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Networks and Clusters in Business History.


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Introduction

Analysis of business networks and clusters by historians has become a prominent strand of research in several areas of business history over the past two decades. While many business historians choose to unravel the complexities of business relationships of the past, not all have chosen to adopt the framework of social network analysis to examine the functioning and characteristics of these relationships. Therefore this chapter examines the presence and use of network themes and analysis within business history but also highlights areas where networks have been misinterpreted and areas which could benefit from further research. The frequent use of social network analysis in the fields of sociology and contemporary management/business studies allows business historians to view how network analysis can be employed in their own work. Further to this, by looking to these fields for research inspiration through an analytical framework, historians are able to create a theoretical fluency which Maclean et al. (2015) argue will add to the dual integrity of business historians’ research.

Networks can be complex structures containing a multitude of actors and linkages. The reasons for the presence of actors in a network and bonds they create vary, making it incredibly difficult to isolate networks. Thus before launching into a discussion of the uses and abuses of networks and clusters in business history, it is logical to start with a definition. A commonly used definition of networks as they relate to economic actions comes from Smith-Doerr and Powell (2005) who define networks as ‘formal exchanges, either in the form of asset pooling or resource provision, between two or more parties that entail on-going interaction in order to derive value from the exchange’. Even further simplification and broadness is provided by Mitchell (1973) who explains that a social network ‘can be thought of as the actual set of links of all kinds amongst a set of individuals’. Sociologists argue that network analysis focuses on the ties that link people, groups, organizations and countries and that the main purpose of analysing a network is to isolate and interpret patterns in these ties (De Nooy et al., 2005). The scope of these definitions implies that almost any grouping of
individuals or institutions can be defined as a network and presumably operate under similar network themes and characteristics.

Therefore networks can be a useful framework for historians attempting to understand group behaviour and individual interactions of the past and can open a dialogue between business historians and scholars of contemporary business and management. For the study of historical business communities, industrial districts and international trade routes, the use of social network analysis tools has been exceedingly useful. However, some that study these areas still have yet to adopt this perspective and more worryingly, ‘networks’ has also now become a buzz word for many historians who will claim to be analysing a historical network without employing a theoretical framework. Questions about the network approach need to then be asked here: is a network approach always the best approach for studying business groups or organizations in history? Is it wrong to apply a modern sociological framework to communities of the past? What are the dangers?

*Network Analysis before Business History*

Social network analysis emerged within the field of sociology in the 1970s and quickly became a widely accepted method for studying individual relationships and group behaviour. Many of the early social network theorists were crucial in influencing economic/business perspectives on network functions. Granovetter’s 1973 article in the American Journal of Sociology was instrumental in shaping the way in which sociologists viewed network operations. He stressed that the existence of dyadic or weak ties in a network allowed for the accumulation of diverse knowledge, increased mobility and opportunity for network expansion. Importantly, Granovetter (1985) later stressed that one must focus on business groups as a category of network, stating that repeated exchange can create networks of cooperation and collusion. Knowledge of each other’s characteristics as business men and women helps to match/refer each other to outside business opportunities. The networks which existed amongst marketplaces, industrial districts and trading communities act as model case studies for these sociological theories. Also prominent in the early 1970s, Lodhi and Tilly’s (1973) work on urban and migratory networks remains one of the most influential early examples of the adoption of social network analysis by historians. They argue that historians could use social network analysis as a way of situating individuals within larger societal changes (for example, social uprisings, mass migration and urban expansion). This concept
thus can also be applied to business history and changes in the nature of local, national and transnational business over the centuries.

In the last few decades, sociologists and economists such as Burt (2004), Rauch (2001), Watts (1999), Podolny and Page (1998) and Coleman (1988) have continued to produce theoretical works that historians have found useful in explaining network formation and functioning, especially within the context of business/economic communities. The flexibility of this theoretical framework and its ability to allow historians to pinpoint behavioural patterns which may not be explicitly pronounced in archival sources, not to mention the potential for inter-disciplinary collaborations, seems like an ideal approach to adopt. Yet, many still remain reluctant to think of historical communities in such a way. Wetherall (1998) argues that historians have typically been slow to adopt social network analysis as a research method because of three distinct reasons. First, the field of historical social network analysis first studied by sociologists is still widely unfamiliar to historians; second, historians using quantitative data to study their subjects make up a rather small proportion of historians\(^1\) and third, the social network analysis often requires quite robust data which certain subject areas and indeed historical ‘eras’ may not permit. Since Wetherall published his article in the late 1990s, there has been significant advancement in the field of historical network analysis, and much of this has been the work of business/economic historians. Network and cluster analysis allows for a framework through which business networks and clusters in history can maintain their individual diversity while still identifying trends in business organization and operation.

That said, business historians studying networks and clusters inevitably turn to much of the non-historical literature listed above, principally because of the important theoretical framework that many of these scholars laid out but also because of a lack of an extensive theoretical literature from business historians on networks. In many ways the study of business networks is helping historians deepen their understanding of interactions and exchange in business communities. We cannot ignore the importance of networks in business history, as Cookson (1997) argues, ‘businesses need networks, for industrialists must connect with others in order to buy and sell, to find finance and partners, to recruit and train staff and to develop technology and discover technical information.’ The study of eminent firms or conglomerates has pervaded much of early business history. However, historians such as

\(^1\) While this is true, historians have also discovered that a range of qualitative sources are also useful in network construction and one need not only work with so-called ‘big data’.
Cookson (1997), Haggerty (2010), Toms (2004), Casson and Cox (1993) and Rose (2015) have shown that understanding communities and organizational structures in which businesses and business people develop can be equally valuable to the history of business. The historians above have each contributed networked perspectives on business history and given that businesses do not emerge in isolation, the application of social network theory to understanding the internal dynamics of business communities and businesses themselves is valid. That said, the emergence of study of historical business networks has tended to be concentrated in a number of key areas. Histories of oceanic trade and merchant firms have yielded a number of influential studies on networks (Haggerty, 2013; Lamikiz, 2013; McWatters & Lemarchand, 2013; Margazalli, 2015; Games, 2000). If one thinks of a network as a tangled web, a port-to-port physical trade on an international scale tends to fit most naturally within a network framework. Merchants operated in a low institutional environment where personal relationships ruled and therefore using a network approach allows historians to grasp the complexities of a business environment centred on high-risk ventures, slow communication and lack of formal governance.

Another area in which the study of business networks has featured prominently is in the history of the industrial north-west. Being an area of business/economic history which has received much attention, fresh perspectives which incorporate more nuanced theories are a welcomed rejuvenation of a tried and tested topic (Parsons & Rose, 2005; Toms, 2004; Rose, 2000). Other areas also taking a network approach include studies of board interlocks, finance and credit networks, and the history of innovation and industrial districts. Studies which pick apart inter-organizational relationships and internal business networks in a range of industries still remain primarily the remit of pure business/management scholars and sociologists. That said, much of their work reveals the scope for application of network theory in business history and perhaps a move towards more theoretical fluency. The following sections of this chapter will explore some of the major themes and contexts of network studies and how they have been utilized in business history. From this, areas which could be benefit from network studies can be highlighted as well as areas in which network theory has allowed for misinterpretations of history.

**Key Themes**

Through historical network studies a number of key themes have been identified: trust, reputation, risk and knowledge or information; all four are essential to network formation and
function. There are of course much more complex themes that emerge in network studies such as embeddedness, obligation, etc.; however these four comprise the most basic attributes of networks and are often the first examined in historical business networks.

Trust is an intrinsic part of networked community and in business in particular, it is one of the core attributes of a transacting relationship. Fukuyama (1996) in his important work devoted to the concept argues, ‘trust is the expectation that arises within a community of regular, honest, and cooperative behaviour, based on commonly shared norms, on the part of other members of the community...but while contract and self-interest are important sources of association, the most effective organizations are based on communities of shared ethical values’ (1996, p.26). In business, trust is required to establish a working relationship and although trust can come in different forms, the idea that an individual expects a business contact to behave in a particular way, one which will not bring harm to themselves or their business, is fundamental to every business relationship. Therefore, trust as it relates to the creation of networks becomes an important of analysing historical business networks.

Business historians have analysed the concept of trust within the context of networks in several ways. In studies of international trading networks, trust was required in every business exchange (buying, selling, credit extension) because contacts were often located in distant locations, communication was slow and formal governance procedures were almost non-existent (Glaisyer, 2004). Despite many business networks operating in a low institutional environment, many networks adhered to social norms which fostered trust between individuals who shared the same business culture (Gómez-Galvarriato, 2008). Of course, there are many different types of trust, when looking into family business networks, historians have often highlighted the concept of ascribed trust, whereby a person is trusted by a network on the basis of attributes other than proven good business practices. Colli (2003) and Haggerty and Haggerty (2009) have each written on this notion of ‘ascribed’ trust and the family firm because family members were a first source for employees, capital and property and thus were trusted simply because they are related. Other forms of trust were also important to building business networks; impersonal trust for instance was trust bestowed upon an individual because of their affiliations (religious groups, i. e. Quaker) or particular social norms which may obligate people to act morally (Casson, 2003). These kinds of trust were particularly important in business communities where individuals relied first on family and failing that, had to create new connections.
Aslanian (2006) in a study of early modern Armenian trade networks argues that the existence of ‘trust’ amongst business communities was not simply present because of strong ties between business associates but was something that was constructed over time as a result of the accumulation of social capital within a given group. Social capital, a prominent strand of network studies championed by sociologists such as Portes (1998) and Burt (2000) define social capital as the individual or collective benefit gained from one’s own relationships and position in a given network. The benefit being that one is trusted within their given network, participates in cooperative relationships that are beneficial rather than detrimental to them and accrues a reputation which will allow them to access new opportunities, information and contacts. Fukuyama (1996) also suggests that ‘social capital is the capability that arises from the prevalence of trust in a society or in certain parts of it. It can be embodied in the smallest and most basic social group, the family, as well as the largest of all groups, the nation, and in all groups in between.’

Trust within business networks was also inseparable from reputation. Numerous studies on networks and embeddedness have shown that transaction are most likely to occur between individuals who have knowledge of each other or who have fostered some sort of reputation, usually positive, within a given business community (Granovetter, 1985). As Coleman (1988, S107) argues, ‘reputation cannot arise in an open structure’, it is the network themselves that foster and transmit reputation and thus it becomes an integral part of exchange within a network. Despite reputation being an essential part of network building and expansion, there are few dedicated business history studies on this topic, although most network histories will touch on it in some form. One of the few but instrumental early studies on medieval trade networks conducted by Avner Grief (1989) explains how a group of traders built trust based on reputation and vice versa. He argues that the mechanisms of reputation reveal a relationship in which trust and reputation must operate together, ‘the merchant can thus trust the agent – the agent possesses a reputation as honest agent’ (p. 867).

The ‘honest agent’ is one that is trusted to act in the best interest of the principle (merchant) which then stems the risk of misbehaviour or misconduct. The mechanisms of trust and reputation are in place because businesses are subjected to many different kinds of risk. An interesting strand of the study of historical business networks is examining the ways in which they respond to risks in a variety of forms. This could be market fluctuations, war, financial crises and host of others. The concept of risk and indeed risk and business or risk and the economy has its own plentiful literature (Lupton, 1999; Nooteboom, Berger and
Noorderhaven, 1997). This has been used to inform our historical conceptions of how businesses of the past have coped with risk. Much of the literature suggests that networks of known and trusted associated were necessary for minimising risk. Especially in times of uncertainty, networks also provided information and knowledge which served to lessen financial risks.

Risk then becomes an important driver for the creation and endurance of networks. Risk as it relates to business networks or simply business relationships can be conceived in numerous ways (risk, hazard, threat, uncertainty, etc.). Haggerty (2013) establishes that a risk is the measure of a hazard occurring and this measure often brings with it a degree of uncertainty. Forrestier (2010) argues that although there were risks that were unavoidable, risks that stem from individual action could be lessened. A strong business culture linked to good business practice and reputation ensured that businessmen and women operated justly without the need for institutions. Therefore business networks can also be understood as a form of governance because actors become accountable to other actors. While some institutions did help to mitigate risk (government, debtors courts, chambers of commerce, etc.), prior to formal codes governing businesses, actors were forced to deal with risks through their networks. By operating in a network in various forms, individuals ideally can spread risk. This was why for example, merchants often part-owned vessels, underwrote insurance policy in groups and extended credit to firms they knew and trusted.

Risk also impacts the size and density of an individual’s network – individuals may seek out multiple contacts which provide the same good or service in an effort to reduce the risks that come from vertical integration. Some may choose to keep their network small in order to protect their businesses from outside hazards brought about by the unknown (Biggart & Hamilton, 1992). One aspect of business networks which could use more attention in the business history literature is the use of networks to either allow for or restrict malfeasance in a more modern sense (Granovetter, 1992). Networks are the necessary organizational structure through which corruption and collusion occurs and although there have been a number of studies on the history of corruption and fraud, examining the networks that allow for this behaviour would be illuminating.

An important part of mitigating risk is acquiring the appropriate information to deal with potential hazards or uncertainties that may arise. The contemporary socio-economic literature contains a wealth of research pertaining to the function of networks as the transmitters of
information and knowledge (McFadyen and Cannella, 2004; Coleman, 1988). Much of this literature refers to the knowledge accumulated through associations as human capital and much like social capital, this remains one of the benefits accrued by being an actor in a network. The business history literature as well has adopted theories of human capital accumulation, it being one of the main objectives of network formation (Jacob, 2014; Berghoof & Kohler, 2007; Duguid, 2004). Duguid (2004), in his work on the port commodity chain, emphasizes the information required when business networks engage in the production, procurement and sale of a commodity which requires a wealth of knowledge related to quality, cost and other ‘peculiarities’ of port and the markets for this good. Further to this, actors in this network also had the challenges of cross-cultural business and international regulations with which to contend and thus the ability to access and transmit information was crucial.

Networks and the capital gained (or in some cases, lost) that comes as a result of membership are tied into the factors listed above, as well as many additional subtleties of human behaviour and relationships. The shape and structure of a network depends entirely on the contexts in which they are created and function. How is it then that we can study, in general terms, business networks of the past? Each network will inevitably be different but may display particular patterns related to culture, location, size and industry. The following section will discuss some of the contexts in which business networks arise and the characteristics ascribed to each.

Business Networks and Clusters in Historical Context

The contexts in which a business network is created greatly impacts upon the way it functions. It is not enough to say a business network exists and therefore it will contain trustworthy associates who exchange goods and ideas that benefit the group as a whole. Each network will contain a different set of variables, each will be faced with a different set of obstacles, risks, uncertainties, etc. and each will operate on a different scale. This section will examine some of the contexts in which networks in business history have been explored: the family business, local business communities, industrial districts and international trade.

Family business networks have persistently been an important part of business communities. The development of business networks within the context of the family was common as family was and often still is the first source of financial capital, property, knowledge and opportunity. Ascribed trust mentioned above was bestowed upon family members and
encouraged individuals to participate in business under an informal behavioural code. Family was an expected source of business partners and heirs, as Fukuyama (1996) argues, ‘among the numerous forms of social capital that enable people to trust one another and build economic organizations, the most obvious and natural one is the family, with the consequence that the vast majority of businesses, both historically and now, are family businesses.’ Of course not all family networks will operate with the same emotional proximity to one another or indeed the same sense of obligation. We must presume that family members may be in-different to one another and this may influence their actions in business relationships with kin. Even in the same family, members can belong to different ‘circles of intimacy’, which can govern the types of relationships that emerge (Firth, 1956). A cousin-cousin business relationship may be the same or different than a brother-brother/sister-sister relationship depending on the level of intimacy between each actor.

The functioning of family-owned businesses and internal networks remains a pressing concern for scholars of contemporary business who have investigated key issues such as agency problems (Morck and Yeung, 2003), gender and small business ownership (Renzulli, et al., 2000) and family networks within Asian business (Carney & Gedajlovic, 2002; Yeung, 2000). The multitude of studies featured in *Family Business Review* (such as Lambrecht (2005) on transitions between generations in family business and Miemela’s (2004) study on family business networking demonstrate the interest in studying family business networks and networks in transition. In business history, literature on the family firm is substantive with Colli (2003, 2011; Colli & Rose, 2003) making some of the greatest contributions to our understanding of the intersection between family and business spheres. The use of network analysis in the study of the family firms provides a fresh perspective on older historiographical questions regarding firm dynamics, agency problems and hereditary business. While many scholars have noted the benefits and persistent of family business (Colli et al., 2013; Mathias, 2000), business historians have started to problematize family networks (Haggerty, 2011; Hancock, 2005). Finding a historical context for problems first recognised by sociologists, business historians such as Haggerty (2011) have examined how individuals chosen as business associates on the basis of familial association may not have always been ‘the right man’ or woman for the job. In business networks, there was almost an obligatory selection of family member as business partners due to ascribed trust and not always experience or capability. There is scope here then for networks in business history to
be problematized further, while networks are often entered into for the benefit of members, the outcomes for networks were certainly not always positive.²

Beyond the family, small scale networks formed on the basis of ethnicity and religion also played a substantial role in business. Many studies of local ethnic business networks focus on ethnic diasporas which provides opportunity that examine the formation, function and sometimes dissolution of embedded networks in one environment. Olegario (1999) examines Jewish business groups in New York City in the nineteenth century, combining a discussion of networks and culture for a displaced ethnic group which established a thriving business community. Godley (1996) also turns his attention to the role of Jewish financiers in both New York and London as part of a migrant business community. Hancock’s (2005) study of Scots in the Madeira trade paints a different picture of migrant networks, one fraught the problems related to family obligation, hereditary business and cross-cultural communication. A few contemporary studies examine the ways in which minorities bind together to create opportunities for themselves (Model, 1985). This intersection between the history of ethnic minorities and the history of local business networks is one that business historians have yet to fully examine. While these histories may exist under the field of social or cultural history, they have yet to crossover fully to the realms of business history.

Histories of religious networks in business have also been plentiful. Due to the outstanding success of Quaker business in the eighteenth and nineteenth centuries, a number of historians have provided detailed studies of their business and their networks within Quaker communities (Tolles, 1948; Prior & Kirby, 1993; Landes, 2015). Although fewer in number, studies of early French trade in Canada centre on the catholic networks which bound them together against the hordes of protestant/dissenting Anglo-merchants (Bosher, 1998). What at times becomes problematic with histories of ethnic or religious ties is the extent to which networks overlapped. In business communities as intertwined as early modern port cities or industrial towns, one cannot expect that actors ‘stuck to their own kind’ in all instances. Businessmen and women were often pragmatic, engaging in exchange with whomever regardless of ethnicity or religion, if it appeared profitable to do so.

Much emphasis in the literature is placed on specific ties which created networks; however, spatial proximity also becomes in itself an important factor. Face-to-face interactions,

² This can be seen not only in family networks but also in local and regional networks. Family, especially in an early modern sense, was a very fluid organizational construct and often non-family members would develop bonds with a high level of intimacy, occasionally referred to as ‘fictive kin’ (Socolow, 1978).
especially in the case of neighbourhoods or industrial districts, was a key feature of business relationship formation and function. As a governance mechanism, it also allows for reputation building and accountability. One of the ways in which local business networks have been explored in business history is through associations within industrial clusters or industrial district. Studies of clusters have been used to explain particular structures within local business networks or industrially connected networks. According to Wilson and Popp (2003), a cluster can be defined as ‘a wider agglomeration of industries that may be connected by common products, technologies, markets (either of supply or demand) or institutional frameworks.’ The literature on current and emerging industrial districts is vast, much of it linking back to so-called Marshallian economics (Becattinni, 1990) and for the purposes of this chapter, the description has been kept brief. Industrial districts are ‘geographically designed productive systems, characterised by a large number of firms that are involved at various stages, and in various ways, in the production of a homogeneous product’ (Pyke et al., 1990); however, recent debates challenge the notion of geographical proximity with regards to districts, stating that resource sharing is accomplished through networks (clusters), regardless of distance, more frequently than in districts (Boschma & ter Wal, 2007).

Influenced greatly by the work of Porter (1990), understanding clusters can help us understand the ‘intangible infrastructure of a region’ or related industries in many regions for that matter (Casson on Regional Business Networks in Wilson and Popp, 2003, p. 23). As Nicols (2014) argues, ‘clusters have institutions and culture, industrial structure and corporate organisations that promote innovation and economic development’. The association of similar businesses allows for knowledge-sharing and competition which in turn encourages innovation and development. The formation of a cluster relies on the availability of resources necessary for a particular type of business, available opportunity from the business community and the presence of industry-specific knowledge. Firms forming the cluster also need to be motivated to reduce transport costs and promote the creation of a pooled labour market.

Specific research into innovation clusters has illuminated current geographical spaces in which specific industries have found success, such as Ripcurl and Quicksilver in Torquay, Australia (Stewart, Skinner and Edwards, 2008) and the innovative edge of technology companies in the Silicon Valley (Lee et al., 2000). The study of industrial clusters and districts within business history has also produced many influential works. The edited
collection by Wilson and Popp (2003) offers a complete and theoretically rigorous study of
the development and characteristics of industrial districts in Great Britain from the eighteenth
to twentieth century. Indeed, the theme of industrial districts of Victorian Britain has been a
popular one, even if earlier studies apply less of a theoretical framework than Caunce (1997),
Popp et al. (2006) and Casson (2003). Since Wilson and Popp’s edited collection, the interest
in this topic has continued. There has been an increased focus on industrial clusters and
districts in East Asian economies (Lee & Jin, 2009) as well as the creation of industrial
districts in tourism and specific holiday destinations (Cirer-Costa, 2014). Movement away
from classical studies of financial and textile clusters in Victorian Britain opens the scope for
applying theoretical frameworks of clustering and districts to newer industries and non-
western regions, which could potentially inform our understanding of regional development
and emergent markets of the past.

Related to the study of intra-sectoral links, work on corporate networks and particular
networks of board interlocks has created a new thread of business history which examines
inter-organizational links and corporate governance through the twentieth century. Research
into board inter-lock networks gained momentum in the early 1980s with the work of Koenig
focusing in on contemporary American directorate networks. However, some such as Scott
(1991) and later Windolf (2002) and Conyon & Muldoon (2006) chose to take a more
international as well as longitudinal approach in order to demonstrate how directorate
networks compare and how they have changed over the twentieth century in locations such as
Great Britain and Germany. In recent years, this research has again become relevant,
especially within emergent business history literature. Business historians are now looking to
readdress the relationship between industry and finance using the directorate network as an
indicator of communication and influence between the two (Schnyder & Wilson, 2014). Da
Silva et al. (2016), Del Angel (2016) and Salvaj et al. (2016) have also begun to look at this
networked relationship in other international contexts, specifically Portugal, Mexico and
Chile. This research is a promising bridge between business history and current business
research which together could highlight important observations related to governance and
policy.

One area of network studies which has received arguably the most attention in business
history is international trade networks, likely because, as Divall (2012) argues, a history of
globalisation will inevitably lead to a history of business networks. Many historians who
Examine international business and trade have chosen to adopt social network theories into their work (Haggerty, 2013; Buchnea, 2015). Examining the operation of international business communities through this lens allows historians to more easily negotiate the inner workings of business relationships across vast distances. Especially in the case of what some may term the ‘pre-modern’ economy, before communication was instantaneous, networks were essential for sustaining connections and ensuring accountability when face-to-face contact was not possible. Unlike other histories of business networks and clusters which have focused largely on the western world, studies of international networks has begun to make a move in earnest towards non-western contexts (Musacchio & Read, 2007; Seland, 2013; Veevers, 2013). That said, much of this literature continues to focus on business networks in the colonial context, especially studies which focus on the Indian Ocean and port economies.

Studies of networks in international business history still has an incredible amount of ground to cover, especially in terms of the development of multi-national enterprise and twentieth century multi-national corporations. That said, the extensive literature on trade networks has pushed historians to adopt approaches beyond only applying socio-economic theoretical frameworks and engage with network analysis technology. The extensive nature of international trade networks makes it difficult to articulate the multitude of bonds formed and the ever-changing nature of business connectivity. To remedy this, scholars have adopted network analysis software to create visualisations of large networks to aid in explaining both the scale and embeddedness of early trade networks (Haggerty, 2010; Buchnea, 2015). This is not to say that visual analytics have not found favour in other areas of historical business network research, interesting work is currently being conducted in corporate network histories (Musacchio & Read, 2007) and industrial district histories.

*The Problem with Networks in Business History*

The study of networks in business history, although a natural framework for certain topics, is not without its problems. Histories of business networks have tended to emphasize the advantages obtained by network membership, specifically the access to a variety of resources. This emphasis is not misguided since networks were often created to receive such benefits. However, what has been emphasized less are the ways in which networks have served to disadvantage particular members or the community in which they operate. Too often we view networks as functional business systems, whereby individuals or businesses are connected and these connections offer them multiple forms of capital. Business historians are now
looking to problematize networks (Hancock, 2005; Crumplin, 2007). Networks have served many beneficial purposes in historical communities but what occurs when networks are detrimental to businesses? In sociology, there have been a number of theoretical developments with regards to the disadvantages of networks. In recent years, most influential among these is the concept of negative social capital which is the reputational and associational disadvantage obtained from being linked to networks known for bad business practice, dishonesty or failure, to name a few characteristics (Glaeser, Laibson & Sacerdote, 2002). Also linked to this is the negative effects of social capital, ‘excessive trust’ in a network can lead to pressure on members to be successful and in inherently risky markets can lead to networks as a whole making poor decisions simply because they trust each other too much (Portes, 2014). This side of historical business networks has yet to be engaged with fully but there is incredible scope for further research on the downside of belong to business networks.

Aside from a need to further problematize networks and perhaps push theoretically boundaries within business history, one must also consider the practicalities of network research within the field of business history. While using network analysis to study the dynamics of business communities and inter-organizational relationships has proved useful, it can present some disadvantages; one of these pertains to sources. Understanding networks is about understanding relationships which allows us to gauge the overall function of a network. In history, we are forced to reconstruct relationships and this can be done using any number of sources. Wills, census data and other genealogical data may tell us whom was related to whom but does this indicate a relationship? Corporate network data is often pulled from annual reports or stock exchange year books. This data is robust and gives a clear indication of corporate networks; however, researchers are faced with the challenge of digging out great quantities of qualitative data to actual determine the character of board-director relationships. Further to this, how can we know how the network is utilised and transformed outside of the boardroom without asking the directors themselves? For early studies of international networks, correspondence is the most valued source. Despite the rather formulaic style of business letters, the frequency of firm-to-form correspondence or correspondence between business partners allows researchers to rebuild relationships where such sources are plentiful. However, due to source limitations, there are instances where it may be difficult to reconstruct historical business networks and network data will often be incomplete. That said,
even a partial picture of a business network can be useful in understanding business strategy, the behaviour of individual firms and wider business group composition.

While network analysis is a useful tool for studying human interaction it can sometimes presume that individuals will behave in a determinable way, that they are rational beings. Networks are flexible, they act as informal forms of organizations and institutions and allow us to view human behaviour in diverse network scenarios. However, if the evidence on business networks is not robust, presumptions regarding the actions of network actors can be dangerous. Business historians now have the task of using networks not only as a way to explain informal business organization but to explain some of problems communities might encounter as a result of network actors. Concepts such as negative social capital or dark networks which have become vogue in current business research can also provide a lens into less favourable network outcomes of the past.

**Conclusions: where to next?**

To date, business historians have produced monumental studies which demonstrate how social network analysis can be utilised to understand business groups and behaviour in the past. Established research strands on industrial districts, international trade and Victorian Britain have demonstrated how networks can be used successfully to analyse business groups. Emergent research on historical corporate networks and more nuanced historical examinations of social and human capital are strengthening the theoretical fluency of historical network studies by framing business history topics in a manner which current business/management journals will find relevant. That said, there is tremendous scope for further research; subjects which could benefit from social network analysis and network studies which could push the theoretical discussion further.

The use of new techniques such as network visualisation software and network mapping could provide entirely new perspectives of the structure and composition of networks. While visualising static networks is useful, projects which examine network change over time with the use of multiple visualisations would provide important insights into business network development and transformation (Buchnea, 2014). Emerging work on Chinese and South American business networks exposes the dearth of studies of non-western historical business network studies. New studies have revealed that networks features which western business and markets have deemed to be problematic, such as cartels, opaqueness, and nepotism are at the core of Asian business networks (Biggart & Hamilton, 1988). The importance of
Zaibatsu, family controlled conglomerates in Japanese economy through twentieth century and South Korean Chaebol networks of companies or firms owned by a single person or family (Samsung, Hyundai, Goldstar, Daewoo), demonstrates the necessity of networked relationships to East Asian business. If networks are controlled by the intangible values/cultural norms of a given society then networks in societies with different cultural values should operate differently. Business historians thus need to first grapple with non-western business culture before non-western historical business networks can be interpreted accurately. The amount of work already completed on various network topics is promising and the continued interest in network studies outside of business history indicates that a sustained inter-disciplinary dialogue related to business networks is possible and worthwhile. While business historians must be cautious in interpreting the characteristics of individual business relationships of the past, analysing historical business network behaviour will elucidate many aspects of business group dynamics and business community development over the centuries.

References


