools of data collection and analysis are not standardised (Bluhm, Harman, Lee & Mitchell, 2011). All four of these characteristics fit my study. I collected data at the natural setting of the organisation as it allowed me also to observe its context, for instance, organisational artefacts and events that occurred and would not be present in a controlled experiment. My data also originated from research participants that experienced the networked structure of their organisation, its complexity, and how it has changed over time. My design was reflexive in that I allowed for the non-linearity of research decisions, such as data collection methods. This also added to the non-standardisation of methods – as I was not testing theories but examining concepts, I was able to choose methods that engaged with the phenomenon of the MNE organisational network. For example, my use of network pictures as a data collection method that maps the subunit level organisational network structure of the MNE.

The role of context

IB phenomena, such as MNEs, are often studied in multiple national cultures given their transnational structure (Lo & Michailova, 2010; Tsui; 2004; Welch & Piekkari, 2006). This is because the ‘real-world’ nature of the MNE network phenomenon often has a blurred boundary with its context (Forsgren, Holm, & Johanson, 2005). In line with this thinking, context is a “dynamic array of factors, features, processes or events which have an influence on a phenomena that is examined” (Michailova, 2011, p. 130). It is dynamic as it changes over time and is influenced by events (Johns, 2006). I integrate the role of context
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significantly through focusing on events within the target organisation at the organisational and industrial level (Johns, 2006). I also contextualised my findings on each subunit depending on their country’s national culture and the ethnic culture of research participants. Although the ethnic culture of research participants did not inform my conceptual framework, I took care to understand the personal history of participants and how their perspectives were influenced by the time they spent in different job roles in different countries (Edmondson, 1999).

Contextualisation involves “illuminating the phenomena” often through studying its nested elements and components, such as individuals within a group and subunits within an MNE (Cappeli & Sherer, 1991; Edmondson, 1999). Although this is often done ad hoc or post hoc by most researchers, I did this before any data gathering due to the boundarying concerns of network and time-based research. I contextualised through a research design that covered cross-level research, studying processes and events, and collecting qualitative data (Johns, 2006). I employed cross-level analysis through studying the nested bundle of sub-relationships that made up the intra-network subunit relationships. I also used key events to anchor the interview guide and network pictures. I focused on studying processes, the influence of time and integrating a processual perspective to my research methodology (which is discussed in section 4.3).

Taking a processual and temporal perspective on intra-organisational MNE networks allows me to directly observe and analyse contextual effects through focusing on events and “examining configurations or bundles of practices” (Rousseau & Fried, 2001, p.9). For example, I used events as the sensitising artefacts for discussing changes in the configurations of subunit triads with my participants. I also borrowed conceptualisations from scholarly fields that used network theory to develop the IB perspective on MNE intra-organisational network structure. In this way, I used such conceptualisations as ‘partial lenses’ which in turn had implications for the qualitative case study approach I used.

4.2 Qualitative case study approach

I pursued a case study approach as I investigated the MNE as a contemporary phenomenon within its “real-life context”, that is, its current and enduring business processes and organisational structure (Yin, 2009). Table 10 outlines the rationale for the decisions I made for my case study structure. I also used an ex-ante case study approach (Alvesson & Kärreman, 2007). The rationale for my decision was that a case study is often described in
terms of its scope – the case/s chosen reflect boundaries around the phenomenon under study (Eisenhardt, 1989; Myers, 2013; Yin, 2003). The issue of boundaries is particularly significant as network-based research must delineate between the network as a phenomenon and as a context for empirical inquiry (Dubé & Paré, 2003; Halinen & Törnroos, 2005; Kragh & Andersen, 2009). In addition, the case study approach is a disciplinary convention within IB due to its usefulness in constraining the research scope for qualitative data collection (Piekkari & Welch, 2011; Piekkari, Welch, & Paavilainen, 2009).

Table 10 Case study structure and rationale

<table>
<thead>
<tr>
<th>Decisions</th>
<th>Rationale</th>
</tr>
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</table>
| Case study | - Investigates the phenomenon of the contemporary MNE - Relevancy of real-life context - Blurred lines between the phenomenon and context - Boundary the phenomenon under study  
  o Disciplinary conventions for IB phenomena  
  o Disciplinary conventions for organisational network-based research |
| Qualitative ex-ante case study approach | - Use of partial lenses of network concepts from different disciplines to sensitively understand the network phenomenon  
  o IB business network theoretical perspective of the MNE  
  o Organisational network theory from IMP and OS |
| Single case study approach | - ‘Rich data for better stories’ (Eisenhardt, 1991) - Deals with the complexity of multiple sub-cases in a range of countries and contextual factors - Relevance of contextual factors  
  o Keep constant for cross-case comparison  
  o IB research is contextual, influences methodological choices and also the case sampling process  
  o Organisational network research is influenced by historical events |
| Multiple embedded case study approach | - Mitigate validity and reliability issues - Multiple sources of evidence - Chain of evidence for processual data - Replicable case study protocol - Unit of analysis is the intra-organizational subunit network relationship |
| Replication approach for sampling | - To extend concepts of multiplexity and temporality - Not enough known about concepts to explore polar types - Not interested in variables but processes and how they change over time |
| Purposeful sampling | - To find relevant case sites - To find participants that are valid sources of data |
| MNE theoretical sampling | - Used literature and experts to general purposeful criteria  
  o Industry: IB context - Manufacturing and product-based MNE |
Chapter 4. Research methodology

- **MNE**: Logic - Large to have more triads and old to have more historical data
- **Triad**: IB context - Relationships between sales, manufacturing, and HQs
- **Participants**: Logic - Executives who have been at the MNE for more than five years and also newer employees to see what history has been taught as corporate culture

Although scholars often reify case study approaches to the interpretivist paradigm (Dubé & Paré, 2003), they can be positivist or critical both in the research philosophy and methods utilised (Myers, 2013). In this vein, Andersen and Kragh (2010, 2011) offer three contrasting views on the use of theory in case research and ensuing selection and treatment of data - inductive, *in vivo* and *ex-ante*. Although I did not use theory but concepts and conceptualisations, I still borrowed network and process concepts from outside the IB discipline and used Andersen and Kragh’s arguments to structure my case study.

I did not use the traditional inductive case study approach as this would entail generalising my findings (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). I did not use the *in vivo* case study approach using complementary theories to continually adjust a pre-existing theoretical framework (Andersen & Kragh, 2011, p.51). Rather, I used the *ex-ante* approach to “challenge underlying assumptions” (Andersen & Kragh, 2011, p. 150). I used the concepts of temporality and multiplexity to problematise and conceptualise the MNE as the phenomena under investigation (Alvesson & Kärreman, 2007). In addition, Andersen and Kragh (2011) argue that *ex-ante* case study researchers sensitively use multiple theoretical vantage points to refine their understanding of reality. I used network concepts borrowed from the business network perspective in IMP and organisational network theory in OS as ‘partial’ lenses to understand the inner workings and structure of an MNE.

**4.2.1 The single case study approach and multiple embedded subcases**

I used a single case study approach to consider the contextual factors affecting the sub-cases for cross-case comparison (Lervik, 2011). For example, the MNE that I studied is undergoing organisational restructuring changes, simultaneously centralising some core activities while expanding into different country markets through acquisitions. This is also pertinent for business network research because of the influence of historical events on network structure and organisational activities (Halinen & Törnroos, 2005). I gathered data on critical events that shaped subunit relationships and their response to contextual factors within and external
to the MNE, such as industrial and external business environment changes. IB research is contextual, and this has a direct influence on the methodological choices employed (Michailova, 2011). It was, therefore, part of the case sampling process (Poulis, Poulis, & Plakoyiannaki, 2013).

Delving deeper into one MNE as a single case study allowed me to study the intra-organisational MNE network relationships in-depth and gather rich data for ‘better stories’ (Eisenhardt, 1991; Fletcher & Plakoyiannaki, 2011; Siggelkow, 2007). I was able to coalesce an overall company narrative for one MNE’s decisions about organisational structure while exploring their specific subunits and histories in-depth.

I opted for a multiple embedded case study approach to address validity and reliability issues (Yin, 2009). I used multiple sources of evidence and chains of evidence to construct validity. I also used a conceptual framework to support external validity in my single-case study and replication logic among the multiple sub-cases. Keeping the MNE environment as constant as possible, I developed a replicable case study protocol for reliability purposes. Another rationale for applying a multiple embedded case study approach concerned my unit of analysis (Bizzi & Langley, 2012). If industry effects are studied, a number of firms can be examined. However, as the very relationship between MNE subunits was the unit of analysis, I chose case sites from within one MNE.

My case study protocol contained the “instruments, procedures, and ground rules for collection data” (Bachiochi & Weiner, 2002, p. 176). It acted as my project overview, containing overall research questions, field procedures and interview guide (Yin, 2003). This kept my focus on the research objectives for replicating the sampling of case sites as I visited multiple country sites and spoke to a diverse range of participants.

4.2.2 Sampling of case and sub-cases
I selected replication for the sampling of case sites, rather than polar types, as it was not possible to target polar types of the temporality and multiplexity of the MNE intra-organisational network structure (Eisenhardt, 1989). This was because little is currently known about the processes that contributed to extreme cases of organisational network multiplexity and temporality. I used the replication case site selection method as sub-cases were selected that extended research concepts. For example, to examine temporality, I chose case sites that have existed for at least five years and have enduring business processes. Furthermore, I followed a process methodological perspective, not a variance perspective that
would rely on data from extreme cases. I elaborate on the processual perspective in section 4.3. I also used purposeful sampling to determine relevant case sites and participants that were valid sources of data for answering my research questions (Guest, Bunce, & Johnson, 2006; Patton, 2002). For example, I gathered data from research participants who were at the executive management level of the target MNE and had been in the organisation for five years or more.

*MNC case selection – theoretical sampling*

I consulted IB literature, academic and industry experts to deduce the purposeful criteria for industry, MNE, triad and participant selection. The typical organisation studied in IB was often in manufacturing and product-based industries (Vahlne & Ivarsson, 2014). I had options to pursue access to three MNEs – two that are manufacturing-focused and one that was involved in Fast Moving Consumer Goods (FMCG). I consulted my doctoral supervisors, a Professor of Supply Chain Management and three managers in MNEs in white ware, mining and dairy industries. I chose a product-focused manufacturing MNE and the larger of the options I had access to. This was because of the availability of data on the largest number of subunit triads and types of subunits, such as corporate HQs, regional HQs, sales and manufacturing subsidiaries.

The MNE I chose was over a hundred years old – whereas the smaller manufacturing MNE was at least 50 years younger and would have had less data on the temporal aspect of subunit relationship building. My chosen MNE is much older in age compared to all other options. I reasoned that selecting an older MNE would give me more opportunities to access historical data, a populated company history and to collect data from long-term (five years plus on the job) employees.

I chose not to engage with an FMCG company for two reasons. First, the original conceptualisation of the MNE as a network was based on and developed from data on manufacturing MNEs (Ghoshal & Bartlett, 1988). As I developed the nascent constructs of multiplexity and temporality, it made sense to keep to the historical use of manufacturing MNEs to present a scholarly addition to IB. Second, FMCG companies have very short product life cycles and incremental product development. As I focused on multiplexity and temporality, it would be too complex to decipher the fast and high number of events that would shape intra-firm network relationships occurring in an FMCG. My chosen MNE also operated in a relatively stable business environment compared to the FMCG and presented a
higher opportunity to study complex concepts because of this stability. The second manufacturing MNE was kept as a backup case study.

4.3 The process perspective and retrospective nature of data

For my examination of how relationships between MNE subunits change over time, I took a process perspective to understand the phenomenon under investigation, research design and methodological decisions. I also developed conceptualisations of the phenomenon from mechanisms or logic that generated temporal patterns, so enabling the research to be process focused (Langley, 2009). The process of the relationship itself was assumed to alter the multiplexity and configuration of the relationship triad. I examined the temporality of MNE subunit relationships in two ways; how relationship multiplexity changes over time and how the configuration of triads (within which the relationships are embedded) changes over time. Similar to the area studied, the research process itself was value-laden (Denzin & Lincoln, 2011) and the process perspective I adopted has implications for my ontological and epistemological choices, my case study design and the type of data I collected.

4.3.1 Process methodology implications

Process research examines phenomena that evolve (Langley, 2007; Mohr, 1982; Van de Ven, 1992) and “explicitly incorporates temporal progressions of activities as elements of explanation and examination” (Langley, et al., 2013, p. 1). This emphasis does not reduce research to an exercise in ‘comparative statics’, which is the case with life cycle analysis (Pettigrew, Woodman, & Cameron, 2001). To not be reductionist in my investigation of the MNE as a network of dynamic intra-organisational network relationships, I made particular choices about my temporal orientation. I chose a process approach rather than a variance approach and a retrospective case study. I captured temporal aspects when collecting data on subunit relationships and my sampling method captured relevant retrospective data (Bizzi & Langley, 2012).

I followed an interpretivist approach although Morgan and Smircich’s (1980) argue that when studying process and change, the researcher should follow the ontological assumption of ‘reality as a concrete process’. My research process was phenomenological in that I looked for meaning more than causes (Laverty, 2008). Cunliffe (2011) in her extension to Morgan and Smircich’s (1980) work argues that ‘reality as a [concrete] process’ still falls within the qualitative ‘research as a craft’ categorisation. That is, process studies may rely on subjectivist and interpretivist philosophy for research design decisions and do not need to be
studied using quantitative methods. I could therefore use interpretive qualitative data as it assisted me to derive explanations from the consequences of events as well as securing the sequences of events (Miles & Huberman, 1994).

Process research looks at outcomes as “diachronic patterns of occurrence” in contrast to variance outcomes that are described as “the synchronic presence of higher and lower levels of specific attributes” (Langely, 2009, p.410). Thus, the focus is on temporal patterning as distinct from the variation between independent and dependent variables (Buzzi & Langley, 2012; Van de Ven, 1992). These two perspectives are not mutually exclusive as process data could be used to develop variance-based theoretical interpretations. This is because variance theorising develops ‘know-that’ knowledge whereas process theorising develops ‘know-how’ knowledge (Langley et al. 2013). Rather than focusing on outcomes, I focused on ‘know-how’ knowledge as it presented “beneath the surface events and chronology […] for recurrent patterns in the process, for structure and underlying logics” (Pettigrew, 1997, p. 341).

Most MNEs are hesitant to give open access to industry sensitive information even to their employees pursing doctoral study, let alone an ‘outsider’ such as me (Dickson-Swift, James, Kippen, & Liamputtong, 2007; King, Hebl, Morgan and Ahmad, 2013). More importantly, real-time research designs are often open-ended and non-linear (Buzzi & Langley, 2012) and are more useful when conducting individual level analyses, such as the individuals’ perceptions of and narratives about particular events (Langley, 2009). A key focus of my research was on enduring temporal events at the subunit level.

I used a retrospective case study method as it placed focus on a sequence of critical events within the MNE and their temporality in terms of subunit relationship processes and triadic permutations over time. Using a case study approach in processual and retrospective study also highlighted the interaction between the sub-case, its MNE intra-organisational network context (Dubois & Gadde, 2002) and the evolving nature of findings of those interactions (Weick, 1979). In addition, this approach placed boundaries around the processual and network nature of the study (Easton, 2010; Pettigrew, 1997; Van de Ven, 1992; Van de Ven & Huber, 1990).
4.3.2 The retrospective nature of process and network data

Retrospective case studies on processes and business networks have specific implications for research methods and methodology and are presented in Table 11 (Cox & Hassard, 2007; Golden, 1992; Van de Ven & Huber, 1990; Welch, 2000). The most pressing are retrospective bias and the disparity between operational and presentational data (Woodside & Wilson, 2003). Operational data is understood as observed ‘true’ behaviour within the object of study. However, this is distorted by participants’ worldviews and intentions – changing it to presentational data. Furthermore, the etic (general, outside perspective) explanations of research subjects often include their emic (contextual, internal perspective) meanings (Evered & Louis, 1981). Woodside and Wilson (2003) argue that researchers should take care when designing their interview guide to include probes that delineate between operational and presentational data.

Table 11 Process methodological perspective and the challenges of retrospective, processual network data

<table>
<thead>
<tr>
<th>Process Methodological Perspective</th>
<th>Rationale</th>
</tr>
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</table>
| Conceptualise the phenomenon from mechanisms/logic that generates temporal patterns | ● Temporal patterning:  
  ○ “Diachronic patterns of occurrence” (Langley, 2009)  
  ○ Multiplexity of relationships and how they change over time  
  ○ Configurations of triads and how they change over time |
| Process and temporal paradigm | ● Ontology: Interpretivist  
● Epistemology: Subjectivist  
● Temporal orientation:  
  ○ process approach  
  ○ retrospective case study  
  ○ capturing temporal aspects in the unit of analysis  
  ○ capturing relevant sources of retrospective data during the sampling process  
● Qualitative: Explanations from consequences of events and securing sequences of events  
● ’Know-how’ knowledge: underlying processes and patterns of structure |
| Retrospective case study design | ● Boundary the time frame  
● Focus on a sequence of events and their temporality  
● Interaction between evolving case and context  
● Picking comparative sub-cases:  
  ○ cross-case comparison techniques and minimising retrospective bias |
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| Implications of retrospective, processual network data | • *Retrospective perspective*
<table>
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<tr>
<td></td>
<td>• Nuanced view of past events that include actual outcomes</td>
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<td>• Minimise retrospective bias through</td>
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<td>• multi-method and multi-sourced data</td>
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<td>• taking into account industry and context</td>
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<td>• do not introduce further systematic errors due to multiple sources</td>
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<td>• Disparity between operational &amp; presentational data</td>
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<td>• interview guide construction</td>
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<td>• <em>Process perspective</em></td>
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<td></td>
<td>• Examined sequences of unfolding incidents, activities and stages</td>
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<td></td>
<td>• Focus on enduring events</td>
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<td>• Relationships that have interactions over time and are varied in interaction intensity</td>
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<td></td>
<td>• Logical chain of evidence</td>
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<td></td>
<td>• <em>Network perspective</em></td>
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<td></td>
<td>• Boundaries within the context of MNE triads</td>
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<tr>
<td></td>
<td>• Specific network dimensions of temporality and multiplexity</td>
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</table>

Due to the nature of retrospective data, verbal reports may encounter inconsistencies (Cox & Hassard, 2007). This may not be a significant issue as research participants offer a more nuanced view of previous events that includes an awareness of actual outcomes (Woodside & Wilson, 2003). Furthermore, I follow a multi-method procedure, such as interviewing a number of participants involved in the relationship between subunits and analysing archival documents to mitigate retrospective bias (Golden, 1992; Pettigrew, 1997). Additionally, I took into account the organisational and industrial context and was careful not to introduce further systematic errors when gathering information from multiple sources (Golden, 1992).

Another consequence was that an explicit process perspective has to be taken when studying retrospective processes (Van de Ven, 1992). When I gathered my data, I examined sequences of events over time that described how relationships change over time. I focused on enduring events and relationships that encompassed a number of interactions over time and varied in interaction intensity. I examined sequences of incidents, activities and stages that unfolded during the durations of relationships to identify logical chains of evidence.
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This brought up a key implication of retrospective case studies; the issue of picking comparative sub-cases (Van de Ven & Huber, 1990). I used cross-case comparison techniques to minimise the bias of historical accounts (Cox & Hassard, 2007; Woodfield & Wilson, 2003). However, the challenge of picking comparable sub-cases was compounded by my study of network-based relationships (Halinen & Törnroos, 2005). As explained earlier, to increase the chance of working with comparable elements I applied a multiple-embedded case study approach (Halinen & Törnroos, 2005). To reiterate, my single case was the MNE as a whole, and within the MNE, I took a number of sub-cases with each sub-case comprising a subunit triad. MNE subunits were also selected according to types so that triads may be comparable. For example, different types of subunits were categorised as sales, types of headquarters or manufacturing. I also gathered data on event categories, duration, order and recurrence to augment my cross-case comparison (Van de Ven & Huber, 1990).

In addition, conducting case study research in business networks had specific issues related to time and a process perspective. Halinen and Törnroos (2005) highlight challenges that include the problem of network boundaries, complexity and time. I ‘boundaried’ the networks I investigated by gathering information from participants within an MNE subunit triad. Halinen and Törnroos (2005) also state that although it would be ideal to include all relevant dimensions of a network to capture the complexity inherent in a network structure fully, this strategy is simply not viable. Therefore, I concentrated on the specific dimensions of temporality and multiplexity to capture theoretical complexity. I also integrated the temporality construct conceptually and methodologically to ensure that I collected the data that captured empirical complexity.

4.4 Data collection

In this section, I explicate the processes I followed to collect data using unstructured and semi-structured interviews, network pictures, archival documents (online and offline) and reflexive fieldwork notes. The research timeline for data collection is presented in Figure 7. I outline the characteristics of the participants I interviewed, how I developed my interview guide, the piloting of the interview guide and the process of collecting data through interviews. I describe how I used network pictures to augment the interview process and the role it had delivering data that otherwise could not be grasped using interview data alone. I also discuss the types and role that archival documents played in supporting my interviewing
process (and as a data collection method in its own right) and how I integrated a reflexive process for my fieldwork notes.

4.4.1 Overview of selected MNE, data collection timeline and research participants

To preserve anonymity, I will refer to the selected MNE as Tersus from here onwards. Tersus, a Scandinavian MNE was founded in the 19th Century, has over 60,000 employees, a market capitalisation rate of over 6 billion USD and is in the Forbes Global 2000. It sells products across seven geographical market segments and to professional, commercial and retail consumers. Tersus also holds a diverse brand portfolio with brands aimed at both the luxury and mass markets.

I gained access to subunits within a specific market-based geographical region that included countries within the Asia-Pacific region. Tersus informally categorise their subunits according to ‘type’. These include sales, manufacturing, regional headquarters and the country hosting the subunits. The countries I gained access to were Singapore, Vietnam, Thailand, Australia and New Zealand. For reasons beyond my control, I was not able to get access to the Tersus’ Scandinavian global headquarters. However, I had access to regional headquarters in Singapore and Thailand and was able to gain in-depth data on the relevant activities of the global headquarters, other regional headquarters and global centres (such as a global service subunit). As anticipated, my failure to gain access to the global HQs required me to rely more on network pictures as a data collection tool and archival data, such as company reports and industry news. I recruited participants from sales and manufacturing subsidiaries and regional headquarters. The participants came from a range of functional departments, including support activities such as Finance, Treasury and Tax, Human Resources and Operations Management, as well as core business activities, such as managing key product lines.

Figure 7 outlines the research timeline I experienced while developing my interview guide and collecting data. The development of the interview guide and piloting started in July 2013. After consultation with my supervisors and other experts, I contacted Tersus in August 2013. Due to my contact’s schedule, primary data collection activities occurred from November 2013 to July 2014. I conducted two unstructured interviews (over two days each) and 42 semi-structured interviews (over an hour each). Forty of the participants had been at Tersus for more than five years. I conducted interviews face to face with participants from the regional HQs in Singapore and Thailand, the sales subunit in Vietnam and Thailand, and the
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sales and manufacturing subunit in Australia and New Zealand. During these interviews, I used network pictures as data collection tools and augmented all activities with reflexive field notes. Throughout the entire data collection period from January 2013 to August 2016, I gathered company documents from the interviewees, industry magazines, social media and academic publications. In addition, I set up Google Alerts to receive timely news and industry updates about Tersus. I continued to collect secondary data on Tersus until May 2017. Half a year after my primary field data collection phase ended in early 2015, my MNE champion and primary data gatekeeper left the company.
Figure 7 Data collection timeline and key activities
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The research participants

The majority of research participants were senior management, with three in non-management roles. An outline of the research participants and their roles and which subunit they belonged to and the data types gathered is presented in Table 11. During the piloting stage of the interview guide, I found that managerial staff would have more relevant information about projects between subunits. They also had an overview of the different types of relationships that projects encompassed. To test this assumption during data collection, I collected from non-management roles. However, when conducting interviews with the two non-managerial participants, it became clear this was indeed the case, and I moved onto targeting managerial participants for the later interviews.

I collected data from face-to-face participants in five countries in South East Asia and Australasia, and one was collected online due to geographic distance. Research participants belonged to subunits in Singapore, Vietnam, Thailand, Australia, and New Zealand. Due to the sensitivity of the data, it was a positive result that only three interviewees asked not to be recorded. When this occurred, I wrote comprehensive notes, asked for more elaboration and extended the interview time.

Theoretically, large MNE networks are assumed to span a number of foreign markets (Forsgren, 2013) and I chose triads (three linked subunits) from a number of subunits within one MNE. Rather than focusing primarily on the number of triads and subunits, I followed Bizzi and Langley’s (2012, p. 228) advice if a unit of analysis is a relationship, gathering large enough samples of individual relationship ties allows for a credible “theorization of these processes”. Bizzi and Langley (2012) state that there is not an exact number for process research interviews. For example, in their table of examples of process studies in networks, the number of interviews ranges from 13 to 150. Instead, I must look towards “[being] constantly on the lookout for useful ways to derive insight from tracing similarities and differences in process patterns” (Bizzy & Langely, 2012, p.229).
Table 12 Research participants and number of interviews

<table>
<thead>
<tr>
<th>Code for quotes in Tables 19, 20 &amp; 22</th>
<th>Participants</th>
<th>Primary Data (November 2013 to July 2014)</th>
<th>Secondary Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Structured &amp; unstructured interviews</td>
<td>Documents (Pages) (January 2013 to May 2017)</td>
</tr>
<tr>
<td>P01</td>
<td>Regional President</td>
<td>6</td>
<td></td>
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<tr>
<td>P02</td>
<td>Regional Business Controller for product development</td>
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<td></td>
</tr>
<tr>
<td>P03</td>
<td>Regional Manager of multiple product categories</td>
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<td></td>
</tr>
<tr>
<td>P04</td>
<td>Regional Head of product design</td>
<td>1</td>
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<tr>
<td>P05</td>
<td>Regional Industrial Financial Analyst</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P06</td>
<td>Regional Marketing Manager</td>
<td>1</td>
<td></td>
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<tr>
<td>P07</td>
<td>Regional Operations Manager</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P08</td>
<td>Regional Operations Manager</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P09</td>
<td>Regional Manager for Digital Marketing</td>
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<tr>
<td>P10</td>
<td>Regional Head of Tax and Treasury</td>
<td>1</td>
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</tr>
<tr>
<td>P11</td>
<td>Regional Head of IT</td>
<td>1</td>
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<td>P12</td>
<td>Regional HR Business Partner</td>
<td>1</td>
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<tr>
<td>P13</td>
<td>Regional Strategy and Financial Analyst</td>
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<tr>
<td>P14</td>
<td>Regional Product Manager of product category</td>
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<td></td>
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<tr>
<td>P15</td>
<td>Regional Manager of logistics function</td>
<td>1</td>
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<tr>
<td>P16</td>
<td>Regional Director of product category</td>
<td>1</td>
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<tr>
<td>P17</td>
<td>Regional Director of Supply Chain</td>
<td>1</td>
<td></td>
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<tr>
<td>P18</td>
<td>Country General Manager</td>
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<td>Country Manager of HR</td>
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<tr>
<td>P20</td>
<td>Country Director of Sales function</td>
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<td></td>
</tr>
<tr>
<td>P21</td>
<td>Country Director of Marketing function</td>
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<tr>
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<tbody>
<tr>
<td>P22 Country Manager for Finance</td>
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<tr>
<td>P23 Country Manager for Supply Chain</td>
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<td>1</td>
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<tr>
<td>P24 Country Director of Sales function</td>
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<td>1</td>
</tr>
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<td>P25 Country Manager for Customer Service function</td>
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<td>1</td>
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<tr>
<td>P26 Country Sales Supervisor</td>
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<td>1</td>
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<tr>
<td>P27 Country Manager of Product lines</td>
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<td>P28 Country General Manager</td>
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<td>P31 Regional product category director</td>
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<td>P32 Regional product category director</td>
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<td>P33 Regional product category director</td>
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<tr>
<td>P34 Regional product category director</td>
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<tr>
<td>P35 Country General Manager of HR</td>
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<td>1</td>
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<tr>
<td>P36 Country Director of Service and Logistics</td>
<td>1</td>
<td>1</td>
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<tr>
<td>P37 Country CFO</td>
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<td>1</td>
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<td>P38 Country Director</td>
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<tr>
<td>P39 Country Managing Director</td>
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**Total** 44  63  160+  100+
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The interview collection phase took place over a ten-month period from July 2013 to March 2014. This extended primary data collection period was due to organisational events that made data collection a sensitive issue. Tersus continues to undergo a number of large mergers and the relocation of factories from Western countries to South East Asian sites. This is supported by the development of a global sourcing subunit that centralised supply chain decisions. This affected data collection activities as the job security of some participants were influenced by these changes and any data on mergers and acquisitions (M&A) was particularly sensitive. Due to this, I had to stagger my interviews to avoid irritating participants during high-pressure situations, which may have led to immediate withdrawal of my access. I did not want to access to global headquarters for these reasons, which I will expand on in the following paragraphs.

4.4.2 Selection of critical event triads
In line with the current sensitive organisational-wide events occurring within Tersus, I let the selection of critical event triads occur organically from the participants. I supported the selections with the analyses of public organisational documents and news alerts while gathering semi-structured and network picture data. The critical event triads as is described later in 5.2.2, were in this sense, emergent. However, as they emerged, I guided data gathered on critical event triads to present many individual perspectives on the same triad to allow for analyses across critical event triads as sub-cases. This was done in two ways. First, similar to social network techniques that use ‘ego/actor network’ lists’, participants were asked to first list subunits they believed their subunit interacted with the most. Second, they were then asked, in line with Wuyts, Stremersch, Van den Bulte, and Franses (2004) and Wu, Choi, and Rungtusanatham (2010) work on marketing and supply triads, to expand upon the interactions they discussed in terms of critical organisational events. After all the data was gathered, key critical organisational event triads emerged and data was iteratively integrated into the summative network pictures (see Section 6.2.3).

4.4.3 Layered access and lack of access to global headquarters
I achieved access through an executive of a geographic region of Tersus. I was granted access to the regional headquarters, heads of functional lines, and country offices. However, access occurred through a number of stages, each with issues that influenced my ability to gather data. For example, I had no difficulty recruiting participants within my champion’s geographic region. However, due to sensitive organisational-wide critical events in other geographic regions, for instance, the shutting down of European factories, I was not able to
access Tersus’ global headquarters. Furthermore, historical archival data also showed that such access would have been improbable even without the influence of sensitive events. For instance, a Master’s thesis, which consisted of three structured interviews with executives at the global headquarters and the company historian, only gave information and quotes that were already freely available on Tersus’ website.

The path I took to gaining executive suite access closely followed Macdonald and Hellgren’s (2004) extension of Pettigrew’s (1985) ‘networking game’. In this game, researchers are tested by one corner of the network and are given access to another corner if they pass inspection. My ability to gain access grew in such manner and I encountered layers of gatekeepers, that is, individuals that were in charge of access to the rest of their geographic region and subunit(s). However, gaining gatekeepers’ trust had no bearing on my ability to access Tersus’ global headquarters. It became apparent to me while gaining access that Tersus had a particular informal perspective and history concerning external tertiary level researchers, such as myself. I had been told a number of times by participants in all of the countries I drew interviews from, that Tersus did not usually allow any undergraduate, graduate or post-graduate research unless that researcher was a long-term employee. Of those, only a handful was granted access for doctoral study. This was supported by my search of academically available sources of information.

Another significant reason for my lack of direct access to global headquarters was that Tersus was experiencing ongoing organisational restructuring processes, including the closing of factories in Australasia, labour relation issues in Europe and moving manufacturing operations to lower-cost countries, such as Thailand. Consequently, I found that I had to navigate political issues when interviewing participants carefully. The critical events occurring within the entire MNE meant that any discussion of the relationships between subunits and the global headquarters would be considered sensitive. Sensitive research is typically understood to concern topics that can lead to discomfort, even danger, such as religion, politics and physical abuse (Dundon & Ryan, 2010; Clark, 2010; King et al., 2013). However, they are also topics that can lead to participants feeling vulnerable with job security or experiencing long term negative effects on their life at the organisation (Cunliffe & Alcadipani, 2016). Given the secretive nature of the organisation and the current level of organisational changes within the whole MNE, it was not surprising that participants in certain subunits were more concerned with confidentiality. However, with careful rapport building through discussion of ethical research standards and my assurance that they could
withdraw at any time, any problems with confidentiality were mitigated (Thorpe, 2014). As a result, none of my participants withdrew.

4.4.4 Semi-structured and unstructured in-depth interviews

I collected my primary data through semi-structured and unstructured in-depth interviews. While conducting the interviews, I used network pictures and reflexive field notes to observe the research site (such as company buildings and offices), physical artefacts and the para-language of participants. This enabled me to understand the context of the interviewees’ ‘spoken’ data (Scott-Baumann, 2011).

Interviews are often used as a source of primary data in qualitative case study research in IB (Welch, Piekkari, Plakoyiannaki, & Paavilainen-Mäntymäki, 2011). The strength of semi-structured and unstructured in-depth interviews is the ability to explore and allow emergent information and themes to arise from the conversation with participants (Kvale, 1996). In particular, semi-structured in-depth interviews have the advantage of providing structure so that key research concepts can be examined and made consistent across all interviews (Kvale & Flick, 2007). Bryman and Bell’s (2011) and Kvale’s (1996) guidelines for developing an interview guide were followed to develop the semi-structured in-depth interview questions offered in Appendix C.

I also included in the interview guide notes for interviewing behaviour and the types of probes to use during particular sections. I followed Qu and Dumay’s (2011) extension of Alvesson’s (2003) work on the localist perspective of interviews concerning the types of questions and probes I used. Drawing from Kvale (1996), Qu and Dumay (2011) summarise the types of interview questions normally carried out in a semi-structured interview. The types of interviews include: introducing, follow-up, probing, specifying, direct, indirect, structuring, silence, interpreting and throwaway.

I took steps to balance the open nature of semi-structured and un-structured interview procedures with more mechanistic processes to ensure consistency and rigour (Myers & Newman, 2007). For example, when interviewing, I balanced the tensions of letting the interviewee speak freely and keeping the interview on topic by employing active listening through probes and repetition of participants’ perspectives before asking for further clarification. I also used data from my unstructured interviews to guide how I conducted the semi-structured interviews. For instance, from my first unstructured interview, I collected
some information about the history of the Australian subunit. I then integrated this knowledge into some of the clarification questions I asked of Australian participants.

In my interviewing process, I took a reflexive approach to collecting data in line with Alvesson’s (2003) thoughts on an adaptive approach to interviews. Rather than using interviewing as a tool (traditional neo-positivist) or a human encounter (qualitative romanticist), he posits that interviews are a “complex social situation” (Alvesson, 2003, p. 18). Beyond using prompting and follow-up questions (such as, ‘what do you mean by…?’) (Roulston, 2014), I used reflexive field notes to understand the context of each interview through additional techniques, such as gathering background information on participants before the interview and taking a note of office artefacts.

*Piloting the interview guide*

I first discussed the semi-structured interview guide with academic experts in my discipline and my specific field of enquiry. I then piloted an interview guide on four individuals who bore the demographic and organisational characteristics of the intended participants. I made reflexive notes during interview pilots to determine which questions needed amendment, which types of participants to target and what processes to use, depending on the personality of the interviewee.

A key conclusion of piloting was the importance of the educational level of the participant and their managerial position within the organisation. Although I experienced high levels of trust with the four pilot participants, it was clear that their educational backgrounds played a part in the ease of conceptualising and understanding my research and whether they were comfortable with the processes of qualitative (rather than quantitative) research. The educational backgrounds of piloting participants varied from Undergraduate to Master’s level, similar to the target participants. The higher the managerial and education levels, the more likely the pilot participant was able to conceptualise and offer their perspective without prompts from me as the interviewer. This exercise was particularly important for identifying terms that were ‘disciplinary jargon’ and needed to be simplified or explained.

In line with academic thought, their functional experience also strongly informed the types of responses given and the level of managerial experience and status in their organisations (Harvey, 2011; Mikecz, 2012; Welch et al., 2002). For example, pilot interviewees with more technical backgrounds gave technical examples and focused less on their subjective interpretation of events. The level of managerial experience also influenced the type of
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information given. The higher the level, the more strategic the information became; the lower the level, the more technically specific the examples became. This showed me that I should aim to mitigate any ‘elite biases’ by not just targeting the executive suite at *Tersus* but also making sure to collect data from non-managerial staff (Myers & Newman, 2007).

*The interview structure*

Before beginning the interview, I gave a short and simple overview of my research, then explained and received signed consent forms from the participants. The beginning of the semi-structured interview guide (Appendix C) is a ‘face sheet’ of information to contextualise responses (Bryman & Bell, 2011). I asked questions about their tenure to ascertain if participants would have key information about critical organisational events. Furthermore, I asked about their position in the company for two reasons. First, their level of managerial influenced the types of information they shared. For example, a senior executive had a more long-term view of intra-firm network relationships in terms of how they changed over time. A junior managerial participant had a more focused view on the shorter-term goals of sub-relationships within the intra-firm network relationship. Second, I asked participants if there was anyone else they thought useful to talk to regarding the projects carried out.

The three main topics in the interview guide were developed from my literature review and categorised according to the key constructs in my conceptual model. The first was intra-firm network relationships. This covered the intra-firm network relationships between subunits encountered by the participants, the range of sub-relationships they found within the aggregated intra-firm network relationship, and how one sub-relationship might influence another. This enabled me to capture data on the concept of multiplexity. Examples of the questions asked to open up discussion on these relationships included ‘what are the top 5 subunits your unit interacts with?’ and ‘For each relationship, how have they changed over the last five years?’ For each topic section, I used increasing open questions to direct the unstructured interview and move away from a ‘question-answer’ dichotomy towards one that resembled a structured conversation.

The second main topic concerned critical events that have shaped and are shaping the intra-firm network relationships and their sub-relationships. This was often project-related, and a number of organisational projects emerged from previous interviews. For example, a key organisational project was the establishment of a global supply organisation. I was able to direct the interview on this topic depending on what information was not apparent from
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previous participants or archival data. I used probes for elaboration of such projects to structure and give direction to questions that relied on abstract concepts. For example, I would rephrase answers back to the participants, ‘you said…..is that correct?’ and then ask questions leading on from their statement to create conversational flow.

I also asked questions on the process aspect of the development of the intra-firm relationships and its sub-relationships, such as on sequencing, activities and timelines of events. This captured data about the concept of temporality. At this stage, network pictures were used to develop a figure that the participant could talk to. This often lessened the burden of talking about abstract concepts, such as temporality, and allowed the participant to speak more about how they defined key concepts, such as multiplexity. It also allowed me to ask questions about the organisational network structure. For example, I asked questions that used network pictures as a tool to clarify the discussion concerning the network triad structure. For example, did they see a triad structure? What permutations of the structure did they perceive? Do they believe that, in their line of work and their perspective of the organisational network structure, a triad was a valid basic organising structure? If not, what did they see it as? All questions were closed or open depending on my need for elaboration and clarification.

In line with Kvale (1996), I concluded interviews by asking the interviewee how they felt about the interview and if they had any further questions or feedback. Similar to retrospective questions, this allowed the interviewee to spend a few moments to ask their questions and elaborate on concepts. Interviewees often used the network picture to augment their elaborations or position their questions. Some of the issues highlighted here were evident from piloting the interview guide, for example, the use of different kinds of probes for varying levels of control over the interview.

Retrospective questions

As many of the questions related to retrospective data, I asked participants the difference between operational and presentational data (Woodside & Wilson, 2003). I used prompts to invite the participant to elaborate on critical events followed by questions related to ‘triggering’ events (critical events that shaped the intra-firm network relationship and its sub-relationships), how event participants reacted or thought about the event and what they predicted might happen next because of the event.

I also integrated reflective types of interview questions. Gordon (1992) talks about retrospective elaboration and clarification where probes are used to talk about earlier points
made in the interview. I used such probes for three reasons. First, I had to return to key points and questions when I did not want to break the ‘free-association pattern’ (Gordon, 1992), which is significant in semi and unstructured in-depth interviews. Second, I used it as a way to summarise the points discussed to show I was an active and conscientious listener. The last reason was that sometimes rapport-building took longer than usual with the interviewee. There were a few instances where I could return to some questions that the interviewee originally perceived as sensitive. It was very important for me to have a system in place so as not to aggravate the interviewee (Myers & Newman, 2007).

Asking retrospective questions also meant that interviewees had a chance to reiterate and elaborate on points that they felt were significant. I used Granot, Brashear and Paulo’s (2012) advice to ask participants to reconstruct, rather than remember events. I asked direct questions such as ‘what happened when…?’ Asking direct questions meant that I could encourage interviewees to firstly talk about specific event activities and then give perceptual conclusions on the event.

**Interviewing ‘elites’**

As noted in previous sections and highlighted in Table 11, I interviewed a number of ‘elite’ participants. ‘Elites’ are the formal members of organisations, differing from ordinary citizens who are more likely to participate in sociological enquiry (Welch et al., 2002). I treated all participants with active respect and showed that I had researched their backgrounds by asking informed and respectful questions (Harvey, 2011; Hansen & Trank, 2016). I also slightly amended the prompts and wording of certain questions and topics for those who had been working at the company for less than three years. For example, if they were relatively new to the Tersus I would ask what they had heard about a particular project. Also, as a relative newcomer, what did they consider to be good practice, drawing from the intra-organisational relationships that they had not seen in their previous employment situations?

I augmented this process by taking constant and in-depth field notes during the entire stages of data collection (Michailova & Liuhto, 2001; Van Maanen, 1979). To think about such issues reflexively beyond interview talk and transcription text, I took into consideration the location and participants’ paralanguage (Poland & Pedersen, 1998). Before, during and after the interview, I made careful reflexive notes with observations related to: verbal (language, voice, volume and intonation) and non-verbal (body-movement, mirroring body position)
communication (Welch & Piekkeri, 2006), the use of physical space, level of corporate
dressing and the office. I also took careful note of the key artefacts displayed prominently in
the office space and interview location and whether this linked to interviewee responses.

At every interview, I consistently offered to give (and participants often accepted) an
aggregated report of relevant findings to participants to maintain a dialogue that allowed me
to follow up any significant leads after analysis of transcripts and organisational documents.
In addition to recording and transcribing the interviews, I used network pictures to augment
the flow and conceptual boundary of each interview. This enabled me to offer a summary of
shared knowledge and to collect relevant information, specifically on triads.

4.4.5 Network pictures
I used network pictures to gather data on relationships as process-related phenomena. I
gathered 66 network pictures in total during in-depth interviews with research participants.
Adapting techniques from sociology and education, a burgeoning group of organisational and
management scholars utilise diagrams, pictures and other visual representations in qualitative
research (Bell & Davidson, 2013; Bryans & Mavin, 2006; Davison, 2006; Meyer, Höllerer,
Jancsary, & Leeuwen, 2013; Pedersen, 2008). Diagrams have been used in a variety of ways,
from the scientific visualisations of organisations (Markham, 1998) to more common
organisational charts and then as tools to draw out participant emotions (Kearney & Hyle,
2004).

The key rationale for using these visual methods is that using only language in research
methods is mired in issues such as cross-cultural language barriers and illiteracy.
Furthermore, organisations have embraced visual media, such as static graphs, interactive
multimedia and lived media such as architecture (Bell & Davidson, 2013; Buckley & Waring,
2013; Pain, 2012). Some argue we are starting to engage in a ‘pictorial turn’ and ignoring
such aspects presents a current ‘blind-spot’ in organisational research (Bell & Davidson,
2013).

Diagrams can be seen as visual representations of reality modelled as understood by the
people drawing them (Kazmierczak, 2001) and as a coalescence of linguistic symbols and
representative images illustrating key aspects of an organisation (Crilly, Blackwell, &
Clarkson, 2006). For example, an organisational chart is a visual representation of an
organisational power structure seen from a hierarchical perspective. It has text written in
terms of the names and job titles that imply power differentials and functional expertise. An
organisational chart without text would be meaningless, and a text without a chart would be hard to understand. When it is drawn or perused by a person, key concepts of power structures, status and hierarchy are reiterated in the person’s mind (Kearney & Hyle, 2004).

One method for tackling a more complex and processual perspective of a phenomenon is network pictures. Network pictures are the participants’ subjectively perceived network as an organisational actor and also an interviewer’s sense-making of the participants’ network reality (Ramos et al., 2012). I utilised concepts from the IMP perspective on network pictures as a data collection tool, such as classification of critical events and analysis of the changing triad structure and multiplexity of subunit relationships. Within IMP, activity and event are components of a process under study (Makkonen, Aarikka-Stenroos, & Olkkonen, 2012). An event may be the negotiation of a contractual arrangement between two subsidiaries, and the activity is the chain of interactions. In addition, events may be focal or contextual. For example, at the organisational level, the focal event may be the outcome of contractual negotiations between peer subsidiaries, while the contextual event is the situation under which the negotiation occurred. For instance, did HQs encourage the event? Did HQs do so because they deemed it necessary for the two peer subsidiaries to work together on a project?

Although network pictures themselves are a concept not native to the IB field, there are a number of similar ideas in IB and IMP. Ramos and Ford (2011) highlight that the concepts of network horizons and schemata that are prevalent in the IMP literature. Pictures in IB are used to outline the inter-organisational network structure of MNE alliances such as Rosenkopf and Schilling’s (2007) network cluster pictures of industries. The traditional use of network pictures in IMP was to explore managerial cognition by integrating a sense-making perspective (Ramos & Ford, 2011; Ramos, Henneberg, & Naudé, 2012). More recently, IMP scholars have argued for aggregating such ‘individual’ level cognitions on (inter-organisational) networks towards a collective understanding termed as ‘network insight’ (Mouzas, Henneberg, & Naudé, 2008; Roseira, et al., 2013).

I apply a similar logic for why I gathered individual perceptions of network triad relationships to understand a collated (rather than collective, as the individuals are not the unit of analysis) understanding of the relationships and sub-relationships between the subunits and within the intra-firm triads. Such interactions make up an enacted network of events and actors (Halinen, Salmi, & Havila, 1999). I also follow Mouzas et al.’s (2008) guidelines for collecting such data from ‘heedful’ interactions for ‘network insights’. Heedful
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interactions are understood as critical events that trigger the shaping processes of interactions and sub-relationships and therefore the intra-firm relationships and triads themselves (Halinen et al., 1999). As they are a process, they also develop over time (Corsaro & Snehota, 2012; Ford & Mouzas, 2010).

I adapted my use of network pictures as a data collection tool. During the piloting phase of my interview guide, I intended to use network pictures as a summarising tool. This would mitigate any indication of me leading the interviewee in terms of how they defined the key concepts of multiplexity and temporality for themselves. This appeared to be acceptable when I piloted the interview guide and network pictures in tandem. The pilot interviewees told me that they were happy to see me draw a summarising network picture of the triads they discussed. To them, it showed that I had listened actively and they were able to offer changes to the network picture instead of grasping at abstract concepts and trying to remember what they had said.

This process also occurred in the first five or so interviews within Australasia. However, very early on, many interviewees wanted to draw their own network pictures as they thought out their answers. It became a process whereby the interviewees became less concerned with talking to me as an outsider and more involved with drawing a network picture as an internally stimulating exercise. Over the course of data collection, I used network pictures not only as a summarising tool but also as a collaborative exercise integrated with the interview guide. It was clear to me that they needed to draw their triads when the interviewees’ hand started twitching or when they used their triads to explain themselves. Sketching became a stimulating interactive experience, with me asking specific questions and sometimes drawing in the participants and asking for their feedback. Other times, the participant drew the whole triad and asked me questions about what information I would like on the relationships noted. In every interview, the network picture was drawn and then used as a guide for elaboration. I, as the interviewer, took care to make sure that there were still the required comparative dimensions in place for the later aggregation of data and analysis.

Although there are limitations for using diagrams as a research tool due to the underdeveloped nature of this method, I took care to mitigate issues and used network pictures to collect data. I probed deeper into the perceptions of the participant, for example, how parts of the network picture may express their subconscious and tacit knowledge (Crilly et al., 2006, p. 347). I also took care to constantly ask for feedback from participants so that
the creation of the diagram was participatory and addressed validation and rigour issues (Bell & Davidson, 2013). In ensure rigour, I used an iterative approach to evaluating and developing the network picture and used different probes to study the co-created diagram and the narratives that emerged (Buckley & Waring, 2013; Crilly et al., 2006). Rather than viewing the diagrams as an augmentation of qualitative semi-structure interviews, both can be used in tandem with a form of positive symbiosis.

Another advantage to using network pictures is that diagrams sit in between drawings, tables and lists in terms of structure and their roles as research tools (Buckley & Waring, 2013; Crilly et al., 2006). At one end of the spectrum are drawings, which are ambiguous and often used to sketch out conceptualisations or graphic ideation. On the opposite end are highly structured tables and lists used for one-way communication. I used network pictures as a form of two-way graphic elicitation during interviews. They were especially useful when creating a common frame of reference for both the research participant and me when discussing abstract and conceptual knowledge and processes (Kazmierczak, 2001). In addition, using network pictures was useful for tackling difficult and multi-layered concepts, such as embedded hierarchies within the heterarchical organisational network. Multiple layers and cross-level concepts were discussed as graphical objects and could be placed in the context of lower and higher level concepts or contexts by the research participant. Having this option also allowed me, as the interviewer, to formulate more clearly complex lines of questioning, thereby accessing more nuanced and less reductionist data from the participant.

4.4.6 Organisational documents

Supplementary to my primary data gathering, I collected secondary data throughout the entire fieldwork. Table 13 outlines the different types and sources of secondary data I collected, both offline and online from social media and Internet websites. I had access to some internal physical, organisational documents from participants though the majority of the documents collected were online. For example, information was collected from Tersus’ well populated corporate and subunit websites, public relations and marketing communications, industry journals and magazines and newspaper archives. In addition, I had set up a Google Alert service and received up-to-date alerts on Tersus’ industrial movements, such as problems with European work unions and competitor buy-out bids.

Documents are often collected to support data triangulation and are often used within qualitative case studies as they augment rich and thick case descriptions (Yin, 2009).
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However, Bowen (2009) argues that document analysis can reveal more. First, they provide the context for where participants exist (Bowen, 2009). Initially, I collected macro-economic documents on the industry that Tersus operates in to understand the history of Tersus, its situation in the industry and the economic environment of the participants’ countries. One example of documentation was the latest UNCTAD (2013) global value chain report. I was also able to collect online documents on Tersus’ corporate history and ascertain from their reports where the sales country subunits of Vietnam, Thailand, Australia and New Zealand were situated globally in relation to the attention of global headquarters. Documents can also suggest the kinds of questions to be asked (Bowen, 2009). In this case, the online documents informed the interview questions I asked my participants by letting me know which topics to talk about directly and which to treat sensitively. Documents I gathered also let me track changes and developments in Tersus. As I heard about activities occurring within the organisation, I was able to see the outcome from news and industry alerts.

Using online documents in the public domain proved an especially efficient method. As Bowen (2009) suggests, one advantage was that it was less time-consuming. For example, automating alerts on Tersus’ was straightforward, as was sifting through the relevant news items using key words, such as mergers and labour relations. Online documents were also easily accessible; there was one instance where a participant, due to secrecy, skirted around a topic. However, when I pointed out that parts of the topic had already been explained in an industry publication, I was able to garner more information. Retrieving documents was also unobtrusive, as they did not cause negative reactions as pointed questions with participants may have.

There are some drawbacks to using such documents. I found that most documents retrieved from the public domain had to be critically analysed to pierce through the veneer of public relations management or ‘biased selectivity’ (Yin, 2009). A few historical organisational documents were difficult to access as they were written in Scandinavian, a language I am not familiar with. I had to resort to Google Translate and other personal sources to understand them fully. Another problem was first amending my Internet alert regarding Tersus; I had at first subscribed to any updates on Tersus from blogs and even product discussion forums that later proved to be irrelevant. However, any drawbacks to using documents such as these were mitigated by careful and reflexive analysis.
Table 13 Summary of documents collected

<table>
<thead>
<tr>
<th>Type of document</th>
<th>Private/Public Domain</th>
<th>Type and Date of Access</th>
<th>Number of Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant information and reports (e.g. LinkedIn, industry publications)</td>
<td>Public</td>
<td>Online, January 2013 to August 2015</td>
<td>50+</td>
</tr>
<tr>
<td>Internal organisational documents</td>
<td>Private</td>
<td>Offline, June 2013</td>
<td>5</td>
</tr>
<tr>
<td>Externally available organisational documents (e.g. corporate website)</td>
<td>Public</td>
<td>Online, Ongoing January 2013 – November 2016</td>
<td>60+</td>
</tr>
<tr>
<td>Internet Alerts on the organisation – news, social media, brand and product forums</td>
<td>Public</td>
<td>Online, Ongoing January 2013 – May 2017</td>
<td>100+</td>
</tr>
<tr>
<td>Academic publications/reports on the organisation</td>
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<td>Online, January 2013 - May 2017</td>
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</tr>
<tr>
<td>Industry publications and reports</td>
<td>Public</td>
<td>Online, Ongoing January 2013 – May 2017</td>
<td>10</td>
</tr>
</tbody>
</table>

4.4.7 Reflexive field notes and photos

To pursue good qualitative research, I aimed to develop thick descriptions from rich data (Doz, 2011; Van Maanen, 2011a). Reflexive field notes are often used as a key data collection tools in ethnographic studies and particularly during observation (Van Maanen, 2011b). However, I am neither engaging in ethnography nor am I using observation as a principal source of data. Rather, I used reflexive field notes to enhance the data collected through semi and unstructured in-depth interviews, network pictures and document analysis of internal and external sources of archival information on Tersus. I also was able to take photos of the external environments of the Tersus buildings and other relevant artefacts. I took care to do so ethically, making sure that photos taken were in the public domain and anonymised. I did not use reflexive field notes reductively as a stand-alone method but as a process through my entire research path as a way to constantly interrogate my analysis and conclusions.

I was aware of “language and cultural norms [that] may require specific contextual sensitivity and perceptual acuity” (Doz, 2011, p. 587). For example, when visiting the Australian subunit head office, I noted a particular artefact. It was a large, well-organised and information-rich health and safety board. It became clear from the interviewees at the Australian subunit that it was a physical representation of the discrepancy between the legal and managerial relationships between the head office and their factories. In addition to reflexive notes on the
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physical location and artefacts, I also noted my thoughts as a researcher where I tried to reflexively consider my worldview to illuminate any inherent biases I hold or to ruminate on outcomes or events during the research process. Writing my thoughts reflexively highlighted what I considered worthy of examination and challenged me to look past such biases (Madadevan, 2011; Wolfinger, 2002).

I used Wolfinger’s (2002) strategies for reflexive thinking on field notes. He argues that researchers often highlight events in their mind that they find salient. They are salient because they deviate from what the researcher thinks is the norm concerning their tacit expectations and what they observe in situ. An example was one participant asking not to be voice recorded but sharing with me an indepth network picture. The interview was memorable because of this and the role of network pictures in gathering rich data. I realised its salience and was careful to spend time reflecting on the outcomes of using network pictures.

Wolfinger (2002) also points towards strategies for comprehensive note-taking. This was especially germane for me during the two non-recorded interviews. I asked the interviewees if the interview might go a little longer than anticipated, as I would have to write comprehensive notes. These in-depth field notes primarily involved writing key quotes verbatim as well as noting the answers to the questions that I posed. The activity of writing notes slowed down and focused our discussions, even leading to one of the most useful network pictures developed by an interviewee.

I also made use of Emerson, Fretz, and Shaw’s (2011) idea of jotting. For example, often I would have to ‘jot down’ my reflexive thoughts about their answers as there wasn’t time to write them out during the interview. When this happened, I made sure to spend time immediately after the interview extending these ‘jotted’ thoughts and any others that were triggered during this process. I also ‘jotted’ during particularly time-sensitive interviews and where possible, I spent as much time as possible after interviews elaborating on reflexive field notes.

4.4.8 Reflexive data triangulation - beyond convergence and towards scope, depth and consistency

As part of interrogating my research process reflexively, I was conscious that a logic must be applied to the triangulation of data. This moved beyond increasing validity to acting as an organising process throughout the research journey. This logic for the reflexive triangulation
of data collection methods is depicted in Figure 8. My primary data was unstructured and semi-structured interviews and network pictures. I used network pictures to ascertain how relationships within Simmelian dyads and subunit triads changed over time due to critical events. These network pictures also supported the information gathered from the interviews. For example, after I asked the participants which subunits they often interacted with, they could then extend their discussion by drawing a subunit triad. Using this network picture, I was able to ask about the other subunits I learnt of from organisational documents and where they could be situated within the map. The secondary data I used originated from internal and external company documents, academic and industry publications as well as from social media. I took reflexive field notes specifically before, during and after interviews, and throughout the whole research process to ‘glue’ the different methods together. This was why all types of data were within the box of reflexive field notes in Figure 8.

Figure 8. Reflexive triangulation of data collection methods

‘Between method’ triangulation was pursued using multiple sources of data (Jick, 1979). This increases external validity if similar conclusions are reached through different data collection methods (Denzin, 1978). Flick, von Kardoff and Steinke (2004) note that the conversation on qualitative method triangulation stems from Denzin’s (1978) argument that triangulation is used as a validation strategy. Beyond methodological triangulation, which ‘between-method’
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falls under, is the triangulation of data, investigator and theories. I have discussed
triangulating concepts from different fields in my conceptual blending section in Chapter 2,
where I utilised multiple disciplinary perspectives to illuminate the particular aspects of
temporality and multiplexity in intra-firm network relationships. The nature of my research
meant that investigator triangulation was not possible and so I used reflexive field notes to
note and interrogate the subjective influencing of participants and myself. Lastly, I
triangulated data by gathering “data drawn from different sources at different times, in
different places or from different people” (Flick et al., 2004, p.178). My data collection was
multi-phase held over nearly a year. As much as possible, data drew from as many different
subunits within an identified triad; for example, between the regional headquarters in
Singapore, the partial regional headquarters in Thailand and the sales company subunit in
Vietnam. The data collection of online information on Tersus continued past the interview
data collection phase and ended after data analysis was complete.

Seale (1999) and Flick (1998) claim that triangulation goes beyond just validating results and
does not fit well within constructivist research. The latter relies on the assumption that there
is no fixed reality or ‘truth’ but rather reality is constructed of many ‘truths’ depending on the
participant’s worldviews. Instead, researchers look to “increas[ing] scope, depth and
consistency” (Flick, 1998, p. 230). Therefore, I not only combine data from different sources
but also deploy Flick’s (1992) ‘reflexive triangulation’ to consider how my pool of data can
mitigate threats to validity.

4.5 Exiting the field and mitigating limitations

Traditionally, questions of sample size and exiting fieldwork have been based on
expectations about the occurrence of data saturation (Eisenhardt, 1989). However, this is
difficult to determine at the beginning of data collection and even during its process as it is
the quality of data collection that determines when there are diminishing returns to thematic
insights (Bowen, 2008). Instead, I follow Michailova et al.’s (2014, p.143) argument that
“reaching saturation is not a critical determinant of exit; rather, it is coming to terms with an
appropriate time to leave”. Although I achieved the required level of ‘thematic insight’ from
my data, I ‘came to terms’ with leaving the field when my champion within the MNE left
their position eight months after I concluded primary data collection (see Figure 7, data
collection time-frame). Exiting the field at the end of primary data collection went well, and I
maintained contact with my participants, particularly as most related to me that the interview
was enjoyable and they looked forward to my conclusions. Although my champion had moved on, they let me know they still had their contacts and would support any future data collection exercises.

As all research design choices have inherent weaknesses and biases, I have attempted to mitigate those at every decision-making stage; for example, the reflexive triangulation of data sources. I have discussed my decisions throughout this Chapter and will summarise them here. The decisions taken to mitigate limitations were based on retrospective data, lack of access to global HQs and the ethnically diverse nature of the research participants from *Tersus* in this section.

First, the data I collected was based on my participants’ perceptions of reality and is therefore influenced by context and retrospective bias. I mitigated these biases by using other sources of extra-contextual information, such as reflexive field notes and paralanguage, and supporting archival and secondary data, such as company reports and the industrial news available from online reporting and industry magazines. I also collected data on critical events and triggers by interviewing participants within a sub-case (triad) to engender different perspectives. I used a lesser-known technique of network pictures, rather than relying on traditional network analysis such as a social network analysis of ego networks. This allowed me to generate a complete picture of critical events, the triad structure of the MNE, and ground the abstract concepts I explored in real-life terms. For example, I examined the temporal changes of subunit relationships within their subunit triad. It also allowed me to generate rigorous interpretations of participants’ perceptions about events and chains of evidence.

Second, I failed to gain access to the *Tersus* global headquarters. I mitigated this by asking for more information about the activities of the global headquarters from participants and increasing my amount of triangulated secondary data. My lack of access to global headquarters could be attributed to the organisational nature of the MNE and its current industrial environment. My chosen MNE is a traditional manufacturing mature industry currently undergoing organisational and industrial consolidation. I took care to develop a large amount of archival data on global headquarters activities.

The third major limitation was due to the ethnically diverse nature of my MNE. I had to target participants who are conversant in English. The *lingua franca* of *Tersus* is English, although participants come from a diverse range of ethnicities and countries. I always asked
for more clarification when it was clear that communication was affected or the participant was not wholly sure of their English speaking capabilities. In some instances, this turned into an opportunity to expand upon and ask further questions about their understanding of concepts by using probes and paralanguage. For example, two participants asked not to be recorded, but I was able to extend their interviews to write comprehensive notes and gather the most detailed and useful network pictures of a subunit triad. The participants targeted for interviewing were primarily at the managerial or executive level, which I had established when piloting the interview guide. However, I was also able to talk to a few non-managerial participants and gathered secondary data to ensure a more rounded perspective.

4.6 Ethical considerations

As with most field-based research, there will be ethical concerns due to the nature of the study and the research design (Kvale & Flick, 2007). In line with the University of Auckland research regulations, a Human Ethics Application was made to the University of Auckland Human Participants Ethics Committee (UAHPEC) and full approval was achieved. All relevant ethics documents, including consent forms, are presented in Appendix D. Overall, there were two key ethical issues regarding the study: confidentiality and preserving the anonymity of participants, and ensuring voluntary participation.

I made sure to understand the research ethics processes in the countries visited and their legal requirements (such as research visas). More importantly, utmost care was taken to ensure the confidentiality of participant responses. I assured participants repeatedly that any reported or published information would be presented in such a way that the identity of the source would be kept confidential and anonymous. This was stated in the participant information sheet and consent form for the president, senior management and employees recruited as participants. This proved useful when I encountered an ‘ethical moment’ with a participant where I was asked whom I would report to and whether my findings would be given to executives (Guillemin & Gillam, 2004). Knowledge of the ethics framework guided me in my actions and on what was appropriate; for instance, I assured the participant that I didn’t report to anyone, especially any executives, and informed them of how the UAHPEC regulations and processes worked (Corbin & Morse, 2003).

I also communicated to the interviewees that participation was strictly voluntary and that any decisions made about participating would not affect their employment in any manner. They were advised that they could withdraw one month after the interview without providing a
reason. I informed participants that any recordings and interview reports would be strictly confidential and not shared with anyone else. They could also request to stop digital (audio) recording at any time during the interview. Interviewees were offered the opportunity to check their interview reports before my analysis of any information that they provided. All participants elected to be sent a summary of findings at the end of the project.

4.7 Analytical procedures

In this section, I outline the structured process taken to manage the analysis of the diverse range of data gathered, including semi-structured and unstructured interview data, network pictures, internal and external organisational documents, social media, reflexive field notes, and field photos. I categorise the data as textual and visual and differentiate between processual, network, and retrospective data. Figure 9 depicts the coding framework developed from core thesis concepts, and types of data and Figure 10 presents the analysis framework. Included in my analysis framework is the process of triangulating themes using a proportional hub and spoke model to communicate robustness and trustworthiness.

4.7.1 Provisional coding framework

Before I started my analysis, I paid careful attention to re-engage with the research questions and concepts central to my thesis. This is depicted as the top box in Figure 9. During my data collection, I took the opportunity to submerge myself in the data and also research participants’ perspectives and interpretations. I intentionally compartmentalised ‘my sense of self’ to constructively and reflexively consider how the research participants’ and my assumptions influenced the data collected (Islam, 2015).

The core concept focuses on the dynamic nature of intra-firm relationships within a networked MNE. More specifically, I studied how temporality and multiplexity influence such relationships. I defined the MNE as an organisation that gains competitive advantage through developing value-creating network relationships inside and outside the formal boundaries of the firm and formal country borders (Michailova & Mustaffa, 2012; Vahlne & Johanson, 2013). The intra-firm relationships I studied are the interactions between subunits, which are sales, manufacturing, global service organisation, regional headquarters and global headquarters. I also focused on critical events to anchor my data gathering and perceive them as event networks and their “time-based connected event relationships” (Chou & Zolkiewski, 2012, p. 247). To recap, the working definition of relationships that I introduced in Chapter 2
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was a series of interactions that evolve between two actors, which have the primary aim of pursuing an activity and/or exchanging or transforming a resource.
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### Coding types

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### Coding Patterns

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### Data Management

- Attribute

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#### Second Cycle

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<tr>
<td>- Pattern</td>
</tr>
</tbody>
</table>

*Figure 9 The coding framework*
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I used my conceptual framework to develop the first iteration of a coding framework for pre or provisional coding using Saldaña’s (2009; 2016) and Boyatzis’s (1998) advice on developing codes for content and thematising data. Coding is context-dependent, and so I integrated visual data analysis into my framework due to my use of network pictures and photos as part of my reflexive field notes. I utilise Saldaña’s (2009, p.3) definition of a code given his inclusion of visual images: “a code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data”.

The labelling of the code is significant as it should “represent and capture a datum’s primary content and essence” (Saldaña, 2009, p. 3). For example, a key term I used was relationship – this term has multiple layers and various facets of meaning depending on its context. In layman’s terms, it is defined as “the way two or more people or things are connected, or the state of being connected” (Oxford English Dictionary, 2016). IB scholars treat relationships as a context specific concept. For example, they often use the term interaction to focus on explicit connection (Monaghan, Gunnigle, & Lavelle, 2014), ties for specific social network connections (Batjargal, 2007), knowledge flows to focus on the movement of organisational information (Michailova & Mustaffa, 2012), and linkages describe inter-organisational connections (Nell & Ambos, 2013). Other, more discipline-specific terms are used, such as corporate board interlocks in strategic management orientated MNE studies (Hernandez, Sanders, & Tuschke, 2015). I accounted for all such differing terms in my coding framework.

I took care to capture a range of terms for each code from the literature review and pilot them before fieldwork. I did this so that I could probe the research participants on their perspective on core concepts, such as relationships, and underlying assumptions. I used an iterative process to develop the coding framework to instil rigour as emphasised by Saldaña (2009).

4.7.2 Types and kinds of data
I gathered textual and visual data types as well as data that was different in kind, that is, processual, retrospective and network-based. I explained the motivation for using visual data, such as network pictures and field photos, in the previous chapter. However, more discussion on the differences and similarities between textual and visual data is warranted due to the nascent use of visual data in organisation studies (Bell & Davidson, 2013; Garreau et al., 2015). Each type and kind of data has its own matched coding strategies to gather and crystallise relevant categorisations and meanings (Charmaz, 2006; Saldaña, 2009, 2016). For
example, visual data can be coded using an *in vivo* coding pattern to gather terms and concepts that are grounded and salient in participants’ interpretations (Saldaña, 2009). Another example is fieldwork photos of the target organisation that can be analysed using materiality and social semiotics to understand the role of organisational artefacts and what it communicates to the employees such as organisation culture norms (Davison, 2006).

Table 14 presents the similarities and differences between textual, including transcribed verbal data, and visual data that guides coding and analysis strategies (Meyer et al., 2013). Both types of data are constructionist and legitimising in nature (that is, their reliability is based on accurate gathering and the analysis of participant perceptions) but differ on their logical ‘reasoning’ – textual data often has a linear argumentation whereas visual data is holistic. For example, when looking at a picture, its elements are understood in relation to the whole image. Additionally, visual data does not have an explicit meaning. With textual data, the meaning is immediately apparent and processed. With visual data, there is currently no global lexis, although this is expected to change given the increasingly pervasive role of visual media in society due to ICT technologies (Bell & Davison, 2013; Davison, McLean, & Warren, 2015). Due to this, during my coding, I decomposed the visual elements to link its apparent message to contextual factors. A good reason for doing so is that research participants create drawings that are often gilded with emotional memories and specific critical events that are not immediately apparent at first glance.

Table 14 *Similarities and differences between textual and visual data*

<table>
<thead>
<tr>
<th>Textual data</th>
<th>Visual data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructionist and reliability strategies are based on accurate data collection and the analysis of research participants’ perceptions.</td>
<td>Holistic Logical Reasoning</td>
</tr>
<tr>
<td>Linear Logical Reasoning</td>
<td>Implicit meaning</td>
</tr>
<tr>
<td>Explicit meaning</td>
<td>currently, no global lexis for the viewer</td>
</tr>
<tr>
<td>- immediately apparent and processed by the viewer</td>
<td>- visual elements are decomposed and linked to emotional memories, contextual factors, and critical events</td>
</tr>
<tr>
<td>Tangible – what is the meaning of the text?</td>
<td>Intangible – what is the story behind the image?</td>
</tr>
<tr>
<td>- Ambiguity of meaning and subjectivist nature of interpretation</td>
<td>- Artefacts that ‘store’ and transmit contextual knowledge</td>
</tr>
<tr>
<td>- Artefacts that ‘store’ and transmit contextual knowledge</td>
<td>- Triggers for eliciting richer data from research participants</td>
</tr>
</tbody>
</table>
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Textual and visual types of data differ regarding tangibility and therefore the level of interpretation needed while coding. Although both are ideally suited for qualitative inquiry, visual data is more so because of its intangible nature, resistance to quantification, and the extent and diversity of material (Davison et al., 2015). Visual data can be diverse in that it can be used as a trigger for eliciting richer information from research participants and analysed as artefacts that store and transmit contextual knowledge for the research participants (Meyer et al., 2013).

I also had to use different coding strategies for the different kinds of data collected. Coding strategies changed focus depending on the kind of data. For example, when coding retrospective data I accounted for future data triangulation and coding for tie strength and intensity. Coding process data required focusing on a kairological timeframe and the changing magnitude of concepts over time. Coding for network data required coding for critical events that triggered a permutation in a subunit triad configuration.

Another step I took preparing the raw data for coding was using categories developed from my thesis concepts to enable a cross-comparison of sub-case data. I partitioned my coding process into three stages as depicted in Figure 9 as boxes under the data sources. The first stage involved data management and choosing attribute codes that sit across all data types and from all sources. For example, coding for triad components such as sales, management and manufacturing subunits or coding for attributes such as the relevant demographics of the participants, for example, how long they had been in Tersus and in their current role. The second stage involved using first cycle coding patterns for determining broad topics, then process and ultimately emergent coding for emergent concepts. These coding processes occurred within data collected from each source, subunit and triad for a logical chain of evidence. The last stage before data analysis brought the segregated codes back together to enable further cross-comparison of sub-case and triad data. This segregation and re-integration of codes allowed for in-depth comparison of similarities and differences of broad topics and enabled me to develop explanations for concepts derived from retrospective accounts of enduring critical events.

4.8 Coding the data

After provisional coding, I moved on to choosing and using specific coding patterns on data depending on their source. This was done as each source had its specificities. Interview data, field notes, and documents were all textual. Network pictures and fieldwork photos were
visual. Social media, on the other hand, was a mixture of both. This variation influenced the specific coding patterns I used and the ordering of the two cycles of coding. I used the *in vivo* coding pattern to capture emergent codes in my interview data but not in my field notes. This is because *in vivo* coding patterns are used to capture participants’ voice (Saldaña, 2009) whereas the perception being presented in the field notes is my own. Additionally, I did not use *in vivo* coding for my fieldwork photos because it was not directly obvious that the organisational objects represented the research participants’ voices.

Saldaña, (2009; 2016) outlines a large variety of coding patterns and strategies for qualitative researchers to use as there is no ‘best way’ to code data. He cautions that too many or incompatible coding patterns must not be used to ‘muddy the analytic waters’ (Saldaña, 2009, p. 47). He splits the coding patterns into first cycle and second cycle stages. The first cycle coding patterns are to generate broad topics and other less structured categories. Following this, I used structural, descriptive, and simultaneous coding patterns on the interview data to generate broad topics related to the key thesis concepts. I used second cycle coding patterns to develop concrete themes, explanations and to construct clarification. This included using patterns, longitudinal and axial coding to extract concrete themes and to bring together the coded data on broad topics derived from each data source.

### 4.8.1 First cycle coding patterns

Following Saldana’s (2009; 2016) advice to not ‘muddy the analytic waters’, I chose coding strategies that directly related to the nature and goals of the study. Following the initial provisional coding strategy and framework, I used attribute coding for data management throughout the whole process by creating a chain of logical evidence on critical events for analysing processual data.

I use structural, descriptive, and simultaneous method to start crystallising the broad topics related to the thesis concepts. Structural coding is a question-based code that acts as a data management category, similar to attribute coding, but different in that it covers the key thesis concepts and themes, rather than the attributes of the research participants and data sources. Structural coding also codes and categorises data and is particularly suitable for interview transcripts. The act of coding involves assigning a content-based or conceptual phrase to a large data segment, which is then aggregated for more detailed coding and analysis in the second cycle. I use structural coding for the interview transcripts, documents and social media data but not for field notes, network pictures or fieldwork photos. This was because
field notes and fieldwork photos are influenced by my perspective and interpretation, and network pictures are visual.

Descriptive coding differs from structural coding in that it is less general and leads to a categorised inventory or summary of the data corpus (Saldaña, 2009). Saldaña (2009; 2016) considers it essential groundwork for second cycle coding as the codes developed are ‘identifications of the topic’ and the ‘substance of the message’ of a passage of data for subsequent analysis. It is also useful when collecting data from different time periods to chart changes in critical events and participants’ perceptions. I only use descriptive coding for interview data, field notes, network pictures and fieldwork photos. I did this because these allowed me to explore and extend the concepts I worked with. I do not use it for data from documents and social media as these sources have data that supports the topic codes derived from other sources.

Simultaneous coding is the application of two or more codes to a passage of data (embedded) or the overlapping of two codes applied to some sequential data passages (Saldaña, 2009). I used simultaneous coding given the particularly rich nature of some of my data sources. For example, the network pictures were co-created with my participants, and simultaneous coding was applied because they are “both descriptively and inferentially meaningful” (Miles and Huberman, 1994, p. 66).

In addition to coding and categorising broad topics, I also utilised process and magnitude coding strategies to capture the process perspective. Capturing the process perspective in my data was significant for the processual nature of my study. Process coding involves coding explicit action words – or gerunds (Charmaz, 2006). The verbs highlight observable or conceptual activity and action, such as struggling or adapting. This includes interactions, emotions and problem-solving. In general, such actions can also be “strategic, routine, random, novel, automatic, and/or thoughtful” (Corbin & Strauss, 2008, p. 247). By capturing such processes, I was able to develop a more dynamic account of events as the pattern of critical events changed (Dey, 1993).

I used process coding simultaneously with magnitude coding to track the interactions between concepts and their increasing or decreasing importance. I used process and magnitude coding for all data sources except for fieldwork photos, as photos are inherently static. Also, given the restrictions on the photos, I was allowed to take, none of them showed changes in any process.
Lastly, I used *in vivo* coding to capture emergent codes, themes and data categories. *In vivo* coding has its roots in grounded theory as an initial coding cycle. It is particularly suited to when researchers want to attune themselves with their participants’ voice. It is also called literal coding as one uses “underlining, italicising, highlighting” on transcript interview data and notes down changes in vocal emphasis (Saldaña, 2009). For saliency, I coded how significant it was to the participant, the level of frequency of the emergent theme or concept, and whether it represented a range of possible dimensions of categories. I also iteratively checked to see that codes were directly related to the thesis concepts and conceptual frameworks.

### 4.8.2 Second cycle coding patterns

I used pattern, longitudinal, and axial coding after generating the first order broad topics, process focused codes, and emergent codes. This is depicted in Figure 9 as the bottom most box. The second cycle coding patterns aggregated the codes and themes extracted from first cycle coding across all data sources. Pattern coding is “explanatory or inferential codes” and can be used on emergent themes for the configuration of coding relationships (such as between codes derived from process and magnitude coding). I used them to group first cycle codes into small sets of themes, concepts, and summaries of interrelated codes (Miles and Huberman, 1994). I also used pattern coding to look for rules, causes and explanations in the data. The codes that occurred regularly were then used to develop a statement that “describes a major theme, a pattern of action, a network of interrelationships, or a theoretical construct from the data” (Miles and Huberman, 1994).

I used longitudinal coding on the themes interpreted from process and magnitude coding. I used Saldaña’s (2009) seven descriptive categories to organise the codes and data. These include increase/emerge; cumulative; surges, epiphanies and turning points; decrease/cease; constant and consistent; idiosyncratic; missing. Saldaña (2009) encouraged the use of dynamic descriptors to capture the temporal nature of the phenomena studied. I follow Das’ (1993) line of thinking when presenting measures of time and temporality. I coded for multiple types of time, such as individual, group and organisational time.

Beyond different types of time is the notion of temporal fit through ‘mapping activity to time’ and ‘actors relating to time’ (Ancona, Okhuysen, & Perlow, 2001). By using network pictures as data, I captured temporality through mapping organisational relationship activity to reconfigure the events of triads. I was then able to compare multiple ‘temporal maps’ through
multiply configured network pictures. This comparison enabled me to explore the interdependencies between process concepts and temporality (Reinecke & Ansari, 2015). I was also able to analyse objective and subjective concepts of time and process to present a more accurate picture of reality (Dawson, 2014).

Using these extensions, I amended Saldaña’s (2009, 2016) longitudinal qualitative data summary matrix. This is presented in Appendix E. First, I integrated the notations on different processes by adding a category for key actors, triads, temporal perceptions and personalities of the participants. Coding for temporal perception and personality allowed me to think reflexively about the participants’ biases towards their accounts on critical events, such as on the timing of key business relationships. To the category of ‘differences above from previous data summaries’, I indicated when the participants were reinterpreting past events (Cox & Hassard, 2007) and the linking of ‘narratives’ to a critical configuration of events (Dawson, 2014; Pedersen, 2009).

Lastly, I used axial coding to reassemble the segregated codes and data passages from the different data sources into focal, second-order categories. I used axial coding as it allowed me to “sharpen [the code] to achieve its best fit” (Glaser, 1978, p. 62) as its goal is to achieve code saturation. I followed Charmaz’s (2006) definition of axial coding by first linking sub-categories to categories as well their components. These components were split into properties (attributes) and dimensions (the variation in a range). For example, the subunit sub-relationships differed in content; this content differed according to functional and operational content. The sharpening process is part of achieving code saturation – where new or supporting codes and categories stop emerging from the data. Strauss and Corbin (1998, p.136) outline these categories as “properties, dimensions, conditions, actions/interactions, or consequences”. This signalled to me that I was towards the end of the coding process.

4.8.3 Code saturation

I identified data saturation in the previous chapter when discussing the relevant number of interviews needed to achieve such saturation. Code saturation differs from data saturation in that the former is the saturation of concepts and themes found in the data and codes, the later means assessing when to stop collecting data. It is widely accepted by the scholarly community that saturation is an ill-defined term, with no concrete guidelines (Charmaz, 2006; Dey, 1993, 1999; Morse, 1995; O’Reilly & Parker, 2013). Dey (1999) critiques the use of the term saturation as it lacks a consideration of consequences and instead argues for the concept
of theoretical sufficiency. Qualitative researchers are encouraged to show how legitimate their categories are as part of their analysis by mapping and diagramming how they derive first and second order categories from the data. Bowen (2008) adds that a researcher should strive for thematic exhaustion through paying careful attention to the trustworthiness of the data.

To attain a level of trustworthy theoretical saturation, I followed Charmaz (2006, p.162) and Guest, et al.’s (2006) advice, in particular, how do your comparisons illuminate your theoretical categories and in what other directions do they take you? I was careful to add to the theoretical categories of multiplexity and temporality as I aim to extend these concepts. To add to trustworthiness, I had also to make sure that the explanations were strong and could not be attributed to other concepts that nullified or biased my conclusions. I also followed Guest, et al. (2006) conceptualisation of saturation as a ‘stable’ codebook.

4.8.4 Use of NVivo X software for analysis management

Dey (1993) mentions that part of reaching saturation is that all relevant data has been included in the coding and analysis. Therefore, research saturation is supported by the use of software for analysis management. Given that I collected data from various sources, I used NVivo X software for data management. Using NVivo X allowed me to contrast and compare a number of categories and ensured themes across all data sources. It also has provision for coding pictures and other visual material. I could not use NVivo X easily for network pictures analysis – however, I imported the co-created network pictures as visual items and analysed them using traditional network picture analysis techniques. I stress that NVivo X was used as a data management tool – I did not believe that it would do any analysis for me. I did not use any analysis techniques that did not fit the nature of my study; such as word frequency count clouds. I adhered to the statement that the “quantity of data in a category is not theoretically important in the process of saturation” (Morse 1995, p. 149) and that “frequency counts are out” (Morse 1995, p. 148).

4.9 Analysing the codes

In this section, I briefly outline the analyses that I used for each data source. Although some coding strategies were used for multiple data sources, their kind and type still influenced the required analysis. The framework for analyses is depicted in Figure 10. The previous sections on thesis concepts, data types and sources coalesce into the top three boxes. This section is depicted in the third box labelled analytical procedures. The arrows between the data sources
and analyses represent coding strategies as discussed in previous sections. The last box in Figure 10 is the framework for the proportional triangulation of data for rigour and is outlined in the next section 4.10.

**Thematic analysis of interview data**

I used thematic analysis for my interview data and familiarised myself with the data, transcribing, reading and re-reading it iteratively for coding (Braun & Clarke, 2006). Categories generated from coding coalesced into concrete themes and potential themes. I then reviewed the themes and checked them against coded segments of the data corpus. This was done until a clear thematic map was derived with definitions and names for each theme (Ryan & Bernard, 2000; Vaismoradi, Turunen, & Bondas, 2013).

To develop such a map I used Boyatzis’ (1998) pointers on a ‘good’ theme. A well-developed theme has a label that is often written last as it is conceptually meaningful to the studied phenomena. It has a definition that states its key characteristics. There is a description about when a theme occurs, as well as any qualifications or exclusions. Both positive and negative examples are given to avoid any confusion. For example, in my analysis I have the theme, ‘the MNE has structure-specific temporality’.
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<table>
<thead>
<tr>
<th>Thesis Concepts</th>
<th>Research questions • Literature review • Conceptual • Theoretical</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Data Types</th>
<th>Textual</th>
<th>Visual</th>
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</thead>
<tbody>
<tr>
<td>Data Sources</td>
<td>Interview Data</td>
<td>Field Notes</td>
</tr>
<tr>
<td>Analytical Procedures</td>
<td>Thematic Analysis</td>
<td>Content Analysis with a focus on reflexivity</td>
</tr>
</tbody>
</table>

(Proportional) Triangulation of Data (for rigor)

Figure 10 The analysis framework including proportional triangulation of data
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Document analysis of internal and external organisational documents

I collected public and private documents on Tersus before, during and after primary data collection. In addition to traditional organisational documents, such as annual reports, and internal documents shared with me by research participants, I also collected documents from contemporary sources such as websites and product board forums (Bowen, 2009; McCulloch, 2004). I use Bowen’s (2009) definition of documents containing “text (words) and images that have been recorded without a researcher’s intervention” (Bowen, 2009, p. 28). However, I segregated documents from data collected through social media on Tersus as portions were a part of customer marketing campaigns. Therefore, I use some social media analysis methods developed from marketing to ensure a level of trustworthiness (Hookway, 2008).

Analysis of organisational documents is often used for triangulation and can be used as an analysis method in its right (Bowen, 2009; McCulloch, 2004). Although I do not elevate document analysis to this level, it does play a relevant part supporting key presumptions gathered during analysis of other data sources and offering areas for further investigation. For example, as Tersus was going through a major and protracted labour dispute with some of its manufacturing hubs, I had to search for relevant documents that allowed me to have a more informed style of interview questions with research participants. I was able to situate the data I collected within a relevant context that then influenced the conclusions I gathered.

I followed Bowen’s (2009) advice when conducting document analysis. I first identified relevant and meaningful passages of text that were coalesced into themes. Similar to coding transcripts, I had to pay careful attention to my objectivity and sensitivity when selecting passages. I used Scott’s (2006) four criteria when appraising documents: authenticity, credibility, representativeness, and meaning. Scott (2006) describes authenticity as the soundness and authorship of the document, e.g. where did it come from? Credibility as sincerity and accuracy, e.g. whether its content seemed trustworthy. Representativeness as survival and availability e.g. has it stood the test of time and is there a reason it is easily/not easily accessible? Meaning as literal and/or interpretative understanding, e.g. what is the level of interpretation that I had to use to gather relevant information on Tersus? I also used McCulloch (2004) theorisation criterion - given that I aimed to extend concepts developed from the interpretative perspective.

The document types and sources I gathered were internal documents released to me by my participants and external documents gathered from the company group of websites,
government-run business history institutions, industry magazines, and news networks, such as Bloomberg. I analysed the data using content analysis as well as using intertextual analysis concepts such as focusing on the ‘history’ of the text to understand its meaning (Fairclough, 1992).

**Social media content analysis**

As explained above, data from social media channels such as Facebook, Instagram, Twitter and LinkedIn were analysed differently from traditional organisational documents. This is because such data is constructed and shared with the purposeful intent to communicate certain implicit ideals to their consumers. Accessing the professional social media of participants also allowed me to triangulate data, such as how long the participant had been within *Tersus* and which participants may have more information on certain critical events. I gathered only relevant data from social media channels on *Tersus* depending on whether I needed more contextual details regarding certain organisational decisions and activities. I analysed the data using content analysis (Anderson and Kanuka, 2003). However, I filtered the data rigorously by avoiding social media data related to promotions, contest/game information and other such non-relevant issues (He, Zha, & Li, 2013).

**Network Picture process analysis**

I used network pictures to capture network and process elements from *Tersus*’ organisational network. Network pictures are a mental representation of relational and network-based relationships as seen by a focal participant – usually a manager. It is a form of mapping that is native to the subfield of IMP but has its genesis in the management concepts of sense-making and cognitive maps (Henneberg, et al., 2006). IMP scholars have taken cognitive mapping further by applying it to the context of industrial networks and integrating network concepts. Network pictures, therefore, comprise the network map of actors’ perspectives on the organisational network they are embedded within.

What constitutes a network picture as an illustrative tool has been widely discussed. Henneberg, Rohrmus, and Ramos (2006) attempt to deconstruct network pictures into building blocks by analysing current forms of network pictures in their scholarly field. They present an ‘open’ framework of network picture building blocks – open in the sense that building blocks may be added or ignored as needed according to the researcher. These building blocks are network-based, such as centre/periphery, boundaries, directionality, power, actors/activities/resource (ties), and context or context based, such as focus,
environment, time/task. Ramos and Ford (2011) critique this approach by stating it is too ‘open’, and that network pictures are only used as way to understand/illustrate the world view of the participant rather than as a structured research tool.

As I found network pictures to be more than a graphic elicitation support tool for my interviews, I followed Ramos and Ford’s (2011) argument that network pictures can be used as a research tool that allows researchers to co-create network pictures with their participants. I also integrated Halinen, Törnroos, & Elo’s (2013) process view of network pictures to capture their temporality. I focused the network pictures on critical events within the organisation and what activities, actors or resource ties triggered permutations in the network the participant is embedded within. Focusing on critical events also allowed me to switch between retrospective and real-time analysis as needed and a logical chain of evidence was constructed for my conclusions.

Lastly, given that I used network pictures in a particular MNE setting and needed to make sure I could do cross-comparisons, I relied on the basic network structure of a triad. I chose a network triad for conceptual and theoretical reasons explained in Chapter 3. In addition, business network literature in IB often talk about at a type of headquarter-subsidiary relationship (Forsgren, et al., 2005). As I collected my network pictures, it became clear that the participants also adhered to this mental model and often structured their network pictures this way without any input from me as the interviewer.

*Pictorial analysis of fieldwork photos*

Analysing the field photos I took was different from analysing network pictures despite both being pictorial in nature. Field photos are not co-constructed and their meanings are not easily apparent – therefore I had to select which photos to analyse. Field photos were also not of inner building environments or private offices – only public areas were photographed. Similar to the social media data I collected, I used such photos as way of triangulating data gathered from other sources and to keep context in mind – the buildings in all geographic areas were strikingly similar which can be interpreted as the corporate culture being rather strong (Bell & Davidson, 2013; Davison, McLean, & Warren, 2012; Meyer et al., 2013). I used sectorial analysis to analyse part of the photos using *NVivo X* software.
4.10 A proportional hub and spoke framework for the triangulation of data and mitigating biases

Given the diverse range of data sources, I developed a proportional ‘hub and spoke’ framework to illustrate the triangulation of data when presenting my themes. This is depicted in the bottom part of Figure 10. Within-method triangulation of data is pertinent for qualitative data studies to the interpretive nature of data and therefore issues of bias and validity (Denzin, 1978; Flick, 2004; Jonsen & Jehn, 2009). However, the traditional use of within-method triangulation does not show the specific influence that certain sources have. Each data source and its coded data corpus do not have equal influence on a theme – rather each source is proportional. The reason for considering the proportionality of the source is to show more transparently to the reader the process I used to ensure that I mitigated biases and promoted validity (Jonsen & Jehn, 2009).

Proportionality allowed me to ascertain areas of convergence, divergence and lacunae (Flick, 2004). An example of convergence from the analysis was a history of Tersus using interview data and organisational documents. An example of divergence was data gathered on the General Manager of a subunit in Thailand from social media that highly diverged from interview data. An interesting example of lacuna was the lack of retrospective data on failed subunits and their relationships. Integrating proportionality enabled me to take a more structured approach than bricolage (Denzin, 2012) or crystallisation (Tobin & Begley, 2004) to show robustness and authenticity of the themes.

4.11 Chapter summary

In summary, this chapter covered the decisions and justifications for the research design and methods chosen. I followed an interpretivist epistemology and constructivist-structuralist paradigm as I re-interpreted my participants’ perceptions of the MNE network organisational structure. I also conducted a multiple embedded sub-case study choosing subunit triads within one large MNE. I conducted my research within one MNE to hold constant the number of internal organisational and external environmental factors that the subunits experienced. Doing so also allowed me to pick comparable triads for analysis.

I discussed process methodology and its implications concerning retrospective and network-based data. Given that I examined processes over time and drew from retrospective data, I took care to mitigate any bias through the triangulation of data sources and a non-variance view of the key concepts of multiplexity and temporality of MNE intra-organisational
relationships. I then outlined the selected MNE, the data collection timeline and research participants. I covered key issues informing my data collection, layered access and failure to gain access to the global headquarters. I also discussed my data sources and collection methods, which included: semi-structured and unstructured in-depth interviews, network pictures, reflexive field notes and secondary data (internal and external company documents and online information including industry reports and professional information about the elites interviewed). I concluded the first section by outlining my decisions and reflexive thoughts on exiting the field and how I mitigated the three key limitations of retrospective data, the lack of access to global headquarters, the ethnic diversity of the research participants and other ethical considerations.

I then moved onto the second section where I covered the analytical procedures I used to code and analyse data from a number of difference sources. They varied regarding the amount of text and/or visual elements. This informed the coding strategies used to develop first and second order categories and then overarching themes. I also look at the proportionality of conclusions from data sources when triangulating my themes to generate a more robust and authentic analytic method.
Chapter 5. Analysis and findings

5.0 Analysis and findings

In this Chapter, I present the analysis and findings of the case study of the MNE Tersus and its embedded sub-case studies of MNE triads. I present answers to the overall research objective and research questions, which are, to examine the dynamic nature of relationships between intra-organisational network subunits within the MNE. Specifically, how do multiplexity and temporality influence such relationships?

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<td>intense growth through M&amp;As</td>
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<td>5.2 Subunits of the MNE intra-</td>
<td>Presents the actors of the sub-cases and types of event triads</td>
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<tr>
<td>5.3.1 Content and types of multiplex subunit relationships</td>
<td>Answers the research question: How does multiplexity influence intra-organisational network relationships between MNE subunits?</td>
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<td>5.3.2 Interaction between the content and types of multiplex subunit relationships and their emergent outcomes</td>
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<td>5.3.3 Dynamic triadic multiplexity of subunit</td>
<td>Explains the temporality of subunit network relationships within an MNE</td>
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| 5.5.3 The multiplexity and temporality of MNE intra-organisational network relationships | organisational network subunits within the MNE |

Table 15 presents the structure of the chapter and the content of each section. Each section addresses a series of aims that together presents a coherent and logical chain of arguments to answer the research objective and questions. The first section presents a brief outline of the empirical context that Tersus and its subunits conduct business within. Tersus is undergoing restructuring for a more efficient organisational structure while still using M&A strategies to grow within an increasingly consolidating industry. This has triggered a number of critical events that are the focus for the triad sub-cases analysed. I briefly outline these critical events before presenting the key actors and triads examined in the rest of this Chapter.

The second section outlines the key actors as identified by research participants and organisational documents. These are the focal MNE subunits, which include the regional and global headquarters (termed RHQs and GHQs), the sales companies, the manufacturing companies, and the global service organisations (termed GSOs). As I look at critical events concerning temporality and so Tersus’ organisational history, I outline the past subunit structures and emerging subunits identified in the analysis. The first and second sections together present the empirical context of the target MNE as well as the key actors at the triadic level.

In the third and fourth section, I amend slightly from the thesis concept order presented in Chapter 2. During the analysis, it emerged that temporality was relatively pluralistic, similar to the concept of multiplexity. Multiplexity also directly related to the structure of the event triads through the composition of the subunit relationships. Therefore, I first discuss the multiplexity of subunit relationships before their temporality.

The third section answers the research question, how does multiplexity influence intra-organisational network relationships between MNE subunits? I outline the different types of multiplex sub-relationships, for example, ‘functional’ and ‘operational’, and the interactions between them. I also highlight the issue of multiplexity within particular triads by presenting network pictures that permutate according to critical events. The fourth section answers the research question, how does temporality influence intra-organisational network relationships between MNE subunits? I outline the different types of temporality as experienced by the research participants with regards to the MNE subunit network relationships, that is, kairological and chronological.
The last section focuses on the organisational network component of the analysis. I present the network governance issues that *Tersus* is currently encountering at the organisational level of analysis. I discuss the network effect issues of an evolving organisational network structure in terms of the key concepts of Simmelian dyads and triads, embedded hierarchies in heterarchies and vice-versa. I end with focusing on the unit of analysis, the MNE subunit relationship and how its multiplexity and temporality can be used to understand relationship strength.

5.1 The empirical context: Organisational restructuring after a period of intense growth through M&As

*Tersus* is a global manufacturer of home and professional appliances as well as outdoor products. The home appliances include products such as washing machines, cooktops, and air conditioners. Professional appliances include food and laundry service equipment. Data on *Tersus*’ organisational history was gathered from a number of sources and as a process. I collected initial data was collected from online sources, such as the MNE Group website and country specific websites. The data was then triangulated with data from other secondary sources, such as a governmental business history portal, scholarly publications, industry and financial reports, and news sources. I re-confirmed facts through primary data collected from participant interviews. The proportional triangulation of sources to determine the history of *Tersus* is given in Figure 11.

Figure 11 depicts the proportional triangulation of data used to determine *Tersus*’ organisational history. Proportions are symbolised by the size of the circles and thickness of the arrows. Data convergence occurred between interview data, documents, and social media. There was a small amount of divergence in data between interview data and documents when discussing reasons for the divestment of product lines and companies. However, this divergence was attributed to research participants’ speculative reasoning. There was a lacuna when discussing large and organisational-sensitive events with research participants in the interview setting. For example, research participants did not understandably want to discuss the protracted failure of *Tersus* to acquire a large competitor. However, continued monitoring of financial and industrial reports and news outlets filled in any missing information.
Figure 11 The proportional triangulation of the data to map the history of Tersus

Since its inception in the 1900s, Tersus has grown through an M&As strategy. Tersus was originally a direct sales company – a strategy they continued into the 1940s in Australasia. As early as the 1920s they attained novel products through the acquisition of local companies. After the First World War, they quickly became a transnational company through the purchase of manufacturing factories in UK and Australasia and swiftly entered the North American market. Tersus continued its direct sales strategy and during and after the Second World War, continued to add new products to its range and upgrade its products through acquiring companies and their factories in a number of European and Australasian countries.

From the 1970s to 1990s, Tersus continued to acquire companies at a high rate – around 400 companies. However, this also included the acquisitions of companies not considered core to the Tersus brand, such as building components and plastics. By the end of the 1990s, it had acquired more than 600 companies globally, with most of its sales occurring outside its original home country. During this time, Tersus moved on from a direct sales marketing strategy in its major markets and developed a number of agreements with competitors and sales franchises to sell their products in European, North American, and Asian markets. It was towards the end of the 1990s that executives at Tersus realised intense inorganic growth through M&As and product diversification strategies led to an unwieldy organisational structure that needed consolidating and streamlining.
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From the late 1990s and onwards, *Tersus* continued to pursue an acquisitions strategy to enter or strengthen its market share in large markets, at the same time as streamlining its operations through the divestment of industrial products and sectors not related to the initial and core product category of home appliances and small consumer products. It began a series of restructuring programs that saw the further divestment and selling of a large portion of its direct sales operations. This refocus towards the key product-based competencies of *Tersus* by executives also led to the development of a global branding strategy towards product design and development in the early 2000s. After such a history of intense growth and acquisitions, *Tersus* had to contend with a rapidly changing industrial environment. They continue to face increasing competition from Asian MNEs that have the resources to enter markets at a loss and do not experience organisational inertia in terms of product development and manufacturing due to their shorter organisational history.

The original beginnings of high inorganic growth and recent history of divestiture and restructuring of operations cast a contextual shadow over the data I collected. Table 16 presents a summary of *Tersus’* history. Nearly all of the research participants I interviewed were aware of *Tersus’* history, as many were part of the acquired companies. If they were not, they had previous jobs with close business partners of *Tersus* or a direct competitor. In addition, they had all experienced an internal branding strategy that pushed customer focus (be it internal or external) and product design as a core competency. In effect, *Tersus* was going through a continual internal ‘pruning’ phase regardless of the continued, although less intensive, M&A strategy. As the large branches of product categories were divested, such as healthcare products, or separated into companies, such as outdoor product brands, *Tersus* executives turned towards intra-organisational restructuring programmes. Such restructuring programmes continue today as *Tersus* aims to develop focused and efficient organisational structure and processes. I analysed such restructures from a Simmelian dyadic and triadic perspective. Next, I present the key actors within such triads.
Table 16 History of Tersus’ MNE Group strategy from the 1900s to present

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Tersus’ MNE Group Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900s to 1970s</td>
<td>• High rate of Mergers and Acquisitions</td>
</tr>
<tr>
<td></td>
<td>• Evolution from Transnational to Multinational Enterprise</td>
</tr>
<tr>
<td></td>
<td>• Expansion of operations to rest of Europe, North America and Australasia</td>
</tr>
<tr>
<td></td>
<td>• Diverse product ranges and brands</td>
</tr>
<tr>
<td>1970s to 1990s</td>
<td>• Higher rate of Mergers and Acquisitions</td>
</tr>
<tr>
<td></td>
<td>• Strengthening of Multinational enterprise operations</td>
</tr>
<tr>
<td></td>
<td>• Expansion of operations to parts of Asia</td>
</tr>
<tr>
<td></td>
<td>• Divestment of non-core product ranges and brands</td>
</tr>
<tr>
<td>1990s to 2000s</td>
<td>• Lessening rate of Mergers and Acquisitions</td>
</tr>
<tr>
<td></td>
<td>• Development of corporate branding and product design and development strategy</td>
</tr>
<tr>
<td></td>
<td>• Strengthening of Multinational enterprise market share due to increasingly competitive industrial environment</td>
</tr>
<tr>
<td></td>
<td>• Expansion of operations to parts of CIS</td>
</tr>
<tr>
<td></td>
<td>• Divestment of peripheral product ranges and brands</td>
</tr>
<tr>
<td>2000s onwards</td>
<td>• Lower rate of Mergers and Acquisitions</td>
</tr>
<tr>
<td></td>
<td>• Targeted acquisition strategy to gain market share and enter new markets, including failure to acquire a large competitor</td>
</tr>
<tr>
<td></td>
<td>• Continued development of corporate branding and focus on product innovation</td>
</tr>
<tr>
<td></td>
<td>• Period of non-investment in operations due to the Global Financial Crisis in 2006 – 2009</td>
</tr>
<tr>
<td></td>
<td>• Expansion of operations into Asia and Africa</td>
</tr>
<tr>
<td></td>
<td>• Continued divestment of peripheral product ranges and brands</td>
</tr>
</tbody>
</table>

5.2 Subunits of the MNE intra-organisational network triads

In this section, I outline the key subunits that provide the focus for the analysis of intra-organisational network relationships within a triadic form. Tersus terms its non-global headquarters (GHQs) subunits according to function, such as regional headquarters (RHQs) and then within that function, the geographic assignation. After outlining the types of subunits the research participants belonged to and provided information on, I present the four triadic configurations that emerged as the most relevant sub-cases for the concepts of multiplexity, temporality and overall organisational network effects and governance. While explaining the triadic configurations and forms, I use this notation: GHQs – RHQs – Sales. In addition, through my analysis, I found that certain triad configurations represented particular
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events. For example, GHQs – RHQs – Sales often occurred when GHQs was implementing strategic initiatives for the rest of the MNE intra-organisational network.

Figure 12 presents the proportional triangulation of data when defining and developing the network boundaries of Tersus’ subunits and triads. The structured and careful triangulation of data on the MNE triad is significant given the lack of direct access I had to GHQs. I initially collected a large amount of data from a three-hour unstructured interview and other one-hour semi-structured interviews with an executive at Tersus, supplementing this with public organisational documents and social media. I continued to collect interview and network picture data from research participants to set the definition and boundaries of the subunits and triads. As the data collection phase progressed, I augmented my conclusions from reflexive field notes. Examples of this were deciding the best way to respond when participants asked for a definition of subunits and triads. I was careful to direct the questioning back to them with follow-up probes so that my own biases did not influence the data collected.

Field Photos played a small part in the definition, as I was able to take photos of public artefacts that listed company subunits. For example, in one country, I noticed that the RHQs component was handled separately from the sales company, and the after-sales service company, even though they shared a building. This triggered me to ask probes and follow-up interview questions about the organisational structure of the companies in that country and establish operational subunit boundaries.

5.2.1 Types of subunits within Tersus

Global and regional headquarters

The GHQs of Tersus is still situated within the Scandinavian country from which it first originated. The Tersus MNE group is branded as a Scandinavian organisation with a Scandinavian design aesthetic. The MNE group owns a number of high-profile brands that present specific lines of home care products aimed at geographic regions and market demographics. Due to the portfolio of high profile brands, the average consumer does not know that Tersus owns such brands or of the MNE’s high global market share. This presents an interesting situation where the Tersus brand itself is not considered as highly as the brands it owns. Recently, Tersus attempted to change this perspective by position the Tersus brand as high-end and design-led.
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The GHQs strategy has changed in response to the industrial environment, as I described in the previous Section outlining its history. However, the company’s role as the ‘head’ has not wavered. Interview participants, after a number of questions, often said that regardless of GHQs availability to ‘work with’ their subunit on key issues, the bottom line was that GHQs made the key decisions that were often based on profitability, rather than opportunities. This is because the majority of the subunits I studied were situated within the large geographic region of the ‘Asia Pacific’.

GHQs was still seen to focus most of its attention and resources on North American and European markets. This is not surprising given the size and long-standing organisational history Tersus has with these markets and lasting organisational memory of failures in Asian markets. There is little public information about their Asia Pacific operations on the Tersus group website. I had to look at a number of disparate industry reports, news outlets and social media sources to gain secondary information on Asia Pacific operations. In addition, participants often used the term “up, back in [Tersus ‘GHQs city]”. They described a sense of a pronounced hierarchical distance between GHQs and the research participants’ subunits. All participants logically understood that GHQs could not afford them the unlimited resources they needed to pursue opportunities, but still mentioned their constraints and the increasing dominance of Asian competitors. This finding is in line with HQs-subsidiary attention literature in IB (Kostova, Marano et al., 2016).
In contrast to the stability of the GHQs, the RHQs played an integral part in the organisational restructuring process and were not limited by physical location. For example, the Asia Pacific RHQs is situated in more than two countries. As factories were moved to lower-cost economies, the physical location of RHQs changed. In the past, a major part of the Asia Pacific RHQs was situated in Australia. No doubt, in part, because a large number of manufacturing plants were situated in the Australasian region due to the history of organisational expansion after the ‘World Wars’. In the early 2000s, the RHQs was moved to Singapore. Participants mentioned that Singapore as a country had positioned itself as the ‘gateway to Asia’ due to its geographic location and diversity of trade links with a number of Asian countries.

In addition, parts of the RHQs are now situated in Thailand as a number of key factories have been moved there. These restructures sit in line with a number of sales companies that are now operating in SEA countries, such as Vietnam, the Philippines and Cambodia. Looking towards the future, participants noted that there was a ‘race to the bottom’ concerning low-cost manufacturing. One participant mentioned that in the future, Vietnam and other countries such as Laos and Cambodia might become the Asian manufacturing hub.

The functional and operational structure of the RHQs also mirrored that of the GHQs. Heads of product categories reported to their global heads and geographically categorised service heads reported to theirs. Some participants that were reporting to both functional and operational lines stated that Tersus was a type of matrix organisation. At first, this appears the case when looking strictly at reporting lines. However, with the additional types of subunits, such as global service subunits, Tersus appears to have a more networked and complex organisational structure.

Tersus’ GHQs use their RHQs to deliver services to the rest of the MNE intra-organisational network as well as their embedding within key countries, such as Thailand, due to manufacturing. The move from Australia to Singapore also created a signal that Tersus acknowledged the Asia Pacific localisation challenges that are different for those of the North American and European market. It also signals that they see the Asia Pacific as a growth sector in the future, rather than Australasia.

Sales companies
The four sales companies I had direct access to are situated within the Asia Pacific region. There were conflicting accounts of New Zealand being a sales company separate from
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Australia. Tersus’ corporate website mention the two countries as one unit. However, research participants said that New Zealand often interacts with Singapore about finances and other support services. They are also two different markets, with particular product lines only sold in New Zealand. For this reason, they are considered two separate sales company subunits. The other sales companies were situated in countries close to their RHQs, Singapore and Thailand. The standard type of sales company sales units are in the emerging economies in South East Asia.

There are also a sales companies in China and Japan, and Tersus Group brand products are sold in India. The research participants did not have information on the Indian sales company. I turned to public documents, financial news sources and social media instead. The initial entry of Tersus into India was difficult due to a complex institutional environment that favoured local and Asian MNEs. However, this situation was repeated with all of Tersus’ direct competitors. Tersus’ entry into China more than 20 years ago was also similarly difficult. As a result, at that time Tersus was not able to compete successfully with their Asian MNE counterparts. However, in the last five years, Tersus has been tentatively increasing operations in China after its successful entry into Brazil. It currently markets its Chinese operations as successful.

Manufacturing companies
The current manufacturing companies that are part of the triads I analyse are situated in Thailand, Australia, and China. The newer manufacturing companies are situated in Thailand and China. The older companies were in Australia – with one in the process of disestablishment and shifting overseas. Participants noted that further manufacturing companies might be established in Thailand and China, and in the far future, Vietnam and Cambodia.

Global service organisations
A form of subunit different from the traditional forms was identified during analysis. A number of the Tersus subunits I analysed were undergoing a critical event centred on the formation and integration of a global service organisation – in this case, a global supply subunit. The focal global supply organisation was a sourcing organisation for manufactured products. Some participants had mentioned that a previous GSO had been implemented for human resources. Other participants had mentioned that traditional services, like invoicing, were transactional in nature and reliant on enterprise-wide IT systems.
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5.2.2 Triadic configurations of the subunits
I came across four subunit triad configurations during data collection and specifically from the network pictures drawn by research participants. Such configurations were determined by their key business process and strategies. I use the notation ‘subunit – subunit – subunit’ to show the three focal subunits within the triad. The abbreviations used are GHQs for global headquarters, RHQs for regional headquarters, Sales for a sales company, Manuf for a manufacturing company, and GSO for a global service organisation. The order of the subunits does not denote any power structure. These are:

- RHQs – Sales – Manuf ‘Localising product development’ triad
- RHQs – Manuf – GSO Supplying intra-organisational subunits’ triad
- GHQs – RHQs – Sales Disseminating decision making’ triad
- GHQs – GSO – RHQs Increasing organisational efficiency’ triad

Localising product development’ triad: RHQs – Sales – Manuf
This triad emerged from the data when sales company participants discussed the interactions they had with RHQs and overseas factories. The key rationale for these triadic interactions was when local sellers asked for more localised iterations of the range of manufactured products the factory was producing. The majority of the interactions between the sales company and factory were mediated by the RHQs, though there were instances where the sales company directly interacted with the factory to build face-to-face relationships when it was clear the business process would be a long standing one. For example, RHQs allowed sales company executives to meet and interact with a manufacturing company in another country to establish relationships that would facilitate knowledge sharing and gathering. Participants in the sales company stated simply knowing ‘who to contact’ and building rapport with them facilitated subunit interactions across diverse cultures. In contrast, no such relationships were encouraged between a type of GSO and Sales Company with the interactions kept strictly transactional in nature.

Supplying intra-organisational subunits triad: RHQs – Manuf – GSO
Tersus is in the process of integrating a global supplier organisation. The majority of the data on GSO interactions with RHQs and manufacturing subunits came from RHQs participants in the form of interview data and network pictures. The integration of the GSO was a relatively new event during my data collection, and many business processes were being restructured to meet the new requirements. However, the topic was a secretive one with little information
outside of organisational documents and Tersus participants. This was partly due to the fact Tersus was in talks to buy out one of their major competitors in another geographic region. I boundaried the triad so that I wouldn’t include sales companies as the participants from the sales companies had little to do this event.

Disseminating decision-making triad: GHQs – RHQs – Sales
Although the organisational network perspective argues that MNEs may have a heterarchical network structure, I found that strong hierarchical lines still exist. This may be due to the nature of the industry and the history of the inorganic organisational growth of Tersus (Haleblian et al., 2009). As a result, although the triads at the regional level appeared to work at a similar level of analysis – there were clear decision making lines drawn from the GHQs and disseminated by the RHQs. It also appeared that the decision-making capabilities were relegated back to the primary RHQs in Singapore and GHQs.

Increasing organisational efficiency triad: GHQs – GSO – RHQs
A triad focusing on increasing intra-organisational efficiency also emerged in relation to the development of the global supplier organisation. GHQs, GSOs, and RHQs interacted based on geographical regional product lines. This was also linked to Tersus’ global product boards. The executives of geographic regions who used particular employees from a variety of operational and functional departments headed these boards. These global product boards pursued radical product innovation for dissemination and localisation across a variety of markets. From a triad perspective, such units may be classified as bridging units (Zaheer & McEvily, 1999). On the other hand, the organisational efficiency triads worked together to localise products for geographic regions as well as to reduce redundant supply lines and create economies of scale to reduce manufacturing costs.

Abandoned Simmelian dyads within triads: GHQs – Sales & Sales – Sales
Since my analysis concentrates on triads, I did my best to capture other permutations during data collection. For example, when participants talked about whom they interacted with the most, I did my best also to note who they did not interact with and why. I also looked for a range of open and closed triads. That is, an open triad would have no link or a weaker link for one Simmelian dyad (Tortoriello & Krackhardt, 2010). Two Simmelian dyad types that had to be abandoned when determining the triads; these were GHQs – Sales and Sales – Sales. The lack of interaction between GHQs and Sales showed me that perhaps Tersus had a strong hierarchical operational structure. A large number of participants in Sales Companies
answered that they had almost no or little interaction with GHQs (Bouquet & Birkinshaw, 2008).

Interestingly there was also little interaction between sales companies. When probed on this situation, research participants remarked that Asian-Pacific markets were diverse, each with their own localisation issues. This is in line with IB scholars are now conceptualising and measuring culture as more pluralistic compared to previous treatments (Caprar, Devinney, Kirkman, & Caligiuri, 2015). Such differences even existed between countries that shared similar historical background and demographics as well as seller companies such as Australia and New Zealand.

5.3 Multiplexity of subunit network relationships

In my conceptual framework depicted in Chapter 3, the subunit network relationship multiplexity is a bundle of multiple co-existing sub-relationships that differed in content and type. I left the types and contents of such sub-relationships loosely defined during data collection to generate MNE intra-organisational network-specific categories. The majority of the data was gathered from the network pictures developed by research participants. Due to the sense-making nature of the network pictures, I was able to ask targeted questions about the different types and content of the sub-relationships between the subunits (Garreau et al., 2015). The act of drawing also triggered a number of thoughts and interpretative data from research participants. Again, I triangulated this data with public documents, social media and other secondary data sources. Figure 13 presents the proportional triangulation of data concerning multiplexity.

5.3.1 Content and types of multiplex subunit relationships

As data collection progressed, it became clear that the types and content of the sub-relationships between MNE subunits were still dictated by the key processes that the participants’ work roles, experiences and processes that Tersus presented as key to their competitive organisational advantage. These and other findings are presented in Table 17. Table 17 outlines the data structure of the key themes that arose from the analysis. The first-order categories represent the interpretation by the research participants through representative quotes and secondary data segments.
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Figure 13 The proportional triangulation of data for defining and categorising subunits’ multiplexity

The second-order themes are developed through my analysis and interpretation of the data and first-order themes. Second order themes have also been listed according to content. My second order themes directly related to the research question, *how does multiplexity influence subunit MNE network relationships?* More specifically, *what are the MNE specific content and types of the sub-relationships that make up the multiplex nature of the MNE subunit relationships?*

The second order themes that answer these research questions are that sub-relationships do differ in content. They can be based on functional content, for example, functional MNE processes such as Human Resources, Finance, R&D and Innovation. Sub-relationships can also have operational content and processes that influence the areas of After Sales Support, Marketing, Financial Control, and Product Development. This finding highlights the key business processes where *Tersus* believes their core competencies and advantages lie. In addition to content is the directionality of the sub-relationships, with some participants mentioning that they can also be only one way and non-reciprocal in the traditional sense, for example with reporting lines from sales subunits to RHQs or GSOs.
Table 17 Data structure for types of multiplex subunit relationships

<table>
<thead>
<tr>
<th>CONCEPTUAL FRAMEWORK</th>
<th>FIRST-ORDER CATEGORIES</th>
<th>SECOND ORDER THEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNE subunit relationship structures – Multiplexity is another measure of relationship strength</td>
<td>Sub-relations differ in content and change</td>
<td>1. Sub-relations differ in content</td>
</tr>
<tr>
<td>MNE subunit relationship structures – Dimensions of multiplexity of the intra-organisational MNE subunit relationship</td>
<td>Sub-relations and interactions are based on functions</td>
<td>2. Sub-relations are based on functional content</td>
</tr>
<tr>
<td></td>
<td>Functional sub-relations include Legal, HR, Finance, R&amp;D and Innovation</td>
<td>2.1 Functional sub-relationship content includes HR, Finance, Legal, R&amp;D and Innovation</td>
</tr>
<tr>
<td></td>
<td>Sub-relations can be operational</td>
<td>3. Sub-relations are based on operational content</td>
</tr>
<tr>
<td></td>
<td>Problem-solving rationale leads to relational operational sub-relations</td>
<td>3.1 Operational sub-relationship content includes After sales support, HR, Marketing, Financial control, &amp; Product Development</td>
</tr>
<tr>
<td></td>
<td>Operational sub-relations are prevalent in After sales, HR, Marketing, Financial control, &amp; Product Development</td>
<td></td>
</tr>
<tr>
<td>MNE subunit relationship structures – Dyadic and triadic</td>
<td>Some sub-relations are only one-way interactions</td>
<td>4. Sub-relationship can also be only one way</td>
</tr>
<tr>
<td>MNE subunit relationship structures – Multiplex in composition</td>
<td>Sub-relations content is based on work task</td>
<td>5. Sub-relations are based on business processes content</td>
</tr>
<tr>
<td></td>
<td>Most sub-relations have a cost leadership rationale</td>
<td>5.1 Sub-relations are based on attaining cost efficiency</td>
</tr>
<tr>
<td></td>
<td>Sub-relations are customer focused - inwards and outwards</td>
<td>5.2 Sub-relations are based on customers</td>
</tr>
<tr>
<td></td>
<td>Inward facing sub-relationships are support services</td>
<td></td>
</tr>
</tbody>
</table>
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| Multiplexity - Focusses on social network and business network perspective and a diversity of network concepts | Outward facing sub-relationships are market based  
Modularisation - customer focussed projects and interactions  
Marketing and product focus rationale  
Sales subunits interact with RHQs for product line resources  
Core competencies, such as Design, handled differently from other support functions  
Sub-relationships can be formal and/or informal  
Informal sub-relationships can be relational  
Functional sub-relationships are regional, but operational sub-relationships are global  
Shared services sub-relationships are global in focus  
Support service sub-relationships are mostly regionally focused  
GSO (global service organisation) subunits are set up to manage, develop, and implement a range of regional support services  
Regional Distribution Centre is being developed and is another type of GSO  
Support services sub-relationships can be transactional  | 5.3 Sub-relationships are based on product lines  
5.4 Sub-relationships are based on key competencies and handled differently from other support services  
6. Sub-relationships can be formal or informal  
7. Sub-relationships based on functional processes are regionally focused; those based on operational processes are globally focused  
7.1 Sub-relationships that are shared support services are global  
7.2 Sub-relationships that are support services are regional in focus  
8. Sub-relationships that are support services are transactional in nature |
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<table>
<thead>
<tr>
<th>Multiplexity - Network structure, actor, activity, and resource based</th>
<th>Finance is a bridging function between functional and operational teams</th>
<th>9. There is overlap between sub-relationships based on different functional and operational content</th>
</tr>
</thead>
</table>
| Sales subunits see little structural change – just a change in interactions | Problem-solving jobs and teams are cross-functional  
Cross-functional teams for product categories  
Centre of excellence is cross-national and cross-functional  
Business partners hired to problem solve and work across function and national boundaries  
Interactions based on problem-solving not always formalised  
Global products that are cross-operational and cross-geographic | 9.1 There is overlap between sub-relationships based on different functional and operational content for problem solving purposes |
| Use of IT systems to problem solve small operational issues and transfer data one-way | Some jobs, like analysts, interact with a number of functional lines  
Shared services interact with other regions and functional lines  
Customer focused cross-functional teams | 9.2 There is overlap between sub-relationships based on different functional content |
Chapter 5. Analysis and findings

In line with subunit sub-relationships following key business processes, another second order theme is that they are based on business process content and strategies. The key business processes that arose out of the data were attaining cost efficiency, customer focus, and product lines. Furthermore, sub-relationships based on key competencies were handled differently from other support services, such as product innovation and design and manufacturing supply chains. Although I concentrated on formal relationships and sub-relationships when conducting unstructured and semi-structured interviews with research participants, they still talked about the role of informal sub-relationships in their projects and business processes. The role of informal sub-relationships is considered integral to their work tasks for research participants who often travelled to RHQs and the manufacturing subunits needed to develop long-term interpersonal relationships (Carpenter, Li, & Jiang, 2012).

In continuation with the demarcation between functional and operational content and types of sub-relationships, I found functional processes were often regionally focused but key operational processes were globally orientated. There were support services that were either global or regional in focus depending on the attention on the business process; for example, product innovation is globally focused, while manufacturing is regionally focussed. Research participants also noted that some sub-relationships were transactional in nature. For example, the accounting function was handled by another support services subunit in another country through an IS system. Lastly, participants in the semi-structured data and network pictures showed that there were interactions and overlap between functional and operational sub-relationships, especially when project groups were put in place for problem-solving or analyses for opportunities to increase efficiency or effectiveness of business processes. In some cases, this was formalised as specialist work roles, called ‘[function, geographic region] business partner’, for example, HR Asia Pacific Business Partner.

Table 18 presents the representative quotes and secondary data segments for the first-order categories and second-order themes. For rigour, I have also included the some quotes that opposed my second-order themes.

**Table 18 Representative quotes and secondary data segments for multiplexity**

<table>
<thead>
<tr>
<th>Theme 1. Sub-relationships differ in content</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-relationships differ in content and change over time</td>
<td>“Same here, they used to have their own factories, their own ‘triangles; in place, but now the organization has changed so much that literally the similar setup is being handled. The only difference is that we do a lot of projects in [Country] also for the</td>
</tr>
</tbody>
</table>

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other regions. So everything is not regional demand. So it’s not all about [Country] there…”.
*(P04, semi-structured interview and network pictures)*

“It was a very different structure back in the 90s, [at the time] we were the world’s biggest manufacturer of home appliances, lot of things have changed, because we have moved from a manufacturing to a market-based company, that is a massive change, it changes psychology”.
*(P10, semi-structured interview)*

*Also discussed by P02, P03, P07, P08, P25, P30, and P31 and analysed in network pictures.*

<table>
<thead>
<tr>
<th>Theme 2. Sub-relationships are based on functional content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-relationships and interactions are based on functions</td>
</tr>
<tr>
<td>“I interact with other [functional] managers, the plant general managers, once every two days or so”.</td>
</tr>
<tr>
<td><em>(P02, semi-structured interview and network picture)</em></td>
</tr>
</tbody>
</table>

“…”
*(P06, semi-structured interview and network pictures)*

*Discussed by P01, P08, P10, P12, P14, P16, P18, P19, P28, P30, P31, P32, P37, P39, and also analysed in public and private organisational documents.*

<table>
<thead>
<tr>
<th>Functional sub-relationships and interactions can be transactional</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Just because we are a global organisation, where you have this complex matrix structure, where, in my case, you have to report, I have to operationally report to [Region Head] and [Product Head], and functionally to the Head of [Operation Head], on the other hand, because the way, as the culture, we are so used to involve[ing] the relevant stakeholders to make the decisions”.</td>
</tr>
<tr>
<td><em>(P12, semi-structured interview and network picture)</em></td>
</tr>
</tbody>
</table>

“…”
*(P26, semi-structured interview and network picture)*

“…”
*(P16, semi-structured interview and network picture)*

“…”
*(P01, semi-structured interview and network picture)*

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Chapter 5. Analysis and findings

<table>
<thead>
<tr>
<th>Chapter 5. Analysis and findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>business which is global operation, so while they are employed technically by Tersus, they don’t report to anyone here, [they] reports back to [GHQs] effectively, through someone in [RHQs]”. (P35, semi-structured interview)</td>
</tr>
<tr>
<td>Also discussed by P11, P16, P18, P21, P28, P29, and P39.</td>
</tr>
<tr>
<td>Functional sub-relationships and interactions can also be relational</td>
</tr>
<tr>
<td>“We took ourselves to [city] when we were trying to put together this [product] offer, and they were almost in tears [of gratitude]. [The present was a famous local product]. And they said, “no-one has ever done that”. And then next thing, we’ve got a global exclusive landing on our doorstep. You build those relationships”. (P38, semi-structured interview and network picture)</td>
</tr>
<tr>
<td>“We don’t have any formal reporting from the sales companies to me, it’s a dotted line relationship, it’s informal”. (P15, semi-structured interview and network picture)</td>
</tr>
<tr>
<td>Also discussed by P18, P24, and P37.</td>
</tr>
<tr>
<td>2.1 Functional sub-relationship content includes HR, Finance, Legal, R&amp;D and Innovation</td>
</tr>
<tr>
<td>Functional sub-relationships include HR, Finance, Legal, R&amp;D and Innovation</td>
</tr>
<tr>
<td>“I have the joy of having 3 bosses, my direct boss is the regional [head of function], but I also report to Head of [function] and also the Head of [product function]. As a result of that, I speak with the [subunit] general managers on a regular basis, and then each of the product VPs, who will sit here, I am interacting with them on a daily basis as well. And also the other functions, Strategy, HR, Supply Chain, although that is a relatively new function that is formed here, the countries I have been interacting with a weekly basis. One of the joys of [my function], it’s one of the few functions that cuts across the organization. So you interact with pretty much all functions”. (P02, semi-structured interview and network picture)</td>
</tr>
<tr>
<td>“Yes, the relationships differ depending on the function, such as the legal line here and the HR line there [pointing to network picture]”. “The interactions, yes they also include things like product marketing and development”. These are typical of responses given when asking about the content of sub-relationships using network pictures.</td>
</tr>
<tr>
<td>Also discussed by P01, P03, P04, P10, P12, P16, P18, P19, P23, P28, P29, P30, P33, P34, P35, and P39.</td>
</tr>
<tr>
<td>Theme 3. Sub-relationships are based on operational content</td>
</tr>
</tbody>
</table>
### Chapter 5. Analysis and findings

| Sub-relationships can be operational | “The product category that is relevant, as well as the global [operational] head team which is in [GHQs], on the [functional] side, mostly here [RHQs], I also very work closely the [functional] team as well”.  
(P05, semi-structured interview) |
| --- |
| “In our HR direction, we want to be a business HR, we will try to also be a business COE as well…make user of their [the rest of the business] inputs to develop our processes”.  
(P07, semi-structured interview and network pictures) |
| “So it happened during our quarter meetings, global will share some of the best practices that we can use or adapt”.  
(P09, semi-structured interview) |
| “Sometimes, it creates confusion for the operational team, when you have two bosses and they have different opinions, sometimes there is double work”.  
(P13, semi-structured interview) |
| Also discussed by P04, P06, P07, P08, P12, P23, P29, and P38. |

### Problem-solving rationale leads to relational operational sub-relationships

| Problem-solving rationale leads to relational operational sub-relationships | “[adhoc problem solving] depends on the heads, could be all functions, sales, marketing, HR”.  
(P28, semi-structured interview) |
| --- |
| “The sales companies indirectly interaction with each other through me, I help with problem solving”.  
(P34, semi-structure interview and network pictures) |
| “We learn from each other [another Country Sales Company] for best practice, it’s not formalised, the way we do business”.  
(P18, semi-structured interview and network picture) |
| Also discussed by P01, P06, P38, and P39. |

### 3.1 Operational sub-relationship content includes After sales support, HR, Marketing, Financial control and Product development

| Operational sub-relationships are prevalent in After sales, HR, Marketing, Financial control, & Product Development | “HR, finance, marketing, supply chain, sales (product), customer service, project sales as a different sort of channel”.  
(P18, semi-structured interview and network picture) |
| --- |
| “For sure, with product marketing, global supply chain, Australia counterpart, ad-hoc”.  
(P15, semi-structured interview and network pictures) |
| “The role of HR is to be the sender and support the functions such as finance, sales, and marketing”.  
(P30, semi-structured interview and network pictures) |

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<table>
<thead>
<tr>
<th>Theme 4. Sub-relationships can also be only one-way</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Some sub-relationships are only one way interactions</strong></td>
</tr>
</tbody>
</table>
| “Well, they are just reporting lines. They don’t represent us but we report to them. We don’t get anything back. At the beginning of the year, our budgets are set”.  
(P35, semi-structured interview and network picture) |
| “If its country level, then its country leadership, if it’s regional, then regional leadership, if its sector, then it’s a global leadership”.  
(P06, semi-structured interviews and network picture) |
| “So it happened during our quarter meetings, global will share some of the best practices that we can use or adapt”.  
(P09, semi-structured interviews) |
| “Regional yes, but not global, its more market-[orientated], global has some connection like, teleconference, where this is the priority of HR focus this year, like a cascade”.  
(P19, semi-structured interview) |

Also discussed by P01, P02, P10, P21, P28, P30, P38, and analysed in network pictures where participants drew one-headed arrows.

<table>
<thead>
<tr>
<th>Theme 5. Sub-relationships are based on business processes content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-relationships content is based on work tasks</strong></td>
</tr>
</tbody>
</table>
| “I would say that I interact with my boss and my peers, and then down the line I also interact on a regular basis with my counterparts in the local business units, and this would be either the local marketing manager or trade marketing manager, depending on the differences in the business units”.  
(P06, semi-structured interview and network pictures) |
| “In our HR direction, we want to be a business HR, we will try to also be a business COE [centre of excellence] as well”.  
(P07, semi-structured interview) |
| “We are a very business organisation, means that people are running their own businesses but nobody is looking at their corporate picture, so my job is that I have a corporate function role, there are only two or three departments that have it here, like IT has it and Legal has it. Other than that, everyone is just their business focus, their own product-line focus”.  
(P10, semi-structured interview) |

Also discussed by P23, P29, and P35, and analysed in network pictures, public documents and news outlets.
### 5.1 Sub-relationships are based on attaining cost efficiency

Most sub-relationships have a cost leadership rationale

"It was a straight out issue of…I want to say globalisation, but really, it was more a logistics issue, in terms of manufacturing a product in New Zealand, and then being able to send it to the larger markets just wasn’t cost effective".

*(P38, semi-structured interview)*

"Business cost…productivity in our industry is being driven by scale. Well principally that is a manufacturing issue – you have to manufacturing at a scales of one million plus units in your factories to be competitive and there is a constant drive because of market values – like for like market value declines. So our imperative is to innovate in the product field so that the new product is worth more than the old product”.

*(P39, semi-structured interview)*

"It makes you drive efficiency, until you don’t know where the bottom is”.

*(P10, semi-structured interview)*

*Also discussed by P17, P11, and P36, and analysed in public organisational documents.*

### 5.2 Sub-relationships are based on customers

Sub-relationships are customer focused – inwards, and outwards

"Globalising while losing touch with the market is extremely dangerous. So we are globalizing with all of the knowledge of the local environments. Which means that we get an enormously complex network structures”.

*(P04, semi-structured interview and network pictures)*

" Basically I am responsible for the P&L, first interaction is the internal people, the people we have within the company, mainly the head of departments, the divisions we call it, some of the managers, making sure they understand the goals of the company, the direction of the company and what we expect to achieve, and this one part, the other part, is externally, the customers”.

*(P28, semi-structured interview)*

"You will have a country head, you will have executives running in [Country A]…the Electrolux plant – who we are their customer – they will send product to us, to [Country B], to [Country C]…to get economies of scale…they need to compete on a cost level more economical than our competitors”.

*(P36, semi-structured interview)*

Inward facing sub-relationships are support services

"The whole marketing division is basically a supporting role for sales and product. “We bring in the ideas from [RHQs], and then we try to adapt it here”.

*(P21, semi-structured interview)*
Chapter 5. Analysis and findings

<table>
<thead>
<tr>
<th>Outward facing sub-relationships are market-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>“My [operation] role can be broken down into 70% supporting the management and 30% supporting the employee”.</td>
</tr>
<tr>
<td>(P30, semi-structured interview)</td>
</tr>
<tr>
<td>Also discussed by P02, P07, and P14 and analysed in network pictures and private organisational documents.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modularisation - customer focused projects and interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Then we give our inputs [draws a thick line on the network picture] we give the inputs, and then they marry the inputs, but for other products, we would like to grow as fast as we can, it usually also comes from the bottom up, so we give our inputs, together with the other markets”.</td>
</tr>
<tr>
<td>(P24, semi-structured interview and network picture)</td>
</tr>
<tr>
<td>“The reason for that is, is that we don’t have any manufacturing locations of our own, it’s a 100% outsourced business, and we don’t have any manufacturing capability of our own but we develop products and deliver, we have a centralised global [function], so the interaction we have with our global colleagues is far more than what you would see with other product lines on a day to day basis”.</td>
</tr>
<tr>
<td>(P16, semi-structured interview and network pictures)</td>
</tr>
<tr>
<td>“One project, we need to work with so many parties…so we need to work with the product managers, they can be one that sit here [Country A] or in the region [RQ], so the one in charge of the region they know all [which product is available to supply the project]…we cannot offer something that is not available”.</td>
</tr>
<tr>
<td>(P20, semi-structured interview)</td>
</tr>
<tr>
<td>Also discussed by P21, P04, P06, P17, P38, and P39, and analysed from public and private organisational showing the geographically based organisational structure.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modularisation - customer focused projects and interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The structure of Tersus is very decentralised in Europe [and] the only difference between Europe and SEA structure is the size”.</td>
</tr>
<tr>
<td>(P01, semi-structured interview and network pictures)</td>
</tr>
<tr>
<td>“It’s very much a networked organization, and this is what we have structurally set in place as well, that actually, it needs to be very networked so that you can work with anyone, anywhere in the world, […]it actually doesn’t matter if you are not co-located with each other”.</td>
</tr>
<tr>
<td>(P04, semi-structured interview and network pictures)</td>
</tr>
<tr>
<td>“We have structures that demand constant interaction”.</td>
</tr>
<tr>
<td>(P10, semi-structured interview)</td>
</tr>
<tr>
<td>Marketing and product focus rationale</td>
</tr>
<tr>
<td>--------------------------------------</td>
</tr>
</tbody>
</table>
| “I am the product manager for [geographic region], specifically for [product category] that is called ‘[product category]’ [Tersus] is organised like that [draws and points to network picture]”.
(P16, semi-structured interview and network picture) |
| “Our focus is marketing the product, we have product development, but we don’t manufacture the product”.
(P18, semi-structured interview and network picture) |
| “We have a number of brands [that] meet certain local markets, like [Brand] for [Country]. Our focus is on marketing to our markets and customers and so I talk to [RHQs] and maybe [GSO] to see if I can meet their demands”.
(P38, semi-structured interview and network picture) |
| Also discussed by, P01, P02, P03, P04, P06, P08, P09, P11, P12, P15, and P23, and analysed in network pictures and private organisational documents. |

<table>
<thead>
<tr>
<th>Sales subunits interact with RHQs for product line resources</th>
</tr>
</thead>
</table>
| “We are trying to use them more and more [the RHQs], we are finding that [city] is starting to go to them now, so it just makes sense for us, rather than having to go through another set of hands, we just go direct to [RHQs] for answers [about getting more resources for meeting market product line needs]. Which doesn’t always work particularly well [quiet rueful laugh]”.
(P38, semi-structured interview) |
| “Sometimes, when the SKU is not the regional SKU, and so sometimes, very rarely, the supply chain can work with the factory in [Country A] and [Country B]”.
(P20, semi-structured interview and network pictures) |
| “My role here [as regional HQ] is between the sales company and the headquarters”.
(P30, semi-structured interview) |
| “Under the [geographic sector], to follow up what project is going on and what new projects [regional HQs], we also talk to the sales companies as well, the needs of the products, and what is going on with the sales, the customer insights”.
(P32, semi-structured interview and network pictures) |
“I work with the region with the product development, because when we have the new product, they can send me the features of the product and then I can choose which feature we want. I also have to work with supply chain to bring the product to [Country], forecast sale, sales and marketing”.  
*(P27, semi-structured interview and network picture)*

“I would say, it is usually more country based, rather than functional, because we are closer to the sales companies rather than the other functions”.  
*(P14, semi-structured interview and network picture)*

Also discussed by, P01, P33, P34, P35, P37, and P29.

### 5.4 Sub-relationships based on key competencies are handled differently from other support services

<table>
<thead>
<tr>
<th>Core competencies, such as Design, handled differently from other support functions</th>
</tr>
</thead>
</table>
| “We are starting to globalise, for example when it comes to [Product Category], we haven’t identified a global lead yet. But there is a globally responsible person who is sitting in [GHQs]. And [they are] identifying a partner in the [Country A], a partner in [Country B], and a partner in [Country C]”.  
*(P01, semi-structured interviews and network pictures)* |
| “You work with consumer science, you work with product line, you know what is happening in technology, you have a larger global group, we don’t want to repeat the same activity, there is global design lead for each category, this is a global team, and they will have leaders from each geographical location.”  
*(P03, semi-structured interview and network pictures)* |
| “We are the heart of the company, all other functions are supportive to be honest, and that’s why we are global in our reach. […] Product line, design, R&D, these are the most important functions when it comes to the product”  
*(P03, semi-structured interview and network pictures)* |
| “The Project management, the R&D and the Design, works very strongly as triangle.  
“These triangles are very much managed – whatever the location, there are triangles throughout”  
*(P04, semi-structured interview and network pictures)* |

Also discussed by P32 and 35.

*Changed over time:* “No, it’s never been, the historical part of it. We didn’t have a [RHQs] before so [Country A] was running its own business, [Country B] was running their own. We had Design and R&D in [Country C]”.  
*(P04, semi-structured interview)*
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Also analysed in public organisational documents and news outlets.

**Theme 6. Sub-relationships can be formal or informal**

| Sub-relationships can be formal and/or informal | “Even if you don't have the explicit of a power line of a direct reporting relationship, you have a build a strong enough relationship in informal networks to be effective. Because the strict power-line networks do not necessarily reflect the real world responsibilities”.  
*(P39, semi-structured interview)* |
|---|---|
| | “Then of course, there are some aspects that might deepen the relationships over time and then you might formalize processes, increase the frequency of structured interaction for example or structure interaction in better ways”.  
*(P17, semi-structured interview)* |
| | “Formally, we deal directly with the regional team, but informally we have some chit-chats on the product [with other sales companies]”.  
*(P24, semi-structured interview)* |
| | Oppose: “I think that all relationships are social, we are taking to people”.  
*(P38, semi-structured interview)* |

**Theme 7. Sub-relationships based on functional processes are regionally focused; those based on operational processes are globally focused**

| Functional sub-relationships are regional, but operational sub-relationships are global | “We are not global, we are very regionally set up. So you can look at it from an operational point of view, with a regional set up, you can look at it from a functional basis, which is our [starts sketching network picture] so we got operationally regional set ups and we got functionally global set up. And if I should illustrate the structure [draws more of network picture]”.  
*(P04, semi-structured interview and network pictures)* |
|---|---|
| | “Well again, the nature our business is complex [paused for emphasis] and we tend to operate in a matrix across certain
functions, and the functions have different geographic locations to operate it”.
*(P39, semi-structured interview and network pictures)*

“Today, we are company that is grown globally by acquisition. What the group is aspiring to be, and we are on a journey, is that the global organisation would provide 80%, I’m just picking a number randomly, would be a large portion of what we call ‘core process’, and that would be adapted, last 20, 30% to the local market”.
*(P37, semi-structured interview)*

“Manufacturing reports up its own chain, and non-manufacturing, in [product line] reports up a separate chain. The manufacturing managers in [Country] do not report to [the Managing Director of that Country], they report directly to [Regional HQ]”.
*(P35, semi-structured interview)*

Also discussed by P01, P02, P03, P04, P06, P07, P11, P12, P16, and P27, and analysed in network pictures and public organisational documents.

### 7.1 Sub-relationships that are shared support services are global

Shared services sub-relationships are global in focus

“The issue I see with this triad structure is that HQs is really the only one that talks to RHQ, [though] there are instances where there is indirect interaction [in the form’ of global product boards].
*(P01, semi-structured interview and network pictures)*

“Actually with [shared service], we need to have contact with the other [shared service] people in the other countries, like [RHQs], [Country], or [GHQs], or that sector, I just work with the people from [shared service], because the other relevant subject, I will pass through my colleagues only.”
*(P22, semi-structured interview)*

Also discussed by P02, P03, P04, P07, P10, P12, P21, P23, P28, P29, P30, P33, P36, and P39.

### 7.2 Sub-relationships that are support services are regional in focus

Support service sub-relationships are mostly regionally focussed

“There are different types of ‘subunits’, there are regional HQs that manage the country level and each country has its own ‘P&L’ sheet”.
*(P01, semi-structured interviews and network pictures)*

“It can be anything from, ranging from, the actual forecast results, if they have any issues, investment requests, even to the more mundane accounts payables, anything that touches the finance function…each of our plants run independently, so they’ve each
got their own full finance functions…it’s not just manufacturing finance, it’s a complete P&L balance sheet”.
(P02, semi-structured interview and network picture)

I am a channel, between the regional leadership and the local, in two ways, so there is now a better ability to raise issues and table them at a more regional level, at the same time, directives coming from regional, it should now make it easier to broadcast them now down to at the local level”.
(P17, semi-structured interview)

Also discussed by P10, P13, P14, P18, P20, P21, P24, P27, P31, P33, P41, and P42, and analysed from network pictures, public and private organisational documents.

<table>
<thead>
<tr>
<th>GSO (global service organisation) subunits are set up to manage, develop, and implement a range of regional support services</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I would say equal [in relation to interacting with a subunit and the GSO], the [subunit] in terms of the revenue and products, we buy a lot of terms of value, in terms of unit and complexities, its more challenging working with GSO, because here [points to network pictures] we have more than 10+ suppliers [the GSO has to deal with], here we just have one factory [points to network picture]”.</td>
</tr>
</tbody>
</table>
(P23, semi-structured interviews and network pictures)

| “In [geographic sector] we also work part of the team that is part of the [GSO], so they are the [product type A] and [product type B] specialists, working more of a coordinator for us, they are like an organisation that is coordinating with them and people with [geographic sector]”. |
(P08, semi-structured interviews and network pictures)

| “We are rolling out [service] globally, which will be controlled and managed through a [GSO], which also poses its challenges because then the local unit does not have ownership”. |
(P11, semi-structured interview)

The discussion of this type of subunit was also covered by P15, P17, P27, P29, P31, P33, and P34.
Public and private organisational documents also had data to support this theme.

<table>
<thead>
<tr>
<th>Theme 8. Sub-relationships that are support services are transactional in nature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support services sub-relationships can be transactional</td>
</tr>
</tbody>
</table>
| “We just click a button and then we get the invoices, there is no relationship”.
(P38, semi-structured interview)

| “We have interactions nearly daily with the factories, but that is all on the systems. No, we don’t talk unless there is a problem to be solved”. |
### Chapter 5. Analysis and findings

<table>
<thead>
<tr>
<th>Sales subunits see little structural change - just change in interactions</th>
</tr>
</thead>
</table>
| “In terms of structure, we have not changed that much, basically the same structure, only people change, but the structure is the same…there may be more interaction between different function, because…you know the matrix organisation, it’s become clearer, that its become more and more matrix…they have to interact with the regional people”.  
(P28, semi-structured interview) |
| “Yes, I mean, more people using it? I think so because the company is actually encouraging us to use it. [Organisational project] just kicked off last year”  
(P09, semi-structured interview) |
| “That’s true, our people here, [its quite stable] some people have been here [in Tersus] for 17 years”  
(P19, semi-structured interview) |
| “I think that is quite the same [the organisational structure] there hasn’t been a lot of change over the year, because the people in the region are the same.”  
(P20, semi-structured interview) |
| “Most sales staff here have worked here 15 years”  
“All of my team, [number] people, have worked more than 10 years”  
(P29, semi-structured interview) |
| “Asia Pacific, the way it is now, has been like this for only 5 years…before there was a lot of interactions between sales and regional headquarters”  
(P34, semi-structured interview) |
| Also analysed in public organisational documents. |

<table>
<thead>
<tr>
<th>Use of IT systems to problem solve small operational issues and transfer data one-way</th>
</tr>
</thead>
</table>
| “No we don’t really have to meet. We use chat programs, you know Lotus Notes? To talk to each other about little problems we are having and what to do”.  
(P13, semi-structured interview) |
| “We don’t really talk to them. They just email over the specifications and documents and we use them. We localise them but only with their [GHQs] approval”.  
(P21, semi-structured interview) |
| “You may have demand from local office, but it has to be discussed centrally […] we have an IT architecture board that validates the solution” |
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(P11, semi-structured interview)

Also analysed in private organisational documents.

5.3.2 Interaction between the content and types of multiplex subunit relationships and their emergent outcomes

In addition to the content and types of multiplexity within subunit relationships are their interactions. Such interactions lead to negative emergent outcomes such as increased tension and forms of alienation. For example, some participants mentioned the worries of managing misaligned legal and operational responsibilities. However, the majority of interactional effects appeared to be positive and used for problem-solving opportunities, such as the use of cross-functional teams and cross-national centres of excellence. These are outlined in Table 19.

Table 19 Representative quotes and secondary data segments for interactions of multiplex sub-relationships

<table>
<thead>
<tr>
<th>Theme 9. There is overlap between sub-relationships based on different functional and operational content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance and product marketing are bridging functions between functional and operational teams</td>
</tr>
</tbody>
</table>
| “If you mean engineering product development. Essentially product marketing are the interpreters if you like, often between brand marketing and a R&D person. They are the interpreters between the two”.  
“They will talk about finance, they are the financial bridge between sales and ‘hard’ finance, the best example by far is the product marketers though”.  
(P39, semi-structured interview) |
| “Some time, last time, we opened the office in [Country], because [Country] is our new channel, so we need to get the approval from the committee, and I need to work with the people from [RHQs], and work with the [GHQs] in Stockholm…but it’s through the sector, you can say it like that”.  
(P22, semi-structured interview) |
| Also discussed by P01, P02, P03, P04, P05, P06, P09, P13, P23, and P29, and analysed in network pictures and public organisational documents. |

9.1 Overlap between sub-relationships based on different functional and operational content for problem-solving purposes
### Problem-solving jobs and teams are cross-functional

<table>
<thead>
<tr>
<th>“We have this project that they have been working on for seven years. It’s finally in the last phase. They had to work with a number of different engineers and product heads around the world to solve this problem”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P01, semi-structured interviews)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>“We do try to spread it across the various plants to learn from each other”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P02, semi-structured interview)</td>
</tr>
</tbody>
</table>

Also discussed by P04, P31, and P39, and analysis of network pictures when participants drew in lines to represent the cross-functional sub-relationships existing within Tersus.

### Cross-functional teams for product categories

<table>
<thead>
<tr>
<th>“[Tersus] is quite a super matrix [structure], as they also have cross-functional roles, in depth”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P31, semi-structured interviews and network picture)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>“[s/he] has someone here in this function working for [she/him], and then over here as well [points to network picture], this is linked to another person sitting here in this function”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P13, semi-structured interviews and network pictures)</td>
</tr>
</tbody>
</table>

Also discussed by P02, P04, P35, and P39, and analysed in network pictures and private organisational documents.

### Centre of excellence is cross-national and cross-functional

<table>
<thead>
<tr>
<th>“We have a centre of excellence with this lady here [points to Country A subunit], another person here [points to Country B subunit], and [the head of the COE] sits here”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P13, semi-structured interview and network pictures)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>“For every launch, we got through a [framework] – an online system that has checkpoints to ‘pass’ before it gets sent to a steering committee for approval…there has to be team agreement and ‘checkpoint passing’, sometimes with advice and caveats”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P33, semi-structured interview and network pictures)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>“The system we are using is called for asia pacific, not only south each asia, China, Australia, Taiwan, Japan…we all use the same system”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P25, semi-structured interview)</td>
</tr>
</tbody>
</table>

Also discussed by P07, P12, P17, and P19, and analysed in network pictures and private organisational documents.

### Business partners hired to problem solve and

<table>
<thead>
<tr>
<th>“My relationship with [the subunits] is to drive regional and global HR priorities”</th>
</tr>
</thead>
</table>
### 5.3.3 Dynamic triad multiplexity of subunit relationships triggered by critical events

In this section, I present the different triad permutations that outline changes in the multiplexity of subunit relationships as a response to critical events within Tersus. This addresses the ‘networks as flows of activity and in continual states of transformation’ element

<table>
<thead>
<tr>
<th>work cross function and national boundaries</th>
<th>(P12, semi-structured interview and network picture)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A business partner finance person - which is kind of a bridging role”.</td>
<td></td>
</tr>
<tr>
<td>(P04, semi-structured interview and network picture)</td>
<td></td>
</tr>
<tr>
<td>“[s/he] is a business partner and so [s/he] has access to this person here in [Country A] [points to network picture], and this person here in [Country B]”. Well that is what a business partner does. They look for opportunities amongst all the subunits and where they can make the processes better. They sit close to the heads and analyse”.</td>
<td></td>
</tr>
<tr>
<td>(P01, semi-structured interview)</td>
<td></td>
</tr>
<tr>
<td>Also analysed in private organisational documents.</td>
<td></td>
</tr>
<tr>
<td>Interactions based on problem-solving not always formalised</td>
<td>“No it’s not always formalised like that. We just talk to each other when we need to solve a problem, so it is not like we have to talk to each other a certain number of times. We do have formalised meeting times but those are every week or so”.</td>
</tr>
<tr>
<td>(P38, semi-structured interview and network picture)</td>
<td></td>
</tr>
<tr>
<td>Also discussed by P28, and P29.</td>
<td></td>
</tr>
<tr>
<td>Global product teams that are cross-operational and cross-geographic</td>
<td>“We have these things called Global Product Boards…sometimes I get pulled into teams that are global depending on the knowledge needed”.</td>
</tr>
<tr>
<td>(P39, semi-structured interview and network picture)</td>
<td></td>
</tr>
<tr>
<td>“It’s really a journey, [it really started] when the global product boards were formed, which was about [number] years ago, it was a [Country] driven initiative, I mean the [Operational head] for the company is also an ex-automotive guy, from [Company], so I think, s/he is the one that implemented global product boards to really try to get a lot of commonality going forward”.</td>
<td></td>
</tr>
<tr>
<td>(P02, semi-structured interview)</td>
<td></td>
</tr>
<tr>
<td>Also discussed by P01, P11, and P39.</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 5. Analysis and findings

of my conceptual framework and utilises a process perspective to map such flows and transformations. The triadic permutations are boundaried by focusing on the overall MNE organisation re-structuring process that started almost a decade ago and continues to undergo change. As I focus on multiplexity and triad permutations, I term these as reconfiguration cases because subunit relationships and their sub-relationships appear to reconfigure to meet organisational requirements. I focus on two reconfigured triad cases within *Tersus* - the first is on the transition of a previous RHQ into a sales subunit and the second on the development of GSOs. The triad permutations presented are developed from the network pictures collected from participants and triangulated with secondary data. I also present a triad that did not change or permutate due to its rarity – a ‘localising product development’ triad. I include this triad as it presents a unique and positive subcase.

I use the content and types of multiplex MNE sub-relationships to present the findings on each triad. I first give a short overview of the triad and then a brief comment on how widely used the triad appears to be within *Tersus*. I then look at each Simmelian dyadic subunit relationship in terms of the original social network concept of multiplexity, which is the number of content-based interactions, such as those that are functional in nature. Then I outline whether the overall direction of the subunit relationship is two-way or one-way. A two-way direction is a more collaborative subunit relationship and one-way is more directive in nature. Lastly, I focus on the interaction effects – whether they are additive, neutral, or hindering to the subunit relationship and the triad. Together, all these dimensions represent the MNE organisational network concept of subunit relationship multiplexity.

*A ‘changing of the guard’ - reconfiguration subcases for changing RHQs*

This reconfiguration case involves two triads as identified in the analysis. The first is a ‘disseminating decision making’ triad (GHQs – RHQs – Sales) and focuses on the transition of a RHQs into a sales company. The second is a permutating triad; a sales company that changes its interactions as a new RHQs is established in a different country giving options for them to contact subunits not otherwise possible to access.

The triad is depicted as linked circles that represent subunits. The links represent relationships and their strength is symbolised by the line width, for example, a thicker line means a stronger relationship between the two subunits. The relationships are labelled alphabetically and are constant for each reconfiguration case. For example, in the first triad for the first case of a RHQs transitioning into a sales company, the relationship labelled ‘[a]’
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is the same relationship labelled ‘[a]’ in the next triad. The identity and role of the subunits can change, as the RHQs changes to a sales company. Further, ‘GHQs’ is the abbreviation for global headquarters, ‘RHQs’ for regional headquarters, ‘GSO’ for global service organisation, ‘Sales’ for sales company, and ‘Manuf’ for manufacturing company. I also note between the transitions in subunit identity, for example, Sales* represents the new sales company that was previously the RHQs and RHQs’ represents the new RHQs that was previously a sales company.

RHQs transitioning to a sales company

Before 2004, there were strong ([a] and [c]) subunit relationships between GHQs (G) and ‘Country A’ RHQs (R), and between ‘Country A’ RHQs and Country B’ Sales Company.

Subunit Relationship [a]
- *Low multiplexity*, concentrating on delivering support services (functional) and global strategy (operational).
- Level of *interaction was low* as ‘Country A’ RHQs was given much autonomy. A large number of employees were from the previously acquired business.
- *Directionality* of the sub-relationships was primarily one way – from GHQs to RHQs.
- *Interaction effects* of the sub-relationships to the relationship was *assisting* and *competing*. For example, GHQs assisted the RHQs with resources and there was some
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competition due to meeting productivity targets within a specified timeframe and the level of resources.

- Interaction effects of the sub-relationships to the triad were additive. For example, the [a] relationship added support services and resource allocation to the triad.

Subunit Relationship [b]

- Very low multiplexity, concentrating on communicating global strategies in a few functions, such as marketing (operational).
- Level of interaction was very low, as ‘Country B’ Sales company was expected to report to ‘Country A’ RHQs and was treated as part of ‘Country A’ sales company.
- Directionality of the sub-relationships was one-way – from GHQs to ‘Country B’ Sales Company.
- Interaction effects of the sub-relationships to the relationship were neural and assisting. For example, there was always a line of communication for the ‘Country B’ Sales Company to interact with GHQs. However, the majority of the interactions were about communicating global strategy and it was neutral as it did not directly add value to the sales company’s operations.
- Interaction effects of the sub-relationships to the triad were neutral in line with communication-based interactions. There was little opportunity to transfer best practices to other sales companies.

Subunit Relationship [c]

- High multiplexity, concentrating on providing support services and resource allocations, such as budget allocation and speaking for its sales companies (functional and operational).
- Level of interaction was high, as ‘Country A’ RHQs had much autonomy to allocate and direct resources for its sales companies as it saw fit.
- Directionality of the sub-relationships was two-way – the ‘Country A’ RHQs worked in tandem with ‘Country B’ Sales Company to meet both their requirements.
- Interaction effects of the sub-relationships to the relationship was assisting and competing. For example, there was the usual tension between meeting targets within a specific budget and the allocation of resources.
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- *Interaction effects* of the sub-relationships to the triad were *additive*. Effects were mainly productivity-based rather than adding value or presenting opportunities to transfer best practices to other sales companies or open new avenues for growth.

![Diagram of triadic structure]

This triadic structure in Tersus is typical in how it structures supporting services and resource allocation to its RHQs and Sales Companies. What is different is that ‘Country A’ RHQs is transitioned into a sales company. Planning was put in place to shift more support services to the new RHQs and to decentralise some to GSOs, such as an HR focussed GSO. In addition, they starting planning to close factories in ‘Country A’ and move offshore.

After 2004, a new RHQs was opened in ‘Country C’. ‘Country C’ was more central to SEA (its geographic horizon) in terms of trade and culture. This event highlighted a shift away from giving ‘Country A’ a high level of autonomy. It also signalled Tersus’ global strategy to restructure the organisation into one that was more efficient in its resource allocation. There were very strong new ([d] and [e]) subunit relationships between GHQs and ‘Country C’ RHQs (RHQs’), and between ‘Country A’ transitioning subunit (Sales*) and the new ‘Country C’ RHQs.

Subunit Relationship [a]

- *Low multiplexity* of sub-relationships. However, higher than before 2004. This was because the content of the interactions had changed due to the transitioning of Sales* and preparation for closing and moving manufacturing plants.
- Level of *interaction was low* but higher than before due to the transition. Sales* also started to be given less autonomy in its operations. One manufacturing plant was kept to meet localisation needs, but this will be moved offshore in the future.
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- Directionality of the sub-relationships was two-way because of the transition.

- Interaction effects of the sub-relationships to the relationship was assisting and competing. For example, the transition meant that Sales* lost some of its autonomy concerning budgeting and business planning.

- Interaction effects of the sub-relationships to the triad were additive and hindering. For example, it was additive in that the process was for organisational restructuring to reduce redundant relationships and interactions. It was also hindering in that reducing the autonomy of Sales* meant that there was less latitude for expanding business operations or allocating more resources.

Subunit Relationship [d]

- High multiplexity of sub-relationships. This is because of the restructuring of the previous operations in ‘Country C’ to become the geographic RHQs (functional and operational).

- Level of interaction is high as decision-making activities are slowly being moved to the new RHQs and back to GHQs (functional and operational).

- Directionality of the sub-relationships are two-way because of the development of the new RHQs.

- Interaction effects of the sub-relationships to the relationship was assisting. For example, the development of the new RHQs was to allow Tersus the ability to access the efficiency gains from moving manufacturing to a nearby SEA country.

- Interaction effects of the sub-relationships to the triad were additive (Sales* could access more support services) and hindering (Sales* lost autonomy).

Subunit Relationship [e]

- High multiplexity of sub-relationships. This is because of the development of RHQs’ and the transition of Sales* (functional and operational).

- Level of interaction is high as decision-making activities are slowly being moved from Sales* to RHQs’ (functional and operational).

- Directionality of the sub-relationships is two-way because of the development of RHQs’ and the transition of Sales*.

- Interaction effects of the sub-relationships to the relationship was assisting and hindering. For example, RHQs’ offered more support services but less autonomy for Sales*.
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- *Interaction effects* of the sub-relationships to the triad were additive and hindering. For example, RHQs’ is a new subunit that has more decision-making authority than Sales*.

*Sales company taking advantage of a unique opportunity*

This triad structure in Tersus is typical of how it structure supports services and resource allocation to sales companies through its RHQs.

Before 2004, the RHQs was situated in ‘Country A’. It provided support services, such as budgeting, to the sales companies under its purview. It also had a high level of autonomy. There were strong subunit relationships ([f] and [g]) between HQs and the sales companies (Sales¹ and Sales²).

Subunit Relationship [f]

- *Low multiplexity* of sub-relationships. However, higher than before 2004. This was because the content of the interactions changed due to the transitioning of Sales¹ and the preparation for closing and moving manufacturing plants.
- Level of *interaction was low* but higher than before due to the transition. Sales¹ also started to receive less autonomy in its operations. One manufacturing plant is currently kept to meet localisation needs, but this will be moved offshore in the future.
- *Directionality* of the sub-relationships was two-way because of the transition.
- *Interaction effects* of the sub-relationships to the relationship was assisting and competing. For example, the transition meant that Sales¹ lost some of its autonomy concerning budgeting and business planning.
- *Interaction effects* of the sub-relationships to the triad were additive and hindering. For example, it was additive in that the process was for organisational restructuring to reduce redundant relationships and interactions. It was also hindering that that the reducing autonomy of Sales¹ meant that there was less latitude for expanding business operations and more for the allocation of resources.
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Subunit Relationship [g]

- **High multiplexity** of sub-relationships. This was because of the restructuring of the previous operations in ‘Country C’ to become the geographic RHQs (functional and operational).
- Level of *interaction* was high as decision-making activities are slowly being moved to the new RHQs and back to GHQs (functional and operational).
- **Directionality** of the sub-relationships is two-way because of the development of the new RHQs.
- *Interaction effects* of the sub-relationships to the relationship were assisting. For example, the development of the new RHQs was to allow *Tersus* the ability to access the efficiency gains from moving manufacturing to a nearby SEA country.
- *Interaction effects* of the sub-relationships to the triad were additive and hindering. For example, it was additive in that Sales\(^2\) could access more support services. It was hindering in that Sales\(^2\) lost autonomy.

After 2004, the RHQs was moved to ‘Country C’ (RHQs’) and the previous RHQs is being transitioned into a sales company (Sales*). This transition has created some ambiguity for ‘Country D’ sales company (Sales\(^2\)). There are strong relationships between the RHQs – current and transitioning, and the sales company ([f] and [g]). As RHQs’ becomes the

This triad structure is not particularly common in Tersus. This is due to the unique event of a transitioning RHQs. Furthermore, the sales company is in a unique situation – although its business operations have been traditionally intertwined with Sales*, it can access new opportunities via other subunits, such as a manufacturing subunit in a different country.
predominant RHQs, the sales company is finding that interacting with them can be beneficial in some instances since RHQs’ also holds most of the decision-making activities.

**Subunit Relationship [f]**
- *High multiplexity* of sub-relationships due to the transitioning of roles and other restructuring events occurring in *Tersus* (functional and operational).
- *Level of interaction is high* due to the transitioning and shifting of decision-making back up to RHQs’ and GHQs.
- *Directionality* of the sub-relationships was two-way because of the transition.
- *Interaction effects* of the sub-relationships to the relationship was *assisting* and *hindering*. For example, the transition meant that Sales* lost some of its autonomy while RHQs’ gave more access to support services.
- *Interaction effects* of the sub-relationships to the triad were *additive* and *hindering*. For example, as stated earlier, Sales2 has ambiguity about which RHQs to interact with over some issues, such as accessing certain products for the local market.

**Subunit Relationship [g]**
- *High multiplexity* of sub-relationships (functional). This is due to the previous organisational structure. Sales2 still has to go through Sales* for the majority of decision-making activities. It is unclear if Sales* will transition fully into a sales company shortly. This is because *Tersus* is using a distributed structure for its support services, for example, parts of a GSO HR support services is spread across different business units in the Asia Pacific region.
- *Level of interaction is high* as the majority of decisions are still communicated from Sales* (functional).
- *Directionality* of the sub-relationships is primarily one-way from Sales* to Sales2.
- *Interaction effects* of the sub-relationships to the relationship was *assisting* and *hindering*. For example, Sales* still plays the role of RHQs for Sales2 – so they provide support services as well as resource limitations that Sales2 has to work within.
- *Interaction effects* of the sub-relationships to the triad were *additive*. Both Sales* and Sales2 have sales functions, such as after sales support. They are not *synergizing* as the cost leadership approach does not allow much room for innovative projects.
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Subunit Relationship [h]

- *Very low multiplexity* of sub-relationships (functional). There have been some instances where S² goes straight to the new RHQs for decisions. This is sporadic as Sales* was still the main conduit for support services and resource allocation.

- Level of *interaction is low* for two reasons. As stated before, Sales* still acts as the conduit for resource allocation and product line access. In addition, decision-making activities are also being re-centralised in Tersus.

- *Directionality* of the sub-relationships is primarily one-way due to the type of interactions, which involves asking for more resources.

- *Interaction effects* of the sub-relationships to the relationship were assisting.

- *Interaction effects* of the sub-relationships to the triad were additive and occasionally hindering. Sales² bypassing Sales* has some political ramifications.

A non-reconfiguration case – ‘Localising product development’ triad

This triad structure is not common in Tersus as sales subunits and manufacturing subunits often do not talk to one another. The rare occurrence of such triads does not seem to be influenced by the push by Tersus to change organisational structures to pursue a cost leadership.

In some very rare instances, sales subunits can work together with manufacturing subunits to develop a localised product or product line. These localised products are often re-designed to meet the needs of a particular market using the current manufacturing platform available. They are not re-designed from new technical specifications. RHQs still manage sales units and manufacturing subunits (Manuf) closely ([a] and [b]). However, sales unit and manufacturing subunits can interact focused on this event.
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Subunit Relationship [a] and [b]
- **High multiplexity and level of interaction** due to the role RHQs plays in delivering support services and resource allocation.
- **Directionality** of the sub-relationships is one-way as the majority of decisions are made at RHQs.
- **Interaction effects** of the sub-relationships to the relationship and the triad are **assisting** and **hindering** as RHQs also creates restrictions on resource allocation.

Subunit Relationship [c]
- **Very low multiplexity** of sub-relationships (functional). There have been some instances where S interacts with M for a localised product or product line.
- **Level of interaction is low**, at first, the sales company may interact with manufacturing subunit higher than normal but after the localised product is delivered the interactions fall back to formal and transactional lines. However, latent relationships for future interactions are maintained.
- **Directionality** of the sub-relationships is two-way due to the collaborative effort of developing localised product or product line.
- **Interaction effects** of the sub-relationships to the relationship and the triad were **assisting** and **additive**. Such rare instances are always positive in terms of meeting goals such as meeting local market supplier needs and developing face-to-face relationships between subunit employees.

5.4 Temporality of subunit network relationships

The temporality of subunit network relationships is conceptualised as the reconfigurations of MNE triads. However, during data collection and analysis, it became apparent that research participants experience temporality and time beyond that of just chronological to include a kairological perspective. Similar to the MNE subunit relationship network concept of multiplexity, such relationships also appear to experience their own types of temporality or chronotypes. The majority of such chronotypes are specific to the MNE and their subunit relationships, such as the difference between the group and subunit time.

Table 20 outlines the data structure of the key themes that emerge from the analysis. Similar to Table 18 and 19, the first-order categories are the interpretation of quotes and secondary
data segments according to the conceptual framework. Representative quotes and data segments are presented in Table 21. The second-order themes relate directly to my second research question, *how does temporality influence subunit MNE network relationships?* More specifically, I can offer specific chronotypes and the interactional effects of such chronotypes that are tailored to the MNE organisational network structure. Figure 14 presents the triangulation of data when examining the concept of temporality. Given the process perspective I use, the majority of data came from network pictures with support primarily from interview data.

**Figure 14 The proportional triangulation of the data for defining and categorising subunits’ temporality**

5.4.1 *Chronotypes of temporal subunit relationships*

Chronotypes of subunit relationships include kairological time and are divided into event time, relationship time, and mirror-time. Event time represents the temporally based activities within the critical event the triad is experiencing. Relationship time is different in that the focus is on new, old, or latent interactions between subunits. Lastly, mirror-time emerged due to some participants considering the alternate paths *Tersus* and its subunits could have taken. In addition, participants also categorised their thoughts regarding ‘The Group Time’ and ‘The Subunit Time’. Some subunits experienced more of a chronotype than others – this concept is explained further in section 6.4.3. In addition to experiencing different chronotypes, participants within subunits also patterned movement between the chronotypes, which I
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categorise as the interactional effects of temporality. These are traversing (movement from one chronotype to another), contradicting (opposing chronotypes), and juxtaposed (chronotypes working in tandem).
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Table 20 Data structure for chronotypes of temporal subunit relationships

<table>
<thead>
<tr>
<th>CONCEPTUAL FRAMEWORK</th>
<th>FIRST-ORDER CATEGORIES</th>
<th>SECOND-ORDER THEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporality – Time, process, and age of relationships is a significant issue</td>
<td>Sub-relationships experience different types of temporality</td>
<td>1. Temporality has different chronotypes</td>
</tr>
<tr>
<td>Temporality – dynamic and contextual</td>
<td>Sub-relationships experience clock time</td>
<td>1.1 Chronological/clock time</td>
</tr>
<tr>
<td></td>
<td>Sub-relationships experience event time</td>
<td>1.2 Kairological/event time</td>
</tr>
<tr>
<td>Temporality – Latency and relationship termination is a managed process/inevitable</td>
<td>Sub-relationships have a process: - formation - activation - latency - persistence - death/termination</td>
<td></td>
</tr>
<tr>
<td>Temporality - Emergent concept</td>
<td>Sub-relationships experience mirror-time</td>
<td>2. The MNE has structure-specific temporality</td>
</tr>
<tr>
<td></td>
<td>Subunits experience ‘The Group’ time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subunits experience ‘Subunit’ time</td>
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<tr>
<td></td>
<td>Sub-relationships can traverse time</td>
<td>3. There are interactions between different types of temporality</td>
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<td>Sub-relationships can experience contradicting time</td>
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<td></td>
<td>Sub-relationships can experience juxtaposed time</td>
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### Chapter 5. Analysis and findings

#### Table 21 Representative quotes and secondary data segments for temporality

| Theme 1. Temporality has different chronotypes | 
| Temporality can be relational or transactional | “Well, I don’t interact with them, I mean face to face. We have an [IT] system in place where we just send what they need”. *(P36, semi-structured interview)* |
|  | “You need the number of interactions, over time, to really build those relationships. I go there every month, or so to meet people face to face”. *(P38, semi-structured interview)* |
|  | “Age of the company is still determined by the age of the people in the network…and how the knowledge has been shared”. *(P17, semi-structured interview)* |
|  | Also discussed by P19, P20, P24, P28, P32, and P35, and analysed in network pictures. |
| 1.1 Chronological time | “Those interactions are scheduled, every day or every week, we update them or talk about solving whatever issue has [come] up”. *(P02, semi-structured interview and network picture)* |
| Sub-relationships experience clock time | “See here [draws on network picture], there are some reporting lines here that go back to here. That’s all set-up before for the project time-frame”. *(P04, semi-structured interview and network pictures)* |
|  | *All participants mentioned ‘clock’ time when sketching network pictures.* |
| 1.2 Kairological time | “There are some events that happen between us [the subunit and the other two actors in the triad]. And the events do change the interactions and relationships we have with those others [points to actors in the network picture]. Yes, sometimes those interactions happen more because we need some information, some audits, etc.”. *(P04, semi-structured interview and network pictures)* |
| Sub-relationships experience event time | “It goes in and then it comes out, it goes in and then it comes out, suddenly we all become very localised and then we become very globalised and then [repeats] this is an entropic thing. You have to respond to the times, to situations, the financials, what the demands of the organizations are. Or demands of the companies”. *(P03, semi-structured interview and network picture)* |
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<table>
<thead>
<tr>
<th>Sub-relationships are based on a process</th>
<th>“These relationships do have a type of lifecycle. But in reality, I will always be interacting them into the future. There will always be problems to solve!” (P36, semi-structured interview)</th>
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<tbody>
<tr>
<td></td>
<td>“Simpler one is the mentoring process, we have a global mentoring process, but it has some flaws, and knowing that the flaws may have an impact with the region, so I decided to have a meeting with all the region heads for feedback for the [geographic sector] mentoring/mentee programme”. (P07, semi-structured interview and network picture)</td>
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<td>“This line here, [operation] is a new process, we are developing…” (P13, semi-structured interview and network pictures)</td>
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<td>“[Operation] is in a state of transformation, we have to adapt the processes and change the mind-set…on the value of [Operation]”. (P30, semi-structured interview and network picture)</td>
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<td></td>
<td>Also discussed by P02, P04, P06, P08, P10, P12, P15, P16, P25, P32, and P35, and analysed in network pictures and field notes using process coding.</td>
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</table>

- Formation

| “Sometimes we come up with a business case, then it goes ‘up’, and we get the go ahead to start talking to those people [in other subunits] but most of the time we are told who to talk to specifically for a project”. (P35, semi-structured interview and network picture) |
| Also discussed by P01, P02, P04, P08, P13, P23, and P30, and analysed in network pictures using process coding. |

- Activation

| “I guess that would happen with the R&D focussed projects. [Country] was a success story for them, so they are trying to access some experts there for their project”. (P39, semi-structured interview) |
| “We are relatively new. So nothing is really ‘activated’. Also, most of the people here have been in the same company”. (P22, semi-structured interview) |
| “Not really, sometimes we talk to others, like a best practice sort of thing. But quite often we have talked to them before. As you |
Chapter 5. Analysis and findings

| - Persistence | “The history of growth and expansion is acquisition. This has led to a large number of brands which led to a consolidation of brands and manufacturing”. (P01, semi-structured interviews and network pictures) |
|               | “The structure is always the same, but the importance of each [component] is changing, but I cannot dwell on that”. |
| - Latency     | “We don’t really experience ‘latency’ like you explained. There are times when we don’t communicate directly with [subunit] but there are always reporting lines that go back, or just emails that go back and forth”. (P01, semi-structured interviews) |
|               | “When you are doing your job, and things are going as they should be, you don’t get direct enquires. Sometimes it’s best to be left alone and get on with it”. (P38, semi-structured interviews) |
|               | “I guess there are times when you have interacted with them before, but that is for other projects and that doesn’t really happen often”. (P36, semi-structured interviews) |
|               | “Some projects take years to come to fruition. Some have been going on for ten years, and it is only now that we are getting somewhere”. (P39, semi-structured interviews) |
|               | “New relationships are part of the project, and as the project moves on, those relationships will be phased down again…project driven, there will be relationships that are short-term…they won’t disappear, they will still be there…and be reactivated…in this case [it’s been done consciously]”. (P17, semi-structured interview) |
|               | Also analysed in network pictures and using process coding. |

| - Latency     | “At the start of the [project] stage, we interact with supply chain and with [RHQs] which has a package for [Geographic region]”. (P33, semi-structured interview and network pictures) |
|               | Also analysed in network pictures, social media, and public organisational documents using process coding. |

| - Latency     | probably found out, [Tersus] doesn’t really have a lot of greenfield investments. They tend to acquire to enter the market usually”. (P35, semi-structured interview) |
|               | Also analysed in network pictures, social media, and public organisational documents using process coding. |

- Latency

- Persistence
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<table>
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<tr>
<th>Sub-relationships experience ‘mirror’ time</th>
<th>(P03, semi-structured interview)</th>
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<tr>
<td></td>
<td>“What I have only seen, is change…it was a very difficult company at the beginning”.</td>
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<td>(P10, semi-structured interviews and network picture)</td>
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<td>“As an organisation, we have been, you know that [Tersus] is close to 100 years old, more than 60% have been acquired, so it is all inorganic growth, it is not organic. Today if I look at it, we are a global organisation, but we are not completely centralised. 30-40% is centralised, unlike certain other multinationals”.</td>
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<td>(P12, semi-structured interview)</td>
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<td>“[Tersus] is very different, it’s very stable, compared to other companies…I think it’s a different philosophy, [Competitor] they change their channel strategy every 6 months…we have a 5 year plan”.</td>
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<tr>
<td></td>
<td>(P18, semi-structured interview)</td>
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<td></td>
<td>“Also analysed in network pictures and organisational documents.”</td>
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<tr>
<th>- Death/termination</th>
<th>(P38, semi-structured interview)</th>
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<td></td>
<td>“Yes, when we finish a project, you naturally stop talking to that [subunit], but that’s normal anyway, and you meet the people you were talking to at other meetings”.</td>
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<td>(P39, semi-structured interview)</td>
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<td></td>
<td>“You could say that when the subunit shuts down that is when the relationship stops but then new relationships start up with where the factory gets moved to”.</td>
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<td>(P35, semi-structured interview)</td>
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<tr>
<td></td>
<td>“Some businesses get made separate from [Tersus]. For example [brand] is now their own business”.</td>
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<td></td>
<td>(P10, semi-structured interview)</td>
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<tr>
<td></td>
<td>“If you don’t survive today, you won’t have a future anyway…the history doesn’t matter so much…if you look at history…you looks at companies…companies disappear”.</td>
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<tr>
<td></td>
<td>“Also analysed in network pictures and organisational documents using process coding.”</td>
</tr>
<tr>
<td>Sub-relationships experience ‘mirror’ time</td>
<td>(P39, semi-structured interview)</td>
</tr>
<tr>
<td></td>
<td>“I guess if [Tersus] had taken a different approach to the way we grow. We have inorganic growth so we would look very different today if we had taken a different route”.</td>
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### Chapter 5. Analysis and findings

<table>
<thead>
<tr>
<th>Theme 2. The MNE has organisational structure specific temporality</th>
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<tr>
<td><strong>Subunits experience ‘The Group’ time</strong></td>
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<tr>
<td>In general, participants that experience ‘The Group’ time, talked about the Tersus and its current strategies as part of their own subunit’s strategy, words and phrases they used includes,</td>
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<tr>
<td>“What we at Tersus aim to do…”</td>
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<td>“What the Tersus, what our vision is…”</td>
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<td>“Up until a couple of years ago, all the companies have been largely independent, and that is a result of how [Tersus] as a company as grown, it has been through acquisition, and [Tersus] is really only starting on the path of really going truly global, similar to what automotive [industry] did several years ago. So as a result of that product development is starting to get a lot more centralised and global, so I think the biggest change going forwards, is going to be the loss of some of the independence of the sales companies. And really start acting as a true global company. So that ranges from sourcing decisions, as in where...”</td>
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countries are actually getting their products from, and that is providing the right information to make sure that is the optimal decision for the group”.

*(P02, semi-structured interview)*

“Resource is one thing… I see that not catching up as quickly as we need… we are still lagging behind, also the complexity of the [Tersus] [operational] system, so there is a lot of integration that we need to manage”.

*(P08, semi-structured interview and network pictures)*

“The current structure is good for management, in terms of [GHQs], but it is slow… however it has just changed so it will stay like this for a bit”

*(P33, semi-structured interview)*

“[Tersus] suffers [from this] because it was a company that grew by acquisition… so while [GHQs] feels that we are global, those of us at the other ends of the earth still struggle with that… but! we are much more accepting of the fact, that we are part of a global company”.

*(P35, semi-structured interview)*

“Even though we try and strive for [global Tersus], everywhere in the world, we have to competing priorities, at the end of the day we are measured and judged by your own performance, which to some degree goes against the [global Tersus], where what might be good for [Tersus] globally might not be so good for [Tersus] [Country]… so you need to find a balance”.

*(P36, semi-structured interview)*

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<tr>
<th>Subunits experience ‘Subunit’ time</th>
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<tr>
<td>In general, participants that experience ‘Subunit’ time talked about their subunit as a business unit and did not intermingle talk of Tersus as an MNE Group with their own. The words and phrases used drew a clear distinction between their subunit and Tersus. They also talked about the future and the past of their subunit as separate from Tersus.</td>
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“The good news is, is that I have seen both worlds […] in a decentralised company like [Tersus], puts the sector in charge of its own fate, which is perfect, because we don’t have a father overseeing and saying “no you don’t do this, you do that”… so the sector is in charge of its fate, and may have the potential to grow more than what the parent company expects”.

*(P14, semi-structured interview)*

“From the [operational] perspective, there was a time when the structure, for each of the countries, and the region, was more or
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less similar. Back then, the business wasn’t so big right, so it wasn’t so complicated”.
(P06, semi-structured interview)

“When it comes to internal, it’s a lot to do with personalities, that relationship between me as a connection to that sales company will be driven largely by personalities, I think, not necessarily the age, it might take one month and then I would have tighter organisational relationship with that one sales company although its new compared to some of the old[er] one[s]”.
(P17, semi-structured interview)

“Before, if you are talking about 2007 and 2008, when it was booming, people would change jobs like <clicks fingers>, because there is so many companies coming in [to Country]...but now it has stabilized. My team, we haven’t had a significant turnover in the last 2 years”.
(P24, semi-structured interview)

5.4.2 Interaction between chronotypes of subunit relationships and their emergent outcomes
In addition to the chronotypes of a subunit, relationships are their overall interactional effects. Some sub-relationships fluctuate between relationship formation and relationship activation time as they establish persistent interactions. Others have to divide their time between the group time and subunit time to manage one-off global projects and their usual business processes.

To reiterate, for the ‘Theme 3 – There are interactions between different types of temporality’, there were three subthemes, ‘sub-relationships can traverse time’, ‘sub-relationships can experience contradicting time’, and ‘sub-relationships can experience juxtaposed time’.

For the first subtheme of ‘sub-relationships can traverse time’, process and network picture data showed that the patterning of different events the subunit experiences sometimes led to the subunit switching between different chronotypes. For example, at the time of data collection, Tersus was implementing a global sourcing organisation. This GSO was focused on logistics. Some research participants mentioned that there was a previous HR-focused GSO project that had been made secondary to the new GSO implementation. Looking at industrial factors, this was related to the buyout of a major competitor, reaction to the global financial crisis of the late 2000s, and the failure to succeed in large Asian markets. Research
participants had to break their time into meeting the current needs of *Tersus* and meeting the needs of their subunit.

For the second subtheme of ‘sub-relationships can experience contradicting time’, the process and network picture data showed that the patterning of different events the subunit experiences sometimes led to processes working against each other or creating tension. For example, there is tension between reducing redundancy in organisational sourcing and meeting the local market requirements that adhere to the regional product catalogue.

For the third subtheme of ‘sub-relationships can experience juxtaposed time’ process and network picture data showed that the patterning of different events the subunit experienced sometimes led to the processes working in tandem and creating more opportunities for the subunit. For example, the growth in the SEA geographic region meant that a specific country subunit could present opportunities and access resources for a largely unknown market.

### 5.4.3 The dynamic triadic temporality of subunit relationships as triggered by critical events

The triad sub-cases I present in this section are different from the previous cases presented in the section on multiplexity. The focus here shifts towards the idea of temporality to answer the research question, *how does temporality influence relationships between MNE subunits?* I build on the analysis offered in the previous examples by considering the multiplexity of the sub-relationships regarding content, directionality, and interactions. However, the sub-relationships that I will cover are unique in that they focus on the inclusion of the GSOs. The GSOs present a subunit different from the traditional subunits of GHQs, RHQs, sales companies and manufacturing plants in that they do not often have one physical location, are a conglomeration of services under one function and draw personnel from a number of other subunits. They are also instrumental in creating complexity in *Tersus* by adding sub-relationships that ‘muddy’ the hierarchical boundary between HQs subunits and non-corporate subunits.

Given the nature of GSOs, it is not surprising that their relationships with other subunits are high in multiplexity and levels of interaction. Keeping those conditions constant, I analyse the concept of the temporality of subunit relationships. In particular, I look at significant chronotypes – chronological and kairological as well as MNE structure-specific time. Chronological time is the traditional clock-time that sub-relationships experience. Kairological time is based on the context of the subunit relationship, the events it experiences
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and includes pluralistic time, such as mirror-time. This finding goes beyond the current perspective of time in IB by presenting a pluralistic view of chronotypes (Welch & Paavilainen-Mäntymäki, 2014). Within the kairological relationship, time is formation, activation, latency, persistence, and death/termination. Mirror-time is an emergent concept from the data – in some cases, participants presented their thoughts on the organisational process and its structure in terms of ‘if a different strategy had been/is being pursued – the organisational structure would be different’. I call it mirror-time due to the idea that such thoughts present a ‘parallel world’ or outcomes that have the same organisational and industrial conditions as the ‘real world’.

After chronotype is the MNE structure-specific time of ‘The group time/subunit time’. This emerged from the analysis when some subunits appear to run ‘more in step’ or in close alignment with the GHQs requirements compared to others that were more focused on their own subunits and its processes. For example, language and the focus of some interview data was on how subunits could contribute to the Tersus as a whole and be ‘good group citizens’. Participants from such subunits were also more knowledgeable about Tersus’ current dealings and future strategies for their subunit. Participants from subunits that experienced more ‘subunit time’ talked more about their subunit as the locus of control and were knowledgeable about their subunits’ strategies towards handing ‘the group’s’ strategies.

Lastly, I cover the interactional effects of the temporalities experienced by the subunits in their subunit relationships concerning the specific relationships and the whole triad. The interactional effects are categorised in terms of traversing, contradicting and/or juxtaposing. Traversing is when the subunit relationship switches from one type of temporality to another, such as between chronological and kairological time. Contradicting is when chronotypes influence each other negatively. Juxtaposing is when chronotypes continue in tandem without influencing each other.

The triad form I cover first concerns the integration of the new GSO subunit within Tersus. The changes in Tersus are related to its raison d’être, that is, its role to remove redundancy and increase efficiency in the manufacturing logistics systems. The second triad form is based on how the new type of subunit leads to a change in the traditional hierarchical organisational structure for managing manufacturing subunits.
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‘The integration of a new form of subunit, the global service organisation’ – integration subcase

The integration sub-cases I cover involves three types of triads identified from my analysis. The first integration case includes a ‘supplying intra-organisational subunits’ triad that permutates into an ‘increasing organisational efficiency triad’ with the primary aim of creating an internal service process. The second sub-case is a ‘disseminating decision making’ triad that also permutates into an ‘increasing organisational efficiency’ triad and focuses on creating a more heterarchical network triadic structure.

Creating an internal service organisation

Before 2013, RHQs situated in countries with a number of manufacturing subunits or central geographic areas used to manage the manufacturing plants (Manuf¹ and Manuf²) to meet their sales companies’ demand levels and product line needs. There were previous attempts to consolidate manufacturing practices to reduce cost and redundancy, though these were not systematically integrated into the organisational structure.

There were strong subunit relationships between RHQs and their manufacturing plants ([a] and [b]) over time. There was very little interaction over time between the plants themselves unless they were working together on a product line ([c]).
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Subunit Relationship \([a]\)

- **High multiplexity and high level of interaction** as RHQs is the main conduit through which sales subunits acquire products to sell. RHQs set the organisational objectives for Manuf\(^4\).

- Both subunits, RHQs & Manuf\(^3\) work within the *chronotype* of *clock time*. This is due to the manufacturing processes as well as the demand cycles of the product ranges available for the geographic region that RHQs serves.

- In addition, \([a]\) presents types of *kairological* time. In particular subunit relationship’s *persistence* and *latency*. It is persistent because Manuf\(^3\) was a previous firm acquired by *Tersus* and so the relationship is path-dependent, based on its organisational history. It also experiences latency, as before 2013 *Tersus* had a strategy of giving a higher amount of autonomy to R than it does now. There was latency in the interaction in \([a]\) concerning the day-to-day activities of Manuf\(^4\).

- Participants involved in \([a]\) also experienced *mirror-time*. This is because the participants gave retrospective accounts of \([a]\) and ‘what might have been’ although they take care to mitigate their accounts with acknowledging the role of hindsight. Another reason is the traditional and hierarchical nature of the subunit relationships between RHQs and manufacturing plants at that time. Participants remarked that there would have been a different organisational structure if *Tersus* had pursued an organic growth strategy instead of a high number of M&As.

- The relationship \([a]\) also had different proportions of ‘The Group Time’ and subunit time. RHQs ran on ‘The Group Time’. Although they devoted time to managing the resource allocations for Manuf\(^4\) and others, their primary focus was still on meeting the needs of GHQs. Manuf\(^3\) meanwhile ran primarily on ‘Subunit Time’ – based on their needs to meet the requirements of RHQs. Therefore the proportion of *The Group Time/subunit time* for \([a]\) is equivalent.

- **Interactional effects** of temporality on sub-relationships are juxtaposed. The subunit relationship \([a]\) encountered the usual juxtaposition of clock and event time, both RHQs and Manuf\(^3\). For example, the transactional demand forecasting and meeting supply interactions that adhere to clock time and the event times focused on setting budgets and other resource allocation tasks.
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- *Interactional effects* of temporality on the triad are also *juxtaposed*. The links between manufacturing and RHQs were typically autonomous and did not influence other similar relationships with other manufacturing units.

Subunit Relationship [b]
- This subunit relationship is run the same as [a]. Manufacturing subunits ran their operations and were given a high level of autonomy concerning management of their operations.

Subunit Relationship [c]
- *Low multiplexity* and very low level of interaction as manufacturing subunits did not have many reasons to interact with one another. They might have interacted with one another if they were pulled into regional or global product projects. For example, if the factories are within one product line, they may share some platforms.
- Because of the rarity of interactions that are project based, [c] presents types of *kairological time* – specifically relationship formation/activation and latency.
  Participants mentioned that any interactions between manufacturing subunits, although rare, were related to regional or global product projects. Such projects can run for over a decade. In this case, [c] represented latent relationships previous set up at the start of the project. They were reactivated as needed.
- Subunit relationship [c] is also primarily on *The Group Time* due to the nature of the interactions.
- *Interactional effects of temporality* on sub-relationships and the triad were both *juxtaposed*. Subunit relationship [c] were handled as part of the day-to-day operations and did not influence the triad.
This triad structure in Tersus is now becoming the norm for how it structures its support services to gain efficiencies of scale (e.g. bargaining power) and focus.

After 2013, Tersus started to implement more Global Service Organisations – in this case, a global sourcing subunit for after sales service parts (GSO). It provided support to the RHQs and its sales companies by managing parts used by the after sales service to fix products under warranty. There are strong relationships between all subunits ([b], [d], and [e]).

Subunit Relationship [d]

- High multiplexity and high level of interaction due to the core organisational activities carried out by the subunits. GSOs are used as the ‘connective’ tissue that links all relevant manufacturing units together (both internal and external) to gain efficiencies and lower redundancies and wastage. GSOs also have a higher bargaining power with internal and external suppliers.

- The chronotypes experienced by subunit relationship [d] are clock time and kaiological relationship based. Clock time as R and GSO develop their relationship into one that runs smoothly day-to-day. Kaiological time – specifically relationship formation transitioning to persistence. As the new subunit becomes integrated into Tersus its role, types of interactions and resources will become solidified. New sub-relationships have been created for [d], and in other instances, previous sub-relationships have been subsumed into the GSO’s scope of operations.

- Both subunits are primarily on The Group Time due to the level of their operations.

- Interational effects of temporality on the sub-relationships and the triad are traversing and juxtaposed as both subunits fluctuate between clock and event time (traversing) to create solidified relationships interactions (juxtaposed).
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Subunit Relationship [b]
- Subunit relationship [b] still enjoys a highly multiplex and high level of interaction after 2013. However, it reduces slightly as the GSO is integrated into the triad. This is because some functional and operational sub-relationships are moved to subunit relationships [d]. It is not reduced completely as Manuf2 has a lower level of autonomy due to more decision-making activities moved to RHQs and the GSO.
- The chronotype of clock time is still significant due to organisational efforts to reduce uncertainty in the supply logistics. However, kairological relationship time changes to a focus on persistence due to the reduced level of autonomy.
- Participants involved in this subunit relationship experience significantly less mirror-time. This is due to the unique and novel nature of the new sub-relationships created in the triad due to the implementation of the GSO. This does not give them enough mental space or hindsight to think of different temporal pathways for the current organisational processes.
- RHQs is still on The Group Time and Manuf2 on subunit time.
- Interactional effects of temporality on sub-relationships are juxtaposed as RHQs and Manuf2 continue their interactions to meet the demand and supply of manufactured products.
- Interactional effects of temporality on the triad are juxtaposed and contradicting as RHQs and Manuf2 continue with their subunit interactions. However, there is now more opportunities for contradicting as the decision making is shifted away from the manufacturing units and towards the RHQs and GSO.

Subunit Relationship [e]
- High multiplexity and high level of interaction due to the role of the GSO as an intermediary. The level of multiplexity and interaction is not as high as subunit relationship [d] due to the GSO’s scope of operations.
- Similar to subunit relationship [d], [e] also has clock time and relationship-based kairological chronotypes. This is also due to the integration of the GSO into the triad. Clock time in terms of the transactional interactions between GSO and Manuf2 and relationship time for relationship formation transitioning to persistence.
- Due to the role of the GSO in terms of decision-making activities, subunit relationship [e] is also skewed towards The Group Time.
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- The interactional effects of temporality on sub-relationships and the triad are also similarly traversing and juxtaposed as organisational activities and objectives are solidified.

*Creating a heterarchical triad*

Before 2013, manufacturing subunits were managed by RHQs for each geographical market region. The GHQs behaved in a typical hierarchical manner, with a strong relationship with RHQs ([a]), which then translated strategies and resource allocation activities. This leads to a strong relationship between RHQs and manufacturing subunits ([c]). The relationship between GHQs and manufacturing subunits, therefore, weaker ([b]).

**Subunit Relationship [a]**
- *High multiplexity* and *high level of interaction* as RHQs and GHQs represent the traditional hierarchical decision-making structure of *Tersus*. It is slightly lower than [c] as the RHQs was given more autonomy before 2013.
- The chronotypes of [a] are *clock time* and *kairological – event, relationship and mirror-time*. Subunit relationship [a] experiences clock time in terms of the usual daily running of the regional operations of *Tersus*. It also experiences event time as GHQs institutes various global and regional projects, such as the acquisition of a new subunit or the development of a new product. There is also relationship time in terms of persistence and
activation related to such events. Lastly, participants did mention mirror-time as they spoke about the different pathways GHQs and RHQs could have taken concerning manufacturing strategy.

- Due to the role of GHQs and RHQs, the subunit relationship is on *The Group Time*.
- The interactional effects of temporality on sub-relationships and the triad is *juxtaposed* as the subunit relationship is to support a productive and less restrictive internal organisational environment.

**Subunit Relationship [b]**
- *Very low multiplexity* and *low level of interaction* as RHQs is the primary channel through which manufacturing subunits acquire support and resources.
- The subunit relationship [b] mainly experiences *event time* as GHQs and RHQs interact for intermittent product projects. It *does not* experience a significant level of relationship time, as it does not have a developed level of interactions. In this regard, it is not path dependent for relationship time. This also suggests why participants *did not* speak about mirror-time for this relationship.
- As the interactions between GHQs and Manuf are related to specific one-off projects, the subunit relationships also experience *The Group Time*.
- The interactional effects of temporality on sub-relationships and the triad are *juxtaposed*. This is also due to the intermittent temporal nature of the subunit relationship.

**Subunit Relationship [c]**
- *High multiplexity* and *high level of interaction* as RHQs is the main conduit through which Manuf acquires resources and key decisions.
- The subunit relationship [c] experiences a large range of chronotypes. *Clock time* in terms of the many operational and functional interactions between the two subunits. *Kairological time* – *event, relationship* and *mirror-time*. *Event time* concerning the intermittent global and regional projects of Manuf. *Relationship time* concerning *persistence*. Participants presented a large amount of mirror-time as the handling of manufacturing operations and logistics was a key issue within the critical event of GSO integration.
- RHQs is on *The Group Time* and Manuf is on *subunit time* due to the autonomy both types of subunit enjoyed.
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- Interactional effects of temporality on sub-relationships and the triad are *juxtaposed* and *traversing* as both subunits worked together to meet their objectives but had autonomy to meet their requirements. As manufacturing units were often located within or near RHQs geographically and also served the same geographic region, their overall strategies were more likely to be aligned.

This triad structure appears to be a form increasingly present in Tersus’ organisational structure. In this form, Tersus appears to be moving towards a more distributed and heterarchical structure. As current GSOs are integrated further, and new GSOs created, there will be more such triad forms present in Tersus.

After 2013, *Tersus* started integrating GSOs for various support services to reduce redundancy in the organisational structure. Following on from the previous form of managing manufacturing subunits – a current triad form creates a strong relationship between the GHQs, RHQs and the GSO. There are strong relationships between all subunits given the role of the GSO ([a], [d] and [e]).

**Similarities between subunit relationships [a], [d] and [e]**

- *High multiplexity* and *high level of interaction* as GHQs, RHQs and the GSO represent the highest level of organising and decision-making subunits in *Tersus*.
- All three subunits are on *The Group Time* for the reason stated above.
- The interactional effects of temporality on sub-relationships and the whole triad are complex – it is *traversing*, *contradicting*, and *juxtaposed* due to the integration of the GSO determining its scope and depth of operations.
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Dissimilarities between subunit relationships [a], [d] and [e]
- The three subunit relationships differ in the chronotypes experienced.
- Subunit relationship [a] experiences clock time in terms of the traditional reporting lines. This has increased as decision-making activities have been migrated back to GHQs after 2013.
- Subunit relationship [d] and [e] experience clock time due to the interactions focused on the integration of the GSO into the organisational structure but not to the same level as [a].
- Subunit relationship [a] also experience the event (the integration of the GSO) and relationship time, specifically persistence. Subunit relationships [d] and [e] differ in that they are focused on the formation of relationship time leading to persistence as the GSO establishes new interactions within the triad.

5.5 The MNE organisational subunit relationship network

In this section, I answer the research objective by presenting the influence of multiplexity and temporality on intra-organisational network relationships between MNE subunits. First, I discuss the concepts of Simmelian dyads and triads as the building blocks of an evolving MNE with dynamic subunit relationships. I then couch the findings in terms of temporal and structural network governance and its implications for heterarchical and hierarchical network forms. I then finish with a discussion on using the concepts of temporality and multiplexity as a form of measuring relationship strength.

5.5.1 The building block of an evolving MNE organisational network structure: Simmelian dyads and triads

A significant critical event occurring in Tersus is the organisational restructuring of the interactions of the traditional MNE subunits of RHQs, sales companies and manufacturing companies. As pointed out earlier in the chapter, Tersus is retreating their decision-making activities back to subunits such as GHQs, RHQs, and the new subunit form – GSOs. Manufacturing subunits are being moved to countries where they can service their geographic area, rather than specific country markets. Such restructuring is not new to industry-leading MNEs such as Tersus – some participants were recruited from other industry-leading MNEs in adjacent manufacturing-focused industries, such as automobile and technology-led consumer products. Such participants remarked that this kind of restructuring had already occurred in their previous MNEs and it was simply ‘Tersus’ turn’ given the highly
competitive industrial environment. This background gave me the opportunity to explore the nature of MNE subunit relationships in terms of their content and structure. My granular level of analysis supported the idea that current relational understanding of MNE subunit relationships can be enriched using the concepts of multiplexity and temporality (Shipilov et al., 2014). More specifically, the content and structure of subunit MNE relationships, the emergent outcomes of the interactions within such relationships, and the conclusions about the dyad/triad conceptualisation (Vedel, Holma, & Havila, 2016).

The content of Tersus’ subunit relationships showed that they did change over time and were bundles of sub-relationships in the form of business process interactions. Such interactions can be relational and/or transactional. An interesting occurrence during data collection was that participants often ‘edited out’ transactional interactions with other subunits. This was because research participants concentrated on the personal and relational focus of their interactions. Research participants also insisted on talking about informal relationships even though the focus of many of the interview questions was on formal MNE subunit relationships.

However, when using network pictures, they drew in and spoke of the transactional (and formalised) interactions within subunit relationships. The act of working on the network pictures collaboratively with me allowed them to ‘add back’ the transactional sub-relationships and make them visible in their mental calculus of how such relationships were structured and their role in subunit triads. For example, at first, some participants remarked that they had no relationship or interaction with support service organisations in other parts of their regional geographic area. However, such relationships became ‘seen’ and were drawn in after the use of network picture diagramming.

Another subunit relationship content type that arose out of analysis was based on the functional and operational lines of Tersus. The analysis found that the functional and operational content of the relationships unsurprisingly followed Tersus’ prominent organisational strategies. These strategies included cost leadership for manufacturing, customer and market focus (both internal and external) for R&D and innovation, focus on product lines and use of modularisation for pursuing projects related to these core areas. As RHQs, sales and manufacturing companies lost autonomy; subunit relationships became less collaborative (that is directionality is two-way) and one-way – showing a move back to the traditional command and control system of managing Tersus. Similarly, there were
interactional effects of sub-relationships on the whole subunit relationship; most were additive. However, some were not, for example, the tension between the legal and operational responsibilities. This tension seemed to be largely ignored by GHQs perhaps because it was considered a necessary outcome of managing organisational legal requirements.

Another consequence of such forceful strategies was that there was a division between how Tersus manages the business processes of its core competencies and those that are based on increasing operational efficiency. This became particularly apparent when analysing the occurrence of Simmelian dyads and subunit triads. Subunit triads devoted to core business processes often had strong closed and open triads, such as the current permutations of the ‘disseminating decision making triad’ and ‘increasing organisational efficiency triad’.

A key conceptualisation that I use for analysis is the idea of Simmelian dyads within MNE subunit triads (see Chapter 3). Some participants began with expressing their doubt as to whether Tersus had any triads, though this was due to the misconception that all triads operated on the same principles as dyads and were strong and closed in their structure. Most participants knew what a dyad was – they viewed subunit relationships as a process of interactions between their subunit and another. Before diagramming network pictures, they extended this view to the concept of a triad. They assumed that subunit triads consisted of three subunits working collaboratively on key projects and daily operations in line with traditional conceptualisations of triads (Simmel, 1950). Those participants were then asked to forego such assumptions and start freely sketching out their network pictures – adding in more than three subunits if they saw fit. If they did not add in more than three subunits, I probed as to why they did not and whether they believed dyads were a better representation of the realities of subunit relationships.

Most participants found that MNE subunits did fall into serial-like or group-like triad configurations when the collaborative condition was relaxed. When asked to include more than a third subunit, the interactions drawn were very low in terms of multiplexity and the level of interaction. I also explored whether this very weak relationship with a fourth or fifth subunit was historical or time dependent. If not, participants often dropped them and kept to the triadic configuration. In addition, when asked to concentrate on critical events, participants focused on triads rather than dyads themselves or forms including more than three subunits. When asked to explain their logic about why they were happy to use triads in their network pictures, most explained that the idea of embedded (Simmelian) dyads allowed
Chapter 5. Analysis and findings

the focus to be shifted to a triad level. The idea of embeddedness of the dyads let participants explain how other subunit relationships affected them (the relationships their subunit has) and the triad in general (Shipilov et al., 2015).

The few participants that added more subunits were often those whose job tasks relied on understanding a larger intra-organisational network within Tersus. Such participants who were ‘closer’ to the inner workings of Tersus, such as part of a cross-functional project team, drew linked triads to show a more complex (though still boundaried) intra-organisational network. Those who did not, were top executives that relied on their knowledge of the entire intra and inter-organisational network of Tersus. They drew larger network pictures that had embedded open triads – the structure of which matched the organisational chart of Tersus. These larger network pictures with embedded Simmelian dyads and triads also changed over time in reaction to the overall organisational strategies Tersus implemented in response to the increasing level of competition and consolidation in their industry. The embedded triads that were primarily operational in focus became geographically regional in their focus, and the embedded triads that were functional became globally focused. This segmentation has consequences for not only the changing roles of subunits but also the whole MNE organisational network structure. From my analysis, Tersus is transitioning from a diversified network to a heterarchy with embedded hierarchies (Egelhoff, 2010). This is discussed next.

5.5.2 Structural and temporal network governance: Heterarchies and hierarchies
During data collection, I focused my analysis on critical events occurring within Tersus. Looking at the temporality of subunit relationships gave me the opportunity to analyse how subunits relationships changed over time. In addition, I was able to analyse the different types of time that participants within subunits experienced. Temporality appeared to affect both relational and transactional MNE subunit relationships given that all relationships – be they collaborative or one-way have their own process that they journey through. All subunit relationships also experience chronological or clock time, although at varying levels – the more project and problem-solving-based the interactions were the less clock time the participants experienced. Instead, they experienced more kairological time. IB scholars, so far, have not differentiated between the different types of kairological time and when they might occur though Middleton, Liesch and Steen (2011) have explored the organisation of time. The dimensions of kairological time that emerged from the data were event, relationship process and mirror-time.
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Subunit relationships experienced event time based on projects that occurred in some triads, such as the ‘local product development’ triad and the ‘increasing organisational efficiency’ triad. In addition, subunit relationships also go through a relationship process: formation, activation, latency, persistence, and death/termination. A key finding is that the majority of the subunit relationships studied experienced activation, latency and persistence. There were a few instances of formation and even less of death/termination. This is due to the history of Tersus following an inorganic path to organisational growth through an initially intensive M&A strategy. Most subunits were not young in age – although they appeared to be a ‘new’ subunit. Most interactions that appeared to be new were in fact activated sub-relationships that were previously latent. The few instances of death/termination were linked to a manufacturing subunit closed down. This was closed down after primary data collection; however, interview data and other secondary data sources showed that subunit relationships were shifted to the new subunit. The employee’s job was terminated rather than the relationship itself. This differs from literature that examines employees that leave an organisation and take informal relationships with them (Levin et al., 2010)

A thought-provoking chronotype that emerged from my analysis is the concept of mirror-time. Due to the organisational restructuring, participants took to reflecting on the path that Tersus has taken and how it may have changed if different strategies had been put in place. The outcome of previous projects had a large bearing on whether participants allowed themselves to dwell on alternate timelines, for example, the inability of Tersus to successfully integrate themselves into the Indian and Chinese market. Another condition that had a bearing on whether participants enjoyed mirror-time was the current subunit relationships and embedded interactions they were involved with. When the interactions were too chronologically time-bound and hurried, research participants did not have the mental space to consider alternative subunit strategies.

Another chronotype that emerged was the idea of ‘the group time’ and ‘subunit time’. Participants often talked about Tersus as ‘the group’. The patterning of subunit relationships and interactions seem to be more ‘in step’ with GHQs and overall Tersus organisational strategies when subunits were more involved in ‘the group time’. When they were more focused on their subunit and processes, it was termed ‘subunit time’. The ratio of the group versus subunit time allowed me to use a temporally based construct to understand how ‘close’ such subunits were to GHQs. Subunits that were undergoing much negative change tended to
Chapter 5. Analysis and findings

be working on subunit time and vice versa. Subunits that were given more opportunities and resources seem to run more on ‘the group time’.

These conclusions were mirrored in the analysis of the interactional effects of chronotypes. When new subunits, such as the GSO were being integrated, there were fluctuating chronotypes within subunit relationships. Subunits would negotiate between meeting their needs (subunit time) and GHQs (the group time) until they developed persistent operational and functional interactions. However, such relationships were also less likely to be contradicted when the subunit ran more on ‘the group time’. The subunits that seem to straddle across different content and temporality types of relationships were ones that were cross-functional, such as the GSOs.

As a whole, Tersus’ organisational structure seems to be moving towards one that is heterarchical in nature. It was quickly changed into a structure that was similar to a diversified portfolio of MNE subunits due to its use of M&As for inorganic growth. The current integration of GSOs to decentralise global services and re-centralise regional decision-making activities means that Tersus can now be considered a heterarchy with embedded hierarchies. A heterarchy is typified by ‘a number of heads’ as opposed to none (original dominance of subsidiaries as centre of excellence) and one (hierarchies) (Egelhoff, 2010). There are embedded hierarchies within particular subunits as smaller companies are still organised according to this organising structure. However, particular subunits, such as the GSOs, present a decision-making unit that is cross-functional and cross-national in nature. Other instances are global product boards, their projects, and the implementations of targeted roles, such as functional business partners. Such subunits and their relationships add another layer of complexity to a traditional manufacturing MNE intra-organisational network and create questions about managing an organising structure. This is discussed next.

5.5.3 The multiplexity and temporality of MNE intra-organisational network relationships
In my analysis, I found that the concepts of multiplexity and temporality of MNE subunit relationships were viable lenses for understanding the dynamic nature of MNE subunits. Such a perspective also allowed for the mapping of changes in Tersus and view of network relationships as flows of activities and resources between actors. The organisational network structure is not a static but in a continual state of transformation at different levels. From the underlying bundles of interactions that created subunit relationships to the triads they are embedded within and, lastly, the whole MNE intra-organisational network.
A granular understanding of MNE subunit relationships should enrich the current relational understanding of MNE intra-organisational networks. To explore such understanding further, I present the content and type of subunit relationships and how it affects its strength.

In Table 22, I give the content and types of subunit interactions that aggregate into subunit relationships. These are segregated into the two concepts of multiplexity and temporality. To understand the strength of the subunit relationship, one can ‘add or subtract’ the dimensions of multiplexity and temporality together. For example, a subunit relationship that interacts is primarily on ‘the group time’ and experiences of traversing time are stronger than a subunit relationship that has a lesser number of functionally-based interactions, is directionally one-way, and experiences subunit and contradicting time.

Table 22 Determining the strength of MNE subunit relationships using the dimensions of multiplexity and temporality

<table>
<thead>
<tr>
<th>Concept</th>
<th>Additive or subtractive (+ or -)</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiplexity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional, e.g. HR, Finance,</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Legal, Marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>MNE core competency</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directionality – two-way</td>
<td>null</td>
<td>Collaboration</td>
</tr>
<tr>
<td>Directionality – one-way</td>
<td>-</td>
<td>Directive control</td>
</tr>
<tr>
<td>Formal and/or informal</td>
<td>+</td>
<td>Value-adding interaction</td>
</tr>
<tr>
<td>Relational and/or transactional</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Cross-functional for problem-</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Temporality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clock time</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Organisational event time</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Relationship time – formation</td>
<td>+</td>
<td>Value-adding interaction</td>
</tr>
<tr>
<td>Relationship time – activation</td>
<td>+</td>
<td>Value-adding interaction</td>
</tr>
<tr>
<td>Relationship time – latency</td>
<td>null</td>
<td>Unused so outcome is uncertain</td>
</tr>
<tr>
<td>Relationship time – persistence</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Relationship time – death/termination</td>
<td>-</td>
<td>Termination of business process</td>
</tr>
<tr>
<td>Mirror-time</td>
<td>-</td>
<td>E.g. Situation allows employee to think of better alternatives that ‘might have been’ and which are not value-adding to</td>
</tr>
</tbody>
</table>
Chapter 5. Analysis and findings

<table>
<thead>
<tr>
<th>Time Type</th>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The group time</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>The subunit time</td>
<td>-</td>
<td>E.g. employee is thinking of misalignment with MNE strategy</td>
</tr>
<tr>
<td>Traversing time</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Contradicting time</td>
<td>-</td>
<td>Negative outcome</td>
</tr>
<tr>
<td>Juxtaposed time</td>
<td>+</td>
<td>Business process</td>
</tr>
</tbody>
</table>

5.6 Chapter summary

In this chapter, I used the concept of multiplexity and temporality to understand the dynamic nature of MNE subunit relationships. I examined such relationships from intra-organisationally based business network perspectives to understand how multiplexity exists within MNEs. I used a process perspective to understand temporality. My analysis is limited to the nature of my data, my analytical procedures and lastly the type of MNE I collected my data from. When presenting my conclusions on multiplexity and temporality, I highlight how I used the triangulation of data and data sources to ensure a level of rigour. From my findings and analysis, the multiplexity of MNE intra-organisational subunit relationships have specific content and types, and temporality has specific chronotypes that are also MNE structure-specific and have their own interactional effects. Putting together the two concepts, I was able to offer some conclusions about how to determine relationship strength, which has implications for triad content, and configurations that can be used for specific MNE events. This, and discussing my findings about the scholarly conversation on the business network perspective of the MNE, is offered in the next chapter.
6.0 Discussion

In this chapter, I discuss the findings as they relate to the conceptualisation of the MNE as an intra-organisational network of subunit relationships. The discussion is divided into three sections. In section 6.1, I discuss the process and business network perspective of the MNE. The focus of this section is on the MNE as a business network that evolves. I present a summary of the extensions derived from the analysis and findings on the IB business network perspective on the MNE. I then discuss my conceptualisation of the networked MNE concerning the growing literature on the relational view of organisations. A relational view encourages the investigation of relationships and relations as critical units of analysis, be they between individuals or subsidiaries. This is distinct from being mired in the current actor-centric view of networks and the propensity to simply re-task social network measures (Hoenen & Kostova, 2015; Shipilov et al., 2014; Strutzenberger & Ambos, 2014).

In section 6.2, I present the structural and temporality ‘anatomy’ of the networked MNE. I start with the network building blocks of Simmelian dyads and triads that house the critical and crucial intra-organisational network relationships as the unit of analysis. I then discuss a measure of network relationship strength through MNE-specific multiplexity and argue for integrating temporality into such measures. I also cover the different types and kinds of MNE triads I found in my exploration of my MNE.

Lastly, in Section 6.3 I coalesce my conceptualisation of the networked MNE by offering an amended conceptual framework and finish with a discussion on the orchestration of MNE network governance. My amended framework presents MNE specific conceptualisations of temporality, multiplexity, and triadic configurations developed from my findings.

6.1 The MNE as an intra-organisational networked organisation

To reiterate, this thesis’ definition of the MNE is an organisation that gains competitive advantage through developing value-creating network relationships inside and outside the boundaries of the firm and in different countries. This definition is based on the assumption that the MNE develops competitive advantage through: a) access to resources in home and foreign markets; and b) access through intra- and inter-organisational network relationships (Bartlett & Ghoshal, 1989; Holm, Eriksson, & Johanson, 1996; Foss, Foss, & Nell, 2012; Vahlne & Johanson, 2013). These relationships are the core mechanism for adding value.
Within the MNE through transforming MNE resources (Ambos & Mahnke, 2010; Ciabuschi et al., 2010; Egelhoff, 2010; Foss et al., 2012). The definition of a relationship is a series of interactions that evolve over time between two actors that have the primary aim of pursuing an activity and/or exchanging or transforming a resource.

The nature of such relationships makes the MNE an organisational form that is distinct from other types of organisations that pursue internationalisation processes and leverage the benefits of a more globalised world economy. Contemporary MNEs differ from organisations such as ‘born globals’, SMEs, and Import/Export companies regarding the basic dimensions of size and complexity (Forsgren et al., 2005). The contemporary MNE organisational structure often spans many countries and institutional contexts. Its governance and orchestration goes beyond managing and leveraging global supply chains and production capabilities as evidenced by the reported failures of top-performing MNEs to enter markets regardless of careful M&A activities with local corporations (Degbey & Pelo, 2013).

Such failures were also found while studying Tersus. For example, Tersus had to move onto a secondary product line that it did not have core competencies in when trying to establish itself in a significant Asian market. It also continues to not enter another large Asian market due to previous failures in that market. The current business literature on such events relegates such a failure to the ‘black box’ of institutional complications (Eden & Miller, 2004). However, focusing on the temporal and multiplex nature of the interactions within such critical events allowed me to understand failures from a complex and internally based perspective. Temporally, Tersus’ historical failure to establish itself in an Asian market allowed country managers to orchestrate internal processes effectively while establishing subunits in the new Asian market. Structurally, Tersus continues to take steps to restructure the entire organisation into one that is more agile regarding product development and manufacturing. In a span of just three years, this has turned another possible failure in the Asian market into a tentative success.

The current network-centric view on the structure of the MNE stems from work conducted in the 80s and 90s and emerged from Perlmutter’s (1965; 1969) MNE classification systems. A key assumption underlying his work was the role of the HQs dictating the resources and activities of their subsidiaries in hierarchical ‘command and control’ governance strategies for linear growth (Hedlund, 1986; Hedlund & Kogut, 1993). However, this perspective did not fit with then-contemporary MNEs that did not follow a linear growth path but rather
rapidly developed strategic positions in foreign markets. Hedlund (1986; 1994; 1999) termed such MNEs ‘hypermodern’ and conceptualised them as heterarchical. Similarly, Ghoshal and Bartlett (1990) started to develop the concept of the MNE as an integrated network and a decentralised federative organisation. Towards the end of the 90s, IB scholars accepted that MNEs were a form of a differentiated inter-organisational network (Nohria & Ghoshal, 1997). Presently this perspective has coalesced into an emerging ‘network theory’ of the MNE, where the overall MNE is heterarchical in nature but still employs embedded hierarchical subunits (Andersson et al., 2002; Egelhoff, 2010; Forsgren, 2013).

*Tersus* followed the core assumptions underlying the perspective of the MNE as a networked organisation. The *Tersus* group was heterarchical in nature when considering its governance structure. Each geographic region had their HQs that coordinated resources and translated global HQs aims into regional strategies and tactics. However, in the last eight years, there appears to be a return to a more traditional hierarchical command and control governance strategy led by the financial earning power and/or core competency of the subunit. For example, those regional HQs and subunits that were generating higher profits presented more opportunities for high growth strategies and/or were key in developing efficient logistics or value chains that were given higher levels of autonomy and lower resource constraints. For those subunits that did not, the decision-making strategies were handed down from global HQs with little opportunity for negotiation.

This reduction in autonomy for the majority of subunits, particularly those concentrated on sales and manufacturing global platforms for their products, signified a shift in the way *Tersus* was governed. Rather than predominantly pursuing external organisational opportunities for growth through mergers and acquisitions as it had done since its inception in the 1900s (See Section 5.1), *Tersus* turned its view inwards. This was in large part due to the increasingly hostile and competitive global economic environment. In addition, *Tersus* found the current size of its operations had logically led to increasingly complex structural and operational issues. *Tersus*’ issues with size echo a trend amongst MNEs that continue to be larger in size and number of subunits (Andersson et al., 2002; Egelhoff, 2010; Forsgren, 2013; Foss & Pedersen, 2002; Rabbiosi & Santangelo, 2013).

Due to this increasing complexity regarding its size and structure, *Tersus* has taken steps to determine and develop its critical interdependencies intra-organisationally. For example, it developed a number of GSOs that acted as bridging units between regional and product
markets. *Tersus* also relocated manufacturing hubs to service a number of regional markets that research participants described as being siloed in the past. In fact, *Tersus* encourages its subunits to use an internal global pooling of resources to leverage core competencies while still letting subunits source from those outside *Tersus* if there are financial advantages. For example, like their competitors, *Tersus* stays in certain product lines and markets even if they are rebadging externally produced units.

The findings support the argument for studying MNE intra-organisational network relationships as units of analysis in their own right. The size and scope of contemporary manufacturing MNEs, such as *Tersus*, means that subunits should develop the local business networks they are embedded within and also their intra-organisational business networks. For example, the New Zealand sales subsidiary of *Tersus* was able to bypass their Australian corporate office and develop a financially worthwhile manufacturing relationship with a key factory in Thailand. In addition, such network relationships are heterogeneous in nature and can be typified as processes that evolve rather than one-off, one-way interactions. I will discuss this next.

6.1.1 The dynamic nature of the networked MNE

In Chapter 2, I documented that dynamic nature of the MNE, as a concept was a largely undefined and unexplored area of interest in IB. Most IB scholars only note in a reified manner that MNEs are dynamic and susceptible to change (see Table 5 in Chapter 2). However, they also assume that relationships within the MNE are built on prior interactions, they change over time and even decay towards termination or latency (Ahuja et al., 2012; Alnuaimi et al., 2012; Tsai, 2000). However, there is currently little consensus on an integrated conceptualisation of the dynamism of an MNE organisational relationships. This may be in part due to the variance-based theorising and conceptualising that IB scholars use while examining such relationships. This variance-based view focuses on the measurement and variance of constructs as independent and dependent variables and simplifies the processes within the ‘black box’ of the MNE (Pentland, 1999). The process perspective I follow enables me to target detailed data about the motives and actions over time within *Tersus* and derive research participants’ conclusions about the occurrence of diachronic patterns instead of variance (Langley, 1999, 2009; Pettigrew, 1997).
Chapter 6. Discussion

The process perspective in Organisational Studies

I chose a process perspective, as it is suited for research on the dynamism and role of change within organisations (Welch & Paavilainen-Määttä, 2014; Van de Ven, 1992). Langley et al., (2013, p.1) define a process approach as one that “focuses on empirically evolving phenomena, [...] explicitly incorporates temporal progressions of activities as elements of explanation and understanding”. Organisational structures are seen as existing in always evolving states of change and dynamism in terms of “movement, activity, events, and temporal evolution” (Langley, 2007, p. 272). The use of a process perspective is therefore logical and meaningful for understanding and disentangling the inherently complex processes within a large and complex organisation such as Tersus. From a process perspective, an MNE is a non-static entity - one that evolves in reaction to its past, present and intended future.

Given the nebulous and complex nature of change and temporality, I followed Langley’s (2007, p.273) advice to draw process-driven patterns from my data of “temporally embedded accounts”. Langley (2007) offers six ways for organisational studies and strategic management researchers to ‘think processually’, which I applied in the conceptualisation and analysis of the dynamic nature of the MNE: tracing back, following forward, outcomes as inputs, nouns to verbs, destabilising stability, and listening to language. I traced back, integrating retrospective accounts in my analysis to provide a temporal perspective on Tersus’ intra-organisational subunit network processes boundaried by organisational, critical events. All interactions have a history that is traced back through a number of sources to ensure analytical rigour (Jones & Khanna, 2006; Kipping & Üsdiken, 2014). In addition, I argued that given the complex interaction between actors and activities within organisational events, event histories are also heterogeneous in nature. Tersus’ subunits relationships experience different types of time (see Table 21 in Chapter 5). By using this conceptual lens on temporality to understand MNE intra-organisational subunit processes, I advanced the understanding of the diverse and interactional effects of various types of time within Tersus’ subunit network relationships. For example, a subunit relationship that traverses from ‘group time’ to ‘subunit time’ would be more productive or more likely evidence positive outcomes than a subunit that finds these types of time in a state of constant contradiction.

Following forward involves tracing the history of events and subunit relationships to the present and beyond to the future in a teleological manner (Langley, 2007; Van de Ven & Sminia, 2012). While a number of process researchers follow history to the present (Welch &
Chapter 6. Discussion

Paavilainen-Mäntymäki, 2014), very few process scholars telescope such patterns into the future. This may be due to a number of reasons, not least of all that offering any prediction given the complexity of organisational phenomena is an exercise in keeping ceteris paribus - which may not be possible due to unforeseen business environment events. However, this is a different story for the MNE, especially one such as Tersus, which has had persistent intra-organisational network processes for over 100 years. The chronological time horizon for overarching organisationally critical events is often five to ten years. For example, the implementation of policies towards developing a strong internally focused brand for Tersus began five years ago although participants referred to its developments as recent and current. The restructuring of global supply operations is also considered current even though it first originated ten years ago. This is so because large MNEs, such as Tersus, often ‘test business cases’ of critical events in different parts of the organisation before implementing the cases globally. This begs the question, what exactly is considered ‘the future’ when telescoping MNE intra-organisational subunit relationships patterns? It may be more akin to such ‘future time’ being kairolological in nature and embedded within the event-history of the subunit relationships, which I term ‘organisational event time’.

Positioning outputs, such as organisational performance, as inputs and ‘changing nouns to verbs’, relate to the ongoing, evolving nature of organisations, which I take into consideration when conceptualising the networked MNE (Langley, 2007). I conceptualised the MNE as an ever-evolving complex network of subunit relationships. The term ‘networked’ also encapsulates the idea that the network is activity-based as opposed to an organisation going through the process of ‘networking’ its structures. For example, Tersus is in a constant state of reconfiguring and pruning its subunits and the relationships between them. This is achieved through integrating new subunits or pruning back redundant manufacturing subunits.

MNEs and their relationships have long been conceptualised as static entities (Forsgren, 2013). However, I argue that conceptualising and analysing MNE subunit relationships as temporal in nature can illuminate the complexities of the MNE organisational structure and processes that are not captured with the current scholarly perspectives that focus on individuals, subunits, knowledge, and organisational activities in isolation.

Langley (2007) briefly explains the last category, ‘listening to language’. She lists the use of discursive analysis to understand the proliferation of certain ‘languages’ in different contexts.
However, the examples she gives rely on concepts tied to the discourse approach and strategic management. I offer an extension to listening to language through the contention that IB network process scholars can also ‘see the sketches’. Using network pictures for participant elicitation and allowing them to generate their own sense-making activities fits the contexts of the MNE subunit level of analysis, exploring network structures and speaking to a number of participants in a diverse range of countries. I explore this further in Section 7.3 where I discuss the use of network pictures to develop a method for qualitative network ethnography.

**The process perspective in International Business research on MNEs**

The majority of IB scholars have, so far, shied away from taking a process methodological perspective when studying MNE organisational processes and structures. Instead, they focus on IB phenomena such as internationalisation and internalisation (Petersen, Welch, & Benito, 2010; Welch & Paavilainen-Mäntymäki, 2014) and the influence of institutional environments on them (Morck & Yeung, 2007). IB research that does take a process view often does not move beyond a process conceptualisation of internationalisation (Petersen et al., 2010). However, Welch and Paavilainen-Mäntymäki’s (2014) do argue that internationalisation process researchers should extend their work to include de- and re-internationalisation as well as post-entry process phenomena. This view is similar to the temporal boundarying of phenomena through focusing on critical events and their event-histories (Langley et al., 2013). To keep the focus on a process perspective on business networks rather than phenomena such as internationalisation, I borrowed and integrated conclusions from IMP as their scholars directly deal with issues of process, temporality, and networks.

Key IMP conclusions that I integrated into the conceptualisation of the networked MNE were: MNE networks as flows, processes as forms of complex networked interplay between actors, activities, resources, and critical events and event-histories as forms of ‘temporal bracketing’ (Bizzi & Langley, 2012; Halinen, et al., 2013; Tidström & Hagberg-Andersson; 2012). The key conclusion on networks as flows is that MNE networks are in a continual state of becoming a network, that is, an MNE is not a network per se but is networking (Bizzi & Langely, 2012; Håkansson & Ford, 2002). This conceptualisation also captures the idea that networking consists of the interactions between organisational actors, activities, and resources. To study such processes, IMP scholars focus on critical events, specifically when
studying interactions embedded within a particular network context (Halinen et al., 2013; Halinen & Törnroos, 2005).

As discussed in Chapter 4, I adapted the use of network pictures as an analytical technique to study MNE triads and their actors, activities, and resources. I focused on the permutations of such triadic structures within critical events within the MNE to ground and make sense of its dynamic processes. I also examine MNE intra-organisational network relationships in a ‘finely stranded’ manner (Welch and Paavilainen-Mäntymäki, 2014). That is, each subunit sub-relationship represents a strand that can vary in terms of type and outcome. A bundle of such strands constitute the overall relationship between subunits. In turn, the relationships between three subunits generate emergent outcomes for the triad as a whole.

Table 23 summarises a process perspective on the MNE and its intra-organisational network. Conclusions from process conceptualisations and studies from OS, IB, and IMP lead to processual thinking on the networked MNE as a flow of networking processes; taking a kariological and chronological view; focusing on critical events; using a triadic conceptualisation to understand the temporality and multiplexity of relationships; and lastly, developing the use of network pictures beyond that of a data elicitation tool.

After integrating conclusions from the analysis and findings, I offer a processual definition of the networked MNE as an organisation that gains competitive advantage through developed and developing intra-organisational networked and networking relationships that exist across country borders through value-creating organisational events.

This differs from the initial definition I presented in that it does not assume all relationships are value creating. The reason is that findings show sub-relationships between subunits may have negative outcomes and the act of ‘pruning’ the intra-organisational network leads to value creation in terms of increasing organisational efficiency. That is, relationships alone do not add value. Their value is only apparent when considered in relation to reconfiguring the past and presently occurring critical organisational events. Such reconfigurations also include terminating/relocating subunits and their relationships. I further emphasise the temporal nature of the MNE by including the past and present tense of actions, such as developed/ing and networked/ing, in the definition.
Table 23 A process perspective of the MNE as an internally networked organisation

<table>
<thead>
<tr>
<th>Concepts from OS process studies</th>
<th>Concepts from IB network-based internationalisation process studies</th>
<th>Concepts from IMP network process studies</th>
<th>Thinking processually about the networked MNE from an intra-organisational perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nouns to verbs – process orientation</td>
<td>Looking at processes that change over time</td>
<td>Networks as a flow</td>
<td>MNE networking rather than networks</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Taking intra-organisational relationships as unit of analysis from a process perspective</td>
</tr>
<tr>
<td>Outcomes as inputs – feedback loops</td>
<td>Post-entry development (contextual to internationalisation process)</td>
<td>Networks as an evolving process</td>
<td>MNE intra-organisational networking</td>
</tr>
<tr>
<td>Following forward from the data</td>
<td>Reassessing temporal boundaries</td>
<td>Kairological view</td>
<td>Chronological and kairological view of events</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Using critical events to denote temporal bracketing and allow for feedback loops, respective and prospective accounts</td>
</tr>
<tr>
<td>Tracing back the data</td>
<td>Reassessing temporal boundaries</td>
<td>Focusing on critical events</td>
<td>Taking into consideration retrospective accounts and historical organisational documents</td>
</tr>
<tr>
<td>Destabilising stability – not just positive outcomes and events</td>
<td>Micro-processes of internationalisation (contextual to the internationalisation process)</td>
<td>ARA (actors, resources, activities) framework</td>
<td>Micro-processes in MNE intra-organisational network relationships are not finely grained but rather ‘finely stranded’ in that each string is an interaction and together, they have emergent effects</td>
</tr>
<tr>
<td>Listening to language – capturing the semantics of the participants’ perceptions of the phenomena</td>
<td>Discontinuities/ Co-evolution (contextual to the internationalisation process) /Alternate growth strategies</td>
<td>Networks as an evolving process</td>
<td>MNE triad permutations:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>In addition to continuity and positive outcomes, there are also interruptions and negative outcomes from processes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Further, MNE triads have various emergent outcomes different from the embedded subunit relationships</td>
</tr>
<tr>
<td></td>
<td>Using network pictures to map changes and for data elicitation</td>
<td>Seeing the (network) sketches:</td>
<td>Going beyond using network diagrams to depict network concepts by developing network pictures as an analytical tool that allows the user to map temporal changes and the complexity of interactions</td>
</tr>
</tbody>
</table>

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Chapter 6. Discussion

Taking a processual view also leads me to extend my definition of relationships. Relationships are a series of interactions that evolved between two actors – in my thesis, subunits. However, those relationships have embedded sub-relationship strands that are not homogenous in terms of temporality. Each strand may experience different types of temporality depending on its primary aim pursuing an activity. I discuss the temporal anatomy of networked MNE intra-organisational relationships in-depth in Section 6.2. Before that, I present the arguments for developing the current IB stance on the networked MNE beyond that of the business network perspective.

6.1.2 Beyond the business network perspective on the networked MNE
The business network perspective on the MNE is the current evolution of conceptualisations on the distributed and federative MNE (Bartlett & Ghoshal, 1989; Ghoshal & Bartlett, 1990; Gupta & Govindarajan, 2000; Harzing, 2000). The core assumption of the business network perspective is the ‘markets-as-networks’ premise borrowed from industrial marketing literature. It suggests that the MNE as an organisation does not behave the way traditional companies do. For example, subsidiaries have a strategic intent, and the boundaries of the organisation are permeable in terms of the resources they access – be they external or internal (Andersson et al, 2002; 2007). This perspective has given rise to the concept of the networked MNE. The networked MNE follows the assumption that the MNE is a large network of network relationships internal and external to the firm (Bartlett & Ghoshal, 1990). Interestingly, IB scholars appear to pay insufficient attention to this conceptualisation and instead focus on the concept of embeddedness – which Forsgren et al. (2005) and others present as a core network concept that explains the political power of subsidiaries to become centres of excellence and not rely on corporate HQs for access to strategic network resources (Andersson & Forsgren, 2000; Andersson, Forsgren, & Holm, 2007).

The current perspective on the networked MNE
The phenomena of subsidiaries developing as ‘centres of excellence’ through local business networks have meant that IB scholars have established a scholarly conversation around the concept of the embedded MNE without really considering its theoretical and contextual history. I argue that it is worthwhile to return to the networked MNE to understand other perspectives that may illuminate its network structure and especially its dynamic nature. I present my arguments for this in this section and include some comments on the original network conceptualisation of the networked MNE and issues regarding the theoretical ballast carried by IB scholars.
Chapter 6. Discussion

Forsgren et al., (2013) contends that the ‘business network theory’ underlying the conceptualisation of the networked MNE is not functionalist in the way other theories are, such as internalisation and contingency theory. For example, how can managers use the network perspective to orchestrate intra-organisational structures, resources and actors for increased performance? Underlying assumptions used by IB scholars needs to be re-contextualised to fit an intra-organisational perspective that includes conclusions on the content of business network relationships, network boundaries and the roles of HQs in the wider MNE organisational network.

Given the use of the ‘markets-as-networks’ approach and implicit focus on subsidiaries, there is an assumption that relationships within a business network are not arm’s-length in nature. However, this does not fit within the view of the MNE as a large diversified network, especially if cultural values and norms are not the organisational ‘glue’ that holds it together (Dhanaraj, 2007; Roth & Kostova, 2003). Instead, the legal and transactional relationships between MNE subunits form parts of the organisational structuring process. If relationships are conceptualised as either social or transactional, the interactional effects between the two are left unexamined.

IB literature often equates the business network of an actor, such as a subunit, to its context. For example, work on influential MNE subsidiaries focus on their political power over other subunits (Yamin, 2007). However, the network is not just the context but also the very structure of the relationships. It is not only the environment that the subunit is embedded within, but also the when, where, type and content of the interactions between subunits that leads to growth activity.

Other assumptions that follow the dominant subsidiary view are that MNEs consist of subsidiary networks embedded within a broader business network and that HQs control is based on network resources (Barner-Rasmussen, 2007; Spadavecchia, 2009). What constitutes the broader network is not clear, and HQs still play a role allowing access to other intra-organisational actors due to its large size and also “legally bestowed power” (Yamin, 2007, p. 138). HQs, be they global or regional, still have strategic influence. In addition, what are the other types of subunits that have influence? For example, Tersus’ global and regional HQs were very active in monitoring interactions between subunits within and across geographical areas. Tersus’ bridging subunits, like the younger GSOs, also had strategic influence and in some instances, they had more influence than established subsidiaries.
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IB literature also treats business networks as borderless (Forsgren et al., 2013; Yamin, 2007). However, when considering the findings related to the meso-level of analysis for the networked MNE, country borders do play a role structuring the intra-organisational MNE network and subunit relationships. This is not surprising as the MNE is a distinct organisation due to its ‘cross border’ condition (Aharoni, 2015). Country boundaries are not permeable, and by negating legal and transactional types of subunit relationships, it unnecessarily hampers understanding of the network structure of the MNE. For example, a research participant noted that the difference between the legal and functional responsibilities over a subunit had significant consequences for the number of possible complications arising in the subunit’s management.

Networked MNEs are constrained and enabled by the institutional environments where its own organisational subunits are embedded (Andersson, Björkman, & Forsgren, 2005; (Dacin, Ventresca, & Beal, 1999; Nell, Ambos, & Schlegelmilch, 2011). Adding back legal and transactional types of relationships addresses the criticisms that a business network perspective appears to ignore the wider economic environment (Dhanaraj, 2007), that MNE boundaries cannot be defined by spectators (Forsgren et al., 2005), and the idea that “top management in MNEs often have only vague ideas about business in most countries” (Yamin, 2007, p. 136).

Dhanaraj (2007, p. 1224) explicitly mentions that Forsgren et al.’s (2005) use of network concepts for a business network view of the embedded MNE is “simpler and less analytically rigorous than mainstream network theory”. In addition, Barner-Rasmussen (2007) asks for conceptual extensions to the dominant dyadic view of the HQ-Subsidiary relationship. In response, I integrate extended network conceptualisations for the MNE intra-organisational network relationship and subunit triads, such as developing the concept of multiplexity and triad configurations. I take care to amend my analytical procedures to develop more rigorous methods for analysing MNE subunit network relationships and the triads they are embedded within. Such procedures include the use of network pictures to boundary the MNE intra-organisational network under study and an analytical framework for textual and visual network data.

An emerging criticism of network-based IB research is ‘what type of network structure to use and when?’ As IB scholars have focused on actors such as subsidiaries, their attention has turned to the differences between internal and external networks (Barner-Rasmussen, 2007;
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Dhanaraj, 2007; Spadavecchia, 2009). Embeddedness literature now considers the variety of networks the subsidiary is positioned within (Dhanaraj, 2007; Yamin & Andersson, 2011. However, scholars still treat the different types of networks separately. Studying different types of networks in isolation ignores their interactions or the illumination of any tensions. Another issue with the embeddedness idea is its mutual and socially relational conceptualisation (Dhanaraj, 2007; Hallin, Holm & Sharma, 2011; Santangelo, 2012). To fit my MNE subunit context, I use the concept of multiplexity to include a variety of relationships, such as transactional and legal relationships, and to consider the interactions between different types of networks.

In summary, the theoretical ballast of focusing on the embeddedness concept has had a number of implications for the progress of business network perspectives in IB. I summarise these in Table 24 to present an updated business network perspective on the MNE. For example, I relax and problematise relevant assumptions and scholarly conceptual norms within the IB field to develop conceptualisations that fit my meso level of analysis, using subunit relationships as the unit of analysis (Alvesson & Sandberg, 2011; 2013). Thus, in the analysis, research participants had difficulty separating out the social, legal and transactional sub-relationships. This is because they perceived some organisational issues to be directly related to tensions between the different types of sub-relationships.

In addition, content-based networks and their relationships do not simply overlay each other and meet only at certain event-based critical junctures in organisational processes. Rather, sub-relationships were in a constant state of flux and permutation within a type of network that is similar to an organic neural network (Garbe & Richter, 2009; Veiga, Lubatkin, Calori, Very & Tung, 2000). The strength of the relationship is dictated by the processual nature of the sub-relationships within such a network. For example, I conceptualise temporality to include kairological constructs; this enables me to see how different forms of subjective and objective time occurs within the networked MNE and how this influences dyadic and triadic relationships. This also gives us a diverse range and plurality of types of relationships in addition to other perspectives that focus on strategic intent, power or knowledge transfer.
Table 24 Updated Business Network perspective on the MNE

<table>
<thead>
<tr>
<th>Previous perspective on the MNE</th>
<th>Updated perspective on the MNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundaries of the organisation are permeable</td>
<td>The cross-border nature of networked MNE operations means that boundaries of the organisation are not permeable</td>
</tr>
<tr>
<td>Business network relationships do not have a nationality/coincide with national borders</td>
<td>A networked MNE is a distinctive organisational form due to its cross-border condition</td>
</tr>
<tr>
<td>A business network is the context</td>
<td>A business network in the networked MNE is not only the organisational context but also affects the organisational network structure</td>
</tr>
<tr>
<td>Relationships within the business network are close and mutually adaptive</td>
<td>Relationships within the networked MNE are also at arm’s length due to the size and diversified nature of the organisation</td>
</tr>
<tr>
<td>Relationships within the business network are socially dependent</td>
<td>Relationships within the networked MNE are plural in nature and include legal and transactional relationships with the social, they are also affected by interactional effects</td>
</tr>
<tr>
<td>Subsidiaries are embedded within a whole network and have strategic intent</td>
<td>There are a number of subunit forms embedded within the networked MNE that have strategic intent including HQs and bridging subunits such as GSOs</td>
</tr>
<tr>
<td>HQ control is based on network resources</td>
<td>Subunit influence is based on relational processes and network structures</td>
</tr>
<tr>
<td>Single level view: Variety of network types, including dyadic units of analysis, internal vs. external, networks based on content</td>
<td>Multi-level view: A networked MNE has subunit relationships comprised of a bundle of sub-relationships. Such sub-relationships have emergent interactional outcomes. Relationships are embedded within triadic network structures that have their own emergent interactional outcomes.</td>
</tr>
</tbody>
</table>

The relational view of the networked MNE

In this last subsection, I discuss the conceptual implications of relationships as the unit of analysis from the network perspective. The relational pluralism perspective appears to be the next stage understanding the core arguments used in network theory to explain phenomena (Bradbury & Lichtenstein, 2000; Day, Fawcett, Fawcett, & Magnan, 2013; Hite, 2003; Shipilov et al., 2014). Such literature on relational pluralism develops conceptualisations, taking relationships as the focal unit of analysis. The literature then links the ideas of multiplexity, in terms of multiplicity of networks, and temporal multiplexity, in terms of kairological stances, from network theory and analysis directly to the organisation.
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Shipilov et al.’s (2014) work on relational pluralism stems from assuming the identity of an actor originates from their relationships with others, specifically the variety of such relationships. In an *Academy of Management Journal* 2014 special issue on relational pluralism, scholars present its implications for different levels of analysis from individual to inter-organisational. However, they do not do so for the meso or intra-organisational subunit level. They do however point out that the “larger and more decentralised an organisation” the more challenges there will be coordinating a variety of relationships (Shipilov et al., 2014, p. 96). I argue that using the complex intra-organisational network context of the MNE presents an excellent opportunity to illuminate the concept of relational pluralism further. Further, looking at the network structures that exist within a networked MNE also allows me to explore how the MNE is a pluralistic organisational form (Brès, Raufflet, & Boghossian, 2017). Exploring relational pluralism in the MNE context also allows IB scholars to determine the configuration of such relationships and in turn, a small part of what makes the MNE a unique organisation (Bradbury & Lichtenstein, 2000; Roth & Kostova, 2003).

MNEs are organisations that are “complex adaptive systems” embedded in heterogeneous networks (Shipilov et al., 2014, p. 90). Relationships are multi-faceted as well as multiplex, that is, relationships vary according to the content of the relationships but also other dimensions, such as the ‘dark side’ of relationships (Shipilov et al., 2014; Pillai, Hodgkinson, Kalyanaram & Nair, 2017). For example, in Tersus, subunit relationships themselves could be additive, subtractive, or have no effect on the triads they are embedded within. Actors shape the networks they are within and vice-versa (Tasselli, Kilduff, & Menges, 2015). This ‘shaping’ is dynamic within a networked MNE as the emergence and integration of subunits intra-organisationally is more structured and purposeful. For example, in Tersus, corporate and regional HQs make the clear decision to split off a subunit that focuses on a specific product line or develops a subunit to meet required organisational processes, such as one that manages a regional manufacturing hub.

Given the social network theoretical history of relational pluralism, it is not surprising that Shipilov et al., (2014) and others such as Ferriani et al. (2013) focus on the network concept of multiplexity. Interestingly, they extend past traditional social network conceptualisations to include other avenues for plurality that include time. They term this ‘temporal multiplexity’ and explain it briefly as the influence of past ties on the development of future ties or ‘ghost ties’. One of the key contributions of the thesis is to take the issue of
temporality in the networked MNE seriously. The organisational network structure in terms of subunit relationships and triads as well as its temporality presents the dynamic anatomy of the networked MNE. This is what I discuss next.

6.2 The anatomy of the networked MNE: triads, multiplexity, and temporality

In this section, I offer the components of a networked MNE as an anatomical form, by integrating the multiplex (structural) and temporal (processual) dimensions of intra-organisational relationships and triads. First, I discuss how triads appear to be explanatory mechanisms for understanding the building blocks of organisational processes within a networked MNE. Second, I offer my conceptualisation and extension of relationship strength and plurality using the concepts of multiplexity and temporality. I conclude this subsection by integrating the multiplex and temporal nature of intra-organisational subunit relationships together and outlining its implications for the networked MNE of Tersus. Third, I discuss the triadic configurations that appear in Tersus and discuss how these are different from those offered by IB scholars that rely on only certain types of network triads, such as subunit-to-subunit or subunit-to-HQs. I outline the varieties and permutations of triads that capture relationship multiplexity and temporal diversity. Last, I integrate all components to offer an amended conceptual model – one grounded in fieldwork and a processual focus on the MNE.

6.2.1 Dyads or Simmelian Dyads or Triads?

I initially took the triadic view when studying the networked MNE as it is a natural extension to the dyadic perspective that underlies the majority of organisational network research directly borrowing from social network studies and theorising (Kilduff & Brass, 2010; Simmel, 1950; Marineau, Labianca, & Kane, 2016). Studying triads is an emerging avenue of research that aims to span the divide between the micro and macro level of conceptualising networks by presenting a meso or intermediate level of analysis (Madhavan et al., 2004; Provan et al., 2007; Wynstra, Spring, & Schoenherr, 2015). However, studying network concepts at anything but the original inter-personal level presents the risk of anthropomorphising them (Borgatti & Li, 2009; Vedel, et al., 2016). The underlying assumptions of network concepts developed at the inter-personal level must be explicated and examined to see if they still hold true at the intra or inter-organisational level.
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In addition, some organisational network scholars still question whether extending the dyadic enquiry to one that is triadic is useful while others admit there is difficulty gathering triadic data (Choi & Wu, 2009; Dubois, 2009; Wynstra et al., 2015). I argue that boundarying and studying triadic structures within the networked MNE fits well with the subunit level of enquiry because it presents a meso-level of analysis. Further, while collecting data from research participants, I made a focused effort to see if instances of triads emerged naturally from the network picturing process. I also questioned research participants as to whether adding extra subunits to the network picture added any conceptual or analytical significance. For example, I analysed when it changed or augmented their perception of the subunit relationships and whether it influenced the structure of the initial subunit relationships that they sketched.

I maintain that an intermediate level of analysis focuses on the ‘building blocks’ of an organisational network structure rather than the basic component of an actor and their characteristics. More specifically within the networked MNE environment, few truly dyadic relationships are not affected by other actors, or their relationships with them. Assuming that truly dyadic relationships exist at the MNE subunit level is reductionist and a form of ‘dyadic atomisation’ that simplifies the large organisation’s complex and dynamic nature (Contractor, Wasserman, & Faust, 2006). For example, the few research participants that added more subunits to the network pictures they drew were often those whose job tasks relied on understanding the larger intra-organisational network within Tersus. Such research participants who were ‘closer’ to the inner workings of Tersus, such as being part of a cross-functional project team, drew linked triads to show a more complex (though still boundaried) intra-organisational network. That is, they put triads as the core network structure and then added single links to other triads that were low in sub-relationships and interaction frequency.

More concretely, at every opportunity, I questioned whether the original understanding of network concepts such as triads was similar to those found at the subunit level and within a networked MNE. For example, while exploring whether triads were occurring or are a useful explanatory concept during my analysis, it was clear that critical event triads sat in the space between highly managed dyadic relationships and serendipitous whole networks structures (Vedel et al., 2016). Subunit triads were created through managed organisational relationships but also evolved and permuted their configurations in response to critical events (Baum, et al., 2012). For example, the development of a GSO at Tersus appeared to be
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carefully managed due to a large amount of resources needed and level of restructuring occurring. However, this did not stop subunits within Tersus from taking advantage of ad hoc situations to interact with the GSO leading to emergent and evolving sub-relationships.

Another underlying assumption of triads is the idea of negative ties or negative outcomes of an embedded dyadic relationship in relation to the triad as a whole (Marineau et al., 2016; Håkansson & Snehota, 1995). This comes primarily from Simmel’s (1950) work on the dissociative forces of relationships within small groups. Simmel (1950) argued that a focal actor within a triadic structure could play different roles as mediator, tertius guadens (one who exploits their position), or as a conqueror who divide et impera. I did not focus on the roles of the subunit actors as such roles are dictated by organisational charts and my unit of analysis is the subunit relationship. In addition, adding back to transactional and legal sub-relationships covers the key processes of roles. However, the idea of negative subunit relationship outcomes and their effects on the triad as a whole did emerge from my analysis.

Most interactional effects of sub-relationships on the subunit relationship were positive in that they were additive. However, some were not. The tension between the legal and operational responsibilities is one example of this. This tension seemed to be largely ignored or unseen by global HQs perhaps because of the cross-functional and operational nature of the relationship.

Triadic closure did not appear to be a common occurrence in Tersus’ triads. There were very few instances where the entire triad was closed. This may be due to the differences between heterarchical and hierarchical network structures (Kano, Verbeke, & Drake, 2015). For example, there were instances of closed triads when all subunits were heterarchical in nature, such as between a global HQs, regional HQs, and a GSO. In contrast, there were far more open triads when following a more traditional hierarchical organisational network structure, such as that between a global HQs, regional HQs, and a sales subunit.

Furthermore, research participants appeared to describe and agree with the idea of Simmelian dyads – that is embedded dyads within triads. There is scant literature on Simmelian dyads within IB literature, a lone example being Batjargal (2007) who does not discuss Simmelian dyads but rather the effect of strong dyadic ties within a triad. To the best of my knowledge, there is no IB literature on Simmelian dyads at the meso or MNE subunit level. Within organisation studies, some scholars do apply the native inter-personal level of Simmelian dyad analysis (Goh, Krackhardt, Weingart, & Koh, 2014). In particular is Vardaman, Taylor,
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Allen, Gondo and Amis’ (2015) work that extends Krackhardt’s (1998) and Tortoriello and Krackhart’s (2010) exploration of the stability and stickiness of Simmelian ties. The key assumption is that a Simmelian structure increases the stability of embedded relationships due to a focal actor that can mediate the other two actors. This assumption is also prevalent in the networked MNE. There were very few triads that did not include a subunit that had hierarchical relationships, such as a global HQs, regional HQs or GSO over another. By including the legal and transactional sub-relationships when exploring subunit relationships, I captured the stable and sticky nature of such organisational network relationships. For example, it is difficult for a subunit, such as a manufacturing subunit, to leave the triadic structure per se unless through termination (shutting down the business) or splitting off as its own separate company.

When asked why they were happy to use triads in their network pictures, most research participants explained that the idea of embedded (Simmelian) dyads allowed the focus to be shifted to a triadic level. The idea of embeddedness of the dyads lets research participants explain how other subunit relationships impacted their subunit’s sub-relationships and the triad in general, an issue I address in section 6.2.3. Furthermore, research participants from Tersus who had knowledge of the entire intra and inter-organisational network drew larger network pictures that had embedded open triads – the structure of which matched the organisational chart of Tersus.

These larger network pictures with embedded Simmelian dyads and triads also changed over time in reaction to the overall organisational strategies Tersus implemented in reaction to increasing levels of competition and consolidation in their industry. From the structure of the Simmelian dyadic relationships within the triads, it seemed that the triads that were operational in focus were becoming regional and those that were functional were becoming globally focused. This leads to the conclusion that Tersus is transitioning from a diversified network to a heterarchy with embedded hierarchies. Such insights were gathered from looking at the Simmelian dyads as well as the triadic structure of the subunit MNEs. This shows that the answer is ‘yes’ to Simmelian dyads and triads as they yield some conceptual and empirical conclusions of significance. Based on this, I define intra-organisational triads within a networked MNE to consist of embedded Simmelian dyadic relationships between three subunits.
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In summary, in this section I have offered meso-level conclusions on the network concepts of Simmelian dyads and triads. These conclusions diverge from their original inter-personal theoretical and conceptual beginnings; for example, the prevalence of open triads and the influence of hierarchical and heterarchical organisational network structures. Continuing with the fact that I do not study the roles of the subunits but rather the relationship, I also gained insight into the concepts of multiplexity and temporality as measures of subunit relationship strength that go beyond interactional frequency. This is presented next.

6.2.2 **Multiplexity and temporality as dimensions of subunit relationship strength**

I elaborate on the dynamic structural components of subunit relationships within networked MNE triads, specifically the dimensions of multiplexity and temporality. I do so because distinguishing subunit relationships by these dimensions has implications for the MNE triadic structures for critical organisational events discussed in section 6.2.3. Following the arguments made in the previous section on the risk of anthropomorphising network concepts, I highlight my findings of the intra-organisational networked MNE view on multiplexity. Extending the arguments presented in section 6.1 on the concept of a temporally pluralistic view of the organisation, I also offer my findings and analysis on the dimension of temporality.

As explained in section 6.1, the current organisational network concept of multiplexity argues that there are a number of different types of relationships between two organisational actors, be it employees or firms within alliances (Shipilov, 2012; Shipilov & Li, 2014; Sytch & Tatarynowicz, 2014). Unfortunately, the majority of the literature offers propositions for studying multiplexity at the individual level of analysis. Within IB, some scholars consider multiplexity in terms of economic and social ties (Coviello, 2006) but most use it as part of their argumentation when studying different content ties (Corredoira & McDermott, 2014; MacDuffie, 2011; Madhavan & Iriyama, 2009). One exception is Shipilov and Li’s (2010) work on inter-organisational multiplex triads where they segregate multiplex ties into contextually relevant dimensions, for example, studying the brokerage role of an actor in terms of the advisory content of relationships with their customers. I analyse the multiplexity of networked MNE subunit relationships similarly. I conceptualise multiplexity at the networked MNE subunit level as a bundle of sub-relationships between subunits as actors. From my empirical findings and analysis, I concluded that *Tersus* subunit relationships were
multiplex in terms of both the content and type and were partly dependent on Tersus’ core competencies.

As logically expected, the content of sub-relationships is based on functional operational business processes and the MNE’s core competencies in product innovation and diversification. All three content-based sub-relationship interactions are additive to the subunit relationships they are embedded within due to their value-adding organisational purpose. The functional sub-relationships are delineated, based on the traditional organisational departments of human resources, finance, level, R&D and product innovation. The operational sub-relationships followed closely the current effort to restructure Tersus into a more efficient organisational structure in terms, such as After Sales support, Product Marketing, Product Development and Financial Control. Significantly, sub-relationships were also based on MNE core competencies, such as shared services that are inwards facing towards organisational customers and outwards facing towards specific markets. The primary sub-relationships are based on core competencies that are product line based given the nature of Tersus’ business as a manufacturer. In addition, sub-relationships were also modularised in that they are carried out as cross-departmental and cross-regional projects.

The cross-border condition that makes the networked MNE distinct from other organisational forms is also highlighted in the difference between functional, operational, and core competency sub-relationships in terms of their regional and global focus. Business processes that are considered part of the core competency of Tersus are prevalent at both the regional and global level, such as the integration of the GSO subunit. In contrast, traditional support service sub-relationships are regional in focus, for example, the use of a service company for billing and accounts for a geographic market. Such sub-relationships also differ between socially relational or transactional types. Core competency based sub-relationships were typified by socially relational interactions, such as inter-personal interactions between employees or groups. In contrast, the traditional support services were transactional with participants noting that they relied on ‘faceless’ ICT technologies for such interactions.

I was also able to determine the additive or subtractive interactional effects of such sub-relationships because I studied them bundled within Simmelian subunit relationships. I depict this is Table 25. Other types emerged from the data apart from social versus transactional business processes. Although I concentrated on formal interactions between the subunits, participants insisted on adding the informal element. Within the part of Tersus I studied,
formal and informal sub-relationships were value-adding interactions. There are very few examples of them being subtractive or negative although this is not because research participants did not share examples of conflict. The research participants that did highlight conflict issues positioned them in terms of the process of interpersonal and organisational negotiation. Similarly, cross-functional types of sub-relationships were for problem-solving instances and additive in nature. The only clear type of sub-relationship that did appear to be subtractive was one-way as instances of directive control from one subunit to another. In contrast, when the directionality of sub-relationships is two-way, the interactions are collaborative and deemed ‘null’. They are highlighted as already based on the business processes that are part of the daily running of the subunit and so did not add or subtract from the strength of the subunit relationship.

Table 25 The multiplexity of sub-relationships in terms of content and type and their interactional effect on the Simmelian subunit relationship

<table>
<thead>
<tr>
<th>Multiplexity</th>
<th>Additive or Subtractive</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional, e.g. HR, Finance, Legal, Marketing</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Operational</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>MNE core competency</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directionality – two-way</td>
<td>null</td>
<td>Collaboration</td>
</tr>
<tr>
<td>Directionality – one-way</td>
<td>-</td>
<td>Directive control</td>
</tr>
<tr>
<td>Formal and/or informal</td>
<td>+</td>
<td>Value-adding interaction</td>
</tr>
<tr>
<td>Relational and/or transactional</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Cross-functional for problem-solving</td>
<td>+</td>
<td>Business process</td>
</tr>
</tbody>
</table>

As I argued previously, the multiplexity of sub-relationships is also temporal in that business processes change over time. The content and types of sub-relationships change depending on the business processes that also change. Therefore, temporality also has implications for the additive and subtractive interactional effects of sub-relationships on the Simmelian subunit relationships they are embedded within. Temporality is also not homogenous. Recently scholars argued that taking a time-based, temporal, and process view illuminates parts of the MNE that are dynamic, pluralistic, and complex (Bizzi & Langely, 2012; Langely et al., 2013; Welch & Paavilainen-Mäntymäki, 2014; Shipilov et al., 2014). Table 26 presents the temporality of sub-relationships and their additive or subtractive effect on the Simmelian subunit relationship that emerged from my findings and analysis.

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## Table 26 The temporality of sub-relationships in terms of chronotype and their interactional effect on the Simmelian subunit relationship

<table>
<thead>
<tr>
<th>Temporality</th>
<th>Additive or Subtractive</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clock/chronological time</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Kairological time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational event time</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td><strong>Relationship time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formation</td>
<td>+</td>
<td>Value-adding interaction</td>
</tr>
<tr>
<td>Activation</td>
<td>+</td>
<td>Value-adding interaction</td>
</tr>
<tr>
<td>Latency</td>
<td>null</td>
<td>Unused so outcome is uncertain</td>
</tr>
<tr>
<td>Persistence</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Death/termination</td>
<td>-</td>
<td>Termination of business process</td>
</tr>
<tr>
<td>Mirror-time</td>
<td>-</td>
<td>Ability of employees to think of better alternatives for future events</td>
</tr>
<tr>
<td>The group time</td>
<td>+</td>
<td>Business process and ability of employees to contemplate subunit alignment with MNE strategy</td>
</tr>
<tr>
<td>The subunit time</td>
<td>-</td>
<td>Ability of employees to contemplate subunit misalignment with MNE strategy</td>
</tr>
<tr>
<td><strong>Moving Time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traversing time</td>
<td>+</td>
<td>Business process</td>
</tr>
<tr>
<td>Contradicting time</td>
<td>-</td>
<td>Negative outcome</td>
</tr>
<tr>
<td>Juxtaposed time</td>
<td>+</td>
<td>Business process</td>
</tr>
</tbody>
</table>

The majority of literature that considers temporality of ties within dyadic relationships and triads consider it homogenous in nature. Scholars maintain that relationships and their multiplexity change over time. They conceptualise time in terms of the tenure of relationships or the influence of past interactions on the development or formation of current relationships (Baum et al., 2012; Li & Choi, 2009; Shipilov & Li, 2010). When looking at literature that focuses specifically on the temporality of organisations and their components, scholars call for explicit temporal conceptualisations and an empirical focus on evolving phenomena (Langley et al., 2013; Langley, 2009). To do so, I look again to IMP literature where temporality is understood to be heterogeneous and attached to processes and action (Araujo & Easton, 2012). IMP scholars focus on the narrative nature of the kairological view of time noting that time itself is relational in character. My findings and analysis show that participants also mentioned and alluded to a variety of chronotypes beyond that of the homogenous clock or chronological time. In addition, participants showed awareness of the interaction of temporal modes (Dawson, 2014). For example, the outcome of historical events, current processes and possible alternative futures that simultaneously informed
participants’ perceptions of sub-relationship and subunit relationship processes (Welch et al., 2016).

In my analysis I showed that Tersus employees experienced a range of kairolological chronotypes related to Tersus’ organisational events, subunit relationships, the alignment or misalignment of their subunit with the MNE as a whole and the ability to think of alternative futures for the current business processes. Chronological time of course still plays a large part as it is the established linear temporal pattern in a Westernised organisational environment (Reinecke & Ansari, 2015). A significant chronotype was related to Tersus’ organisational, critical events. This was not surprising given I bounded the triadic perspective to critical events which are organisationally significant by their very nature. However, the comparison of organisational, critical events to those within the subunit allows sub-relationships to be categorised according to how they related to such organisational and subunit processes, for example, the instance of group and subunit chronotypes in my data. In addition, the relative nature of time is also apparent in ‘mirror time’ where participants were able to discuss the conceptualisation of multiple temporal paths when making decisions in their sub-relationships. This shows that time is not only heterogeneous but also multi-dimensional as there are a number of temporal patterns considered.

Furthermore, temporal conflicts can emerge and add an interactional effect to the Simmelian subunit relationship. Temporal orientation follows temporal structures and can be shaped by groups and experience conflict (Reinecke & Ansari, 2015). I found that participants that experienced ‘mirror time’ often did so because there was ambiguity about the positive outcome of the sub-relationship and therefore appeared to be subtractive to the subunit relationship. This was also more apparent in ‘the subunit time’ and ‘contracting time’ whereby participants were caught in the temporal slipstream between attending to sub-relationships related to the group and the subunit that were at odds with one another.

All other chronotypes were either additive or null concerning the subunit relationship. A significant chronotype was ‘relationship time’, that is the explicit understanding of the sub-relationship as a process that experiences formation, activation, latency, persistence and death/termination. A key finding was that latent sub-relationships had no bearing on the current subunit relationship until they were activated. Research participants did not talk about the latency of subunit relationships, as they were not considered until a critical event activated them. This raises questions about the usefulness of studying latent subunit
relationships within a networked MNE. Although at the interpersonal level there are instances of latency and ‘ghost ties’ (Kilduff, Tsai, & Hanke, 2006; Mariotti & Delbridge, 2011), at the subunit level Tersus appears to keep reports on the learning from past projects but also to put a temporal boundary between past, current and future projects. This may be due to the time-sensitive nature of such organisational events and projects, which do not occur as interpersonal networks. In addition, interviewees had no problems ‘traversing’ and managing ‘juxtaposed’ time. This also raised questions about the problems of temporal conflict due to a variety of temporal patterning (Chetty, Johanson, & Martín Martín, 2014; Reinecke & Ansari, 2015). Although groups shape temporal structures, participants were able to navigate between the group and subunit time if they were in alignment.

By taking together the multiplexity and temporality of sub-relationships within the Simmelian subunit relationships that are in turn embedded within triads, I am in a position to map a process view of the networked MNE. In the next section, I outline the different triadic configurations that emerged from the data and were specifically situated within critical organisational events.

6.2.3 MNE event triad configurations and permutations
Determining the strength of the Simmelian subunit relationships embedded within triads leads to conclusions on the triadic configurations and their permutations. Mapping such triadic permutations according to various subunit relationships presents a process and network-based narrative on a critical event (Halinen et al., 2013; Makkonen, et al., 2012). To reiterate, the key event triads that emerged from analysis are were a ‘localising product development’ triad which consisted of the Simmelian subunit relationships between a RHQs, sales and manufacturing subunit; a ‘supplying intra-organisational subunits’ triad which consisted of a RHQs, manufacturing subunit and a GSO; a ‘disseminating decision making’ triad which consisted of a GHQs, RHQs, and a sales subunit, and lastly an ‘increasing organisational efficiency’ triad which consisted of a GHQs, RHQs, and a GSO.

In Figures 15 to 19, I continue with the figure conventions used in Chapter 5. That is, the relationship between subunits is depicted as a line and the thicker the width of the line, the stronger the relationship. I use the same abbreviations, ‘GHQs’ for global headquarters, ‘RHQs’ for regional headquarters, ‘Sales’ for sales company and ‘Manuf’ for manufacturing subunits. I also do not depict the triad as pyramid shape as other IB scholars do (such as
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Forsgren et al., 2013) but as a triangle shape on its side. This is because a pyramid structure implies a hierarchical organisational structure, whereas I present both heterarchical and hierarchical triads.

![Diagram of triadic reconfiguration]

*Figure 15 ‘A changing of the guard’ – first example of a triadic reconfiguring of RHQs*

The reconfiguration case that I presented in my analysis chapter was labelled ‘a changing of the guard’ to highlight the critical event taking place whereby a new regional HQ is established, and the previous regional HQ is cannibalised and subsumed into a sales subunit. In the first example of a triadic reconfiguration in this critical event, both triadic structures are those of ‘disseminating decision making’. However, breaking down the subunit relationships to their multiplex and temporal constituents illuminates the changes taking place over time within the triads, which are shown in Figure 15. For example, before the regional HQs was moved to a new country, the Simmelian subunit relationships between the original regional HQs and sales subunit was high in multiplexity and temporality as they were given a high level of autonomy by global HQs. The content and type of the sub-relationships changed when the regional HQs was established in a new country. Although the subunit relationship was still strong, this was because the decision-making activities were moved back to the regional HQs. The issues with this move were prevalent as *Tersus* dealt with changing their focus from the subunit to group time and also managing the interactional effects on temporality, such as juxtaposed and conflicting time.
In the second triad reconfiguration in ‘a changing of the guard’ critical event, the initial structure was an open, non-transitive triad (Wasserman & Faust, 1994) that permutated into a weakly closed triad. Figure 16 presents this triadic reconfiguration. This reconfiguration was significant in that it transitioned from a typical open triadic structure for *Tersus* when managing its sales companies through a regional HQ to one that was unique in that it encompassed a cannibalised regional HQ that was transitioning into a sales subunit, the new regional HQs, and an established sales subunit. This presented an opportunity for the established sales subunit to access resources and decision-making structures from both types of regional HQs and develop its own opportunities that may not have otherwise emerged. The transitioning period of the regional HQs meant that the more stable sales subunit was able to develop a weak relationship with the new regional HQs that was not multiplex or temporal but may set the business case for similar, non-routine value-added projects in the future.
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In contrast, there were instances of triads that did not reconfigure but were still part of a critical event. An example that I outlined in my analysis was the ‘localising product development’ triad as presented in Figure 17. This particular critical event was not a common occurrence in Tersus whose core competency is in product marketing and development. In addition, manufacturing subunits did not often interact with each other beyond what was needed within a product line. In this triadic case, a particular product was being localised to meet the needs of a target market using the current manufacturing platform. This event created a weakly closed triad, when normally it would be an open triad. The strong subunit relationships between the regional HQs and the manufacturing subunit and between the regional HQs and the sales subunit are highly multiplex, temporal and unidirectional. In addition, the relationships between manufacturing and sales subunits were low.

However, when considering the triad as a whole and the subunit relationships as Simmelian, the perspective on the subunit relationship changes. Suddenly, the idea of possible future interactions is considered significant. This was the only instance whereby research participants considered keeping such sub-relationships latent for future projects. The interaction effects of multiplexity are assisting and additive, and temporally, all kinds of subunits experience all types of relationship time, while keeping to subunit time rather than group time.
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Figure 18 ‘Integration of a new form of subunit, the GSO’ – the first example of triadic integration

As well as the reconfiguration of subunits within triads, the analysis and findings examples of the integration of wholly new subunits into Tersus emerged as a critical event. This critical event resulted in two instances of triadic permutation in adjacent triads; the first is outlined in Figure 18 and the second in Figure 19. These focus on the establishment of the new subunit structure of a GSO. Such an organisation was designed and established to increase the efficiency of the organisational network structure. In Figure 18, the initial triad follows that of a common structure for regional HQs to manage the various manufacturing subunits that fell under its purview. There were previous non-systematic business cases of amending organisational structures to consolidate manufacturing practices to reduce redundancy, but they were usually treated as temporary projects.

There is a high level of multiplexity in the subunit relationships between the manufacturing subunits and the regional HQs. In particular, the subunits relationships experienced a high level of temporality. All three ran on chronological time due to the nature of their operations but also experienced juxtaposition as subunit relationships were largely transactional in nature. This highlights implications for the Simmelian nature of such relationships. In the first triad in Figure 18 the subunit relationships operated largely independent of any other relationships with manufacturing units because of the type of product lines the manufacturing units dealt with. If parts were shipped from globally located sources, the entire product would
be built within one manufacturing subunit. Over time, as Tersus grew in that region, it became more efficient to establish a new type of subunit, the GSO, to handle the logistics of managing such product parts and manufacturing. This is represented in the second triadic configuration in Figure 18.

![Figure 19 'Integration of a new form of subunit, the GSO – the second example of triadic integration'](image)

In Figure 19, I illustrate the emergence of a new type of triad (right-hand side in the figure). This is a rare instance of a triad within a networked MNE that is strongly closed and wholly heterarchical in nature. First, the initial triad is currently a common structure in Tersus for managing product lines within a geographically based market with a GSO subunit presenting a traditional hierarchical organisational structure. There is a very weak subunit relationship between the manufacturing subunit and GSO due to its low multiplexity and temporality. The second triad appears to be a form that is increasingly present in Tersus’ organisational structure. The emergence of such triads leads to the conclusion that Tersus is moving to a more distributed and heterarchical organisational structure when dealing with processes that are part of its core competencies. All three subunit relationships are highly multiplex in terms of the level of interaction and content, and all are on group time. The temporality of the subunit relationships is also very complex, with all experiencing traversing, contradicting and juxtaposed chronotypes. When breaking down the subunit relationships according to its sub-relationships, differences start to appear. Although the subunit relationship between global
HQ and the GSO are strong, they follow the subunit time as the GSO is established. In addition, relationship time is significant as interactions are formed and created to be persistent in nature.

After determining the variety of configurations and permutations of triads within the networked MNE of *Tersus* using the dimensions of multiplexity and temporality, I am now able to amend my original conceptual framework on the MNE as a network of dynamic intra-organisational relationships. This is presented next.

6.3 The amended conceptual framework: The dynamic nature of networked MNE subunit relationships

In this section, I offer an amended conceptual framework on the dynamic nature of MNE subunit relationships based on the analysis and findings. This framework integrates the arguments developed throughout this Chapter. The amended framework takes an interpretive, processual and relational perspective to the phenomena of MNE subunit relationships and integrates extensions to the concepts of multiplexity and temporality derived from findings. The processual perspective on MNE intra-organisational subunit relationships was presented in Table 23.

The findings show that the concepts of multiplexity and temporality of the subunit relationships within the networked MNE offer an alternative approach to measuring the strength of subunit relationships. Tables 25 and 26 outline this approach. The networked MNE can be composed of subunit triads whose dynamic relationships can lead to a variety of triadic configurations and permutations. These configurations and permutations are based on critical organisational events that emerged from the analysis of *Tersus*’ operations. A discussion of the different types of critical event triads and cases of configuration and permutation occurs in Figures 15 to 19. By taking a multiplex, temporal and triadic view exploring the intra-organisational subunit relationships within a networked MNE, I was able to present the MNE as a network of dynamic intra-organisational relationships.
I replicate my initial conceptual framework in Figure 20. In my initial conceptual framework, I highlight the possible occurrence of triadic forms within the MNE, the conceptualisation of multiplexity as the number of sub-relationships within a subunit relationship, and temporality as the permutations over time of the triadic MNE subunit forms. However, the findings and analysis extend and amend such conceptualisations. First, I found that multiplexity within the context of the networked MNE subunit relationships was not just about the number of sub-relationships, but also about their different content kinds and types. Furthermore, subunit relationships were complex in that each ‘bundle’ had interactional effects that made certain multiplex and temporal sub-relationships additive or subtractive towards subunit strength. Second, temporality was not just present in the triadic permutations integrating a process perspective by focusing on critical events, but also in terms of chronotypes. A more varied and diverse understanding on the kairological chronotypes of sub-relationships and their additive and subtractive nature was presented. Significantly, chronotypes can also be conflicting in nature, which points to not just a heterogeneous understanding of time but one that had direct impact on the strength of subunit relationships.

Figure 20 Initial conceptual model of the dynamic nature of MNE subunit relationships
Third, MNE subunit triads themselves have outcomes that are Simmelian dyadic and triadic (Tortoriello, Reagens, & McEvily, 2011). Within Tersus, certain types of event triads emerged. Such triads differed according to the types of subunits involved (heterarchical/hierarchical), the triadic configuration based on the strength of relationships (full/semi) and the triadic structural forms (open/closed). This is presented in Table 27.

<table>
<thead>
<tr>
<th>Event triad</th>
<th>Type of subunit</th>
<th>Type of configuration – strength of relationships</th>
<th>Type of configuration – structural forms for relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heterarchical</td>
<td>Hierarchical</td>
<td>Full</td>
</tr>
<tr>
<td>Increasing organisational efficiency</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Disseminating decision making</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Supplying intra-organisational subunits</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Localising product development</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The hierarchical and heterarchical types of subunits within triads points to a networked MNE organisational structure that is emergent and orchestrated in nature (Bartlett, Doz, & Hedlund, 2012). A mix of hierarchical and heterarchical forms are present for when Tersus intentionally structures its subunits to meet the requirements of global HQs and their global strategies, such as disseminating decision making and supplying intra-organisational subunit event triads. These types of triads and subunit relationships are explored in IB literature that focuses specifically on role-based relationships, such as those between the HQs and subsidiaries (Kostova, Marano, et al., 2016). However, purely heterarchical forms emerge when Tersus evolves to meet the needs of current markets through a complex form of distributed decision-making, such as the increasing organisational efficiency event triad. Such a complex form is not surprising given the scale and number of decisions needed to create efficient subunit structures. Such events are not explored in-depth in IB literature as
they are considered a part of supply chain literature (Autry, Williams, & Golicic, 2014; Choi & Wu, 2009; Dubois & Fredriksson, 2008).

A purely hierarchical form is used when such subunits take rare opportunities to meet their own subunit specific needs, such as the *localising product development* event triad. These events are explored in the IB literature, but from an inter-organisational network view in terms of subsidiaries as centres of excellence (Ferraris, 2014; Strutzenberger & Ambos, 2014). Although different event triads are covered by different streams of IB literature, by collating and comparing different event triads within a networked MNE, one can get a sense of how such an organisational network may be governed or orchestrated (Hoenen & Kostova, 2015). Certain event triadic types may be considered when meeting the networked MNE organisational processes, which partly answers a key concern of IB business network research that asks for more prescriptive conclusions (Harzing, 2000).

Last, my focus on the intra-organisational MNE context relaxes and questions some of the conditions that are established through prior research on the business network view in IB. Specifically, the risk of anthropomorphising network concepts (Wynstra et al., 2015) when aggregating underlying assumptions at the MNE and subunit level. Although anthropomorphising concepts are useful for building concepts, it should not impede amending concepts to fit the context and level of analysis (Shepard & Sutcliffe, 2015). To amend the network concepts for the MNE context, I include the transactional nature of subunit relationships as HQs subunits still have legal authority and hierarchical power when allocating network resources.

In addition, the MNE as a whole does not have shared values (Roth & Kostova, 2003) *per se*; rather subunit relationships have different chronotypes and temporalities that may be conflicting. Lastly, the MNE is a large enough organisational network that it can encompass different types of network levels, such as the embedded hierarchies within a heterarchical network structure in *Tersus*. This amended conceptualisation is depicted in Figure 20.
Figure 21 Amended conceptual framework of the dynamic nature of MNE subunit relationships

The amended framework depicted in Figure 21 differs from the original conceptual framework depicted in Figure 20 in three significant ways. First, the triad within the MNE intra-organisational network has a range of triadic configurations based on the type of subunits embedded. These emerged in Tersus as the four types of event triads as discussed in Section 6.2.2. This leads to possibility of triads that act as a whole within the MNE and suggests a meso-level of analysis is possible for the MNE. In addition to the different types of triads are their varying permutations over time as the Simmelian relationships (and their sub-relationships) change in strength.

Second, triads could be categorised as heterarchical and hierarchical due to the composition of the triad and its critical event. An assumption of the original framework was the possibility of exploring embedded hierarchies within heterarchies. Drawing from the study of Tersus, this might be a concept worth investigating further to explore different forms of complex MNE intra-organisational networks.

Third; originally, the sub-relationships within a subunit relationship were conceptualised as differing in content and type. The findings suggest that such sub-relationships also experience
chronotypes. Such chronotypes have interactional effects that emerge at the subunit relationship level. Furthermore, multiplexity and temporality may be used as alternative concepts to determine relationship strength. These concepts may also be better aligned to a MNE subunit level of analysis that is different from the traditional network measure of interactional frequency based on intra-personal social relationships. Findings also suggest that kaiological event-based time may be relationally pluralistic and an avenue for illuminating the dynamic nature of the MNE.

Conclusions on the concepts of triads, multiplexity and temporality have emerged from the analysis of Tersus’ intra-organisational subunit relationships. Each of the concepts embraces linked components that are used to conceptualise the MNE as a network of relationships. Although I offer extensions to concepts not constructs in the thesis, I utilise general guidelines from Suddaby’s (2010) advice about clarifying constructs. That is, to define, outline scope conditions, describe semantic relationships of other constructs and integrate overall coherence and logical consistency. The pertinent definitions have been discussed in this Chapter, and each is precisely aligned with the MNE context, network and processual perspective taken. The scope of the amended conceptual framework is bounded to a relational pluralistic perspective in line with the network structures investigated within Tersus.

In addition, the findings are from a MNE that is product focused and has core competences in manufacturing, and design-led product innovation. The scope is also restricted to an MNE that has a significant history and a corporate culture that is predominantly Scandinavian. As it was not feasible to examine the entirety of Tersus’ operations, the findings and amended conceptual framework may not have a global scope and may differ from other types of MNEs, such as those that are younger and were first established in emerging markets (Thomas, Cuervo-Cazurra, Brannen, 2011).

This conceptual framework is grounded in the IB business network perspective of the MNE and its intra-organisational subunit relationships but borrows network and process conceptualisations from OS and IMP. Verbeke et al. (2017) give direction for IB scholars that borrow theory and extensions from other fields. IB scholars are encouraged to check the saliency of the phenomena and problems studied in both the borrower and borrowed fields. In Chapter 2, I map the similarities and dissimilarities between IB, IMP, and OS to examine where the conceptual extensions lie. I also focus on the thesis concepts to ground the network and process extensions to ensure consistency in concepts and assumptions. There is also a
Chapter 6. Discussion

‘knowledge fit’ between the original IB conceptualisation of the MNE as a network, the OS conceptualisation of the organisation as a network and IMP’s industrial network process perspective.

Suddaby (2010) engages Bacharach’s (1989) thoughts on the ‘value of the construct’ as part of its scope. Value is attributed to the worldview of the researcher. When reflecting on this, my research perspective is one that follows the required epistemological and ontological perspective needed to answer the research questions. That is, a social constructivist paradigm that assumes reality, and therefore the MNE as an IB phenomenon is interpretive and pluralistic (Lub, 2015; Kostova, Marano, et al., 2016; Tsang, 2013).

6.4 Chapter summary

In summary, my discussion has put forward extensions to the conceptualisation of the MNE as an intra-organisational networked organisation. Drawing from an analysis of Tersus, I offer amendments to the core concepts of multiplexity and the temporality of MNE subunit relationships, as well as the configurations and permutations MNE event triads. Lastly, I offer some conclusions about the possible orchestration of triads as the ‘building blocks’ of the networked MNE using the dimensions of multiplexity and temporality as measurements of relationships strength. I coalesce all such contributions into an amended framework of the dynamic nature of the networked MNE that focuses on the subunit relationships as the unit of analysis. In my next chapter, I summarise the contributions, limitations and implications of my study.
7.0 Conclusions and future research directions

In this chapter, I summarise the main findings and elaborate on the conceptual and methodological contributions and managerial implications. I also address how I managed the quality of the research process to develop valid and rigorous findings and answers to the research objective and questions. Lastly, I offer limitations of the study and avenues for future research.

7.1 Summary of main findings

The motivation for the study emerged from a continuing IB discussion on what makes IB a distinct scholarly discipline through high impact research (Bello & Kostova, 2012; Delios, 2017; Rugman, Verbeke, & Nguyen, 2011). Out of this discussion is the assertion of the MNE as an inherently IB phenomena (Roth & Kostova, 2003). However, some like Delios (2017, p.392) have argued that IB is “infatuated with the quantification of the world of the MNC”. This thesis presents a qualitative investigation into the MNE to investigate its dynamic and complex nature. The scholarly conversations on the MNE have moved through phases of investigating its behaviour in foreign markets, focusing on its subsidiaries and its influence in external networks, to the current discussion on the role of HQs when managing subsidiaries (Forsgren et al., 2013; Kostova, Marano, et al., 2016).

I present an extension to this perspective by returning the scholarly view to the inner workings of the MNE. What does the contemporary MNE look like? It is clear from the quotes in Chapter 1 that even journalists, who follow the MNE and its behaviours, are unclear what the contemporary MNE is. They are not able to ascertain the different types of the MNE, and what makes the MNE distinct from other organisations that do business across country borders. Why did intra-firm trade rise after the Global Financial Crisis of 2008? What was the structure and content of MNE intra-organisational relationships beyond knowledge sharing and power differentials? The majority of IB scholars take an inter- organisational or intra-personal level of analysis (Michailova & Mustaffa, 2012; Santengelo, 2012). The subunit relationship, as the unit of analysis and part of a meso-level of organisational analysis, appears to be insufficiently examined in the scholarly discussion. Furthermore, although IB scholars acknowledge that the MNE is a phenomenon that changes over time, it is not clear how its relationships are dynamic beyond that of moving through life cycle stages. This thesis coalesces these questions into the research objective and the research
Chapter 7. Conclusions and future research directions

questions about the dynamic nature of MNE relationships. In addition, what is the influence of multiplexity and temporality on such relationships?

Findings on the influence of multiplexity were presented in Chapter 5.3 and discussed in Chapter 6.2. This analysis of *Tersus* finds that subunit relationships did contain a range of content and types of sub-relationships, each of which influenced the whole subunit relationship. The content and types of sub-relationships were grounded in the MNE context. The content was based on business processes following functional and operational lines. In addition, the content of the sub-relationships were also based on the core competencies of the MNE under study, such as product marketing and development. These were all additive to the subunit relationship and to the triad it was embedded within. The type of the sub-relationship followed conclusions from previous research on MNE intra-organisational knowledge flows, such as, uni- or bi-directional, formal and/or informal (Tran et al., 2010; Strutzenberger & Ambos, 2014). However, the subunit level of analysis illuminated some other types of multiplexity, subunit relationships could also be relational and/or transactional. The transactional interactions between subunits, such as an invoicing intra-organisational system, still had prominence in the research participants’ perspectives of the subunit relationship. Subunit relationships could also be based on cross-functional lines for problem-solving issues. All types were additive to the subunit relationship and the triad apart from uni-directional sub-relationships. These were seen as subtractive due to the possible control aspect of a uni-directional relational structure.

Findings on the influence of temporality were presented in Chapter 5.4 and discussed in Chapter 6.2. By adding a kairological view to the analysis of *Tersus*, a range of chronotypes emerged. Not only did research participants experience traditional chronological time, but they also experienced event-based time. The majority of the kairological chronotypes followed conclusions from research on relationships and their stages such as, formation, activation, latency, persistence, and termination (Reinecke & Ansari, 2015; Welch & Paavilainen-Mäntymäki, 2014). However, research participants’ also experienced group time/subunit time, as well as mirror-time. When the sub-relationship followed group time, it was additive to the relationship and to the triad as a whole as such interactions were ‘in step’ with organisational drives orchestrated by global HQs. When sub-relationships followed subunit time, it was subtractive as the possibility of misalignment or ‘being out of step’ was higher. Interestingly, even the research participants’ ruminating on better alternatives for
future events, or mirror-time, was also subtractive. The findings suggest this is related to taking steps, through sub-relationships, to anticipate and re-align past interactions that may add an aura of ambiguity to the whole subunit relationship. In addition, subunits could move through the different chronotypes, such as across group and subunit time. This was additive as it suggests that being able to traverse such chronotypes meant that the sub-relationship was being managed well. This is similar to juxtaposed time, whereby different sub-relationships with different chronotypes were managed in parallel. However, chronotypes could also contradict and create friction, such as mismanagement of group and subunit time.

The relationship as a unit of analysis and the processual view of the meso-analysis of the MNE intra-organisational network also led to the role of triads in the analysis. The use of triads, specifically event triads, boundary the intra-organisational network structures under investigation (Choi & Wu, 2009). The findings suggest that triads within MNEs present a worthwhile avenue to explore a meso-level analysis. The types of event triads that emerged from the analysis of Tersus followed critical organisational events. A key event triad permutation was the integration of the GSO. The integration of a GSO into Tersus’ intra-organisational network created the emergence of a heterarchical triad. The majority of the triads investigated were hierarchical, for example, there were RHQs or GHQs with unidirectional subsidiary sub-relationships. When positioning heterarchical with hierarchical triads, the findings suggest that bridging activities occurred at the meso-level of analysis (Baum et al., 2012). This also suggests that the MNE as a network of relationships is heterogeneous and more complex than originally conceptualised.

### 7.2 Theoretical contribution

A conceptual framework developed and used integrates extensions to its network and process-based assumptions and conceptualisations. The framework and findings are firmly grounded and contribute to the IB scholarly conversation on the MNE from the business network perspective (Forsgren, 2016; Spadavecchia, 2009). The extensions are integrated from OS studies on the MNE and organisational network, and significantly from IMP network and process studies (Bergenholtz & Waldstrøm, 2011; Bizzi & Langley, 2012; Langley et al., 2013). I do not conduct interdisciplinary research; rather I borrow and integrate extensions from scholarly fields, such as OS and IMP (Cornelissen & Durand, 2014). IMP, in particular, has compatible theoretical assumptions but also opportunities for
generative conceptualisations that better capture the complexities of the MNE as a network of relationships (Okhuysen & Bonardi, 2011).

The main theoretical contribution of the thesis centres on the development of the business network perspective of the MNE by taking its relationship as the focal unit of analysis. The two key concepts that emerged from the literature search were temporality and multiplexity. Therefore, I extend a processual and network perspective when developing a conceptual framework. The process perspective developed from the extensions taken from IMP and amended by the findings is presented in Chapter 6.1. To think processually on the MNE as an intra-organisational network of relationships, I conceptualise the MNE as an evolving network phenomena. A processual view also takes into consideration the history of the MNE, a kairological view of events and allowance for prospective accounts. In addition, I conceptualise the MNE relationship as ‘finely stranded’ and heterogeneous.

In Chapter section 6.1.2, I offer an updated business network perspective on the networked MNE by integrating conclusions on the MNE from an intra-organisational view. Findings lead to the assumption that MNE relationships are pluralistic and so there are a number of subunit triadic forms embedded within the MNE. This thesis takes a clear multi-level view of the MNE in line with organisational network conceptualisations (Carpenter et al., 2012). In addition, a relational view on the MNE intra-organisational network is offered in this thesis. Although current work on the relational pluralism of organisations is situated within the management discipline (Shipilov et al., 2014), using findings from complex organisations, such as the MNE, provides an opportunity for IB scholars to illuminate the concept of relational pluralism and take the MNE relationships as the focal unit of analysis.

The findings also suggest that the concepts of Simmelian dyads within triads, configurations of event triads and their permutations, and heterarchical and hierarchical triads can further illuminate the network structure of the MNE and its relationships. Studying triadic structures within the MNE presents a meso-level of analysis and offers conclusions that differ from those from a dyadic perspective. I argue that a triadic focus is more in line with the intra-organisational MNE context and attends to the risk of anthropomorphising network concepts originally developed at the intra-personal level of analysis (Borgatti & Li, 2009; Vedel et al., 2016).
Chapter 7. Conclusions and future research directions

Findings from *Tersus* showed that research participants often described dyadic relationships influenced by a third subunit. In addition, any fourth or fifth subunits were drawn as linked triads rather than a critical event network structure that had more than three subunits. Furthermore, the influence of a third subunit on the embedded dyadic relationship followed a Simmelian behaviour creating a stable triadic structure (Simmel, 1950).

Configurations of event triads and their permutations have led to suggestions of different types of network type triads within the MNE. That is the heterarchical and hierarchical triads that emerged from particular critical events within *Tersus*. These structures emerged from the data through using the concepts of temporality and multiplexity as an alternate method of understanding relationship strength. Rather than relying on traditional and homogeneous social network measures of interactional frequency, I was able to conceptualise and capture relationship strength through a heterogeneous and dynamic perspective. This contributes another avenue for studying MNE network relationships beyond that of the popular IB conceptualisation of embeddedness (Meyer et al., 2011).

7.3 Methodological contribution

I also offer a methodological contribution that integrates the epistemological and ontological implications of taking a network and processual perspective in the thesis. I do this through, a) the use of network pictures beyond their traditional use as an elicitation tool, b) an analytical framework that integrates textual and visual data and analyses strategies, and c) a proportional framework for presenting a weighted perspective for data triangulation. I use such strategies to capture the research participants’ perspectives on network-based data, mitigate the risk from retrospective data, and my failure to gain access to research participants from *Tersus*’ global HQs. I do so to make the research process transparent and allow judgement on the quality of thesis findings (Klein & Myers, 1999).

During data collection, working with network pictures became a data collection method in its own right. Initially, I had intended to use network pictures as a diagrammatic aid during in-depth interviews with research participants (Crilly et al., 2006). This initial decision was made after investigating the methods for depicting network data in organisations (Carpenter et al., 2012; Monaghan, Lavelle, & Gunnigle, 2017). This decision was strengthened after the piloting of the interview guide that found some non-managerial participants had issues with understanding abstractions such as triadic network structures. Furthermore, the use of diagrammatic aids made sense for the context of *Tersus*. Also, the *lingua franca* of *Tersus* is
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English, the research participants from Tersus that I collected data from varied regarding ethnicity and country culture (Cuervo-Cazurra, Andersson, Brannen, Nielsen, & Reuber, 2016). The use of diagrams was to mitigate cross-cultural language barriers by presenting another form of communication.

The use of network pictures emerged as a data collection tool when research participants sketched network pictures for their sense-making process. The use of network pictures was a stimulating interactive activity between the research participants and me. The network pictures became common frames of reference when asking their perspectives on thesis concepts (Kazmierczak, 2001). To ensure rigour, I took an iterative approach to developing the network picture with the research participants and used specific probes to investigate the diagram and its narratives (Buckley & Waring, 2013).

In line with the use of network pictures as a data collection method, in Chapter 4.7, I presented an analytical framework for textual and visual data. I developed such a framework because textual and visual data differed regarding the reasoning used to analyse them (Davison et al., 2015). In contrast to a linear, logical reasoning and explicit meaning found in textual data, visual data relies on holistic, logical reasoning and implicit meaning. Visual data may mitigate some cross-cultural language issues, but it also must have specific coding strategies to deal with ambiguous meaning and subjectivist interpretation. In addition to the different types of data, I also gathered data from a number of sources, including, in-depth interviews, field notes, organisational documents, social media and fieldwork photos. Due to the variety of sources and types of data, to ensure rigour, the analytical framework outlines the types of coding strategies used. Furthermore, I used a framework for depicting the weighting of each source for the triangulation of data. Using proportionality, I highlighted areas of convergence, divergence and lacunae for the findings (Flick, 2004). This process makes transparent the interpretive nature of data and attendant issues of bias and validity (Denzin, 1978; Jonsen & Jehn, 2009; Lincoln & Guba, 1985). This, in turn, allows the reader to rule out alternative explanations for the findings offered in this thesis (Cuervo-Cazurra et al., 2016)

7.4 Managerial implications

The managerial implications of the thesis are primarily aimed at executive level managers, such as those that head country subunits, geographic product lines and functional lines. All three types of managers can use the event triad concept to focus and analyse the critical
organisational events affecting their teams. In particular, managers of subunits can better understand their position within the 'building block' of the MNE intra-organisational network and opportunities to access other subunits that they may not be aware of. In addition, they can better manage the additive and subtractive sub-relationships between their subunit and others. Managers of product lines can use utilise the concept of heterarchical and hierarchical triads to investigate where and when their attention should be spent and managed. Heterarchical triads can be constructed for global product board projects aimed at problem-solving, while hierarchical triads can be constructed for supply chain efficiency. Managers of functional lines can use event triad configurations to understand how they may manage the chronotypes of subunit relationships better. For example, by recognising the tension between group time/subunit times and addressing its subtractive influence on subunit relationships through more managerial attention or access to resources.

The thesis findings also have implications for non-managerial employees. Although the thesis takes the relationship as the unit of analysis and a meso-level of analysis of the MNE, employees can use the conceptual framework to analyse current processes of sub-relationships. This is because the network and process-based framework include micro-processes that directly influence non-managerial employees. For example, they would be able to map the complex bundles of sub-relationships regarding the interactions they have with other individuals in the triadic subunits. Understanding that Simmelian triadic perspectives influences their behaviours also illuminates sub-relationship complexity.

Lastly, the conceptual framework offered in Chapter 6.3 gives a starting point for executives involved in global strategies for the whole MNE to map out what organisational network structures may be best suited to a critical organisational event. In addition, using the concepts of temporality and multiplexity and using network pictures as an analytical tool, they can also start to understand how they might orchestrate the processes within the MNE as a network of relationships.

7.5 Limitations and avenues for future research

The main limitations of the study are its empirical context and lack of access to research participants from the global HQs of *Tersus*, both of which present clear avenues for future research. In addition, this study represents a foray into the investigation of relational pluralism in MNE organisational forms through network ethnography (Berthod, Grothe-Hammer, & Sydow, 2016; Shipilov et al., 2014).
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Some limitations concern the thesis research setting, the type of MNE, its age and size, and its organisational culture, which is an extension of the ethnic culture of the global HQs (Geletkanycz & Tepper, 2012). Findings from Tersus apply to manufacturing MNEs. Future research directions would involve investigating the temporality, multiplexity, and triadic structure of other types of MNEs, such as service MNEs or those with shorter product cycles, such as FMCG MNEs. I also made the decision to target an MNE that had a long history compared to the other MNEs I might have been able to access. This decision was made so that I would have more opportunities to access retrospective data and map event triad permutations as a process over time. Future research directions would aim to focus the conceptual framework offered by replicating the study in other similar MNEs. In addition, the framework can be refined using findings from younger and smaller MNEs to see if the range of event triads differed regarding composition and permutation. Lastly, Tersus’ global organisational culture follows its Scandinavian roots with a design-led product marketing strategy. Future research in companies from emerging economies with non-Scandinavian global organisational cultures could highlight the applicability of temporality, multiplexity, and triads to such contexts.

Another key limitation is the lack of access to research participants from the Tersus global HQs. In Chapter 4.5, I directly address this issue and the steps taken to mitigate it. For example, the use of other forms of data collection methods, such as network pictures, gathering organisational documents, using analytical frameworks and depicting the proportional triangulation of data for the trustworthiness of the qualitative data (Cuervo-Cazurra et al., 2016; Lincoln & Guba, 1985). In addition, there were only three instances where research participants asked not to be recorded during in-depth interviews. However, I was able to carry out much longer and intensive, in-depth interviews with those participants, collecting some of the most insightful and populated network pictures. Rather than a limitation, this situation became a generative outcome.

Lastly, future research could aim to develop a network ethnographic methodology grounded in a relational pluralistic view of the MNE. Different from most organisational network studies, I used an interpretative and qualitative research methodology to investigate the MNE and its network structure (Berthod et al., 2016). By extending the relational pluralistic view of the MNE, IB scholars may examine the relationship as the focal unit of analysis (Shipilov et al., 2014). By using qualitative methodology and a range of data collection methods that
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includes network pictures, IB scholars can develop a network ethnography of the MNE. IB scholars can also build on the thesis network conceptualisation of triads by investigating balance theory or the specific Simmelian behaviours of subunits (Vedel et al., 2016). In particular, the issue of temporality presents an interesting and abundant avenue for the further explication of kairological chronotypes and critical event triads (Reinecke & Ansari, 2015).

7.6 Chapter summary

In summary, I answered the research objective and research questions posed in Chapter 1 of this thesis, what is the dynamic nature of the MNE? Also, what is the influence of temporality and multiplexity on its relationships? I presented a conceptual framework that takes the subunit relationship as the focal unit of analysis and illuminates the temporality and multiplexity of such relationships within MNE intra-organisational network. My thesis and its findings contribute to the IB scholarly conversation about the MNE, joining in with the work of others. These include Djodat & Knyphausen-Aufseß (2016) who argue for a revisit of Ghoshal and Bartlett’s theory of the MNE as an inter-organisational network; Welch & Paavilainen-Mäntymäki (2014) who updated the view of process research on internationalisation of the firm, and more generally in organisational studies; and Shipilov et al.’s (2014) relational pluralism of organisations. I offer extensions to their core arguments on the MNE by taking an internal view of the MNE as an intra-organisational network, I focus on the subunit relationships and their processes within the MNE, and I use my findings to investigate triads and Simmelian dyads. The findings of the thesis in tandem with the future research directions highlighted presents the MNE and its internal processes as a complex and temporal phenomenon. In my thesis, I contribute and engage with an IB scholarly conversation that encourages and energises the conceptualisations and investigations into the contemporary MNE.
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Appendices

9.0 Appendices

Appendix A - Literature search method for the business network perspective in IB

After importing the chosen articles into NVivo 10, some queries were performed to ascertain which research areas to investigate further and to refine the key words generated previously. A larger literature search was conducted on the key concepts to capture current and deeper understanding by researchers. This was iteratively done until literature that covered the dynamic nature of relationships within a network (in a business or organisational) setting was identified.

The starting point for the activity was to ascertain top-tier management and top-tier management and IB journals. First, a list of A* and A ranked journals developed by Professor Anne Harzing for the Australian Deans Business Council (ADBC) was considered (http://www.harzing.com/jql.htm). This list is comprehensive and utilised by Australasian universities in assessing performance of research academics at Universities for governmental funding purposes, such as the Performance-based Research Fund in New Zealand. This list was cross-referenced with lists from literature review articles on IB and the MNE, such as Werner’s (2002) review of twenty top management journals and Michailova and Mustaffa’s (2012) article on subsidiary knowledge flows. Werner’s (2002) article found specific international management (IM) literature in journals in IB and related areas, such as organisational sciences and applied psychology. At this initial stage, journals from this list that did not publish specific IM studies were omitted from the literature search. The rationale for this decision is that such journals were too dissimilar to IB and, at that stage, not sufficient for the current aim of exploring the dynamic nature of MNC relationships in general. Journals from related fields, such as Journal of Occupational Psychology and Journal of Vocational Behavior, concentrate on the individual level of analysis and did not add to the pool of relevant literature.

Michailova and Mustaffa’s (2012) journal list employs a number of lists collated by previous reviews. In addition, they have added specific journals in IB, such as International Business Review and Journal of World Business. These were added to the list of journals to search. However, for the purposes of accessing a wide range of articles, journals that publish non-academic research were also included, such as Long Range Planning, Harvard Business Review, Organisational Dynamics, MIT Sloan Management Review, and California
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Management Review. Additionally, a time frame was not specified at this stage of the scoping activity. The journal list utilised in my initial searchers are:

- Academy of Management Journal
- Academy of Management Review
- Administrative Science Quarterly
- International Business Review
- Journal of International Business Studies
- Journal of International Management
- Journal of Management
- Journal of Management Studies
- Journal of Organizational Behavior
- Journal of World Business
- Management International Review
- Management Science
- Organizational Science
- Strategic Management Journal
- Long Range Planning
- Harvard Business Review
- Organizational Dynamics
- MIT Sloan Management Review
- California Management Review

The aim of the preliminary literature scoping activity is to ascertain the key concepts considered when examining relationships within the contemporary MNE. First the overall structure of the MNE was considered and current thinking on the hierarchical and heterarchical structure of the MNC was explored. However, searches based on these terms as key words were too numerous. Subject terms were utilised to develop a search query that captured literature on MNEs. The finalised query string is ‘multinational AND corporation AND enterprise AND international business enterprise’. Within this search, general terms were chosen to order to capture the largest range of articles on the subject of MNE organisational network structure. Key words of ‘Inter-organi*ational’ and ‘intra-organi*ational’ were used within the SCOPUS and Web of Science databases.
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Appendix B - Literature search method for the business network perspective in IMP

In contrast to the previous literature search, a preliminary literature scoping study was not performed as the key concepts relevant to the proposed research have already been ascertained. Therefore, a more focused literature search was conducted. Similar to before, the starting point for the activity was to ascertain top-tier Industrial Marketing and Purchasing journals. The ADBC journal ranking list by Professor Harzing was used and two journals were targeted at the beginning which were specifically related to Industrial Marketing – *Industrial Marketing and Management* (ranked A) and *Journal of Business and Industrial Marketing* (ranked B). From there, while analysing the content of the articles accessed, some articles relevant to the key concepts of the proposed research were also added to an article database. These articles came from journals in adjacent fields, such as *Journal of Management* (ranked A*), *Journal of Management Studies* (ranked A*), *Journal of Marketing Management* (ranked A), *Journal of Marketing Research* (ranked A*) and *Journal of Supply Chain Management* (ranked B).

Similar to the previous literature search, general terms were chosen to capture the largest range of articles on the key concepts of the proposed research. The initial search of the key word of ‘relationship*’ in the *Industrial Marketing and Management Journal* gave 2217 articles. Therefore to narrow down the results, the search term was changed to ‘relationship*’ AND ‘time’ AND ‘intra’ (to capture articles with intraorganisational or intra-firm). From this search, 300 articles were returned in *Industrial Marketing and Management Journal*. A search in the *Journal of Business and Industrial Marketing* returned 131 articles. Previews of articles and abstracts were read to pick articles that covered the key concepts of the proposed research.
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Appendix C – The interview guide

First:

a) Answer any questions on the Participant Information Sheet and take signed Consent Form
b) Explain my research broadly, including the qualitative interview process and anonymization of data

Keep in mind (from piloting):

a) General questions that can be answered by a certain seniority level and by documents
b) Types of subsidiaries, e.g. R&D, manufacturing, regional HQs and HQs
c) Missing data or further questions on critical events emerging
d) Repeat questions in different forms

Start with:

I. How long have you been in your current job/position?
II. How long have you been in your current role?
III. How long have you been at your current company?
IV. Who do you report to?
V. Open up the interview by asking them what their daily work-life looks like

Terms that normally need clarification through probes/repeat questions are bolded

1. General:

a) Name: __________________________
b) Name of Subunit: __________
c) Background of Subunit: Established in _______________
   Established as _______________
   Part of (company section) ________________________
d) Ownership: Division within company ________________________
   Production/Service unit within company ______________
   Other, please specify: ______________________________

2. Personnel

a) Total number ________________
b) Number of senior management _____________
c) Number of non-management staff _____________

3. Business activities

a) Main type of production/service

b) Type of production/service planning (with relation to other subunits, such as headquarters, regional headquarters or subsidiary)

c) Main products/services and share of overall company turnover

d) Investments in development in:
   New products or developing business processes? Which ones?
5. Relationships

a) Top 5 other subunits your unit interacts with (bring in network picture if it’s not being used yet)

b) Names of the top 2 subunits your unit interacts with

c) Do these two subunits have a relationship with one another

d) List the types of relationships your unit has with the two units

e) For each relationship – how have they changed over the last 5 years?

f) Open questions and prompts related to each relationship prompted by the last three questions asked.

Keep an eye out for: How they change over time, processes, type and content

e) What ‘trajectory’ do you think there were/are on (such as growth, decline)?

f) How does one type of relationship influence another?

g) Who is the main contact for that relationship with the other subunit?

Give them a list to fill out

h) Is the relationship project based?

Keep an eye out for: Sequencing, activities and stages of the relationship

6. Critical event triads – network pictures

Research participants were asked to discuss other subunits that their own subunit has relationships with utilising the below graphic:

Research participants were asked to describe two other subunits they believe their own subunit has relationships with (partner subunit 1 and 2 in the below figure). Critical events in the relationships between the participant’s subunit and partner subunits were discussed, for example, the negotiation of a legal contract between the two. This was used to guide the discussion on the number of interactions and sub-relationships that the participant’s subunit has with the other partner subunits, how the multiple relationships interact with each other and how they change over time due to certain critical events. Further sketches were often developed by the research participants from then on.
Appendices

Appendix D – Invitation letter sent to research participants, Participant Information Sheet, and Consent Form

Dear <name>,

RE: Request to conduct doctoral research

My name is Smita and I am a doctoral student at the University of Auckland Business School. My doctoral research aims to examine the dynamic nature of relationships between subunits within Multinational Enterprises (such as headquarters, regional headquarters and subsidiaries). This research will contribute to understanding how practices for managing intrafirm relationships between subunits can be understood and improved.

The purpose of this letter is to request a time to interview you. If I may, I have also sent an information sheet on the study and consent form. If you have any questions or wish to discuss the research with either myself or my supervisors, please do not hesitate to contact us. The contact details are:

Researcher: Smita Paul,
Department of Management and International Business,
The University of Auckland Business School, New Zealand.
Email: smita.paul@auckland.ac.nz  Tel: +64 21 565 545

Primary Supervisor: Professor Snejina Michailova,
Department of Management and International Business,
The University of Auckland Business School, New Zealand.
Email: smichailova@auckland.ac.nz  Tel: +64 9 373 7599 Ext. 88737

Co-supervisor: Associate Professor Joanna Scott-Kennel,
Department of Strategy and Human Resource Management,
The University of Waikato, New Zealand.
Email: scottjo@waikato.ac.nz  Tel: +64 7 858 5022

Thank you for your time and I look forward to hearing from you,

Smita
PARTICIPANT INFORMATION SHEET

Project title: The dynamic nature of relationships within MNEs: The influence of temporality and multiplexity on intra-firm network relationships

Name of Researcher: Smita Paul

Researcher Introduction:
All interviews will be conducted by Smita Paul, a doctoral student at the Department of Management of International Business, The University of Auckland.

Research Project Description and Invitation
The aim of this study is to examine the dynamic nature of relationships between subunits within Multinational Enterprises (such as headquarters, regional headquarters and subsidiaries). In particular, I aim to examine how they change over time and how multiplexity affects such relationships. A subunit relationship that experiences multiplexity is defined as comprising of multiple co-existing sub-relationships that differ in content, for example, two subsidiaries may have a number of sub-relationships that may be financial, legal and project-based. This research will contribute to understanding how practices for managing intra-firm relationships between subunits can be improved.

I would like to invite you to participate in this research project. Your participation is voluntary. Before making your decision, please take the time to read the following information and please feel free to ask any questions.

Research Procedures
I would like to collect data for this study through interviews and archived company reports. The interviews may only be recorded by your consent. You are free to request that recording cease at any time. This process should take approximately 1-2 hours of your time. There are no anticipated risks to you. Your CEO has provided assurance that participation or non-participation (including withdrawal from participation) in this research project will not influence your employment in any way. Please note that all digital recordings will be transcribed by Smita Paul. You will be offered the opportunity to receive an interview report for content checking and editing prior to any analysis of any information that is provided. You are also offered the opportunity to be sent a summary report of aggregate findings at the end of the project.
Appendices

Data Storage/Retention/Destruction/Future use
Any information provided by you will only be used for the purposes of this research. This information will be kept in a locked cabinet of which the location is only known to the researcher. After six years, your consent form, any original data (in paper or digital format) will be destroyed and any transcription files permanently erased. Data will also be deleted from any electronic storage media used to retain original data.

The findings will be used as part of PhD thesis and may also be reported in academic publications, such as journal articles and book chapters. In addition, the findings might be used in presentations for students and at conferences. Please be aware that at all times, every effort will be made to preserve the confidentiality of your identity.

Right to Withdraw from Participation
Your participation is voluntary. All findings recorded and reported will be anonymised and will not be associated with the names of the participants. You have the right to withdraw from participation at any time during the interview and any time up until one month after the interview. My contact details are provided below if you wish to withdraw from participating after the interview has taken place.

Anonymity and Confidentiality
The identity of participants in this study will be kept strictly confidential. Findings will be published in a PhD thesis and may be reported in academic publications. However, please be assured that results and information will be provided in such a way to ensure that participants cannot be personally identified. Full anonymity of your identity cannot be guaranteed given that data is collected from only your organisation. Every care will be taken to preserve the anonymity and confidentiality of your identity. This will be done by anonymising any data collected and storing it separately from any consent forms gathered.

Thank you for taking the time to consider this study. There is one consent form attached to this information sheet. This form is to gain your consent to participate in the study. Please be aware that only my supervisors and I will have access to this information. This form will be locked in a cabinet separately from any interview data gathered in order to maintain confidentiality and anonymity. Apart from this form, all identifying information will be removed at the completion of this study.

If you wish to take part in this research, please sign the consent form provided. Please keep this information sheet for future reference.

If you would like more information on the study please contact:

Contact Details
Researcher: Smita Paul, Department of Management and International Business,
The University of Auckland Business School, New Zealand.
Email: smita.paul@auckland.ac.nz  Tel: +64 21563545
Appendices

**Primary Supervisor:** Professor Snejina Michailova, Department of Management and International Business, The University of Auckland Business School, New Zealand.  
Email: s.michailova@auckland.ac.nz  
Tel: +64 9 373 7599 Ext. 88737

**Co-supervisor:** Associate Professor Joanna Scott-Kennel, Department of Strategy and Human Resource Management, The University of Waikato, New Zealand.  
Email: scottj@waikato.ac.nz  
Tel: +64 7 858 5622

**Head of Department (HOD):** Professor Nigel Haworth, Department of Management and International Business, The University of Auckland Business School, New Zealand.  
Email: n.haworth@auckland.ac.nz  
Tel: +64 9 373 7599 Ext. 85235

For any queries regarding ethical concerns you may contact:  
The Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Research Office, Private Bag 92019, Auckland 1142.  
Email: humanethics@auckland.ac.nz  
Tel: +64 9 373 7599 Ext. 87830/83761

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 26/09/2013 for (3) years, Reference Number 010310
CONSENT FORM

THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: The dynamic nature of relationships within MNEs: The influence of temporality and multiplexity on intra-firm network relationships

Name of Researcher: Ms Smita Paul

This form is to gain your consent to participate in the study. Please be aware that only my supervisors and I will have access to this information. This form will be locked in a cabinet separately from any interview data gathered in order to maintain confidentiality and anonymity. Apart from this form, all identifying information will be removed at the completion of this study.

I have read the Participant Information Sheet and have understood the nature of the research and why I have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree to take part in this research.
- I agree to be interviewed for approximately 1 – 2 hours.
- I understand that I can choose to be/not to be digitally audio recorded.
- I agree/ do not agree to be audio-digitally recorded.
- I understand that I can refuse to be digitally audio recorded at any time during the interview process.
- I understand that I can withdraw participation without any explanation at any time during the interview process and to withdraw any data traceable to me up to one month after the interview process.
- I understand that information provided during this study will only be used for the purpose of this research.
- I understand that my identity as a participant in this research will be kept strictly confidential.
- I understand that results from this study will be published in such a way to preserve anonymity.
- I understand that this information will be kept in a locked cabinet and isolated from all other information gathered, including audio files, transcripts and electronic data.

Date

Name and address of research participant
Appendices

- I understand that I may request results of this study to be made available to me at the completion of this study.
- I understand that all data, including audio recordings, transcripts and electronic data collected during the study will be destroyed after a period of six years following the completion of the research study.
- I understand that this consent form will be kept for six years, after which it will be destroyed.

Name ____________________________________________

Signature ________________________________________ Date ______________________

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 26/09/2013 for (3) years, Reference Number 010310
Appendices

Appendix E - Qualitative Process Network Data Summary

Data time period: __________________________________________

Subunit: ___________________ Critical Event/s: ___________________

(Use dynamic descriptions below)

<table>
<thead>
<tr>
<th>Increase/Emerge</th>
<th>Cumulative Trigger permutation</th>
<th>Decrease/Terminate</th>
<th>Constant</th>
<th>Eccentric</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Sub-relationships: Content, types, interactions, (emergent)

Differences from previous data summaries

Context/Triggers

<table>
<thead>
<tr>
<th>Interrelationships</th>
<th>Harmonise or Oppose or (emergent)</th>
<th>Patterning/Permutations</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

Preliminary assertions, Network Picture Sketches, Permutations, Triadic Forms