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*Emergent knowledge dynamics in innovation:
exploring e-business entrepreneurship
after the dotcom crash*

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ABSTRACT

This thesis explores emergent knowledge dynamics in innovation in the context of e-business entrepreneurship. Based on a critique of the dialectic interpretation of knowledge dynamics, it forwards a perspective that stresses the creative force of emergence that disrupts existent meanings and produces new potentialities for innovation. It suggests ways of using such a perspective in policy-targeted research.

The first part elaborates on the traditional uses of concepts of knowledge in explanations of entrepreneurial innovation and on the need to account for a dynamic perspective on emergent knowledge. The thesis employs work by Deleuze and Guattari as meta-theoretical vehicle to expand the conceptual potential of social representations theory beyond its traditional focus on a dialectic ontology of becoming. It highlights a dynamic which does not exclusively assume conceptual difference as the source of the novel and which allows for patterns of becoming other than the triadic continuity of dialectics. Together, this provides new possibilities for an understanding of knowledge dynamics taking into account both adaptive and creative dynamics of emergence.

The empirical part combines thematic analysis of interviews and a focus group with Deleuzian analysis of participant observation to facilitate an exploration of emergent conditions for innovation in a particular milieu of e-business entrepreneurship. The exploration shows how changes in shared evaluative dimensions guided – and constrained – the creation of new concepts. Simultaneously, distinct assemblages arising from novel connections of affect and technology in networks created the conditions of fluidity and ambiguity required for new knowledge: in the aftermath of the dotcom crash, new concepts of network leadership and trust in business interaction were emerging.

This study forwards new insights on the study of emergent knowledge dynamics as oscillating between rhizomic opening and dialectic closure. It is in the disruptive encounters between the two that new conditions for innovation can assemble.

Keywords: Knowledge dynamics, emergence, social representation, dialectics, Deleuze & Guattari, difference, rhizome, e-business entrepreneurship.

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*"Solutions nearly always come from the direction you least expect,
which means there's no point trying to look in that direction
because they won't be coming from there."
Douglas Adams*

1 GROUNDING AND OVERVIEW OF THESIS

This thesis is inspired by the growing awareness in entrepreneurship research and practice for the need to better understand the knowledge creation process that drives innovation. Specifically, the thesis is concerned with entrepreneurial business in the e-business sector - also referred to as e-business entrepreneurship¹- where knowledge stands at the centre of efforts to enhance the potential for future innovation. The UK support infrastructure for e-business entrepreneurship provides the example: given the radical changes in e-business entrepreneurship since the stockmarket crash of 'dotcom firms'² in 1999/2000, there is increasing research and governmental intervention targeting the implementation of the 'right' skills for entrepreneurs. The angle on knowledge that is predominantly taken hereby is one that views knowledge as consisting of object-like units possessed by individuals. As a result, innovation is often conceived of as a process of managing the transfer of knowledge objects from the minds of individual entrepreneurs into practice – meaning, the minds of many individuals. In business terms, this is understood as the need to implement innovations in a target group or market through specific management measures such as a marketing or implementation campaign. Even though there is research that draws attention to the shortcomings of an exclusive focus on individuals, suggesting more social and process-oriented perspectives on knowledge creation, knowledge has however rarely been explored in its dynamic and emergent character in this context.

The absence of such a perspective on knowledge dynamics points to a more fundamental problem of meta-theoretical nature: the awareness for epistemological and ontological assumptions about the nature of knowledge. There are deep-seated, usually unquestioned assumptions about what knowledge is and how it is produced that are highly significant for the ways in which we approach research on knowledge, formulate research questions and generate understanding of knowledge phenomena.

¹ Small business concentrating on the selling and trading of services and solutions over the World Wide Web, also called Internet enabled business.

² Firms that have a Web-site on the World Wide Web. 'Dotcom' stands for the domain name of the Web-site which ends in the suffix '.com'

With regard to scholarly and policy-driven entrepreneurship research, these assumptions are predominantly grounded in Cartesian philosophy of thought, which focuses analytical attention exclusively on knowledge as individual, objective and static phenomenon. The implications are significant, specifically in the area of policy-making. For instance, the UK support infrastructure for entrepreneurship has been developed into a system of support aimed at individual knowledge of entrepreneurs, based on the assumption that this is where innovation is mainly originated. Recent research however highlights a disjunction of UK policies from an understanding of entrepreneurial knowledge. Despite robust research and support efforts, the support infrastructure has been criticised as being inefficient in meeting the needs of entrepreneurs.

This thesis argues that in order to better understand knowledge creation processes in the context of innovation, we need to scrutinise meta-theoretical assumptions about the nature of knowledge and more specifically, about the nature of the dynamics of the emergence of new knowledge. When thinking about knowledge in innovation, in essence, the phenomenon we are concerned with is one of emergent knowledge dynamics – the movement and advancing of knowledge that brings forth the conditions for the emergence of new shared concepts. In other words, we are concerned with the creative forces that produce movement in knowledge - movement that lets new concepts arise and previous ones disappear from the social radar of what we collectively believe to be innovative.

To address this, an epistemological and ontological stance is required that allows us to capture this phenomenon beyond the assumption that new concepts are exclusively conceived in the minds of entrepreneurs and diffused throughout society by means of an ingenious marketing campaign. We need to go beyond thinking about knowledge as exclusively determined by presumed knowledge entities in the minds of individuals. Thus, the paramount question of this thesis is: *how can we explain the creative forces of emergence that play a role in the forging of new shared concepts?* In addressing this question, this thesis aims to provide new insights into the phenomenon of knowledge creation in the context of innovation in modern business contexts. It does so by forwarding a critical onto-epistemological stance on emergent knowledge dynamics

and by illustrating the practical relevance of such an angle at the example of e-business entrepreneurship.

This introductory chapter sets the stage for a critical exploration of such a perspective, by briefly sketching out the main theoretical and empirical impetus for this study. The aim is to provide a brief first overview of the thesis, while I will return to each of the issues outlined in the following in more detail in the subsequent chapters.

AIMS OF THE THESIS

This thesis has two primary aims. First, it seeks to develop a critical social psychological angle on emergent knowledge dynamics, which addresses specific shortcomings of Cartesian and post-Cartesian angles on knowledge employed in entrepreneurship research on innovation. Current research focuses exclusively on individual-centred concepts of knowledge as determinants of entrepreneurial knowledge on the one hand, and on management-centred concepts on innovation on the other. This leaves significant questions unanswered about the dynamics that engender the emergence of new knowledge. Entrepreneurial innovation in e-business - the process through which a small business successfully brings forth new knowledge-centred products in e-business - is to be understood specifically in its knowledge creation process here. The argument is that it cannot be sufficiently explained if we base our conceptualisations on knowledge creation on individual-centred and static assumptions about knowledge, separating it from experience and assuming it to be manageable from an outside, 'objective' perspective. What needs to be addressed is the very assumptions we apply about knowledge in order to better understand the creative forces that move knowledge when explaining the emergence of new shared concepts. In a first step in this direction, this thesis proposes a perspective on emergent knowledge dynamics that takes into account both the dialectic dynamics of communicative interaction as well as non-dialectic dynamics in the material world affecting human experience.

Secondly, the thesis aims to forward empirical findings that illustrate first, how such a perspective on emergent knowledge dynamics can be operationalised methodologically and second, how such a perspective lets us better understand innovation. The objective

is to forward an analysis that demonstrates how a focus on emergent knowledge dynamics can highlight the creative conditions of the emergence of new knowledge rather than the absence of (a priori) presumed knowledge categories. This will facilitate the development of practical intervention and research on knowledge in entrepreneurial innovation alike.

In addressing these aims, this thesis sets out to provide entrepreneurship practitioners and researchers, social psychologists and policy makers with a systematic exploration of the ways in which the meta-theoretical perspective on knowledge and its dynamics of emergence are significant for our understanding of the knowledge creation process in entrepreneurial innovation.

BACKGROUND

It has become essential within the critical social psychological framework to make explicit one's position as a researcher, and the impact of this position on the research process, from the definition of the research questions, through method(s) of inquiry employed, to analysis and theory building. This practice is based on the premise that there is no such thing as a neutral presentation of objective facts. All explanations are interpretations and problem representations following a particular subjective and epistemological and ontological standpoint (Marková, 1982) – there is no universal scientific truth (Collins, 2004). It is important therefore to highlight the values that one's intellectual work is grounded in, by acknowledging the motivation, commitments, and conditions that influenced its production. Taking these perspectives on board, I provide a brief account of the ideological and motivational foundation of the research.

My interest in a social psychology of knowledge dynamics in economic life was shaped by two experiences. The first began during my Masters degree, a course that was a conversion degree for graduates with a non-psychology background. I had an undergraduate background in Business Studies, and several years of experience as a Change Management Consultant involved in change management projects in the IT-service industry, but had decided a switch to Organisational Psychology. I was particularly keen to explore ways in which my interest in business and the dynamics of

change could be expanded and perhaps better explained within an organisational psychology framework. While carrying out coursework and engaging with both mainstream and critical literature in social and organisational psychology, I began to identify particularly with social constructionist perspectives on economic life and on social change.

Issues debated within anti-individualist psychology schools of thought, such as the social construction of reality and the importance of social knowledge in change, the overemphasis of the rational individual in the treatment of psychological factors in business, the problematic application of change intervention based on cognitive and individualist psychology, and the compromising relationship between psychology, change management and consultancy practices, constituted some of the key reasons that led me to abandon a further career as a Change Management Consultant.

Ironically, as my engagement with critical social science perspectives grew, I became increasingly aware that the cognitive psychology ethos that was mirrored in mainstream consultancy business practice, rooted in classic economics. My sense of unease deepened during my work on my dissertation, when it became evident that mainstream psychological theories provided very limited analyses of socially shared beliefs and experiences within different business sectors and work communities. The dissertation explored social representations of the e-business economy amongst business professionals in Internet enabled business. The qualitative analysis of the data from respondents touched upon the social construction of e-business, and the complicity of economists' and economic psychologists' conceptualisations of explaining the dynamics of change in this business sector. Crucially, a social constructionist framework shed light on the way in which the social representations of business professionals about the new economy were very different from the public 'hype' about the new economy, and how a new common understanding of interaction in this new sector was being dynamically shaped. Social representations were part and parcel of this change as a form of knowledge inherent to the fabric of daily life. This work focused my research interests on applied social psychology specifically for a better understanding of contemporary changes in economic life.

The second defining experience stemmed from my exposure to change management practices during my work as a consultant. I continued working part-time during the Masters programme and was involved in several capacities – as a workshop facilitator, consultant, decision support coordinator and writer of strategy papers – on a range of European change projects. The projects were for a variety of companies in the IT-service and financial service industries. With each project I became increasingly aware that mainstream ideas of change and knowledge management – which constituted the main driving force of formally approved consultancy practices in systems integration and IT change projects – were as problematic as the mainstream psychology ideas that I had become uncomfortable with in my Masters course. Popular thought in this arena was informed by notions of change as challenges of improvement of the knowledge of individuals and were implemented in form of 'knowledge management plans', pre-defining 'essential knowledge assets' and artificially separating knowledge from the actual experience of change.

Change was seen as something to be designed and managed; particularly in IT-change projects this was linked to aggressive implementation scenarios tied to the structure of specific IT software packages. The design of the implementation of change measures was usually separated from the 'roll-out' of these measures to the workforce, usually in implicit anticipation of resistance by employees to the new knowledge. Thus, the goal of the majority of the IT-change projects was to control and manage knowledge from 'the outside' – albeit in psychologically sensitive ways – in order to improve the ability to keep abreast of the contemporary changes in information technology. This epistemological stance was perhaps unsurprising as psychological approaches in this domain had at its core behavioural and cognitive psychology. What was more surprising was the wholesale and seemingly uncritical adoption of these ideas by IT-service professionals.

A critical look at contemporary business perspectives on innovation in e-business similarly highlights this perspective on knowledge. Most prominently, there is a fundamental flaw in splitting knowledge as the domain of 'thinking' from experience as the domain of 'acting' and making broad assumptions about how certain knowledge units may affect innovative business practices on this basis.

E-business is intricately linked to the contemporary developments in the IT-sector: e-business is often characterised as driven by the development of new information and communication technologies (ICTs), most prominently the rise of the Internet in the 1990s. Since then, there is a growing awareness towards knowledge and its management, fuelled by the new debate about the global information society and its comparison to the industrial age. The novel and increasingly global possibilities of data exchange via the World Wide Web and with this the new possibilities to innovation are said to require new approaches to understand knowledge. For instance, compared to the concern of the industrial age to protect knowledge through exclusive property rights, in the sphere of e-business, knowledge in innovation is said to no longer about the protection of ideas but about the rapid dissemination of knowledge on a global level (e.g. Quah, 2003).

One of the fundamental assumptions of this perspective on knowledge is the idea that knowledge exists in units. Running through much of contemporary thought about change and innovation in business and through much of its criticism lies a taken-for-granted view that there is an entity called knowledge that can be possessed by individuals and that interaction amongst individuals means a cause-effect relationship between these entities. It is assumed that knowledge is situated in the minds of individuals (that are accordingly information-processing units) and that knowledge can be managed by transferring knowledge units from one individual's head to another. Knowledge is thought about as something stable and static, separated from our everyday experience of the world. Experience itself is thought of as an application of such knowledge.

The contemporary reality of how innovation is approached in e-business is influenced not only by mainstream economic ideas, but also by interdisciplinary approaches to knowledge in organisation and management theory. There is a wave of scientific management theories that has begun to broaden the spectrum of approaches to knowledge in the debate on change and innovation management. Increasing attention is paid to social, contextual and interaction-based approaches. Yet few of these approaches take on board the ways in which the experience of e-business professionals shapes knowledge in innovation. This, as I argue in this thesis, is a crucial factor for an understanding of the creative forces of knowledge dynamics. Our knowledge is neither

separated from the everyday experience of social interaction nor from that of the material and natural world around us.

Placed within this broader context, the phenomenon of knowledge in innovation takes on more complex shades that go beyond simplistic dichotomies of individual versus social conceptualisations of knowledge. It is a main concern of this thesis to show the significance of meta-theoretical assumptions about knowledge in this respect: I argue that the logic underpinning the above concepts lets innovation seem a problem rooted exclusively in individually held knowledge units. It is also a static view on knowledge that accounts only to a little extent for the creative forces that bring forth new knowledge. Explanations of innovation are thereby automatically reduced to a phenomenon of 'knowledge unit transfer', estranged from its character as a dynamic creative and emergent process.

THE THEORETICAL CONCERN

The theoretical aim of this thesis is to draw attention to the problematic nature of fundamental and taken-for-granted assumptions about knowledge that shape the way in which entrepreneurial innovation is approached. While there is a strong and growing body of critical social science work on knowledge in changing social contexts, much of the dominant perspectives on knowledge in innovation in business and policy practice stems from mainstream economics and organisation theory, attributing knowledge to manageable units that reside in the individual and conceiving of innovation as the result of an interaction of individuals' knowledge units with the social environment. In these literatures, analytic attention is exclusively directed to two objects of analysis: first, to individuals who are presumed as carriers of 'entrepreneurial creativity' and second, to stimulus-response relations between individuals and the social context. A corollary to these lines of argument is the dominant perception of the individual as the main agent and condition through which innovation can emerge.

Research on entrepreneurial innovation requires a critical approach to the dynamic character of knowledge as well as more attention to the logic of thinking about the creative force in knowledge. By the latter I mean the creative force of movement in

knowledge that potentially brings forth entirely new concepts and renders old ones irrelevant in a specific context. It is this creative process, I argue, that engenders the emergence of new concepts that, in hindsight, we refer to as innovation. Emergence is taken to be the dynamic phenomenon of something new arising, something that does not necessarily translate into previously existent concepts. The theoretical concern of this thesis therefore, as well as the broader phenomenon that is largely unaccounted for with regard to entrepreneurial innovation, is the aspect of emergent knowledge dynamics: the creative force that brings forth the emergence of new³ shared concepts.

The thesis I develop in the following chapters approaches emergent knowledge dynamics particularly from an angle of the meta-theory that frames assumptions about knowledge. By meta-theory I mean the epistemological and ontological assumptions that underpin theorising about social psychological aspects of knowledge. Because it is epistemological and ontological assumptions that inform and structure the types of questions that we ask in critical enquiry and that shape the ways in which we conceptualise dynamic processes, they have to be, in my view, the starting point for an exploration of knowledge dynamics. Focusing on the meta-theory of emergent knowledge dynamics, I will argue, not only contributes to overcoming theoretical limitations to account for knowledge emergence but also helps to find new pathways in addressing practical aspects of the management of innovation in e-business entrepreneurship.

Particularly, in this thesis, I make a distinction between different logics of thought that can underpin our thinking about the knowledge dynamics. I seek to draw attention to their implications for the ways in which we understand innovation. This is based on a critique of fundamental assumptions that orthodox psychological and social psychological angles are based on and is inspired, as I will outline next, by the significant implications these assumptions have for the way in which innovation is tackled on the level of business practice and policy-making.

³ 'New' is understood here in a sense of novelty that is not related to previously existent concepts, but creatively overcomes them by not relating to them, but instead by forging new links with previously unrelated notions.

CHOOSING E-BUSINESS ENTREPRENEURSHIP AS A CASE

E-business entrepreneurship was chosen as a case study for two reasons. First, e-business entrepreneurship is a young and rapidly developing business sector, in which changes in the area of new information and communication technologies (ICTs) converge with a business focus on knowledge-driven innovation, crystallising the new significance of knowledge in the field of innovation management. Secondly, the rise of this new business domain is also widely associated with a major stockmarket crash in April 2000, the 'dotcom crash'. The dotcom crash was a turning point for the sector and since then, e-business entrepreneurship is a top priority for UK policy-makers in terms of enhancing the skills and capacities necessary for innovation. The approach taken in support measures demonstrates the practical relevance and timeliness of a concern for meta-theoretical assumptions on knowledge in research on entrepreneurial innovation: the UK support infrastructure for entrepreneurship and more recently for e-business has been developed into an infrastructure targeted at individual skills and capacities that are presumed as relevant to successful innovation, while, at the same time, there is growing critique as regards these support measures.

E-business entrepreneurship is a business sector that is roughly 10 years old. With the development of the World Wide Web⁴ in the mid-1990s, new business opportunities emerged for selling products and services. New ways to spread information quickly in digital form around the globe led to an explosion in the number of small entrepreneurial businesses that focused on the use of new ICTs for business. Over a short period of time, e-business entrepreneurship emerged as a new and highly successful business arena, which was also referred to as 'Internet-enabled business' (Whinston et al., 2001). Especially in the second half of the 1990s a high level of new business activities developed, a period that is often referred to as the 'dotcom boom'. Since then, entrepreneurship in e-business is often referred to as 'dotcom business'. The name derives from the '.com' suffix of the domain address of business Web-sites.

In this new business domain, knowledge is one of the most significant levers of innovation and its effective management is seen as route to successful innovation. High-tech firms in Internet-enabled business developed quickly into what is known as

⁴ Graphical user interface of the Internet

a 'knowledge-based' business arena of innovation, with the majority of novel products stemming from new ways of selling and trading knowledge - in the form of services and solutions - over the World Wide Web (Whinston et al., 2001). Business types include first, firms that focus on the provision of systems and solutions for infrastructure or service applications on the Internet, secondly, firms that offer information content via the Web such as news and content aggregators, thirdly, Internet intermediaries such as consultancies focused on e-business and fourthly, business-to-business firms concentrating on electronic commerce and retail (Whinston et al., 2001).

What seemed to be an unstoppable growth of the new dotcom business in the 1990s, ended abruptly in April 2000 in the dotcom crash. This stockmarket crash was a worldwide stockmarket collapse of high-tech firms' values. In the UK alone, hundreds of dotcom firms experienced bankruptcy (DTI, 2002). The dotcom crash not only meant a major change for the whole sector of e-business entrepreneurship, but it also created a 'start-from-scratch' scenario for many entrepreneurs and raised new questions as to how knowledge in entrepreneurial innovation should be approached.

The aftermath of the dotcom crash is a context that particularly illustrates the practical relevance and timeliness of the present theoretical concern. The implications of implicit meta-theoretical assumptions about knowledge are inherent in the current UK policy targeted at enhancing knowledge in e-business entrepreneurship. The current support infrastructure has been developed into a system targeted at support for individual entrepreneurs. This confirms the widespread approach to target knowledge as units assumed to be located in individuals and illuminates the practical implications of meta-theoretical assumptions underlying the perspective taken on knowledge: to a significant extent they direct the ways in which innovation is approached and perhaps even more significant, the way in which governmental funds are spent.

Generally, the UK has been investing a large amount of funds into enhancing entrepreneurial innovation since the late 1970s (Curran & Blackburn, 2000) due to its central importance for the UK economy. Small and medium-sized businesses accounted for over 99% of the UK's 3.8 million businesses at the start of 2002. In addition, since 1995 entrepreneurship is reported to have contributed to a steady

increase in job creation and productivity growth in the UK (Harding, 2002, 2003). Today, the UK government spends around £2.5 billion a year on services targeted at small businesses (Small Business Service, 2004). The vision is to 'make the UK the best place in the world to start and grow a business' (Small Business Service, 2004, p.4).

Since the dotcom crash, the support of Internet-enabled business has enjoyed particular attention: it has been placed on the list of top priority interventions that define enterprise policy in the UK (DTI, 2002; Harding, 2003; HM Treasury /Small Business Service, 2002). The Department of Trade and Industry (DTI) defines Internet-enabled business as 'those UK businesses for which the Internet represents more than 50% of their main route to market and/or main source of business.' (DTI, 2002, p. 4). The specific target to support these businesses are individuals: there is a growing number of initiatives to enhance entrepreneurs' capabilities and skills. The objective is to ensure that individuals have the 'right' knowledge, and there is an increasing number of policies and support schemes that are specifically targeted at specific entrepreneurial skills. A question increasingly asked, for instance, is whether 'entrepreneurship can be taught?' (Gibb, 1993).

Given this focus on individual skills, there are increasingly efforts to implement entrepreneurial skills through educational establishments and governmental institutions (Byers, 2000; DTI, 2000). For instance, the existing support infrastructure for small businesses has been considerably enhanced to cater specifically for the skills required in Internet-enabled business (Small Business Service, 2004). There are new nationwide support agencies for small businesses such as 'UK Online for business' or 'BeyondBricks', which are targeted specifically at new start-ups in e-business. Also, based on the assumption that people might be reluctant to start an entrepreneurial e-business after the dotcom crash, governmental policy focuses increasingly on encouraging an 'entrepreneurial culture' to motivate people to move into entrepreneurship (e.g. Small Business Service, 2004).

As part of such a focus on skills and entrepreneurial culture, one area that is specifically targeted is the improvement of managerial business skills of entrepreneurs. The main rationale here is the dotcom crash as proof for the absence of such skills. The

dotcom crash, it is argued, demonstrates that dotcom firms were operated by inexperienced managers and teams, who lacked skills in applying general business laws (e.g. Lovink, 2002). Some argue, if dotcom entrepreneurship had been approached in a more strategic and 'conventional' business sense, the effects of the high stockmarket over-speculations could have been avoided (e.g. Atkinson & Gottlieb, 2001; Kenney, 2001; Lovink, 2002). An often used example for such absent business skills is the failure of entrepreneurs to report the financial value of their firms. Generally, it is said that entrepreneurs of that period oriented their business strategy to a great extent toward the capital markets, aiming to achieve a high firm valuation on the stockmarkets (e.g. Greenberg, 2001). At the same time, due the fact that outside funding for new dotcom start-ups was easily available, many entrepreneurs took on large amounts of venture capital and loans and thereby artificially boosted the corporate and shareholder values of their firms. This led to the phenomenon that many firms were traded with high values on the stockmarkets, while, in actual fact, the value of many firms had been calculated on the basis of borrowed money. Had the debts however been deducted from the reported firm value, many businesses would actually have had negative firm values (Barker, 2001; Lovink, 2002). This calculation of firm value on the basis of outside funds has often been directly attributed to a deficit of business knowledge of entrepreneurs (e.g. Wilson, 2000; Greenberg, 2001).

However, despite efforts that target the business skills of individuals, there is research suggesting that the devised policy measures are only to a small extent addressing entrepreneurs' needs. An example provides one of the most widely drawn on studies on entrepreneurship in the UK, the Global Entrepreneurship Monitor (GEM) (Harding, 2002). In the concluding section of the GEM of 2002 it reads that 'entrepreneurs were not seen to be well understood in the UK' (Harding, 2002 p. 39). And this is not the only report that points to a problem in our knowledge about entrepreneurship; in fact, this resonates and reinforces the ongoing debate about the effectiveness of entrepreneurship policy in the UK (Curran & Blackburn, 2000; Dodd & Anderson, 2001; Gibb, 2000; Gray, 1998). There are mounting calls for more research into the views of entrepreneurs themselves (e.g. Harding, 2003; Small Business Service, 2004). Critiques have also been voiced that despite the support devised for entrepreneurship, measures are not being targeted at the 'right' capacities required. A DTI-commissioned study on Internet-focused business rationalised this by stating that there is an 'absence

of any directly appropriate data' (DTI, 2002, p. 25) on which support and which information small businesses might be seeking.

Given these critiques, this thesis argues that what is necessary is a review of taken-for-granted assumptions about knowledge and their implications for the way in which we address problems such as the above. It is clear that the potential of UK e-business entrepreneurship hinges on the creation of new knowledge; however, this knowledge cannot be assumed to depend exclusively on factors rooted in individuals or to be solved by addressing particular skills types which are seen to be universally relevant to successful innovation. This thesis aims to provide insights on the way in which our meta-theoretical assumptions shape both the ways in which we formulate questions in scientific enquiry and how we, as a result, come to understand the phenomenon of knowledge in entrepreneurial innovation. Particularly, I seek to draw attention to social and experiential conditions of the emergence of new knowledge. In this respect, the present study is a unique endeavour in terms of the significant absence of appropriate conceptual work with which to address such a context.

EXISTENT RESEARCH

Two bodies of work support current policy-making on entrepreneurship and are widely adopted in business practice. The first body of work stems from classic streams in economic entrepreneurship theory that imply knowledge in entrepreneurial traits and behaviour. The second consists of interdisciplinary streams of research embedded in management and organisation theory that take into account psychological and sociological concepts and focus particularly on how innovation can be achieved through different angles on knowledge management and knowledge creation.

The research objectives in these bodies of work are, by and large, either to identify the optimal combination of entrepreneurial qualities and behavioural processes to be able to predict innovation, or to devise models of knowledge creation that allow to predict social factors that drive the process of innovation. As such, both streams have generated much needed empirical information on structural characteristics in entrepreneurial activity, as well as on social factors playing an important role in knowledge creation. They have highlighted gaps in public education and have

generated awareness for the need to develop a more social research agenda on innovation. Fundamentally, these streams provide generally an important basis for an understanding of e-business entrepreneurship.

However, the exclusive focus on individual determinants of knowledge on the one hand and the management-focused, functional view on knowledge on the other, leave unanswered questions about the dynamic nature of the emergence of new knowledge in this business arena. They are meta-theoretically rooted in the Cartesian logic of thought which ties theorising inevitably to a static notion of knowledge as an entity-like phenomenon located in individuals' minds. For the present aim to explore the creative forces that bring forth the emergence of new knowledge in innovation this logic presents significant limitations. It specifically prevents us from understanding the creative and dynamic character of innovation that brings forth new knowledge.

Against this backdrop, this study argues for a critical social psychological approach as a fundament for a critical exploration of emergent knowledge dynamics in entrepreneurial innovation. Theoretically, I locate this development within social representations theory (Moscovici, 1961/1976; Moscovici, 1984) and meta-theoretically, as far as the ontology of becoming is concerned, within the Deleuzo-Guattarian approach to emergence (Deleuze, 1994; Deleuze & Guattari, 1987). The aim is to develop an onto-epistemological stance that helps to better understand the emergent dynamics of knowledge in innovation as well as provide recommendations for change in the contemporary practical context.

THE ANALYTICAL FRAMEWORK

Social representations theory was chosen over other social psychological theories for its critical discussion of the nature of knowledge as socially shared phenomenon and its dialectic conceptualisation of social knowledge dynamics. Developed by Serge Moscovici in the 1960s as a theory for 'the study of social knowledge' (Moscovici, 2001b, p. 9), social representations theory aims to serve as a conceptual interface between psychology and sociology in the explanation of how knowledge dynamics of social construction play a role in processes of social change (Moscovici & Marková, 2000). The theory manifested a revolutionary break with the Cartesian tradition in

social psychology by adopting a Hegelian dialectic approach in order to introduce 'a new synthesis between the individual and the social' (Deaux & Philogène, 2001, p. 5). It was amongst the first theories in social psychology that built on a truly post-Cartesian philosophy of knowledge.

Social representation theorists make three central arguments about the nature of knowledge pertinent to this thesis. First, against the backdrop of the dominant Cartesian perspectives on knowledge, the theory focuses on *dynamics* of knowledge construction as a frame for studying social change (Moscovici, 2001b). Secondly, dynamics are conceptualised as a *symbolic* process, focusing on the evolution of *new meanings* from the interaction of diverse knowledge contents in everyday communicative interaction (Flick, 1998). Thirdly, the theory accounts for the *creative force* of this process stemming from the continuous re-negotiation of the familiar against the unfamiliar in social interaction (Moscovici, 1984). This explicit focus on knowledge dynamics in communicative interaction allows an examination not only of the inter-relationship between the individual and the social but also, and most importantly, of the continual dialectic knowledge dynamics that bring forth new socially shared knowledge.

However, there are two core meta-theoretical limitations in the assumptions of the theory about knowledge dynamics and change that hamper applicability of the theory to critical work on emergent dynamics in innovation. Both revolve around the ways in which difference is seen and stem from the theory's grounding in Hegelian dialectics. The first concerns the question of emergence and in this respect why we socially construct knowledge – which is assumed to be 'the unfamiliar' in the theory. With regard to the unfamiliar, there is a recurrent taken-for-granted assertion within major theoretical texts that the unfamiliar (in response to which people socially represent the familiar in new ways, aligning the unfamiliar with the familiar (Moscovici, 1984)) arises from 'competing versions of reality' (Rose et al., 1995), or different 'stocks of knowledge' (Flick, 1998). The hypothesis is implicitly – and problematically – that the unfamiliar arises exclusively in the sphere of meaningful differences between concepts. Implicated by the Hegelian philosophy of essences, this is a notion of conceptual difference, which excludes from analysis the unfamiliar that does not relate

to existing socio-culturally mediated concepts or in other words, non-conceptual difference.

While critical researchers have distinguished the sphere of the meaningful and symbolically mediated from the material and physical world, the latter is very much seen as existing 'outside' knowledge creation (e.g. Jovchelovitch, 2001). With regard to an account on emergent knowledge dynamics, the consideration of non-conceptual sources of the unfamiliar is however essential because novelty rarely stems exclusively from pre-existent concepts. There is also the domain of non-meaningful, un-mediated and non-dialectic presentations that at first, do not make sense in relation to human meaning systems, yet do make a difference to people in sense experience such as sensitivity or human affect. For an account on knowledge emergence in innovation, social representations work needs to engage more critically with forces stemming from this context and with the implications it has for social representation.

The second problem centres on the notion of the creative force of social representation. Theorists assert that the transformative and creative force of social representation stems from the dyadic synthesis of different concepts; in other words, from the dialectic dynamics that arise from conceptual differences in knowledge. The hypothesis is – problematically – that first, conceptual difference manifests itself in dyadic constellations of concepts (such as contradiction, tension or similarity) and second, that these engender a synthesis, which 'moves' the transformation of knowledge forward in that it creates new dyadic constellations. This implies that the creative force of difference is subsumed to the triadic pattern of dialectics – it is envisioned as a tree-like progressive evolution of conceptual dyads. This however excludes those creative forces that might follow a different pattern of movement such as patterns of disruption of a dialectic evolution.

Critical re-thinking of these core themes will be necessary to adapt the theory for work on emergent knowledge dynamics. To make a first step in this direction, I draw on Deleuzo-Guattarian (Deleuze, 1968; Deleuze & Guattari, 1987) philosophy of becoming as it offers a post-structuralist meta-theory that can facilitate this development. Based specifically on the concepts of 'difference-in-itself' (Deleuze, 1968) and the 'rhizome' (Deleuze & Guattari, 1987) we can develop what I call an

expanded logic of the creative force of emergent knowledge dynamics that acknowledges dynamics beyond dyadic patterns rooted in conceptual difference.

Deleuzo-Guattarian philosophy captures key elements of dynamics that are at present missing from social psychological perspectives on the dynamic and heterogeneous nature of human thinking, sense experience and creativity. It facilitates the clarification of ambiguities with regard to emergent dynamics within the meta-theory of social representations theory. It also provides a mediating logic for the development of a critical account on the emergence of new knowledge within which to incorporate key ideas from social representations theory.

Specifically Deleuze's early philosophy of becoming exposes the constraints of dialectic dynamics for an understanding of emergence: it shows how dialectics overly focuses us on the study of conceptual difference and the socio-historic continuation of meaning. Deleuze (1968) underscores the importance of 'difference that makes itself', that is, difference that does not relate to the familiar - the non-meaningful which is not perceived by humans in the medium of understanding but which is part of our general sense experience. It sees the dynamics of emergence embedded in experience rather than rooted exclusively in the tree-like evolution of concepts. This allows us to acknowledge sources of the unfamiliar other than conceptual difference and lends itself to an understanding of emergence in patterns ambivalent to familiar conceptual dyads. This is crucial for the present concern to account for the emergence of novelty that overcomes the pre-existent. Particularly, the notion of the 'rhizome' (Deleuze & Guattari, 1987), that Deleuze forwarded together with his co-author Guattari, offers a logic of thinking that tackles this issue of non-dialectic, creative patterns of emergence. It is a logic of thinking that is anti-Hegelian, yet, as I will suggest, it has more to offer to dialectics than merely to refute it.

With this thesis, I am far from the ambition to develop a new meta-theoretical paradigm of knowledge dynamics; rather, my aim is more humble: I hope to contribute a first step in this direction by pointing towards some key meta-theoretical building blocks and their conceptual and methodological implications. To be able to examine critically what 'makes the difference' for new innovative knowledge to emerge and as a basis for thinking about knowledge creation in innovation in applied social psychology

and policy research, this thesis seeks to highlight the role that both rhizomic opening and dialectic closure play in knowledge emergence in entrepreneurial innovation.

OUTLINE OF THE THESIS

This thesis is presented in eight chapters. The first half (*Chapters One to Four*) outlines the theoretical, meta-theoretical and methodological framework used, while the second half (*Chapters Five to Eight*) presents the findings of the empirical study and draws these together with the framework developed in the first half.

The present chapter provides a general overview of the empirical and theoretical impetus for this thesis. It introduces the aims of the thesis, the empirical problem and it provides the context of entrepreneurship research to situate the problem of taken-for-granted assumptions on knowledge underpinning research on entrepreneurial innovation.

Chapter Two focuses on existent individual-centred and management-centred perspectives on knowledge in the context of entrepreneurship and innovation. I present a review of dominant economic studies as well as alternative, interdisciplinary studies, either situated in the knowledge-attitude-belief (KAB) paradigm or in a body of work focused on more social and process-focused perspectives on innovation. The strengths and limitations of each approach are discussed, as are areas of conceptual and practical overlap between approaches. The usefulness of a 'social psychology of knowledge dynamics' is highlighted. The aim of Chapter Two is to provide the conceptual grounding for introducing the discussion of the usefulness of the dialectic perspective on knowledge dynamics in social representations theory, subject of Chapter Three.

Chapter Three develops the theoretical and meta-theoretical framework for this study. It draws on an epistemic logic of dialectics inherent to social representations theory as well as an ontological logic of becoming informed by Deleuzo-Guattarian philosophy. Social representations theory has three core themes with regards to knowledge dynamics. These relate to: (1) the dialectic nature of the dynamics between individual and social, framing social knowledge construction (2) the symbolic and subjective nature of the knowledge construction process; and (3) the socially creative force of the

synthesis of different knowledge contents. All three themes are based on Hegelian dialectics. However, the exclusivity of dialectics as a way of thinking about knowledge dynamics as well as specifically, its ontology of becoming undermine the theory's applicability to critical research on emergent knowledge dynamics in innovation. Meta-theoretical limitations are discussed. Drawing on Deleuzian philosophy of becoming, specifically the notions of difference-in-itself and the rhizome offer a way of thinking beyond a dialectic and essential logic of becoming. On this basis, meta-theoretical ways forward are outlined. A case is made for a perspective on emergent knowledge dynamics that takes into account a logic of rhizomic becomings.

Chapter Four describes the research design and the methodology devised in the empirical part of this thesis. A multi-method and explorative design were used to examine emergent knowledge dynamics in e-business entrepreneurship. Data was gathered in a snowball process in Greater London through individual interviews, participant observation and a focus group. There were three types of analysis: first, a dialectic social representational analysis of the thematisation of e-business entrepreneurship by entrepreneurs; second, a Deleuzian interpretation of non-dialectic becomings in networks informed by the Deleuzo-Guattarian ontology of difference and rhizomic becoming and third, a thematic analysis based on a Deleuzian repetition of the social representations framework for dialectic analysis, with a view to highlight de-familiarisation. The choices of methods of data collection and analysis as well as the procedure of data analysis are outlined. Also, the fieldwork process is described in-depth: the process of selecting research settings and participants is described; challenges and limitations are discussed.

Chapters Five, Six and Seven present the empirical findings. I report on three analyses that unite dialectic with Deleuzian analysis of data. *Chapter Five* focuses on mapping out central evaluative dimensions in participants' social representations of e-business entrepreneurship in the light of the dotcom crash. Changes in evaluative dimensions since the dotcom crash are traced. The aim is to highlight the ways in which dialectic dynamics shape and constrain processes of knowledge transformation within the context studied. *Chapter Six* reports the results from the Deleuzian analysis of rhizomic dynamics. I present the ways in which lines of affect and lines of technology have become enmeshed in new ways, producing new connections that highlight

instances of emergent conditions for new, innovative concepts. The findings highlight how rearrangements in networks have reverberations beyond those captured in a dialectic model of knowledge dynamics, insofar as they bypass existent meanings of networking. *Chapter Seven* concentrates on the analysis of the focus group: based on a Deleuzian repetition of thematic analysis for de-familiarisation, a minority representation was found that confirmed that in and around networks a disruption of existent knowledge had taken place which provides conditions for the creation of new concepts. Together, the three analyses show the emergence of new conditions for innovation: the results highlight new insights on trust in online interaction, network leadership and managed networks.

Chapter Eight concludes the study by tying together key strands from the previous chapters, both in terms of the theoretical development and the empirical findings. Limitations as well as implications for further research are discussed.

Overview of Chapter Two

This chapter critically reviews two bodies of work on entrepreneurial innovation in terms of their meta-theoretical assumptions about knowledge. The first body of work constitutes a paradigm of classic economic studies on entrepreneurship that attributes knowledge to individual entrepreneurs' traits. The second consists of interdisciplinary schools of thought that take on board psychological and sociological perspectives to explain knowledge in innovation. The strengths and limitations of each approach are discussed, as are areas of conceptual and practical overlap between approaches. This prepares the conceptual ground for introducing the discussion of the usefulness of social representations theory, subject of the subsequent chapter.

2 RESEARCH ON ENTREPRENEURIAL INNOVATION: A CRITICAL REVIEW OF META-THEORETICAL ASSUMPTIONS ABOUT KNOWLEDGE

There is a long tradition of research on entrepreneurship in economic theory and after years of vigorous debate, a growing consensus holds that entrepreneurship can be defined as the process by which people discover and exploit new business opportunities, often through the creation of innovation (Davidsson and Wiklund, 2001; Shane and Venkataraman, 2000). As noted by Davidsson et al. (2001), for example, the field has converged around the view that entrepreneurship is about emergence, albeit with some scholars emphasizing the emergence of entrepreneurial opportunities and others emphasizing the emergence of innovation.

The more recent period of theorising has developed into a interdisciplinary and growing research field with a diversity of alternative approaches (Katz, 1991; Katz, 2000). Research on both entrepreneurship and innovation is today an anything but unified body of work, including influences from fields as diverse as anthropology, economics, psychology, sociology, geography, politics and history (Curran & Blackburn, 2001; Herron, Sapienza & Smith-Cook, 1991). Yet, although overall research interest in this field has grown considerably over the past two decades and authors draw on a plurality of research approaches and discourses (Curran & Blackburn, 2001; Julien, 1997; Low & MacMillan, 1988; Herron, Sapienza & Smith-Cook, 1992), scholars within both orthodox and interdisciplinary streams have paid comparatively little attention to the implications of underlying meta-theoretical assumptions about knowledge for our understanding of emergence and innovation. Indeed, a recent systematic review of some of the main publications in recent entrepreneurial and small business research by Grant & Perren (2002) has found that epistemological assumptions have rarely been made explicit.

Against this backdrop, this chapter aims to contribute to more awareness of the importance of the meta-theoretical perspective on knowledge in theorising on entrepreneurship and innovation. Specifically, I critically review streams of existing research pertinent to this thesis in order to show how underlying epistemological assumptions impinge on our understanding of knowledge emergence. I focus on two bodies of work that support current policy-making on entrepreneurship and are widely adopted in business practice on innovation management. The first stems from classic streams in economic entrepreneurship theory. It concentrates mainly on the entrepreneur as unit of analysis and implies knowledge in entrepreneurial traits. The second consists of interdisciplinary streams of research embedded in economic psychology, alternative economic perspectives and different strands of organisation theory. They take into account psychological and sociological concepts and focus particularly on how innovation can be explained through different angles on knowledge management and creation. The following review reveals that albeit theoretical approaches have diversified and there are a variety of conceptual approaches to knowledge, there are common underlying assumptions about the nature of knowledge that hinder a dynamic understanding of knowledge emergence in innovation.

2.1 The classic perspective: focus on the entrepreneurial individual

The lack of attention to meta-theoretical assumptions about the nature of knowledge is particularly vivid in classic economic entrepreneurship theory and practice. Probably one of the most ubiquitous perspectives in this field is the attribution of the emergence of innovation to the knowledge held by individual entrepreneurs. Most economists and practitioners will readily speak of the important role of entrepreneurs in the economy, stressing their contribution to innovation. By the same token, the conventional code of scholarly research on entrepreneurship and innovation is widely established as examining the traits of entrepreneurs as central units of analysis. This perspective is grounded in the long history of Cartesian thought in orthodox economics and has become deeply embedded in Western discourse about the liberal values of freedom and self-regarding actions, where self-determined individuals are seen to be able to transform their ideas into reality due to their special personal capacities (Fuller, 2004).

Orthodox economic theories rationalise human knowledge and behaviour in formal models, such as consumer and choice theories (Lea, Tarpy, & Webley, 1987). At the heart of economic theorising are utility equations (Landreth & Colander, 1989; Maital, 1982) established in order to model human behaviour and predict economic utility. Economics sees itself as a 'positive, value-free science' (Landreth & Colander, 1989, p. 309) and accordingly, human knowledge is subsumed to a single, superior and 'objective' rationality that is seen to be aimed 'at a specific end – the maximization of utilities' (Katona, 1975, p. 217). In other words, a major characteristic of classic economic reasoning is that rational decision-making is thought to determine the actions of human beings. Human thought is viewed as strictly logical, centred on a clearly defined goal and free from the influences of emotion or irrationality. (Struempel, 1990).

This classic economic perspective on knowledge reflects key assumptions of the Cartesian philosophy of thought. Cartesian philosophy of thought is grounded in the work of the seventeenth-century French philosopher René Descartes (1595-1650). Descartes established the rationale for the distinction between a science of things and bodies and the divine cogito, the mind of the individual. Descartes' famous 'Cogito ergo sum' (I think therefore I am) is the conclusion that the thinking self is the one thing that we cannot doubt – true knowledge is therefore seen to be originated in the minds of individuals and in rational information-processing (Marková, 2003).

Descartes' philosophy held mind against body, as well as reason against culture. Cartesian thought maintains that all knowledge is believed to be best acquired through reason and through concepts and methods that are freed as much as possible from the 'fallibilities' of human sense perception and the influence of local contexts. Cartesian logic, hence, conceptualises the solitary reasoning thinker in search of 'true' and better knowledge independent of contextual factors or interaction with other human beings (Russell, 1945).

Given this underpinning, it is therefore not surprising that the mainstream economic view on entrepreneurship centrally features the individual entrepreneur as main unit of analysis with regard to knowledge. Even though the notion of 'knowledge of entrepreneurs' is as such rarely explicitly addressed, it is implied in concepts of traits and qualities of entrepreneurs. Specifically, the entrepreneur is portrayed as individual

with special qualities that are beneficial for economic growth and innovation (Bassetti, 2003; Bolton, 1971; Brockhaus & Horwitz, 1986; Storey, 1982): both Keynesian and neo-classic economic theory⁵ portray the entrepreneur as an agent of change whose special abilities drive innovation in the economy (Holcombe, 1999).

Considerable evidence has been gathered to suggest that the traits of entrepreneurs can be distinguished from other 'non-entrepreneurs', usually managers in employment. Entrepreneurs are said to possess a tendency to thrive on risk and uncertainty and follow their intuition as a basis for action (Hornaday & Bunker, 1970; Pickel, 1964), whereas non-entrepreneurs are seen to prefer work patterns of control and routinisation (Penrose, 1995).

A good illustration of this view is Coleman's (2000) argument that entrepreneurs' specific quality is their 'entrepreneurial spirit'. He described this entrepreneurial spirit as a trait that is characterised by several qualities such as vision, a need to achieve, high self-confidence and optimism, tolerance for failure, creativity and tolerance for ambiguity. Another example is Olson's work (1985). Olson argues, for an entrepreneurial business to be successful, entrepreneurs must possess the following personal qualities: a sense of role orientation, a high tolerance for ambiguous and unstructured situations, an acceptance of moderate risk, intuitive abilities and a high need for achievement.

This idea of entrepreneurial traits as central unit of analysis draws on a long history of individual-centred theorising in economic orthodoxy dating back as far as the eighteenth century (Gartner, 1989; Low & MacMillan, 1988; Ripsas, 1998; Shane, 2003). Cantillon (1680's - 1734) and Say (1767-1832) are said to be the earliest scientists who paid considerable attention to entrepreneurship by drawing attention to the entrepreneur as a special economic actor with a positive function within the economic system. In Cantillon's (1775) publication 'Essai sur la Nature du Commerce en Général', the entrepreneur appeared as a particular individual who contributes positively to a society's economic value. Cantillon's entrepreneur is a risk-taker, an

⁵ While neo-classic theorists explained the functioning of an economy through self-maintaining equilibria (e.g. Marshall, 1930), Keynes (1936) theories focused on the forces of supply and demand instigated by proactive agents. In both streams, nonetheless, entrepreneurs are said to positively affect the demand and growth-generating side of the economy.

agent of change, arbitrageur and innovator who is responsible for exchange and circulation in the economy. Similarly, in Say's 'A Treatise on Political Economy' (1852), first published in 1803, the entrepreneur plays a stimulating role for economic growth. Say described the entrepreneur as someone who invests in an uncertain and risky enterprise in order to shift economic resources from low to high productivity and greater yield (Say, 1803, cited in Ripsas, 1998). According to Say, an entrepreneur should have a number of special qualities. Successful entrepreneurship

‘requires a combination of moral qualities, that are not often found together. Judgement, perseverance, and a knowledge of the world as well as of business ... the art of superintendence and administration’ (Say, 1971, first published 1803, pp. 330–331).

Historic descriptions such as these underscore how, from the outset, the individual entrepreneurs' traits were put centre-stage and how knowledge is implied to emerge from the rational thinking of individuals who are equipped with such traits. The individual is portrayed as a 'black box' that processes incoming information from the environment and produces innovative ideas as output (Stein, 1974; Woodman, Sawyer, & Griffin, 1993). Thus, knowledge itself is largely unspecified as regards its contents; rather it is assumed that the knowledge necessary for innovation will be created by entrepreneurs with special skills as an automatic by-product.

This deep-seated economic perspective persisted until today. In both scholarly and applied views on innovation, the knowledge that drives innovation is implied as outcome of special attributes of individual entrepreneurs. Gartner (1989) argued, attention has mainly been paid to the research question 'Who is the entrepreneur?' with the normative aim to establish the optimum combination of personality attributes that would allow for a prediction of what determines innovation. By the same token, Van Praag (1999) noted that there are few issues in economic theorizing which are backed up by such a rich historical body of theorizing. Hébert and Link's (1988) impressive review of the last 200 years of economic entrepreneurship research underscores this: one of their main findings was that economic research on entrepreneurship has been dominated by research that focuses on individual characteristics of entrepreneurs as main unit of analysis.

This individual-centred perspective is particularly evident in the Austrian school of entrepreneurship research (Hayek, 1945; Kirzner, 1973; Schumpeter, 1934), which is perhaps one of the most widely cited economic schools today (Holcombe, 2003).

Although barely explicitly stated, the way in which authors link entrepreneurial traits to explanations of knowledge processes and innovation illustrates vividly how knowledge is implied as a phenomenon emerging with special qualities of individuals. According to Schumpeter (1949), for instance, entrepreneurs are the driving force of the market process. Schumpeter asserts that successful innovation depends on entrepreneurs as prime triggers of economic development, and their function in the economic system is to innovate by introducing new products or processes, identifying new export markets or sources of supply, or creating new types of organisation. Entrepreneurs are seen as learners, business founders and leaders who have special abilities to anticipate and initiate change. Consistently, the knowledge change deriving from the actions of entrepreneurs is seen as innovation; usually this is taken to be manifested in the introduction of a new good or of a new method of production by the entrepreneur.

In a similar vein, Hayek (1937; 1945) and Kirzner (1973) emphasise entrepreneurs as prime generators of innovation. Kirzner (1973), building on Hayek's (1937, 1945) emphasis of uncertainty and 'logic of discovery' in knowledge-acquisition processes in economic markets, developed a theory of entrepreneurship which highlights alertness as an important entrepreneurial trait that brings forth economic growth. More precisely, Kirzner claims that amongst the personal qualities of entrepreneurs, alertness is the paramount ability to discover new opportunities. Entrepreneurs are able to notice opportunities that others have not seen or thought before, they anticipate profits and new market opportunities.

In business practice, the individual-centred perspective on traits has been revived particularly since the 1970s. Since then, there is the widespread and unquestioned assumption of the existence of an 'entrepreneurial type' – a personality type that determines exclusively whether or not an entrepreneurial undertaking is successful (Warren, 2004). This is exemplified in recent UK policy research. In a recent study commissioned by the UK agency 'Small Business Services' it is argued that there is an 'enterprising capacity' (Small Business Service, 2004) that distinguishes successful entrepreneurs from other practitioners:

'the capacity to handle uncertainty and respond positively to change, to create and implement new ideas and ways of doing things, to make reasonable risk/reward

assessments and act upon them in one's personal and working life.' (Davies, 2002, cited in Small Business Research Portal, 2003, p. 21)

This capacity, so the argument goes, needs to be reinforced if Britain is to enhance its innovative entrepreneurship potential. To implement this capacity, there are increasingly efforts to implement measures of education and support infrastructure, targeted at individual entrepreneurs' abilities (e.g. Small Business Research Portal, 2003; Small Business Service, 2004).

2.2 Interdisciplinary alternatives: psychological and social perspectives

A second significant area of theorizing on entrepreneurial innovation is embedded in more recent streams of interdisciplinary economic research, economic psychology and theorizing on knowledge management in organisation theory.

In what follows, I single out three particular streams which have a bearing on the present concern, for they all offer psychological or social alternatives to economic orthodoxy. The first approach, draws mainly on the knowledge-attitude-belief (KAB) model and informs psychological approaches to economic behaviour in the context of entrepreneurship that are particularly popular in current policy research. The second approach is forwarded by a more recent school of heterodox economists who challenge the classic economic approach for its neglect of innovation as a research concern of its own. Theorists specifically discuss the impact of contemporary changes in the 'global information society' on the process of innovation. The third approach, like the second, takes a particular focus on innovation. It arose from the critique of knowledge transfer models in organisation and management theory and from authors' turn to knowledge creation and emergence in interaction when investigating innovation.

Although these interdisciplinary schools increasingly oppose the orthodox economic view on knowledge and argue for more human and social approaches by taking on board psychological and sociological theories, there are nonetheless significant assumptions about the nature of knowledge that hamper an understanding of the emergence of new knowledge in innovation.

2.2.1 KAB studies: entrepreneurial dispositions and performance

The first stream that takes an alternative angle on knowledge is found in a school of behavioural psychologists and 'heterodox' economists concerned with the psychology of economic behaviour. Authors in this stream oppose the notion of human knowledge as erroneous information-processing, which, they argue, is 'generally unhelpful' (Lea et al., 1987, p. 127) for an understanding of human aspects in economic processes. Taking on board cognitive and behavioural psychology, they criticise the fact that economic theories measure human knowledge according to a presumed superior rationality (Jungermann, 1986; Struempel, 1990). Specifically, with regard to entrepreneurship research, the trait approach has been criticised and authors have adopted cognitive perspectives (e.g. Baron, 1998; Baron, 2000; Herron & Sapienza, 1992; Shaver & Scott, 1991; Simon et al., 1999). Authors challenged the economic notion that individuals' main behavioural motivation is seen to be a natural drive to achieve maximum economic wealth, and argue that human cognition needs to be taken into account for a better understanding of the mental states that 'really' determine economic behaviour.

In this context, attitude research became highly influential. Particularly, the knowledge-attitude-belief (KAB) model based on the theory of reasoned action (Ajzen, 1985; Ajzen & Fishbein, 1980) is still today one of the most widely adopted psychological models in business and policy research on entrepreneurship. The KAB-model postulates that a person's behaviour is determined by his/her intention to perform the behaviour and in turn, that this intention hinges on his/her attitude toward the behaviour as well as his/her subjective beliefs and norms. Thus, a linear relationship between people's individually held knowledge, attitudes and behaviour is assumed; mental states such as attitudes are seen to be the triggers of action. This model also suggests that better individual knowledge will lead to desired behavioural change.

In essence, the KAB model was attractive to 'heterodox' behavioural economists as it provided a cognitive determinist model for studying human behaviour. The concept of the attitude as a mental state and antecedent of behaviour provided the foundation for research on attitude change and the relations between attitudes and behaviour. It

enabled studies on the attitude profile of individuals which could then be used as a predictor of behaviour. Based on the assumption that mental states mirror a person's beliefs, attitudes have achieved a central position in behavioural economic research as a way to investigate the mental states of large populations and link them causally to action. For entrepreneurship research this meant that knowledge could be represented in form of variables – attitude objects – that could be tested via evaluative dimensions of judgement and causally related to explanations of entrepreneurial behaviour. Models of entrepreneurship processes could thus be devised and based on such models, normative inferences on the likelihood of successful entrepreneurial innovation could be established.

For example, the KAB model is used in opportunity recognition models that explain the 'mind-set' of entrepreneurs that influences the behavioural process of opportunity discovery (e.g. Gaglio & Taub, 1992; Long & McMullan, 1984). An often cited example is the Timmons model of entrepreneurial behaviour (Timmons, 1989). The main variables in this model are the characteristics of entrepreneurs in terms of their individual skills and cognitive abilities, available resources and business opportunities. A key skill of the entrepreneur is seen to be the ability to recognise opportunities and to combine resources available in the environment with entrepreneurial knowledge. If the entrepreneur has the right knowledge resources, it is assumed to be highly likely that entrepreneurs transform a new business into a commercial success (Bygrave & Hofer, 1991). It is important to note that the ability to recognise opportunities is presented here is primarily as an individual-level, cognitive variable. Although there are aspects of the opportunity recognition process that may involve an entrepreneurial team or an entrepreneur's social network, the nature of the innovation process is, especially in the early stages, typically seen as an individual process.

The KAB link between knowledge, mental states and behaviour is also underlying models on entrepreneurs' performance (Holcombe, 2003). Theories have been forwarded that explain the economic effectiveness of entrepreneurs' performance as a function of specific entrepreneurial motivational states. For instance, Swayne & Tucker (1973) suggested a model that predicts innovative performance based on the levels of assertiveness and objectivity that a person possesses. Another example is Moore's (1986) model of entrepreneurial performance. It sketches out a behavioural

model that comprises several stages of 'entrepreneurial performance' – amongst them an innovation stage, during which the entrepreneur's personal intentions converge with the environment to create opportunities.

Models such as these are typically employed in questionnaire-based research that aims to predict the likelihood of successful entrepreneurial behaviour. Hereby, attitude data is used as the basis for inferences on the characteristics of entrepreneurs and their likelihood to engage in successful entrepreneurial behaviour. In other words, data on mental states are used as exclusive predictors of successful entrepreneurship. Typical conclusions are normative inferences on desirable entrepreneurial attitude profiles that are taken to mirror certain 'mind-sets' or entrepreneurial abilities, such as motivation to achieve, commitment and determination, leadership and opportunity awareness (e.g. Hornaday & Bunker, 1970; Pickel, 1964).

Let me illustrate this with the example of one of the most widely cited entrepreneurship studies in current UK practice and policy-targeted research: the Global Entrepreneurship Monitor (GEM). Conducted yearly since 1999, this survey examines the levels of entrepreneurial activity in a number of countries, including the UK. Drawing centrally on the KAB model, it gathers attitudes on entrepreneurship, in order to infer the Total Entrepreneurial Activity (TEA) index, which is designed to measure how much potential for entrepreneurial activity there is in a specific country (Harding, 2003).

The GEM is based on a standardised questionnaire survey of the UK adult population (18 to 64 year olds). The questionnaire asks a random sample of the adult population for their attitudes towards the general category of 'entrepreneurship'. The TEA is then calculated as the sum of those answering positively to a range of questions about people's readiness to start a business of their own. Examples are 'Would fear of failure prevent you from starting a business?' or 'Is starting a business a good career choice?' (Harding, 2002, 2003). The results are figures that compare the levels of entrepreneurial activity in several countries as well as the likelihood of entrepreneurs to engage in entrepreneurship. For example, according to the annual 2003 GEM survey for the UK (Harding, 2003), 6.4% of Britons were engaged in an 'entrepreneurial activity', while 8% of the British population expect to start a business within the next three years. As regards the latter, the report also found that people aged 25-35 were

more likely than other age groups to start an entrepreneurial business as they had a greater motivational predisposition towards entrepreneurship.

Studies such as the GEM are a good solution to the problem of wanting to know, for instance, the frequency of occurrence of attitudes about entrepreneurship in a known population. However, in order to better understand or predict the likelihood of entrepreneurial innovation, studies based on the KAB model are problematic. The implication of the KAB model is that research begins from the premise that virtually all of the time individuals act exclusively as a result of their cognitive predispositions and consistently attention is directed to the question of which attitude objects the individual needs in order to be likely to be successful in entrepreneurship.

The latter is illustrated by the conclusions that the GEM forwarded in 2003; specifically in those targeted at policy. From findings on the attitudes about entrepreneurship in different demographic groups, the GEM derived general entrepreneurial skills gaps - in GEM terms, the 'obvious entrepreneurial gaps' (Harding, 2003, p. 17) - and on this basis, it made recommendations on necessary support measures. For instance, a finding was that individuals who are black or whose ethnic origin is the Indian sub-continent were particularly entrepreneurial because of the positive attitudes these groups displayed about their entrepreneurial skills. From this - and problematically - an inference was made on the skills that need to be taught to other demographic groups so that these could develop similar profiles and thus be more likely to engage in successful entrepreneurship. Concretely, the GEM concluded that a better entrepreneurial attitude profile of other UK population groups could be achieved 'through teaching ... "softer" business skills, like presentation skills, working in teams, leadership and communication' (Harding, 2003, p. 51). Moreover it points out that in order to achieve an entrepreneurial culture in the UK and to stimulate growth and innovation, entrepreneurial attitudes need yet to be reinforced.

It has been established in critical social psychological work that the simplistic and deterministic link the KAB model posits between knowledge, attitudes and behaviour extracts attitudes from their interrelations with the social and reduces research on knowledge to an uni-dimensional process of cause-effect mechanics between different variables (e.g. Gaskell, 2001; McGuire, 1983). There are classic studies dating back as

far as the 1930s that have challenged the deterministic link to behaviour and have shown the flaws of an isolation of the attitude from the social (LaPiere, 1934; Wicker, 1969). Critics have pointed out that it is misleading to assume that greater and better individual knowledge will lead to behavioural change. Contemporary KAB models explain behaviour in a 'social vacuum', writes Gaskell (2001), arguing that research on attitudes need to be developed toward a greater focus on social factors.

Thus, despite the quest for a more human perspective on economic behaviour, by adopting KAB models, the research reviewed above reinforces, in an unquestioned fashion, the orthodox economic perspective on knowledge. It is presumed that knowledge is located in individuals' minds where it is processed in cognition. Successful entrepreneurial behaviour is seen as being determined by an individual's ability or mental predisposition to process knowledge. In addition, the 'right' entrepreneurial skills are inferred exclusively on the basis of typical attitude profiles of successful entrepreneurs. Studies such as the GEM thereby further elevate the orthodox economic idea of human beings as subsumed in their knowledge to a superior economic rationality.

In sum, the KAB approach to knowledge in entrepreneurial innovation is limited in that it cannot explain, in its own terms, how psychological aspects of human behaviour may help to determine future innovation. The process of innovation is seen as a linear progression from attitudes to behaviour, exclusively determined by the cognitive attributes of entrepreneurs. The social context of individuals is however neglected. At best, KAB models focus attention on the surface of knowledge categories and at worst they encourage what I call the illusion that entrepreneurial innovation can be controlled and implemented through managing individual knowledge. Innovation is conceived of as a knowledge transfer process: knowledge is presumed to originate exclusively in entrepreneurs' minds, and is then transferred to other individuals and/or to the sphere of action (Wood, 2002). The assumption is that this knowledge transfer can be reinforced by appropriate educational measures. In studies such as the GEM, innovation is constructed as a problem of the implementation of presumed entrepreneurial skills through the management of the education and motivation of individuals.

2.2.2 Innovation studies I: digitisation, networks and knowledge diffusion

A second stream of interdisciplinary studies relevant here is work in recent sociology-inspired economic research. Notably, in this stream authors turned away from studying the entrepreneur as main unit of analysis, arguing that the emphasis placed on the qualities of the entrepreneur as different to other practitioners has been exaggerated (Filion, 2003). This is based on research that showed that studies in orthodox economic entrepreneurship research have failed to prove any common personality characteristics of entrepreneurs (Gartner, 1989). In fact, authors argue that the qualities of entrepreneurs may not even be a prerequisite for successful entrepreneurship (Davidsson, 2003; Shane, 2003; Van Praag, 1999).

As Gartner (1989) put it, 'Who is an Entrepreneur?' is the wrong research question and similarly, economic researchers claimed that there is a disproportionate emphasis on the individual entrepreneur - an 'obsession with the performance of individual entrepreneurs', as Shane (2001, p.5) phrased it. Davidsson (2001) argued that the focus on the individual entrepreneur hampers an understanding of the knowledge process of entrepreneurship. Similarly, Ripsas' (1998) impressive review of the state of entrepreneurship research in economics concludes that there has been a neglect of the quality of the entrepreneurship process in favour of an overwhelming concern with the individual qualities of the entrepreneur.

In the light of minimal support for the trait approach (Aldrich & Wiedenmayer, 1993), researchers looked in different directions for insights into entrepreneurship. Specifically, authors turned to investigating innovation as the prime knowledge process of entrepreneurship. Hereby, some have adopted an ecological approach, looking at communities and clusters of organisations and their patterns of interaction when innovating (Aldrich, 1999; Meziar & Kuperman, 2001). This research is based on earlier work focused on the firm as the main unit of analysis and aimed at understanding the success criteria of firm creation. Here, a social embeddedness perspective is taken: it is investigated how the firm manages its knowledge in networks with other firms (Aldrich & Zimmer, 1986; Cramton, 1993; Larson & Starr, 1993). In the latter, relationships between firms are seen as a powerful means for the success of entrepreneurial innovation. A firm is seen to be socially embedded in networks and the

argument is that entrepreneurs are not isolated decision-makers, but rather, their knowledge is implicated in networks of social relations. Thus, according to this stream, individuals do not have the knowledge to start a business in a vacuum; instead, they are influenced by significant others in their environment (Aldrich & Zimmer, 1986).

More recent work on innovation processes looked increasingly at the impact of modern changes in the nature of social relationships on innovation, specifically in the context of an increasingly digitised, globally networked and knowledge-centred economy (Chell, 2000; Quah, 2003). Generally, scholars often assert that technological change drives entrepreneurship and innovation (Shane, 2000). Yet, a most recent research stream has qualified this: the core notion here is knowledge dissemination and the argument is that in today's digitised economy it is paramount for successful innovation that ideas can diffuse more rapidly and more widely. The aim is to better understand the contemporary nature of social relationships in order to explain the extent to which an idea can disperse widely throughout society (Bjornenak, 1997; Quah, 2003). For instance, Chell (2000) wrote that due to the fact that a growing number of businesses focuses less on innovation through physical goods but more on innovation based on new ideas, services and relationships for a global market, what needs to be studied is 'the effect of entrepreneurial programmes on the progression of an idea through to commercialisation' (p.117).

Specifically sociological concepts on networks, social relationships and the social contagion of ideas have been influential here. First, a paramount concern is the increasingly networked character of society through the World Wide Web (Agre, 1999; Wittel, 2001). The World Wide Web is emphasised as changing the ways in which we interact and relate to one another (Castells, 1996; Wittel, 2001) and thus, it is said to have an impact on the ways in which innovation can occur. Hereby networks are said to amplify the diffusion and social contagion of ideas – which is taken to be crucial for innovation. In this respect, the social embeddedness approach has been further developed, emphasising the importance of founders' social ties in constructing a firm's base of financial, physical, human, and other resources (Brush et al., 2001). For instance, by drawing on Granovetter's (1982) theory of the importance of weak ties⁶ as

⁶ Weak ties are taken to be social acquaintances in this theory, whereas strong ties are close relationships such as friends and family.

social bridges for effective social networks, Buchanan (2002) argued that the World Wide Web reinforces the power of these weak social ties. Whereas most people or organisations possess a fairly similar numbers of acquaintances (weak ties), through networked relationships via the World Wide Web, it has become possible to develop a far greater number of weak ties in more globally dispersed networks. This means that there are more opportunities for knowledge to spread and for innovation to be successful.

Secondly, the notion of 'knowledge epidemiologies' (Urry, 2003) and specifically Gladwell's (2000) theory of social tipping points have been influential. Gladwell argued that there is a tipping point at which an idea begins to spread widely and cause an idea to become successful as an innovation. The presumption is that a small number of connectors located at key points within a web of widely networked relationships are necessary to cause an idea to spread widely. Because these connectors possess a disproportionate number of social relationships, they can have a powerful effect on the way in which knowledge can spread and bring forth innovation (Urry, 2004). The way in which a social system to dramatically tip from one condition to another is said to be a paramount process characteristic of innovation in modern business contexts (Gladwell, 2000).

Concepts such as these are widely employed in contemporary economic research that makes a case for the importance of digitisation in the context of knowledge-driven innovation. An example is Quah's (2003) work on innovation. He claims that in the modern information society, the economic value of knowledge in innovation changes from scarcity to widespread use:

'Items of knowledge are no longer being puzzled over and used by boffins in a manufacturing lab, encoding the knowledge into slabs of heavy metal for the public at large to use. Instead items of knowledge are being brought forward for direct consumption by the mass population. Think of computer software and videogames; creative output digitised and disseminated over the Internet;' (Quah, 2003, p. 6)

Whereas in the industrial age, the main economic goal concerning knowledge in innovation was to protect it from being openly accessible, by contrast, today, a core economic goal should be to ensure that 'good ideas' are widely disseminated. Thus, the core argument here is that the main characteristic of knowledge in innovation is no longer its exclusivity, but rather the extent to which it is spread and used widely.

The arguments in this stream points to two significant aspects. First, it draws attention to the importance of contemporary changes with regard to a more knowledge-centred and technologically interconnected economy that need addressing when investigating innovation. This reinforces the present concern for the specific context of e-business entrepreneurship as a radical example of a knowledge-centred sector that is driven by new developments in information and communication technology. Second, it suggests that research on entrepreneurial innovation ought to re-orientate its main focus away from the individual as exclusive unit of analysis to a perspective that considers both aspects of the knowledge involved in innovation and social factors of interconnection via the World Wide Web that may determine innovation.

However, despite this timely shift in perspective, there are considerable limitations with regard to the meta-theoretical perspective on knowledge. In a similarly unquestioned fashion as in economic orthodoxy, knowledge is taken to exist in 'items' (e.g. Quah, 2003) that are equated with economic commodities such as money, labour, and land (Stacey, 2000b). Knowledge is typically spoken of as though it were all of a piece; a stable entity-like item that people possess; pre-given, as if it had been in this piece forever; and unified, that is, as though essentially knowledge comes in only one kind. A rational and functionalist view on knowledge (Smircich, 1983) is taken, which portrays knowledge as a pre-existent economic resource that can be controlled by humans. It is a view that is based on a realist ontology that assumes that knowledge about the world exists a priori and is just waiting to be discovered.

This means that although this alternative and sociology-inspired stream points us to an alternative process perspective on innovation that addresses the social context of innovation, it does not offer a handle for the present concern to better understand the knowledge dynamics and the creative force of knowledge in innovation. Even though social relationships are taken into account, they are merely seen as networks of static knowledge-nodes. Even though knowledge items are seen to diffuse and spread throughout these networks, the Cartesian mind-body split, however, has not been challenged: knowledge itself is seen as an unchanging, abstract phenomenon, existing in pre-existent entities that are transferred within networks of social relationships. Therefore, we get hardly any insights on the emergence of new knowledge.

2.2.3 Innovation studies II: social interaction and emergence

A third relevant stream of interdisciplinary studies is found in recent organisation and management theory, particularly in research on knowledge management and organisational learning. Like in the previous stream, the main focus is on innovation, specifically on questions of the management of knowledge with the aim to better understand how innovation is created in various organisational contexts. While generally this is a large and anything but unified literature, there are specifically two streams that have a bearing on the present concern as they problematise the emergent nature of knowledge and advocate interaction-based and process-oriented views on innovation. These are first, concepts on knowledge creation and innovation in learning through interaction (Lave & Wenger, 1991; Senge, 1990; Brown & Duguid, 2001; Weick, 2002) and secondly, a related stream of thought on knowledge emergence in organisational innovation revolving around the concept of tacit knowledge (Nonaka & Nishiguchi, 2001; Nonaka & Toyama, 2003). Both streams oppose the individual-centred, information-processing perspectives and some theorists do so, notably, by opposing functionalist and Cartesian assumptions about knowledge.

In the first stream, the emergent nature of knowledge has been addressed by theorists who argue that knowledge is socially constructed in human interaction in work practice. Perhaps the most notable contribution in this respect has been made by theorists concerned with organisational learning and knowledge creation in interaction (e.g. Senge, 1990; Lave & Wenger, 1991; Brown & Duguid, 2001; Weick, 2002). Authors oppose approaches that centre on cognitive information-processing models of knowledge, which, in their terms, creates the impression that new knowledge arises from an aggregation of discrete, objective information-units. Instead theorists turned to a concept of knowledge as socially created in interaction and dependent on local and cultural contexts. Unlike models of entrepreneurial performance or idea dissemination reviewed in the previous sections, which understood knowledge as locked in the minds of individuals, here the core argument is that the process of human interaction is the primary source of knowledge emergence. New knowledge is seen to be created in inter-subjective, local interpretation processes in work practice (Weick, 2002).

By locating knowledge in practice, authors also oppose static conceptions of knowledge. Scholars argue that the emergence of new knowledge is a manifestation of

a dynamic process of 'knowing' in organisational practice (Blackler, 1995; Varela, Thompson, & Rosch, 1991). Weick (1996), for example, repeatedly argued for the term 'organising' rather than 'organisation', advocating the notion of 'knowing' as central aspect in organisational dynamics of the emergence of new knowledge. Also, Senge (1990), applying systems thinking approaches to the study of organisational learning, stresses that in order to apprehend knowledge creation, 'seeing processes of change rather than snapshots' is crucial (p. 73). Both Weick and Senge warn that a static and cause-effect driven view of knowledge emergence is very limiting in generating an understanding of the complex, knowledge-related problems that organisations face if they want to innovate. Hence, knowledge is no longer perceived as a pre-existent commodity and resource of the 'truth', but a generated form of understanding, which is contextually dependent and continually re-created (e.g. Suchman, 1987; Weick, 1993; Venzin, von Krogh, & Roos, 1998; Stacey, 2000a).

This practice-centred view of knowledge appears to have gradually permeated the field of management and organisation studies as a whole. As a result, conceptions of innovation are increasingly explained through practice-based models of knowledge creation in interaction. For instance, in Weick & Daft's (1984) concept of interpretive innovation, knowledge is seen as produced in communicative interaction: knowledge is created in the ways in which individuals convey what they know to each other through the practice of storytelling. Brown & Duguid's (1991) studies on communities of practice as source of innovation provide another example. They developed a view of knowledge in innovation as social interaction, 'putting knowledge back into the contexts in which it has its meaning' (Brown & Duguid, 1991, p. 47).

The idea of communities of practice, as explained by Lave & Wenger (1991), holds that interaction needs to be examined amongst people who are involved in a shared activity rather than in the context of a shared formal organisational unit. The key argument is that learning and innovation occur via the communities of practice that a person belongs to, rather than via a person's membership of a formal organisation or community. From this point of view, knowledge is seen as an interconnected web of relationships in which human interpretative acts ceaselessly shape and maintain, both intentionally and unintentionally, the relational context of networks. Any knowledge

always depends on a set of relationships to other knowledge in the framework of the whole social reality (Stacey, 2000a).

The second stream relevant here centres on Nonaka & Nishiguchi's (2001) approach to knowledge emergence in the 'knowledge-creating company' and Nonaka & Takeuchi's approach to innovation as 'a dynamic human process' (1995, p. 58). Both centre on the distinction between tacit and explicit knowledge. Nonaka et al. (2000) argue that organisational research has predominantly considered explicit knowledge, which is transmittable in formal and systematic language. However, they claim, there is another important form of knowledge for innovation: tacit knowledge. Tacit knowledge is personal, context-specific and intuitive, and therefore hard to formalise and communicate. It is manifest in informal skills and 'how-to' knowledge that are used in practice (Nonaka & Takeuchi, 1995).

This non-formalisable knowledge, it is argued, encompasses distinctive characteristics that cannot be perceived a priori, yet, that are playing a central role in processes of dynamic knowledge emergence. The main argument is that new innovative knowledge is constituted in the conversion of tacit knowledge into explicit forms of knowledge (Stacey, 2000b). Such a conversion is seen to take place in processes of knowledge sharing and knowledge creation in practice. Thus, it is claimed that research on innovation needs to a greater extent focus on the ways in which people's tacit knowledge transforms into practical knowledge in people's interactions. In fact, Nonaka & Takeuchi argue that tacit knowledge needs to be a paramount concern for an epistemology of knowledge creation:

'To explain innovation, we need a new theory of organizational knowledge creation...The cornerstone of our epistemology is the distinction between tacit and explicit knowledge... the key to knowledge creation lies in the mobilization and conversion of tacit knowledge.' (Nonaka & Takeuchi, 1995, p. 56)

Advocating the notion of tacit knowledge for explanations of learning and innovation, Cook & Brown (1999) argue that tacit knowledge can be made more accessible if it is studied in practice rather than by assuming that this knowledge is hidden in individuals. In this context, Cook & Brown attack Cartesian thought as an epistemology of possession, and propose that a 'generative dance between knowledge and knowing is a powerful source of organizational innovation' (p. 381). Knowledge

and knowing in practice, so the argument goes, stand in constant dialogue and hence an 'epistemology of practice' is needed:

'in addition to the traditional epistemology of possession, there needs to be, in our view, a parallel epistemology of practice, which takes ways of knowing as its focus. ... there needs to be a radical expansion of what is considered epistemic in its own right, which includes knowledge and knowing.' (Cook & Brown, 1999, p. 383)

Cook & Brown's argument of the generative dance between knowledge and knowing suggests that approaches to the creation of new knowledge should involve a focus on the interplay between existent formal knowledge and the act of knowing when tacit knowledge is transferred into practice.

These streams of research on knowledge management and organisational innovation highlight two important insights. First, authors in both streams clearly take a dynamic perspective on the emergent character of knowledge. Scholars argue that knowledge intrinsically involves emergent properties - systemic characteristics that cannot be analysed or even perceived a priori - because knowledge, unlike data or information, emerges from subjective human interpretation and complex interaction between human beings (Stacey, 2000b). These emergent and self-organizing aspects of knowledge are seen to be a result from situated and contextual factors surrounding organisations.

Second, knowledge is not seen exclusively to exist in an isolated state in the minds of individuals, but rather it is seen to be created in interaction (Brown & Duguid, 1991). Practice is seen as the main location of reasoning processes (Hoshmand & Polkinghorne, 1992) and thus, human interaction is recognised for its role in knowledge creation. Activity between actors is highlighted in its importance as an inter-subjective and reciprocal interplay between the actor's knowledges and the context in which they reside.

However, there are two main shortcomings of these studies. First, although the above streams stress 'knowing in practice' and interaction as primary aspects of knowledge creation, knowledge and practice are still assumed to exist on separate levels of reality. This is based on a narrow and somewhat mechanic notion of interaction as a counter-concept to static possessive knowledge concepts. Nonaka and Nishiguchi's (2001; 2003) concept of tacit knowledge illustrates this. The explanation of the emergence of new knowledge starts from the premise that in order to unleash the potential of tacit

knowledge for innovation, it is assumed that certain entrepreneurial individuals already possess tacit knowledge. What is explained is how new ideas conceived by individuals are transmitted into the sphere of explicit knowledge in interaction, so that they can become innovative knowledge. The human mind and its cognition is still seen as the exclusive sphere where ideas originate, and social experience (practice), is seen as a separate, mainly contextual realm into which this knowledge is transferred.

Similarly, theorists concerned with knowledge creation in interaction split the production of knowledge from the use of knowledge and assume that there is a gap between production and use. Even though knowledge is considered a dynamic and socially constructed phenomenon, two separate domains are presumed – knowledge and practice. Innovation is seen as a process of knowledge application in practice – once transferred to practice it evolves in interaction. Wood (2002) has critiqued this as the 'knowledge production bias'. Knowledge production is seen as separated from its use and the social locus for production is attributed to a separate sphere of cognition. As a result, the focus is on either the individual or the social levels of analysis, which leads to the debate of where knowledge might be located 'more' - in individuals or in the social (in knowledge or in 'knowing'). Unsurprisingly, major debates in this stream revolve around the question of which comes first, practice or knowledge, and which of them is more important. Also, an often implicit assumption is that, if they exist in both, there is the need to devise a model for the knowledge transfer between them.

Second, even though the above authors suggest a dynamic epistemology that locates knowledge creation in social construction in interaction and some stress the need to go beyond Cartesian assumptions, interaction is not seen to affect the subject and object relations that constitute it. Rather, interaction is understood as a mechanistic process of influence relations amongst co-present subjects (actors) and objects (knowledge). This gaze is what Hosking et al. (1995) have argued to implicate explanations of the emergence of new knowledge as arising from causal influence relations between the knowledge of different actors in the economy. It leads to research that is mainly focused on identifying those knowledge types that are necessary to determine knowledge transformation processes. Interaction is reduced to a scenario of cause-effect mechanisms between knowledge types possessed by actors from a perspective of the outside observer, excluding the dynamics of subject-object relations. Typical

research questions are: What sorts of knowledges are required to innovate? How can one understand the type of knowledge that needs to be activated in practice so that innovation can occur?

Thus, even though knowledge is conceptualised as created in inter-subjective knowledge creation in practice, this conception of knowledge creation is limiting research on the emergence of new knowledge in that it is studied from the position of the outside observer only, which implies a rather superficial understanding of knowledge creation. Thus, while few theorists would claim to be Cartesian and as we have seen, from attitude research (McGuire, 1983) to organisational research (Cook & Brown, 1999) there is increasing dissatisfaction with Cartesian thought, the above theories nonetheless bear a Cartesian legacy in a more subtle way: through viewing knowledge as an object from a perspective of the outside 'objective' observer, interaction processes are understood by observing others (actors and their knowledge) as objects and by inferring knowledge from what we observe. As social psychologists Blumer (1969), Heider (1958) and Mead (1934) have established, our understanding of how people come to know and act in the social is not served by an abstraction of actor and observer from each other. At best, this divergence in perspective separates the interactions of others from their subjectivity and thus merely paints a phenomenological picture of interaction (Farr, 1997).

The theories on knowledge management and knowledge creation in interaction illustrate this: the overall gaze on studying knowledge in interaction is directed at the surface of the interaction of the presumed knowledge of actors from the 'outside'. For instance, Cook & Brown (1999) suggest looking for indications of tacit and explicit, group and individual knowledge when studying contexts of innovation, and argue that empirical enquiry ought to gather indications of where tacit knowledge is revealed in practice and where it interacts with the knowledge that actors possess. This is a perspective of the outside objective researcher; knowledge is examined in the interaction of presumed knowledge types such as tacit and explicit knowledge.

What is missing - crucially - is the perspective of the other, or of, in this case, the perspective of the 'actors' studied. We do not obtain insights on the subjectivity that people invest when interacting, and how, in this process, knowledge contents change as mediated by dynamic subject-object relations. Knowledge is unknown in its

contents, meanings and potential diversity. In addition, we do not gain insights on how practice itself mediates knowledge emergence – knowledge is abstracted from the realm of practice as an abstract phenomenon that is merely transferred, contextualised and activated in practice. Apart from cause-effect mechanisms of interaction between the presumed knowledge of actors, we do not gain any insights on how knowledge is forged in experience.

2.3 Discussion

Albeit the continued effort of interdisciplinary approaches to define knowledge in more human and social ways, the views on knowledge behind each of the reviewed perspectives on entrepreneurial innovation, summarised in table 1, are dominated by meta-theoretical assumptions that limit the potential application of these perspectives for the present concern. Specifically, they leave unanswered questions about the dynamics of the emergence of new knowledge that necessitate the social psychological framework proposed here.

Stream of research	Nature of knowledge	Innovation	Functional claims
<i>Classic economic studies</i>	Commodity possessed by individuals with entrepreneurial traits	Outcome of special entrepreneurial capacities to process information	Individual entrepreneurs are the main drivers of innovation
<i>KAB studies</i>	Mental states of individuals	Successful entrepreneurial behaviour determined by individual cognition	Innovation can be managed by implementing 'right' entrepreneurial skills through education
<i>Innovation studies I</i>	Entities in the minds of individuals	Transfer and diffusion of knowledge-items into the social	For successful innovation, knowledge needs to be widely diffused into a given social context
<i>Innovation studies II</i>	Tacit knowledge and 'knowing' in practice	Knowledge transformation in practice; unleashing of tacit knowledge in interaction	For successful innovation, emergent aspects of knowledge needs to be activated and contextualised in practice

Table 1: Assumptions about knowledge in research on entrepreneurial innovation

Initially, a synthesis of the two streams of innovation studies was considered as a conceptual starting point for exploring entrepreneurial innovation in e-business. The emphasis that alternative economic work on knowledge dissemination places on the social context of knowledge resonates with the interaction studies of knowledge

management research. Both bodies of work lend weight to a core idea of this thesis in terms of the social and contextual character of entrepreneurial innovation. However, they both have limitations on a meta-theoretical level.

First, the economic studies on knowledge dissemination illuminate the interrelatedness, openness and heterogeneity of the contemporary context of innovation in a digitised and increasingly knowledge-centred economy. They provide the impetus for examining the innovation process instead of merely individual entrepreneurs. However, this angle is limited by a bias to knowledge as static pre-existent units. This way of approaching knowledge does not resonate with the present overall aim to look at knowledge in a dynamic way.

Secondly, although the interaction-focused perspective in knowledge management and organisational research highlights the social context of entrepreneurial activity in more detail and stresses knowledge as a socially created and contextual phenomenon, the dynamic perspective offered is on social interaction from an outside 'objective' perspective; knowledge contents and changes of knowledge contents through the process of interaction are not considered. In addition, although authors stress an epistemology of 'knowing in practice', knowledge and 'knowing' in practice are assumed to exist on separate levels of reality. The assumption is that individuals have new ideas and that innovation emerges in the social process of unleashing these in interaction. In other words, knowledge is seen as existing in a separate realm to that of social experience. This focuses the question of knowledge primarily on the question of which comes first, practice or knowledge, and which of them is more important.

Together, for business practice and policy these assumptions implicate that research questions and research design are inevitably shaped by a logic of thought that sees innovation as either a problem of the management of skills deficits or of knowledge diffusion and/or knowledge transfer. Similarly, solutions to these problems are expected to be either educational measures exclusively focused on individuals' knowledge or measures that are targeted at bridging theory and practice, cognition and interaction.

Overall, therefore, the reviewed research streams point to a common perspective on knowledge dynamics that directs attention mainly on the surface of social interaction, placing emphasis on a priori existent knowledge units and influence relations amongst co-present actors and their presumed knowledge. What is needed, however, is a perspective on knowledge dynamics that moves from an attention to the surface of dynamics to its contents – one that takes into account the heterogeneity and multi-faceted-ness of knowledge contents in emergence.

In addition, while human practice is acknowledged as important sphere of knowledge creation, emergence of new knowledge is conceived of as a transformation process of knowledge between two separate spheres, knowing and acting. Knowledge is abstracted from experience; knowledge is seen as an expression of the disembodied mind of an individual, emerging in a separate sphere to social life and experience. In other words, it is assumed that new knowledge originates in the sphere of human thought, and then finds expression in practice and interaction. I agree with authors in innovation studies that there are non-formalisable, emergent aspects of knowing that are paramount for innovation. However, the creative force of how these emergent aspects of knowing cannot be assumed to be determined exclusively by human sense-making. Experience has not been considered so far as a creative force of emergence of its own. A perspective is necessary that views experience less as a separate contextual realm of knowledge application, but more as an integrate and dynamic force of emergence in the process of knowledge creation.

For this, a logic of knowledge dynamics is required that enables us to think first, beyond the dynamics of unleashing the knowledge that individuals already possess, and second, beyond the assumption that practice is a process patterned by human influence relations of existent knowledge objects in social interaction. We need to move beyond thinking in terms of cause-effect explanations of different knowledge spheres exerting influence on one another. A perspective is required that is able to look at the diverse and context-specific subjective contents of knowledge and at their interdependency with emergent forces of specific experiences. Like organisational theorists and knowledge management researchers, I believe that there are emergent conditions of creation that can be a vital source of people's knowledge creation; however, I am not convinced that we can gain a better understanding of them by

looking at emergence from the 'outside' observer perspective and by looking at social interaction as a sphere that is merely the context of application of what people know. Rather, I argue, we need to re-think the meta-theoretical stance we take when we think about the creative force of emergence. I argue, this creative force is a dynamic that is driven by both social knowledge construction and experience, yet, these are not two separate realms of reality. Rather, while they belong to the same realm of lived experience, it is their dynamics that are different. As will become clear in Chapter Three, we need to think of experience and social thought as differently patterned forces of emergence. It is timely to further develop our meta-theoretical assumptions about emergence in order to be able to account for emergent knowledge dynamics as a phenomenon driven by both experiential and social forces.

In the subsequent chapters, I discuss a critical social psychological approach as a fundament for the exploration of emergent knowledge dynamics in e-business entrepreneurship. Critical social psychological approaches are compatible with the interaction-centred studies in organisation theory in that they also provide a robust critique of KAB work and aim to offer an alternative framework. They also oppose individual-centred work, specifically the presumption that the social context can be held constant, or can be excluded altogether. Theorists critique the assumption that human knowledge is seen exclusively determined by individual traits or predispositions to behave in a certain way.

Nonetheless, what distinguishes critical social psychological approaches from the interaction-focused studies on knowledge management is that people's subjective perspectives are taken into account and that conceptualisations of social knowledge processes are grounded in Hegelian dialectics. This approach can be distinguished from the Cartesian view on knowledge not only by it prioritising the dynamic interrelation between the individual and the social, but also by focusing on, crucially, processes of mutual constitution of knowledge contents in the dialectic interrelation between subjects and objects rather than cause-effect determinism (Marková, 2003; Mead, 1934).

In addition, I address the ways in which we think about emergence with regard to experience. Particularly, there is an urgent need to develop our meta-theoretical view

on the ontology of emergence. Based on a critical social psychological fundament, thus, I draw on work by Deleuze and Guattari (Deleuze, 1968; Deleuze & Guattari, 1987) to develop an expanded meta-theory of emergence.

2.4 Summary and conclusions

There is a long tradition of theorising on entrepreneurship in economics as well as a more recent, growing body of interdisciplinary research on entrepreneurship and innovation, associating either individuals' knowledge or the management of knowledge creation and knowledge diffusion with innovation. In the latter, alternative economic psychology-inspired streams attribute the knowledge held by individuals with entrepreneurial innovation. In more recent economic studies and work on knowledge management, the association of individuals' knowledge with innovation is less direct. By locating knowledge entities into the context of interaction and practice, knowledge management is seen as the task of transferring knowledge either between individuals or between different knowledge spheres such as from tacit knowledge into formal knowledge.

Although recent interaction-focused perspectives in knowledge management research demonstrate the importance of inter-subjectivity and dynamic knowledge creation in practice, knowledge is mainly investigated from an 'objective' outside perspective and is considered to exist either in the individual or the social with processes of transformation arising from cause-effect relations between the two. This provides an approach that mainly draws attention to the surface of influence relations between presumed types of knowledge and contexts, yet, it fails to capture how knowledge itself changes in its contents in the process of interaction. It also mainly draws attention to knowledge emergence in practice as inter-subjective interaction, yet, does not take into account human experience of the material realm. The main research focus is on qualifying existent knowledge types in their potential to bring forth innovation when transferred either from individuals' minds into practice or from collective practice to formalisable knowledge. There is a near absence of work on a better understanding of socially and experientially creative forces of emergence of new knowledge contents.

The next chapter aims at laying the foundations for the development of a critical social psychological approach to understanding the emergent knowledge dynamics in innovation. As a first step in this endeavour, I concentrate on the meta-theoretical assumptions that guide social psychological theorising on knowledge dynamics. I build on the theory of social representations (Moscovici, 1961/1976; Moscovici, 1984) as it provides a useful meta-theoretical fundament for conceptualising emergent knowledge dynamics, and in addition, I use Deleuzo-Guattarian philosophy (Deleuze, 1968; Deleuze & Guattari, 1987) to tackle the link between knowledge emergence and experience meta-theoretically.

Overview of Chapter Three

This chapter discusses social representations theory to critically explicate the role of social construction in the emergence of new knowledge in innovation. In order to clarify this approach, this chapter evaluates the implications of the social representational take on knowledge dynamics for the study of innovation, critically assessing the meta-theoretical implications of the theory's dialectic angle on an understanding of emergent dynamics. Based on a critique of the dialectic interpretation of knowledge dynamics, I forward a perspective that stresses the creative force of emergence that disrupts existent meanings and produces new potentialities for innovation.

For this, the work of Deleuze and Guattari is forwarded. Their work exposes limitations of the dialectic underpinning of social representations theory for an analysis of knowledge dynamics and underscores the need for a critical engagement with logical assumptions. Specifically, their notions of 'difference-in-itself' and 'the rhizome' can substantially enrich a critical social psychological perspective on knowledge emergence: they allow us to think beyond the exclusivity of the emergence of the novel in dialectic relations, which extends our analytical gaze to the unexpected and unprecedented features of emergent knowledge dynamics.

3 TOWARD A CRITICAL SOCIAL PSYCHOLOGICAL PERSPECTIVE ON EMERGENT KNOWLEDGE DYNAMICS

Having illuminated the implications of specific Cartesian meta-theoretical assumptions for theorising on entrepreneurial innovation in the previous chapter, I now turn to the theoretical fundament for a critical social psychological perspective on emergent knowledge dynamics.

Social representations theory (Moscovici, 1961/1976; Moscovici, 1984) was initially chosen as a theoretical frame for this study as it offers the perhaps most challenging and innovative social psychological engagement with knowledge dynamics in relation to social change. It can be distinguished from Cartesian-based concepts not only by its prioritisation of the dynamic interrelation of individual and social, but also by its focus on this dynamic as a process of mutual constitution (Marková, 2003) of symbolic knowledge contents. This lends itself to the present concern of the emergence of new knowledge in innovation, especially as it provides an open theoretical frame that theorises knowledge as a dynamically evolving, socially creative and socially empowering force, overcoming Cartesian philosophy with a view on knowledge based on Hegelian dialectics. However, Hegelian dialectics also tie us to an ontological⁷ logic of emergence that subsumes movement and becoming to the epistemological⁸ logic of dialectics. This is problematic for an understanding of particularly the emergent aspects of knowledge dynamics.

This chapter scrutinises core meta-theoretical assumptions about the ontology of the emergence of novelty in social representations theory. It forwards the work of Deleuze and Guattari (Deleuze, 1968; Deleuze & Guattari, 1987) which provides an ontological logic that exposes the limitations of dialectic assumptions for an understanding of emergence in non-continuous, non-linear and future-directed patterns. It thereby

⁷ Ontology is a word that is used in many different ways. It is often considered to be identical with metaphysics, or as the branch of metaphysics dealing with the nature of being or reality. In this study I use it in a more literal sense reflecting its Greek word-stem 'ontos' (to be) as the science of how a thing (object or concept) comes into being.

⁸ Epistemology is defined as the science of the origin, methods and nature of knowledge.

acknowledges experience as a creative force with its own non-dialectic ontology and thereby de-centres the exclusive focus in social representations theory on dialectic dynamics.

After a brief introduction of the main conceptual streams of knowledge dynamics in social representations theory, in what follows, I scrutinize the theory's dialectic interpretation of knowledge dynamics on a meta-theoretical level and forward a perspective that draws on the Deleuzo-Guattarian ontology of becoming to emphasise the creative force of unprecedented novelty disrupting existent meanings and producing new potentialities for innovation.

3.1 Knowledge dynamics based on Hegel: social representations theory

The theory of social representations was developed by Serge Moscovici in the 1960s as part of a broader intellectual goal for a social psychology of knowledge. Social representations theory aimed to serve as a conceptual interface between psychology and sociology (Deaux & Philogène, 2001) in the explanation of how knowledge dynamics play a role in processes of social change (Moscovici & Marková, 2000). Starting from the Hegelian principle of dialectics (which I will discuss later in this chapter), Moscovici opposed the Cartesian notion of knowledge as 'located' either within the individual or the social, critically emphasising that knowledge is not statically located in either the individual or the social but is rather continually brought forth in the constructive force of communicative interaction. He 're-located' knowledge into processes of social representation arising from dynamic subject-object relations, which meant a revolutionary break with the social psychological 'tradition' of rather individual-centred and Cartesian-based theories of knowledge (Farr, 1996).

It is difficult to provide a singular definition of social representations as many see the actual phenomena as too elaborate to capture its entirety (Marková, 2000) and the history of the concept too rich to be easily compressed into a single definition (Moscovici, 1988). Others see this as a precondition for further development and elaboration (Valsiner, 1998; Wagner, 1994). However, restricting myself to the particular phenomenon of knowledge dynamics, it can be said that Moscovici's conceptualisation of social knowledge offers a perspective of how new knowledge

arises from social construction, embedded in a dialectic meta-theory. Social construction is seen as an inter-subjective process driven by the creative force of the tension between unfamiliar and familiar. I explain this in the following by starting with the three central theoretical conceptualisations of knowledge dynamics and then moving to the underpinning meta-theory.

3.1.1 Key concepts of knowledge dynamics

The theory of social representations conceptualises knowledge as first, socially constructed, second, as symbolic and third, as continually changing in the interplay of new and previous knowledge (hypothesis of the familiarisation of the unfamiliar). Together, these concepts serve as the fundament for the present argument for a dynamic perspective on knowledge against the backdrop of the Cartesian limitations outlined in Chapter Two.

As for the first, the theory of social representations forwards knowledge creation as emergent from *inter-subjective knowledge construction* (Moscovici, 1984; Moscovici, 2001a). Social representations 'are the processes by which we construct our reality. As social-psychological mechanisms they shape how we think and talk about events and objects.' (Deaux & Philogène, 2001, p. 5). There is general consensus that social representations are forms of social knowledge that arise from the 'mechanisms of a thought process' (Moscovici, 1984, p. 29) - anchoring and objectification⁹ - that continually arise in the unceasing 'bubble of conversation, conflict between social groups and encounters between different perspectives' (Jovchelovitch, 2001, p. 175). Thus, rather than advocating a view of knowledge entities that are transferred from cognition to social practice, Moscovici saw knowledge as being continually produced and re-produced in communicative interaction. In this way, the study of social representations offers a frame for studying knowledge 'in-the-making', directing attention to the continual re-construction of shared concepts through which we organise our world (Moscovici, 2001b).

⁹ Anchoring means classifying and naming something new or strange. Moscovici (1984) writes people strive 'to anchor strange ideas, to reduce them to ordinary categories and images, to set them in a familiar context' (p.29). Objectification describes the process of when something anchored leaves the world of the abstract and takes shape in artefacts or physical practices. Objectification, like anchoring, serves to familiarise the unfamiliar.

Secondly, knowledge construction are conceptualised as a *symbolic* process, focusing analysis of knowledge processes on the *meaningful contents of knowledge*. New knowledge is explained as arising from the interaction of diverse knowledge contents in everyday communicative interaction (Flick, 1998). Thus, rather than concentrating on the surface of interaction processes, Moscovici locates social change in the evolution of knowledge contents. Thereby, and in contrast to recent theorising on knowledge dissemination and knowledge creation in interaction reviewed in Chapter Two, we arrive at a study of a 'social epistemology of representations, instead of a social epidemiology of representations' (Flick, 1994, p. 188). We move from studying processes of the dissemination of knowledge units (on their surface) to the study of the formation, maintenance and change of symbolic meanings in social knowledge.

Thirdly, the theory holds that at the centre of social construction stands the *creative force of the unfamiliar* – Duveen (2000) called this the power of new ideas. Moscovici suggests that when people are presented with the unfamiliar, as for instance in 'competing versions of reality' (Rose et al., 1995), or in different 'stocks of knowledge' (Flick, 1998), this is perceived by people as a threat (de-Graft Aikins, 2004) and therefore people are 'under the compulsion' (Moscovici, 2000, p. 50) of anchoring and objectifying the unfamiliar in the familiar. In other words, the theory argues that in response to the challenge of the unfamiliar, people familiarise the unfamiliar and thus create new knowledge by socially representing it in a new way (Moscovici, 1984).

The hypothesis of the familiarisation of the unfamiliar is closely linked to the functional character of social representations: *'the purpose of all representations is to make something unfamiliar, or unfamiliarity itself, familiar'* (Moscovici, 1984, p. 37, emphasis in the original). Social representation serves people in dealing with novelty as 'a means of transferring what disturbs us, what threatens our universe, from the outside to the inside, from far off to near by.' (Moscovici, 1984, p. 39). Moscovici argues that through representation we conventionalise, normalise and categorise and thus put ourselves at ease with what had been an unfamiliar novel idea.

The process of familiarisation is said to be particularly functional for coping with diversity and plurality of concepts in modern life (Jovchelovitch, 2001; Moscovici, 2001b). Usually this involves 'both conflict and cooperation' (Moscovici & Marková,

2000, p. 377) between two or more groups. Moscovici argues that social representation serves people to resolve social conflict arising from new ideas and emphasises particularly the relation between minority and majority groups: new ideas (the unfamiliar), in his view, can be introduced into society by any variety of minority groups.

Here Moscovici stresses the power of new ideas as creative force bringing forth tensions with familiar concepts and in turn, stimulating the forging of new meaning. In the dialectic that arises from the interaction between minority and majority, new creative tension arises that has the potential to change old ways of thinking. Purkhardt (1993) summarised this as the theory's concern with 'the social nature of thought and the creative ability of people together to change society.' (p. xi). At the same time, social representation serves people to continually negotiate and re-negotiate systems of shared social references that are crucial for continuity and social cohesion enabling people to cope with the rapid changes in contemporary modern societies (Moscovici, 2001a, 2001b).

In sum, the theory forwards a view on knowledge dynamics in which the confrontation with unfamiliarity threatens existent meanings and gives way to the possibility of new representation, to the creation of new meaning and the perception of difference between new and old. Howarth describes this process as follows:

'... in learning about the world in which we live we take on particular 'presentations' of that world and re-interpret them *to fit with what we know* 'already' (Duveen, 2001). That is, we take on 'presentations' and re-present them. In this process the social representation may be confirmed or perhaps re-articulated or re-enacted in various ways.' (Howarth, 2003, p. 5, emphasis added).

This conceptualises new knowledge as arising from the juxtaposition of meanings in a process of the collective evaluation of the unfamiliar against the familiar. In response, the familiar is re-evaluated by gradually domesticating the unfamiliar (Wagner, 1998) in the familiar. In this process, it is the familiar as 'a network of interacting concepts and images' (Moscovici, 1988, p. 220) that changes and continuously evolves, always creating new links to other (unfamiliar) knowledges or transforming with them when integrating them.

Crucially, this stance reflects a dialectic point of view which Moscovici (1988) claims to be founded in Hegelian principles of dialectics. It implicates a view on knowledge as constituted in subject-object relations, elevating tensions and contradictions between knowledge contents as paramount aspects of the creative force of 'movement' in knowledge (Farr, 1987; Marková, 2003). Thus, in contrast to the Cartesian-based perspectives in Chapter Two that examined knowledge from an outside 'objective' perspective of the observer, the social representational notion of knowledge elevates the interrelation between actor and observer as constitutive of meanings and research thus takes the subjective perspective of the individual.

To make sense of the potential of the theory to account for emergent knowledge dynamics, it is important to understand the implications of this Hegelian grounding for analysis. Moscovici's adaptation of Hegelian dialectics has profound implications specifically for the way in which we understand novelty and movement. In the following section, I therefore consider the core aspects of Hegelian dialectics that Moscovici draws on, in order to then highlight problematic areas in their employment in the theory of social representations and the way theorists have sought (successfully and unsuccessfully) to resolve them. The aim is to draw attention to the implications of the dialectic logic of thought about knowledge dynamics for a critical social psychological perspective on the emergent dynamics of knowledge.

3.1.2 Meta-theoretical grounding: Hegelian dialectics

Dialectics has a long history within Western philosophy reaching back to the work of Plato and Aristotle and has gained considerable importance in the context of the 'post-modern turn' in social psychology (Evans, 1977). Dialectics can most widely be described as the ancient philosophical technique of argument and counter-argument, of agreed pre-suppositions and logical structure to establish the truth. Over the years, it has been refined and interpreted in various ways, ranging from mathematical algorithms to political manifestos such as in Marxism. In social representations theory, it is particularly Hegel's dialectic method which informed theorising (Marková, 2003). Specifically, Moscovici used the Hegelian dialectic to develop a *dynamic and inter-subjective notion of shared representation* for social psychology (Marková, 2003).

Moscovici used Hegelian dialectics as a meta-theoretical fundament first, to overcome the Cartesian subject-object dichotomy by conceptualising knowledge as an inter-subjectively constructed evolution of social meanings and second, to adapt Durkheim's notion of collective representation.

When Moscovici developed his theory in the 1960s in France, one of his main aims was to liberate social psychology from the Cartesian 'reason versus sense' split by emphasising that 'both ways of thinking are based on reason' (Moscovici & Marková, 1998, p. 386). Moscovici's theory of social representation was a project of the 'rehabilitation' of socially shared knowledges as 'branches of knowledge in their own right' (Moscovici, 1973, p. xiii), opposing the dominant belief in social psychological theorising at the time that there is a universal and superior rationality and truth that human knowledge needs to aspire to through scientific reason. Moscovici drew attention to the social psychology of communicative interaction in everyday life, arguing that this domain was at least equally important as it continuously produced and transformed shared social knowledge that has important social functions of providing familiarity and social reference systems (Deaux & Philogène, 2001).

Moscovici's main theoretical achievement in establishing this was to overcome the Cartesian subject-object dichotomy by demonstrating how knowledge evolves from an inter-subjective meaning construction process. It was here where his theorising was particularly inspired by the Hegelian *dialectic model of movement* (Hegel, 1807, 1830). In social representations theory, Hegel's (1830) dialectic model is mainly featured as a three-step process comprising the movement from thesis to antithesis to synthesis. Knowledge dynamics is portrayed as a triadic becoming that continually evolves in 'being', in essences, concepts and identities (Colebrook, 2002) and that passes on through the difference between such beings. As depicted in image 1, this is the notion that one begins with a clearly delineated concept (thesis), then moves to its opposite (antithesis), which represents any contradictions derived from a consideration of the defined thesis. Thesis and antithesis are contrasted and synthesised to form a new thesis (Marková, 2003).

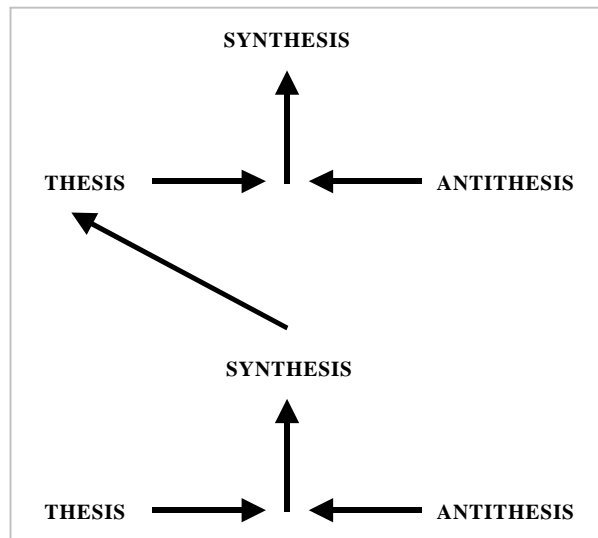


Image 1: Hegelian dialectic

Hegel's dialectic logic of the late eighteenth and early nineteenth century was an attempt to explain the logic of movement, the progress in development and change in nature and in thought. For Hegel, dialectic is the moving principle of reality. The world is seen as a system of mutually interdependent forces which arise from the struggle of opposite tendencies - one stage of historical development leads to the next stage of the upward movement. Dialectics is seen by Hegel as the essence of thought which progresses in an upward movement toward self-realisation (Marková, 1982).

However, by drawing on Hegel's model, Moscovici was not concerned with the aspect of a higher form of self-realisation like Hegel. Rather, Moscovici used it primarily to emphasise tension and contradiction as the central tenets of knowledge dynamics. Crucially, Moscovici read the Hegelian model with a focus on continuous evolution of oppositions rather than on progress. With Hegel he highlighted that every state inevitably posits its opposite and that this process is infinitely renewable: the interaction between opposites, is seen to generate the movement of social change, yet, crucially not a higher third state in which the opposites are integrated. Synthesis for Moscovici is merely the basis for a new dialectic process of opposition.

Another paramount aspect for Moscovici was Hegel's (1807) notion of subjectivity as 'a being-for-self which is for itself only through another' (p. 115). Again, while for Hegel (1807), a main concern hereby was to show that it is through the interaction with

the other that one becomes self-consciously aware of one's 'true' subjectivity, for Moscovici the aim was to show representation as an inter-subjective phenomenon – one that is constituted in the social, mediated by continuous dialectic tensions between people and between people and objects around us.

Moscovici's interpretation of inter-subjectivity is best illustrated by the I-other-object triangle (Moscovici, 1984), that Moscovici placed at the centre of the dynamic of social representation since the very beginnings of the theory (Marková, 2003). More recently, Bauer & Gaskell (1999) called this the 'triad of mediation' (image 2). It symbolises the essence of knowledge dynamics in social representations theory: the way in which we 'know' about our world around us is always mediated by the inter-subjective tension between two or more subjects (the I and the other) and an object (which can be a concrete entity or an abstract idea, such as a sign, representation or symbol) (Bauer & Gaskell, 1999). Subject here can mean a group, a subgroup, a culture, and so on.

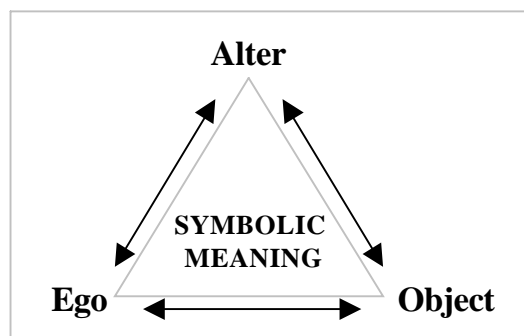


Image 2: The triad of mediation between I, other and object

This dialectic triad is for Moscovici the dynamic unit of tension at the centre of change in social knowledge. It is in this triad of mediation through *subject-subject-object relations* that socially shared meanings are created – it describes the nucleus of symbolic meaning-mediation (Marková, 2003). By drawing on Hegel, therefore, Moscovici was able to argue that representation is always the result of individuals' mutual interpretive action. It served Moscovici to underline and highlight representation as a central *social* psychological aspect of knowledge evolution – one that draws attention to the importance of continually changing symbolic knowledge contents.

The emphasis of dynamic I-other-object knowledge as constitutive of knowledge had a second background. Moscovici was inspired by the Durkheimian (1914) notion of collective representations (Farr, 1998) which focused on shared symbolic universes of cultural beliefs as a form of knowledge where the knower is a collective rather than an individual (Marková, 2003). This appealed to Moscovici: his aim was to show this notion of knowledge as socially existent. However, Durkheim's concept promoted a rather static view on pre-existent long-standing, rarely changing shared representations that are determined by society and could not be influenced by individuals.

By drawing on Hegel, Moscovici found a way to elevate the notion of representation as collective, yet, at the same time, to discard the Durkheimian notion of collective representations as a passively emergent phenomenon arising directly from social structures (Marková, 2003). Here Moscovici was influenced especially by the French interpretation of Hegel of the early twentieth century, which underscores representation and the process of naming as central social aspects of what human beings do to the world when they make sense together (Parker, 2004). It was Hegel's aim to undermine classic representational models of mental representation such as the traditional Kantian philosophical view of the world, the fundamental assumption of which was that the world is pre-given, and the of which was to create the most accurate or 'truthful' representations of this objective world¹⁰.

Hegel allowed Moscovici to turn Durkheim's notion of collective representation as a passive phenomenon into an actively constructed one; the terminology 'social representation' points precisely to this fact: Moscovici replaced 'collective' by 'social' to indicate that he saw representation as a social phenomenon that is brought forth by people, but crucially not as a passively shared reflection of the pre-given social world. It allowed him to stress social knowledge as a phenomenon of collective representation that is *brought forth* in the creative act of human cognition and interpretation.

In essence, therefore, Hegel served Moscovici as a way to transform the notion of shared symbolic knowledge into a dynamic one (Moscovici & Marková, 2000). The

¹⁰ In this respect, representation has been a critical issue of traditional western philosophy. From a classic representational perspective, a reality is always an imperfect "mirror image" of the perfect, objective world. Representation is seen as 'a 'misrecognition' in the minds of individuals that plagues relations between human subjects [and] is already at work in the relation between human beings and the world around them' (Parker, 2004, p. 39).

main appeal of Hegelian dialectics for Moscovici was not Hegel's optimistic belief in a holistic truth and progress (Rosen, 1992), but rather the dynamic route to understanding representation as a social phenomenon. This allowed him to introduce the concept of 'social representation' to social psychology as a theory to account for social change in modern societies through the dynamics of social knowledge contents.

In Chapter Two, I presented perspectives on entrepreneurial innovation that stressed social interaction as crucial in knowledge creation. Nonetheless, I critiqued them as Cartesian-based in that they do not take into account the dynamics between individual and social. Having considered the meta-theory of Hegelian dialectics above, we can now pinpoint more precisely which assumptions distinguish the theory of social representations in its view on social knowledge construction.

First, the co-presence of different ideas is not sufficient for knowledge to move. Hegelian oppositions imply continuous and mutual change or development through tension and the strife of forces. This ontology presupposes that all living phenomena involve themselves in an internal tension of contradictory forces, resolving itself in a triadic movement. Without such tension, there would be no life. In concrete terms, the co-presence of different social groups, of various kinds of asymmetric relations, of dominance and power, are not enough on their own to produce social change. Rather, to produce social change, one must presuppose oppositions in tension (Moscovici, 1984).

Second, Moscovici's interpretation of the triadic movement is not independent from the knower and can thus not be examined from an 'outside' neutral perspective. By drawing on Hegelian dialectics, Moscovici is able to show that knowledge is inherently associated with human inter-subjective interpretations and dependent very much on 'the point of observation' of the interpreter and that the process of interpretation simultaneously shapes and is shaped by social reality. In putting the triadic relationship of I, other and object at the centre, the theory recognises the mediating effect of social interaction on symbolic meaning. The ongoing evaluation and re-evaluation of familiar and unfamiliar is referred to as a creative, synthesising and socially functional force in social representations theory, enabling cohesive social interaction between different social groups and the empowerment of minorities.

Third, the notion of representation in social representations theory goes beyond the classic Kantian one. Representation is not seen as a inferior mental copy of a superior truth, but rather a collectively negotiated representation which exists in the social and is reality for those who constructed it. As we have seen in Chapter Two, recent approaches to understanding organizational knowledge in contemporary management and organization studies assume subjectively held knowledge to be a deviation from a superior scientific knowledge (Aadne, von Krogh, & Roos, 1996; Stacey, 2000b) which reflects the classic mental representationism critiqued above.

In sum, one can say that the Hegelian meta-theory of dialectics enables Moscovici to develop a logic of social knowledge dynamics that centres on first, meaning as the central domain of the mediation of the novel and second, oppositions and tensions as the creative force of movement. I have schematised this logic in image 3 below. One could call this a logic of 'the triadic movement of triads of meaning-mediation'.

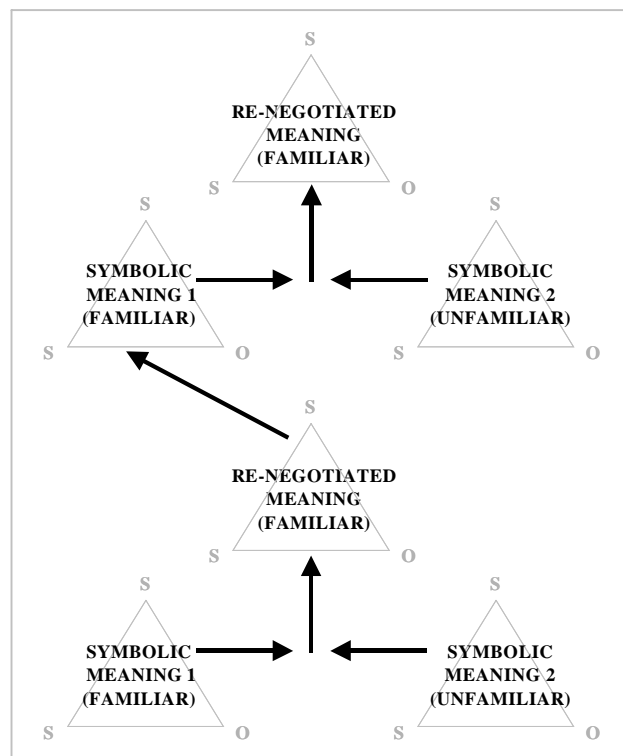


Image 3: Knowledge dynamics of social representation

In social representations theory, the emergence of new knowledge is a continual evolution of meaning in the triadic movement of contradictory forces, characterized by

three stages: unfamiliar meaning (thesis), familiar meaning (antithesis), becoming (synthesis). The synthesis does not devalue the preceding (familiar) concepts, but reevaluates them, together with its opposite (unfamiliar), into a synthesis. The dialectic knowledge dynamics of social representations theory is embedded in a vision of a continuous evolution of meaning, which becomes gradually more discursively embedded in the familiar system of concepts of a group or community. It is with this logic that Moscovici was able to evade the Cartesian subject-object dichotomy.

While this meta-theoretical character of knowledge dynamics in social representations theory allows us to move beyond the Cartesian conceptions of knowledge in orthodox theorising, it however also ties us to a logic of emergence that focuses us more on the adaptive than the creative side of knowledge dynamics and ties us to a logic of novelty that is strongly related to the pre-existent. Both are problematic for our present concern with innovation. I am going to address these limitations in the next section.

3.2 Addressing meta-theoretical limitations

In this study I seek to explore emergent knowledge dynamics in innovation. When it comes to explaining entrepreneurial innovation, the predominant logic of thinking about knowledge adopted artificially separates knowledge from experience: the assumption is that individuals 'have' new ideas and that innovation consists of implementing these successfully into society. This is evident in several streams of individual-centred and management-centred perspectives that focus on interaction and knowledge creation, as shown in Chapter Two. As we have seen in the first part of this chapter, a social representational perspective offers a dynamic perspective by locating knowledge neither in the individual nor in the social but in the creative force of inter-subjective knowledge construction.

I now turn to the question of how we can apply this dynamic perspective to an account for knowledge emergence in innovation. With innovation, we are concerned with a particular type of knowledge dynamics; it is one which revolves around the creation of entirely new concepts – new meanings, ways of interacting and experiencing – that, at the time they emerge, do not have a place in our existent system of meaningful concepts. They are usually phenomena that we refer to as unprecedented, original, unheard-of or unexampled. In other words, they are *unprecedented* phenomena, as

their new-ness does not translate into pre-existent concepts but rather bypasses them in generating new ways of naming and structuring our everyday life.

Think, for instance, of the new-ness that the World Wide Web has introduced. Its innovative character is not merely constituted by technological advances such as e-mail or other new digital technologies - the technological invention of the Internet has existed long before the actual rise of the *concept* of online communication. The innovative character of the Internet was rather inherent to what Castells (1996/97) describes as the emergence of a new logic of time, space and interaction around the Internet, the novel ways in which actors, information, commodities and capital travel along new routes and connect in novel patterns. The knowledge dynamics in the innovation of the Internet is composed by the emergence of a whole new world of concepts and interaction patterns that do not necessarily translate into pre-existent ones.

Thus the problematic that really concerns us here with regard to emergent knowledge dynamics in innovation is *novelty*. Specifically, we are concerned with the *creative force* of emergence that brings forth novelty at the levels of knowledge. How can we understand the creative force that brings forth new concepts and that overcomes existent ones?

With regard to the creative force of novelty, there are two problematic lines of thought that run through the ontological logic of becoming in social representations theory. First, because novelty is mainly understood as the unfamiliar within the boundaries of socio-historically existent concepts, it is difficult to think about novelty as emergent from anything else than the already-meaningful. Second, due to the Hegelian logic of the creative force of the unfamiliar as an integral and functional part of the continuity of triadic evolution, analysis automatically excludes the creative forces that might be unleashed due to the disruption of a triadic system.

In what follows, I elaborate on both issues and point to areas of necessary development. With this discussion, I enter a relatively new terrain of debate in social representations research. Although there is, as we shall see, debate on the nature and source of the unfamiliar as well as on the critical perspective of social representations,

these discussions mainly take place on the conceptual level. The meta-theoretical dimension has, apart from exceptions (Marková, 2000; Marková, 2003), received little attention.

3.2.1 Novelty as emergent from existing concepts

Novelty, in social representations theory, is mainly addressed through the notion of the unfamiliar. The unfamiliar plays, if we recall, a primary role in the initiation of the process of familiarisation and thus the re-negotiation of knowledge. It is broadly referred to as any 'empirical other' (Jovchelovitch, 2001, p. 173) from either *outside* or from *within* the boundaries of cultural meaningful concepts (Moscovici, 1987; Moscovici, 2001b).

The unfamiliar *from within* socio-cultural concepts has been the pre-dominant concern in social representations research. The unfamiliar is usually attributed to novel concepts in modernity (Moscovici, 1988). In early social representations research particularly, the unfamiliar has been attributed to scientific concepts. Researchers have concentrated on investigating knowledge transformation in response to the unfamiliarity of new scientific notions such as biotechnology (Bangerter, 1995; Gaskell & Bauer, 2001; Moscovici, 1984).

The initially exclusive focus on science as the reified realm of novelty has been widened in more recent work (Bauer & Gaskell, 1999; R. Farr, 1987; Flick, 1994) and in turn, a more complex characterisation of the unfamiliar has been suggested. Today, the unfamiliar is more generally attributed to the multi-directional and multi-disciplinary relationships between different types of knowledge in modern life (Jovchelovitch, 2001; Moscovici & Marková, 2000).

The unfamiliar *from outside* the boundaries of culturally meaningful concepts, by contrast, has received only little attention in theorising (de-Graft Aikins, 2004). It is generally attributed to the material and natural world as an outside environment of social representation. Jovchelovitch (2001) describes it as 'an outside, objective and natural world ... without which nothing can be constructed.' (Jovchelovitch, 2001, p. 177). This outside material context is acknowledged as important contextual sphere

that frames social construction, yet the relationship between this outside context and the world of social construction has rarely been addressed (de-Graft Aikins, 2004).

The strong distinction into a world of socio-cultural concepts in which knowledge construction takes place on the one hand, and a material world on the other reflects the Hegelian underpinning of social representations theory specifically in its ontological dimension. The main realm in which the unfamiliar exists is taken to be the conceptual. The realm of concepts and essences is distinguished ontologically from world itself (Lambert, 2002; Parker, 2004) and is prioritised in explanations of novelty in knowledge. The hypothesis is implicitly – and problematically – that the dynamic of the familiarisation of the unfamiliar emerges because the unfamiliar is different to an already-existent (familiar) concept.

By drawing on social representations theory, thereby, we are logically restricted to accounting for novelty that is rooted in already-existent concepts. Because the domain of socio-culturally existent concepts is elevated as primary sphere of the existence of knowledge, analytical attention is automatically directed to the unfamiliar in relation to the world of identities, the made-sense of, the familiar and categorised. Novelty that does not translate into pre-existent concepts, such as radically new phenomena that are not immediately part of our world of names, language and symbols, by contrast, is thereby excluded from analysis a priori.

The absence of research on the unfamiliar from outside the domain of already-existent concepts has received some critical attention in the field. Researchers have stressed that the unfamiliar from 'outside' the realm of meaning plays nonetheless an important role in knowledge construction. Most recently, a pioneer study has been undertaken in this respect: in a study on the social representations of illness experience, de-Graft Aikins (2004) has looked at the unfamiliar 'from outside the boundaries of culture, society and self' (p. 95) by looking at how social construction is underpinned by the unfamiliar in emotions. By considering the unfamiliar in emotions de-Graft Aikins takes into account a domain beyond thought and symbolic meaning, as emotions do not only comprise socio-cultural, cognitive and psychodynamic displays but also biological and neural aspects (Harré & Parrott, 1996; Lupton, 1998). The study's findings show the forging of new social representations of illness informed by not only

the fact that aspects about illness experience contradict socio-cultural traditions, but also by the ways in which illness is experienced emotionally.

In other words, this study illuminates that the unfamiliar might not only be novel because it is different to existing meanings, but also because it does not exist in our meaningful system of knowledge, but nevertheless exists ontologically. Wagner (1998) has problematised this type of unfamiliarity as the sphere of the 'not named' and non-meaningful 'somethings' existing alongside the domesticated world of symbols. 'Somethings' are according to Wagner things that cannot be called objects (yet). They are phenomena that are present but have not been named or domesticated into the familiar world of concepts yet. Before they become symbolically familiarised by the representational labour of a group of people, however, Wagner argues, they nonetheless exist and play a crucial role in the everyday dynamics of experience.

In a similar vein, critical anthropologist Moore (2004) argues that there is a problem with the emphasis of the conceptually meaningful for understanding change. She argues that there are phenomena influencing our sense-making that are not necessarily meaningful or not (yet) expressed in concepts, suggesting that we need to pay analytically more attention to non-meaningful presentations rather than only meaningful representations.

In this respect, I agree with Marková (2000) in that theorising on knowledge construction needs to re-examine the interdependence of the individual and society as a dynamic ontological unit. The future of theorising on knowledge emergence 'cannot be settled without taking into account personal and collective experience.' (Marková, 2000, p. 115). Experience, signs, symbols and representations, she argues, are interconnected in intricate ways; we need to be able to address questions such as why does 'one and the same thing' lead to different processes of social representation. 'Which signs come to the foreground and why? Which signs do we use to refer some underlying themata?' (ibid, p. 115).

These questions are important for the present concern: we can only then explain emergent knowledge dynamics in innovation if we are able to take into account the context of experience that lets one 'presentation', as Moore would have it, arise as more significant than another which in turn might impinge on social construction and the

potential formation of new concepts. For an account of emergent knowledge dynamics in innovation, therefore, greater attention needs to be paid to the realm 'outside' socio-cultural concepts. The present focus on the conceptual realm of meaningful concepts constrains our analytical ability to account for the emergence of unprecedented novelty – novelty that does not relate to existent concepts.

3.2.2 Movement subsumed to the adaptive continuity of dialectic evolution

I now turn to the second problematic meta-theoretical aspect for an account of innovation: the *creative force* of knowledge emergence. In social representations theory, this creative force is mainly attributed to tension or more generally the force of opposition as inherent to 'being'. The Hegelian notion of becoming, if we recall, presupposes that all living phenomena involve themselves in an internal tension of contradictory forces, moving in a triadic pattern. In social representations theory this is manifest in the central assumption that social change is rooted in oppositions or tensions between different knowledges of different social groups (Moscovici, 1984).

Based on this assumption, social representations theory conceptualises new knowledge as arising from the fact that the tension within a dyad of interdependent oppositions logically leads to its resolution in synthesis and thus to the start of a new triadic movement. Centred on the creative force of tension, social representations research forwarded its perspective on the 'power of ideas' (Duveen, 2000), concentrating on the dynamics between opposed concepts such as those between minority and majority representations (Howarth, 2005). As social representations researchers have argued, this perspective 'has the potential to address contemporary social problems and invite interventions' (de-Graft Aikins, 2004; Howarth, 2005).

In research on health and community development, this angle on the creative force of tension between different knowledges has contributed to critical analysis of social injustice and oppression (e.g. Campbell & Jovchelovitch, 2000; Gervais & Jovchelovitch, 1998; Howarth, 2000; Wagner, Duveen, Verma, & Themel, 2000). Particularly, it has given a voice to the social knowledge of minorities, stigmatised or excluded communities by showing how the tension between their knowledge and that

of the dominant group or majority has led to new dialectic dynamics that enable these groups to cope with or adapt to change.

Gervais & Jovchelovitch (1998), for instance, in their study on the health beliefs of the Chinese community in Britain, have drawn attention to a new understanding of health amongst Chinese people in Britain that allowed the co-existence of traditional and old knowledges and thus enabled the Chinese community to integrate their health beliefs with Western ones. Their findings show how a new dialectic co-existence (cognitive polyphasia¹¹) between traditional and modern health knowledges has become established. Furthermore, the study provides policy-targeted recommendations as regards ways in which this new knowledge of the Chinese community can be taken into greater account.

Another example is Howarth's (2000) study on how social representations of living in a South London borough held by non-residents had stigmatising effects on residents. It highlighted how residents sought to reconcile their own views with the stigma and how in turn a new form of social representation emerges that enables residents to cope with stigma. This study made policy-targeted recommendations as regards the recognition of the social knowledge held by the South London borough.

In these examples, researchers were able to critically highlight how contradictory aspects in knowledge have evolved to a functioning dialectic that enables both the knowledges and the involved groups to co-exist or to function together in a new dialectic relationship, without rendering each individual group's knowledge insignificant. The creative force of tension, hence, has been shown in its function of empowering a social group and maintaining the socio-historic evolution of this group's beliefs and traditions (e.g. traditional health knowledge held by Chinese, knowledge of local residents of South London borough).

While there has been a variety of studies from this perspective on tension as enabling the *adaptation* of a social group's socio-historic repertoire in the context of contradictive other knowledges, there has considerably less research showing how the creative force knowledge emergence can be understood as a force that enables people

¹¹ Cognitive polyphasia (Moscovici, 1961/1976) is a particular concept of social representations theory describing the dialectic co-existence of contradictory forms of knowledge in a social group enabling this group to maintain a functioning and coherent social life.

to resist and *overcome* existent social representational meaning-systems such as dominant or traditional ones and how entirely new ones are brought fourth.

In this respect, Howarth argues that, so far, the theory's claim on the creative force of knowledge creation has not been used to its full potential. The majority of studies offers a rather uncritical perspective that often has a tendency to merely 'describe what is happening' (Howarth, 2005, p. 3). Thereby, the use of social representations theory in practice runs the risk to support and consolidate 'the structures and processes that maintain uneven social patterns and inequalities' (p. 3), rather than providing a platform to transform them and thus to provide a critical account of change. In a similar vein, Pérez Campos (1998) writes that social representations research accounts for the 'reproduction process of a society only as long as the 'somethings' that can be faced are always integrated within the socially meaningful local world' (p. 336). He claims that the issue of social change has to be tackled not only by looking at how the unfamiliar is *integrated* into an existent meaning system, but also by examining relationships between social representations that lead a meaning-system to disintegrate. In this respect, Wagner (1998) holds has suggested that 'social representations do not change straightforwardly by replacement' (p. 318) but can co-exist, dominate or exclude each other.

This aspect is crucial for the present concern on innovation. We need to be able to think in terms of how novelty manifests itself in knowledge not only in terms of how it adapts to the familiar and enters into a dialectic relationship with the existent, but also in such a way that we are able to explain novelty in its creative force of *disrupting and overcoming* existent knowledge. In this respect, I agree with Howarth (2005) that social representations research needs to develop toward a more critical account on what social representations *actually do* in society in accounting not only for how social representation enables social cohesion but also for how it plays a role as resisting and constraining force – preventing familiar knowledge constellations to be overcome.

The fact that at present we can hardly account for what I call the creative force of disruption is rooted in the way in which tension is subsumed as an integrate epistemic element to the continuity of a triadic Hegelian pattern of evolution. The triadic logic of dialectics is a progressive logic of becoming that anticipates tension as the mere force

of disruption – a force that overall is assumed to serve the continuity of familiarity. A continuous evolution of continuity and discontinuity is favoured over a discontinuous movement. Disruption is thus subsumed in its ontology to dialectic continuity, playing an anticipated and predictable role. Moscovici writes:

'Continuity/discontinuity, to me, reflects ontological assumptions of dialectics/dialogism ... : the interdependence of culture and the individual mind; their co-development; the interdependence between thought/thinking and language/speaking.' (Moscovici & Marková, 2000, p. 255)

In this anticipated co-development of opposed concepts, crucially, there is little room for discontinuity, for disruption and change in unanticipated ways. What I have in mind here are disruptions that diverge from a given triadic path of knowledge evolution altogether and thereby can potentially overcome it. The presumption is, problematically, that the ontology of disruption is dynamic in a dialectic sense only. We are thus logically tied to thinking about the creative force of disruption in terms of an overall adaptive purpose of tensions: the continuation of a socio-historic evolution. The creative force of disruption that overcomes triadic systems however is logically excluded from analysis.

This limits the analytical potential of social representations theory for an account of the creative force that brings forth novelty in knowledge in innovation. Particularly, with regard to innovation, we need to be able to think in a logic that acknowledges disruption as a creative force in a future-directed, empowering and discontinuous sense. Instead of an exclusively socio-historically oriented purpose of knowledge transformation, we need to be able to look at those instances of unexpected combinations and effects of interactions between previously unrelated components, that generate new potentialities for future concepts.

In the introduction, I wrote that research on entrepreneurial innovation requires a critical approach to the dynamic dimension of knowledge in experience as well as a more focused attention to the creative process of knowledge dynamics that engenders the emergence of something new – something that, in hindsight, we refer to as innovation. It is the two aspects I have argued above, that are central to this aim: first, we need to get a logical handle on novelty beyond its relation to existent concepts and second, we need to be able to acknowledge the creative force of disruption that is not subsumed to an ontology of the continuous patterns of meaningful triads. What is

necessary is an expansion of the current meta-theoretical repertoire of social representations theory on a meta-theoretical level which takes a more detailed look at logic of novelty and its emergence in experience, taking into consideration discontinuity, divergence and non-dialectic patterns of movement.

In this thesis, I propose the work of Deleuze and Guattari for such a meta-theoretical development. With this, it is not my aim to devise a new theory of knowledge dynamics; rather, more humbly, I aim to contribute some new ideas of how we can usefully expand meta-theoretical assumptions about knowledge for a better understanding of emergent knowledge dynamics in innovation.

3.3 Expanding the meta-theoretical frame with Deleuze and Guattari

While in philosophy Gilles Deleuze and Félix Guattari are known as classic writers in the development of critical theory in the late twentieth century, in social psychology their writings are still treated as curiosities. Their importance for social psychological theorising has only begun to be recognized (e.g. Brown & Lunt, 2002). Critics often loosely describe the Deleuzo-Guattarian approach as 'artistic' and indeed, at a first glance, the work of Deleuze and Guattari may appear rather complex and 'different'. Their writings teem with new terminology such as lines of flight, assemblage, intensity, rhizome, becoming, machinism to name but a few. However, a thorough reading of *Difference and Repetition* (Deleuze, 1968) and *A Thousand Plateaus* (Deleuze & Guattari, 1987) unveils a rather different picture: what we find is a carefully crafted philosophy that is fundamentally concerned with the dynamics of emergence and that has a great deal to offer to social psychological thought about the ontology of emergent dynamics.

Deleuze and Guattari's philosophy is not concerned with dialectic evolution or with the relationship of the subject with the object. Rather, their work offers a whole new paradigm of thinking and writing about the dynamism of becoming. Their work is not so much a series of self-contained arguments but rather the formation of an array of new terms, a set of interweaving axioms and propositions, that together propose an intellectual shift from a pursuit of static principles and ordering realities to an interest in dynamic movements, from the configuration of resultants to the mapping of flows,

from a representation of essences to an experimentation with events and experience. It is a logic that is fundamentally concerned with dynamics of becoming grounded in experience aiming to discover conditions under which new concepts – 'for unknown lands' (Deleuze, 1995, p. 103) – might be produced.

In what follows, I show how specifically the notions of *difference in-itself* and *the rhizome* provide us with a logic that allows us to re-think the ontology of emergent knowledge dynamics - in particular with regard to the character of novelty and of discontinuity in innovation. Although in this thesis I draw selectively on only two of Deleuze's and Guattari's ideas, my approach is keeping with their philosophy which animates to 'think otherwise' (Deleuze & Guattari, 1994): to approach philosophy not as something to take as a delineation of concepts, but as a tool-kit for *creation* from which to draw selectively in the light of the analytical task at hand.

3.3.1 Difference in-itself and Deleuze's experiential dynamics

Gilles Deleuze's early work, the key one for the present concern being *Difference and Repetition* (1968), forwards a philosophy of becoming, through which, amongst others, the question of emergence is tackled in a unique ontological way. By contrast to traditional metaphysics, Deleuze does not ground transcendence in non-empirical essences - in fact, he does not assume phenomena to have essences (conceptual identities) at all. Rather, he suggests an ontological logic of becoming in which he sees the event itself, the human experience per se (rather than pre-existent concepts about it) as providing the tools needed for elaborating and understanding the conditions for creation and the emergence of new concepts (Bryant, 2000).

At the centre of this philosophy is the assumption of 'difference in-itself' as the primary ontological aspect of creation. Difference-in-itself, for Deleuze, is a 'pure form of difference' that points to how difference may be internal to the nature of every 'becoming idea', thereby attributing far more richness and multiplicity to becoming than that admitted in traditional metaphysics. Deleuze distinguishes difference-in-itself from conceptual difference: unlike a concept that exists with a single identity 'trapped' in a static being (that does itself not move), difference-in-itself exists in the movement of becoming only – it is not an object outside us to be judged, but rather a dynamic

movement of 'becoming-forces' (Deleuze & Guattari, 1994). In other words, Deleuze differentiates between difference-in-itself as a difference that 'makes itself' and conceptual difference that requires mediation in order to be made (Bryant, 2000).

By opposing conceptual difference, Deleuze challenges the notion of difference through negation in dialectics. In dialectic logic, difference is exclusively determined by negation of same-ness (Deleuze, 1968). Difference-in-itself, by contrast, is 'not negation, ... it is non-being which is difference' (Deleuze, 1968, p. 89, my own translation). If difference-in-itself is not defined by being, but only through the difference to itself, the question arises: what provides the unity of the different? How can we talk about something that is different in-itself? Deleuze's answer is that precisely there is no intrinsic ontological unity – no being as such when it comes to thinking about becoming. Everything that exists only becomes and never is. He draws on Nietzsche's idea that being is becoming, difference-in-itself is an 'internal self-differing difference', it differs from itself in each case (Bogue, 1989).

To show how this difference is continuously in a state of becoming, difference in-itself is coupled with the notion of repetition which Deleuze prioritises as the pre-eminent feature of transcendence and of creative-ness. It is the continual repetition of difference that unceasingly brings forth new difference in-itself. Repetition is not a reproduction of the same, which would be mimesis (Deleuze, 1994), but a kind of poly-rhythm of difference, which through each repetition differs in-itself. With this notion of the continual repetition of difference, Deleuze provides the logic of how everything that is different in-itself can constantly transcend itself. It is a philosophy of 'becoming without Being' (Zizek, 2004) that de-couples emergent dynamics from subject-object relations¹², fundamentally rooting becoming in experience.

Experience is the main philosophical site for Deleuze to explore conditions for creation; in Deleuze's logic, it is experience that leads to constructive activities (Colebrook, 2002). This implicates that from a Deleuzian perspective, we are not exclusively concerned with sense-making of experience through the meaningful world

¹² Subjectivity itself, like concepts or objects, is understood as existing in becoming only, differing from the traditional notion of a self that is looked at, and rationally appealed to from the macro-perspective of existing concepts. Rather subjectivity, as becoming takes place in the becoming-other when people experience free expression in a field of affect and percepts.

of concepts (Hayden, 1998), but rather we are concerned with movement and the flow of events in the material and natural world. The event itself, according to Deleuze, is to be considered as a condition of possibility, or the 'inventive potential' (Massumi, 1992, p. 140) of becoming other than existent concepts. Deleuze (1968) emphasises that as human beings we are part and parcel of both worlds – experience is both mental and physical.

The creation of any new concept in experience, for Deleuze, involves at least

'two other dimensions, percepts and affects. Percepts aren't perceptions, they're packets of sensations and relations that live on independently of whoever experiences them. Affects aren't feelings, they are becomings that spill over beyond whoever lives through them (thereby becoming someone else). ...Affects, percepts, and concepts are three inseparable forces' (Deleuze, 1995, p. 127)

Creation in experience, in Deleuzian logic, is thus not merely a mental reflection on what is experienced, but a force impacting on the body's mode of existence. This force is linked to the intensive capacity to 'to affect and to be affected' (Deleuze & Guattari, 1987, p. xvi), which is defined as a capacity to multiply and intensify connections. The production of potential concepts therefore includes encounters with pure affect and with sensations. The powerful intensity of such an encounter marks the passage between the experiential states of the body and affects the body's capacity to act.

With this emphasis on the experiential and physical realm, Deleuze challenges the classic meta-physical assumption that thought and understanding rule over human perception. Deleuze, by contrast, assumes a 'disjunctive functioning of the human faculties' (Bogue, 1989; Bryant, 2000), arguing that different human faculties such as thought (faculty of understanding) or sensibility (faculty of sense experience) function creatively by continually disrupting each other rather than by serving the purpose of understanding 'in harmony'.

Sense-making and understanding are thus assumed to be on an equal level with other faculties of human perception in sense experience (Bogue, 1989; Bryant, 2000), such that dynamism is seen as emergent from their disruptive encounters. At the same time, this does not mean that the domain of beings and meaning is not important. Rather, Deleuzian logic frees us from the dominant role of meaning and thus existing concepts in thinking about the emergence of novelty. It emphasises that meaning is not

groundless. On its own, meaning, Deleuze writes, 'mediates everything but mobilises and moves nothing' (Deleuze, 1994, p. 55). For 'real' movement to occur, in the sense that entirely new concepts emerge, meaning depends upon an ontological work of dividing the world which ensures that it can visibly bear the marks that ongoing communicative interaction cuts into.

The implication of this philosophy of becoming in experience is that we avoid thinking about novelty in its material and natural character in terms of an 'outside' environment of knowledge dynamics, as social representations theory would have it. Rather, it is an ontological becoming of difference which is part and parcel of knowledge dynamics in that it potentially affects and disrupts sense-making. The Deleuzian ontology of becoming underscores the importance of movement in non-dialectic and non-meaningful experience as the basis for novelty to emerge and for concepts to be created.

3.3.2 Rhizomic becoming: emergence as multiple and discontinuous

The second Deleuzian notion that I draw on is *the rhizome*. The rhizome is a notion of discontinuous movement, multiplicity and increasing complexity in becoming. It underscores the importance of unpredictable and divergent patterns in anything where creation is at stake. Deleuze developed the rhizome together with his co-author Guattari in his later work; it is especially featured in their seminal work *A Thousand Plateaus*¹³ (Deleuze & Guattari, 1987) where the rhizome is both something they write about but also a way of thinking and writing – a way of thinking about *becoming as rhizomic*.

With becoming as rhizomic, Deleuze and Guattari draw on Bergson's (1911/1983) notion of creative evolution, specifically on Bergson's point that 'real' movement always involves a living interpenetration rather than a derived relationship between discrete points or positions in space. What Deleuze and Guattari envision is a pattern of dynamics as the multiplication of connections in a rhizomic system which cannot be

¹³ *A Thousand Plateaus* is itself designed as a rhizome; it is written as a stream of events, alliances, connections (rather than a discussion of concepts), refusing to follow a single chain of signification. Their writing is a rhizomic becoming itself as it ceaselessly achieves multiplicity by establishing unusual connections.

reduced to any sort of fixed pattern or constellation of unities. For them, this is a condition under which new concepts might be produced.

At the centre of the rhizome logic stands the notion of multiplicity and expanding complexity in discontinuously overlapping connections (Deleuze & Guattari, 1987). Based on the image of the underground 'hidden' wanderings in plants' roots (Wood & Ferlie, 2003), Deleuze and Guattari model creative dynamics on the growth and movement of rhizomes; in their view, creative becoming is patterned like the wanderings of a rhizome. For them, potential creation is in unusual combinations, mergers, incorporations and associations, which are only to a little extent tied to existing cultural meanings or relations, the least of all dyadic structures: Deleuze and Guattari write:

'Non-parallel evolutions, which do not proceed by differentiation, but which leap from one line to another, between completely heterogeneous beings; cracks, imperceptible ruptures, which break the lines even if they resume elsewhere, leaping over significant breaks ... The rhizome is all this.' (Deleuze & Parnet, 1987, p. 26)

In rhizomic becoming, there is no fixed centre or order that could fix a subject or object, but rather a movement and flow without any unity. Any point of the rhizome can and must be connected to any other, though in no fixed order and with no homogeneity. It can break or rupture at any point, yet old connections will start up again or new connections will be made; the rhizome, then, is no model, but a way of describing movement in such a way that we focus on the spread of energy, the new connections which disrupts other lineages and thus open up new routes for encounters.

This notion of creative becoming as rhizomically patterned provides a stark contrast to the dialectic pattern of emergence and exposes the predictability and linearity of the dialectic progression in triadic patterns of thesis, antithesis and synthesis. Dialectic triadic logic, for Deleuze and Guattari, is a model of becoming that follows an 'aborescent' logic which, for them, is the model on which all of Western thought is based: the tree model, which 'sprouts from a single seed, producing a trunk and continuously branching out, growing and spreading vertically [and can be] ... traced back to a single origin.' (O'Kelly, 2004, p. 2)

Deleuze and Guattari vehemently reject thinking in terms of tree-roots. For them, the tree model is an image for the constraints of the triadic logic of dialectics which directs

thinking to traceable, historically anchored concepts and makes it impossible to reach an understanding of multiplicity as a condition for creation.

‘the tree is filiation, but the rhizome is, uniquely alliance. The tree imposes the verb “to be,” but the fabric of the rhizome is the conjunction, “and . . . and . . . and . . .” [which] can overthrow ontology, do away with foundations, nullify endings and beginnings’ (Deleuze & Guattari, 1987, p. 25).

By opposing thinking about becoming in 'tree-like' patterns, Deleuze and Guattari challenge the notion of a unique direction or progression of creation. They argue that to be able to think about the potential emergence of new concepts necessitates to break away from the confines of the tree and existent concepts and think in terms of multiplicity.

The notion of rhizomic becoming illuminates the limitations of a dialectic logic for the present concern more clearly. I have argued earlier that the dialectic logic of becoming elevates tensions as the integrate disruptions of same-ness in the continuous flow of triadic constellations. Dialectic thought fixes thought about movement in a homogenous evolution of meaning with a clear predictable pattern and a historic beginning and end. It thus subsumes the creative force of emergence to continuity and progressive evolution. Deleuze and Guattari argue that most modes of scientific thought illustrate this in attempting to posit an origin, or a totalising structure, which leads to thinking in terms of binary oppositions as well as in terms of the expectation of a synthesised new relation or even the adoption of one position over the other.

The rhizome is, by contrast, an approach to thinking about emergence that acknowledges discontinuity as part of becoming and directs attention to the potentialities of becoming – to unexpected connections between seemingly disparate events. Rhizomic becoming offers a way of thinking about the creative force of emergence as a discontinuous force, acknowledging the unexpected effects of experience and its disruptions of our sense-making as intrinsic to becoming. It also means that the creative force of movement cannot be pinpointed predictably as conceptual tension, but is seen more multiple as emerging from intensities unleashed in the unexpected effects of different (in-themselves) percepts, affects and concepts crossing each other (Deleuze & Guattari, 1987).

What matters in rhizomic becoming are, in Deleuzo-Guattarian terms, lines of becoming, dispersion, connections, intensities, disjunctions, flows and discontinuous disruptions. For Deleuze and Guattari, nothing is ever multiples or multidirectional enough. Everything operates at the same time, but amidst ruptures, breakdowns and failures. In such a becoming, one is constantly confronted with gaps, divergences, dispersions and fragments that are intermittent, to say the least.

As we have seen earlier, the dialectic philosophy of knowledge dynamics centres us on thinking about novelty as mainly defined by its difference in relation to pre-existent concepts. From a perspective of difference-in-itself and becoming, then, we are able to think about novelty in terms of its own creative force and movement. This Deleuzian perspective on difference-in-itself grounded in experience lends itself to think about novelty as independent of existent concepts and also allows to think about emergence as a future directed, never-complete becoming. It suggests to embrace emergence in disruption that is multiple rather than discretely bounded and structured. It shows that emergent phenomena are part of a much larger, more diverse and multiple potentiality than is expressed in a dialectic logic of becoming.

3.4 Rhizomes *and* dialectics: from oppositions to encounters

'While dialogues are commonplace encounters are rare' (Zizek, 2004, p. xi).

I have argued in Chapter Two that classic theories of entrepreneurial innovation abstract knowledge from experience, knowledge is seen as an expression of the disembodied mind of an individual, existing in a separate sphere to social life and experience. In this chapter, I have shown how social representations theory provides an approach to dialectic dynamics of knowledge creation, overcoming the Cartesian separation of thinking from doing. However, even though this offers a dynamic approach to knowledge emergence in an epistemic logic of discursive construction, ontologically it excludes experience from emergence in that the movement of knowledge can only be thought through what 'exists' in the realm of concepts (rather than what becomes in the non-conceptual realm of experience). Becoming is subsumed to being and thus, we think of novelty as a phenomenon that emerges from social construction in relation to existent concepts. In other words, pre-existent concepts and

meaning are taken to be the primary mediators of dialectic becoming. Together with the dominant role of tensions and dyadic oppositions in Hegelian dialectics, analytic attention is thereby directed toward an adaptive and linear logic of the evolution of knowledge.

Deleuze's ontology of becoming suggests experience as primary medium of becoming. Rather than presuming the material world as 'outside' of the dynamics of knowledge creation, it acknowledges sense experience as a realm with its own creative force of becoming. This logic enables us to think about movement of difference in-itself instead of the movement of essences. Deleuze's philosophy opens thought about emergence up to the realm of the novel that is not defined by its relation to something pre-existent but only by its difference to itself in repetition. In other words, it frees thinking about emergence from the tracing of concepts as an actualisation of certain historical, social, and political circumstances and events (Bearn, 2000) and our logical repertoire of thought is thereby expanded to a multiple nature of the novel in its unprecedented and unpredictable character.

Deleuzo-Guattarian logic lets us think about the creative force of dynamics as a divergent and disruptive force rather than a convergent and continuous evolution as is the case in dialectics. Thereby, we do not assume that there is an origin and higher purpose to emergence; rather we can see it as something that can potentially disrupt and overcome an existent triadic system of movement.

Altogether, it is a way of thinking about emergence as a future-directed, multiple notion of the emergence of new potentialities, moving towards the intensification of new ideas and new concepts, rather than an adaptive process, predictable in its patterns and anchored in the understandings of the past. In table 2 below, I have summarised the main features of becoming in a logic of rhizomic dynamics in comparison to the logic of dialectic dynamics.

	Dialectic dynamics	Rhizomic dynamics
<i>Novelty</i>	Concept/essence defined by its relation of difference to other concepts	Difference in-itself defined by its continuous movement and its multiplicity
<i>Creative force of becoming</i>	Tension/ opposition between concepts/essences	Continuous discontinuity and multiplicity of events in the material world: continuous repetition of difference in-itself
<i>Dynamic pattern</i>	Tree-like evolution of triads of thesis, antithesis and synthesis	Rhizomic movement, discontinuous, multiple, divergent flow of events
<i>Emergence</i>	New perspective arising from reflexive realisation of conceptual difference	New connections arising from crossings and disruptions of different rhizomic patterns
<i>Effect on knowledge</i>	Collective adjustment of knowledge (familiarisation), creation of a coherent world, ordering and categorisation, anticipation and organisation of experience in relation to socio-historic meaning, understanding of experience	Experience disrupting and inspiring knowledge construction, creation, disruption (de-familiarisation), new routes and connections of non-dialectic flows, new potentialities, overcoming of existent concepts and triadic sequences

Table 2: Dialectic and rhizomic dynamics of becoming

At first sight, the strong anti-Hegelian stance of the Deleuzo-Guattarian philosophy invites to conveniently refute concepts based on Hegelian dialectics. However, Deleuzo-Guattarian philosophy has more to offer to dialectics than merely to challenge it. As Deleuze and Guattari illustrate so well in their own reasoning, by merely refuting another author, we revert logically to the dialectic principle of opposition and thus 'move nothing' (Deleuze, 1994). Instead, Deleuze and Guattari famously *repeat* other authors such as Nietzsche and Plato by working within their frame of logic, yet re-writing their theories which results in a different (in-itself) reading of other philosophers which, by overturning their logic (Bogue, 1989), develops their theories further (Zizek, 2004).

To move forward with regard to developing the potential of social representations theory for a critical view on emergent knowledge dynamics in innovation, I argue that for its meta-theory, both a dialectic logic of becoming and a rhizomic logic of emergence can usefully 'repeat' each other. By this I mean, rhizomic thinking can aid us to overturn the focus on continuity and adaptation in dialectic logic and dialectic thinking can help us to overturn the radical rejection of essence in the Deleuzo-Guattarian ontology of becoming. In this sense, I agree with Zizek (2004) in that 'there

is another Deleuze, much closer to ... Hegel¹⁴ (p. xi). What Žižek draws attention to is an implication of the Deleuzian ontology of becoming for the logic of social scientific reasoning itself: this is the fact that a dissociation of different realms of scientific analysis, such as the individual and the social or the empirical and the conceptual, does not necessarily imply that the aim of science should be to 'cover the gaps' in order to eventually reach a totalising view of the world, but rather 'on the contrary, to open up a radical [new] gap ... the "ontological difference"' (Žižek, 2004, p. xi) which also shows mutual interdependency, but, crucially, *not* in a dialectic sense of synthesis and linear progress – rather, a form of mutual interdependency that Žižek (2004) calls *encounters*.

Žižek's notion of encounters suggests a tight connection between the becoming of difference-in-itself in the material sphere and the evolution of concepts in the realm of meaning: this is not a connection in the sense of a higher purpose of 'creating reality' in a unified transcendental sense, but rather their potential in disrupting each other when it comes to encounters between these two incompatible fields.

What I propose is an onto-epistemological logic of the dynamic of emergence hinging on a double-logic, operating at the levels of conceptual difference and difference in-itself alike. In the mode of rhizomic becoming, difference in-itself in the material and physical world disrupts the triadic system of dialectics from dyadic evaluative dimensions, creates new potentialities of ordering and of connecting multiple lines of becoming. In the mode of conceptual mediation, dialectics function to reinforce pre-existent conceptual and meaningful differences of the socio-cultural real, attempting to adapt unfamiliarities encountered from experience into the realm 'socially knowable', as a stable, coherent system of social knowledge enabling a common humanity.

The encounters between these two logics follow a movement of oscillation between attempts to overcome existent dialectic dyads and a sense of prospective new ideas, a wavering between the experience of radical difference and the constraints of existent meanings. Together, we achieve a discontinuous rhythm of opening up and closing

¹⁴ This is an area with great potential for further development as, so far, and debated controversially in philosophy, Hegel has been the only author amongst the many that Deleuze and Guattari develop that they did not repeat – Hegel in Deleuzian philosophy remains 'totally foreign and the philosophy from whom one has to differentiate oneself' (Žižek, 2004, p. 46).

down, which produces a spiralling dynamic of disruption and adaptation, an alternation between increasing complexity and the constitution of concepts. This movement, in its new combinations and crossings, allows difference-in-itself to be unleashed and while overall, it moves a meaning system forward, at the same time, it hinders it from becoming a chaos.

My proposition of an logic of encounters between rhizomic and dialectic becoming is thus in part also a critique of Deleuzo-Guattarian logic of emergence as far as their rejection of the essential is concerned. Essence is important, as unless we can construct what is essential when confronted with disruption, it is impossible to create new concepts that can in hindsight become an explanation of disruption.

‘Without a minimum order, the organism that relies on its environment could not survive; without minimal predictability of recurring (and thus regulated) experiences, none of us would have the courage to begin the day’. (Frank, 1989, p. 340).

In addition, essence is important in terms of potentially limitless expansion of the rhizome. Recall that the rhizome allows multiple, unceasing creation and cross-connection, which means a potentially limitless and ever more complex dynamic of emergence. Eco (1983) wrote, the ‘rhizome is so constructed that every path can be connected with every other one. It has no center, no periphery, no exit, because it is potentially infinite.’ (p. 57)

In order for new knowledge to emerge, therefore, processes of the shaping of new essences are necessary. These processes have a similar effect as what Strathern (1996) describes as forms of ‘cutting’ of limitless and increasingly complex flows. Through processes of people engaging with each other and making sense of new impressions from their sense experience, they cut into the complex wanderings and assemblages of the rhizome. I argue that such ‘cuttings’ are a central function of the creative force of dialectics in human sense-making: the social negotiation of new concepts not only serves the familiarisation and re-negotiation of old concepts in the light of new ones, but it also, crucially, serves the de-familiarisation of old concepts in the light of new rhizomic connections and becomings. It serves our sense-making to cut oneself loose from dominant representation by articulating intense (in a Deleuzian sense) experiences; this allows us to shape new concepts that halt the rhizomic flow of increasing and limitless complexity by forging new significance and meaning. This

manifests what I indicated at the beginning of this chapter as the creative force of overcoming existing concepts (by de-familiarising them) and giving way to entirely new concepts.

In summary, therefore, with the notion of encounters between dialectic and rhizomic dynamics, I suggest, first, a view on knowledge dynamics as *rhizomic becoming that is variously cut*, looking at cuttings as the individuations of rhizomic complexity in sense experience in that novel 'somethings' emerge that matter to people in experience, yet do not relate to existent concepts and are not (yet) anchored in the meaningful world of concepts. Second, I propose a perspective on *dialectic becoming that is variously disrupted*, looking at disruptions as those instances in sense-making where existent dyads are bypassed and new dyads begin to shape and be drawn on that do not relate to previous central historic evolutionary lineages.

Thinking in this double-logic, I suggest, has great potential for a more critical social psychological stance on change and in particular, on knowledge emergence. It draws attention to the innovative-ness of the interaction between simple essence and complex difference in-itself, between the disruption of triadic systems and the cuttings of the repetition of rhizomic becomings. It enables a more viable understanding of emergent knowledge dynamics, namely that emergent knowledge dynamics has not only a tendency to creation arising from pre-existent beings, but also an inclination to develop dysfunctionalities, to create deficiencies, to provoke deviations, and to generate counter-processes which are both creative and consequential. Simply put, underpinned by this meta-theory, the logic of knowledge construction is neither continuous nor linearly evolutionary; it is a logic that is both discontinuous and spiral.

3.5 Summary and conclusions

Rosen (2000) argues that one can differentiate a simple system from a complex one by how its ontology relates to its epistemology. In a simple system, its epistemology subsumes (swallows) its ontology. In complex systems, the two aspects are acknowledged in their own right. In this chapter, we have seen how the meta-theory of social representations theory treats the complexity of knowledge creation as if it was simple by exclusively subsuming its ontology of emergence to an epistemic logic of dialectics. Knowledge creation is seen as a dynamic mediated mainly by (socio-

historically pre-existent) concepts and the patterns in which these concepts evolve are envisaged in a predictable and universal triadic evolution. In addition, oppositions and tensions between concepts are elevated as central creative forces of knowledge dynamics. The problem with this is that unpredictable, discontinuous and future-directed aspects of dynamics (those aspects that introduce complexity) of emergence are logically excluded from thought, which hampers our analytical ability to explain innovation.

In this chapter, I argued for the expansion of the meta-theoretical framework of social representations theory by a notion that lets us better understand the creative and innovative dynamics in knowledge emergence. Inspired by Deleuze & Guattari's work on rhizomic becomings, taking into account discontinuity and complexity of becoming as a vital condition for the creation of the new, I suggested a view on dialectic becoming as variously disrupted by rhizomic dynamics and a perspective on rhizomic becoming that is variously cut by dialectics, looking at disruptions as a creative force introducing new potentialities and movement, and at cuttings of rhizomic complexity as a vital force of social representation as a way to maintain coherence and stability.

The resulting perspective on emergent knowledge dynamics as encounters between dialectic and rhizomic forces of creation can be summarised in a series of propositions.

- (1) Emergent knowledge dynamics can be better understood by thinking in terms of onto-epistemological encounters between rhizomic and dialectic becoming.
- (2) This entails first, looking at dialectic becoming as variously disrupted, thereby creatively overcoming the dialectic gridlock of the continued existence of central dyads and opening becoming up to new potentialities.
- (3) Second, rhizomic dynamics are variously cut by dialectics, in that human sense-making in the experiential realm cuts into rhizomic movement and thus enables the de-familiarisation of existent concepts and the emergence of new concepts.
- (4) Emergence of new knowledge thus occurs in the discontinuous and oscillating movement of encounters between rhizomic opening and dialectic closure.

In what follows, I illustrate the onto-epistemological logic proposed here at the example of an exploration of emergent knowledge dynamics in e-business entrepreneurship.

Overview of Chapter Four

A qualitative and explorative study was conducted that used the perspective on emergent knowledge dynamics developed in Chapter Three. Over a three-months period (end of September 2002 to December 2002), I explored a natural group of e-business entrepreneurs. This group was selected in a snowball process that focused on entrepreneurs who were actively involved in creating nascent small or medium-sized businesses since or since shortly before the dotcom crash. The empirical enquiry was explorative and employed semi-structured interviews, a focus group, participant observation as well as a novel combination of traditional social representational data analysis techniques with Deleuzian interpretation.

In order for the reader to assess the quality of the research design, the research process as well as the quality criteria applied are laid open in this chapter. I show the reasons informing my choices as regards the methods used, the selection of participants, my relationship with respondents, my influence on the researcher-researched relationship as well as the interplay between theory, method and analysis.

4 RESEARCH DESIGN, METHODOLOGY AND ANALYSIS

The thesis is aligned with qualitative researchers such as Bauer & Gaskell (2000) and Flick (2003) who stress that credible research, whether quantitative or qualitative, is framed by rigorous and critical application of appropriate methods. Data should not be collected or analysed according to universalist and formalised prescriptions. Rather, the main evaluative criteria for designing an enquiry is to be found within the project of research, in terms of its aims and research questions.

To explore emergent knowledge dynamics in innovation is a complex endeavour, especially given the fact that the present meta-theoretical frame involves two different logics of dynamics. Also, the context of e-business entrepreneurship has been virtually unexplored from this angle. To address this challenge, a research design was devised that united three core design elements: first, explorative data selection through a snowball process, second, data corpus construction involving three different methods for data collection and third, a novel interpretative combination of social representational thematic analysis with Deleuzian interpretation.

This chapter is dedicated to clarify and make explicit the design, process and methods of research. I describe all phases of the inquiry conducted, from gaining access to e-business entrepreneurship, data collection to data analysis. In so doing, I acknowledge the ways in which the research activity inevitably shapes and constitutes the object of the study. As such this chapter has three parts: the first is concerned with the research design, the second with the methods of data collection and data corpus construction and the third with the data analysis. In all three I discuss the implications of the present expanded meta-theoretical framework.

4.1 Designing the exploration

The expanded meta-theoretical framework developed in Chapter Three necessitated a novel approach to data analysis and interpretation, one which integrates Deleuzo-Guattarian ideas into social psychological analysis. While the importance of Deleuzo-Guattarian logic is claimed by many scholars, convincing empirical investigations of their ideas are rare. However, as Brown and Lunt (2002) have argued, Deleuzo-Guattarian ideas offer the possibility of a novel re-interpretation of classic procedures of research. They invite us to re-think the variety of methods that researchers have at their disposal in the context of a new understanding of a theory. What matters, they argue, is not the research instruments per se, but,

'the way we approach [research methods], the phenomena we choose to attend to ..., and the way in which we understand the relationship between the [research method] and the theoretical ... ' (Brown & Lunt, 2002, p.20)

With this in mind, I operationalised the present thesis by using three central design-elements that were all targeted at enabling exploration and discovery. The aim was to provide an empirical investigation guided by the meta-theoretical framework developed in Chapter Three rather than a verification of hypotheses in the sense of 'universal facts' (Alvesson & Deetz, 2000). First, I used a snowball process to direct the 'pathway' of the exploration and combined this with data corpus construction in order to address the 'corpus-theoretical paradox' (Bauer & Aarts, 2000, p. 29) of an explorative approach.

Second, I triangulated (Flick, 1992) data from twenty-five semi-structured interviews with participant observation and a focus group with eight respondents. Interviews and participant observation were conducted over a time-span of three months; the focus group was conducted at the end of the three months, informed by initial findings from the interviews and the participant observation.

Third, the analysis and interpretation comprised two types of analyses performed in three steps: first, I analysed the interview data for dialectic dynamics inherent to respondents discourse. I looked specifically for respondents reconstructing meanings that concern highly stable, usually non-negotiable oppositions in order to identify areas of radical change since the dotcom crash. Second, and in parallel to the interviews, I

experienced and participated in respondents' life-world in order to explore 'different' phenomena that did not relate to respondents' discourse. In the Deleuzian analysis of the participant observation I concentrated on new assemblages and individuations in what was experienced. In a third step, I conducted a focus group that honed in on the phenomenon of networks, which emerged as highly significant for entrepreneurs in both interviews and participant observation. The aim was to examine respondents' discourse about networks for disruptions in the way in which respondents drew on central meanings to make sense of e-business entrepreneurship. Together, these analyses allowed me to scrutinise the intersection of new and unusual assemblages on the one hand and disruptions of main meaning-mediators on the other which enabled an interpretation of the data for potentialities and newly emergent concepts.

The characteristics of the design are summarized in table 3 below. In what follows, I shall specify each design element in detail.

<i>Time frame</i>	<i>Data source</i>	<i>Data collection</i>	<i>Data analysis</i>	<i>Objective</i>
23.9.02 – 18.12.02	Discourse of 25 respondents individually	Semi-structured interviews	Thematic analysis focused on dialectic dynamics of familiarisation	To surface main meaning-mediators and areas of radical change in respondents' sense-making
23.9.02 – 18.12.02	Daily experience in 'life-world' of e-business entrepreneurs	Participant observation	Deleuzian analysis focused on rhizomic becomings	To surface novel individuations and assemblages
6.12.02	Discourse amongst 8 respondents	Focus group	Thematic analysis focused on dialectic dynamics of de-familiarisation	To surface disruptions of main meaning-mediators in respondents' sense-making

Table 3: Research design: methods of data collection and analysis

4.2 Data selection and fieldwork management

Any exploration is a journey. In this section, I initially take the reader back to the beginning of this journey. I explain how I approached to study the entrepreneurial milieu I investigated. The rationale for choosing a snowball process as well as the data that resulted from this journey is better judged given this knowledge.

4.2.1 Sampling

To achieve universal propositions, data selection strategies often include to sample from populations to ensure that results are generalisable to that population (Bygrave, 1989). There is debate as to whether the aim to generate research results that generalise for a whole population is adequate for qualitative research, and researchers have argued that this strategy is not suitable in explorative contexts as it transposes statistical methods for the study of natural facts to that of social facts (Harper, 1992; Huck, 2000). Nonetheless, to sample respondents from a population might be a good solution to the problem of wanting to know, for instance, the frequency of occurrence of an opinion in a known population without having to collect every single opinion. The main aim of sampling then is to generalise from one case (of respondent) to another and this approach is typically used in hypothesis testing. The potential problem of this orientation is however to overlook the specifics of single cases: one does not look at whether the theory at hand makes explicable a single case at hand.

To generalise to theory rather than to a population, is an increasingly common approach in explorative case study research where first, the aim is to generalise from a single case to a case in a generic sense (Harper, 1992); second, the rich data and situational grounded-ness of the singular case are important (Stake, 2000) and third, the research concern is one of discovery and in-depth understanding (Gaskell & Bauer, 2000, p. 41).

This is the aim of this study: I seek to explore the characteristics of a social milieu in its dynamic forces of the emergence of new knowledge. With this I seek to verify empirically whether my thesis of encounters between dialectic and rhizomic dynamics can help us to better understand newly emergent knowledge in innovation. I do, by contrast, not claim to generalise my findings about a limited number of entrepreneurs in London to the entire population of e-business entrepreneurs in the UK; rather, my aim is it to illustrate at the example of one specific case how the theoretical position I adopt can advance social psychological enquiry into knowledge emergence. In so doing, the way in which my theoretical and methodological position is constructed may prove useful in other research contexts that deal with knowledge emergence.

However, as we will see below, in the analysis of dialectics I make a claim of representativeness: I suppose that the core meanings that the interview analysis crystallised are representative for the themes discussed and the meanings constructed by the respondents. Thus, some sampling strategy is needed.

4.2.2 Corpus construction and snowball process

It was counter-intuitive for the present explorative design to determine the defining criteria of a population of e-business entrepreneurs a priori. This was first, due to the fact that there is no one best way to define the population of e-business entrepreneurs. In Chapter Three I showed how social representations research distinguishes between the social world of concepts or essences and world of becomings in the material world. I outlined how, by contrast, Deleuze does not make such a distinction and concentrates on the world of emergence from experience where everything that ever exists is becoming.

The social sciences have traditionally dealt with the world of essences and concepts. However, in the light of the present meta-theoretical frame, social science has to recognise its own role in creating the world it studies through its categorisations (Gergen, 1973; Lakoff & Johnson, 1981). Populations are one such human-made creation, they are conceptual identities that categorise humans a priori into generally and socially accepted communities. Critically, however, they can be constructed in multiple ways and especially explorative research needs to be reflective of that (Bauer & Aarts, 2000).

Especially in the case of e-business entrepreneurship it would be misleading to assume that there is a group of people with clear-cut demographic criteria and group boundaries that defines the UK population of e-business entrepreneurs. It would first reinforce the traditional 'entrepreneurial-type' paradigm that I have criticised in Chapter Two for its tendency to define entrepreneurship through the traits of entrepreneurs; and secondly, it would neglect the fact that there are multiple ways to categorise the population of e-business entrepreneurs.

One categorisation, for example, is illustrated in the public debate. Entrepreneurs in e-business are generally considered to be 'dotcom entrepreneurs' both in the popular media (e.g. Dennis, 2001; Wired, 2000) and in government publications

alike (e.g. DTI, 2002). This is a very generic categorisation that is not necessarily only capturing entrepreneurial businesses. In fact, 'dotcom' merely signifies that a firm has a Web-site on the Internet. For instance, there is a large number of small businesses that are dotcom businesses, in that they are selling online services via their Web-site, yet, at the same time, they are not entrepreneurial as they are off-shoots of larger businesses that expanded into the online market.

Another way of categorising e-business entrepreneurship has been attempted by the DTI. In a recent study on Internet-focused business commissioned by the DTI, the aim was to sample from a population of firms that generate more than 80% of their revenue via the Internet. However, this proved difficult to establish empirically as, according to the DTI (2002), there is 'a gap in quantified data on the number of internet-focused businesses in the UK.' (p. 10).

Also, one could use the criterion of people working in small business concerned with new technologies (e.g. Small Business Service, 2004). However, consider a population of people working in entrepreneurial businesses. Many people working in small businesses would probably not refer to themselves as entrepreneurs; rather, they would reserve that to people that are founders and leaders of their own businesses.

Secondly, I decided against sampling from a pre-defined population because it is the aim of the present study to *explore* a social milieu. Defining the socio-demographic boundaries of such a milieu a priori would contradict this strategy and exclude potential respondents that were not expected to be involved in e-business entrepreneurship by the researcher. Gillespie (2004) has shown that in sampling data, fixed assumptions about the nature of a group can hamper explorative research by providing an artificial variable determining shared-ness of knowledge. Because the boundaries of the meaning context are established a priori, the analysis of new and emergent aspects is limited from the outset. As Gaskell and Bauer (2000) have suggested, it is precisely the discovery of local surprises and novelty that is one of the factors that establishes quality and public accountability of explorative research.

Thus, I abandoned the idea of sampling respondents from a population, and instead adopted an approach of data corpus construction which is functionally identical to purposive sampling (Bauer & Aarts, 2000), yet samples contents (in this case

meanings and unusual phenomena) instead of people. I combined this with a snowball process which guided the 'explorative pathway' through the field. This ensured that the group of people I would sample would emerge as a natural group with the fieldwork, it was acknowledged that the social identification of people with a group of e-business entrepreneurs was as much a constructed and changing phenomenon as the meanings and knowledges shared amongst people in such a group.

Social psychologists use corpus construction to build data corpora in explorative research where typically, at the outset, due to the very nature of an exploration, the basic issue is the 'corpus-theoretical paradox' that 'one can not determine a priori what a representative corpus looks like' (Bauer & Aarts, 2000, p. 29). Bauer and Aarts (2000) have made suggestions for how this method of corpus construction could be used to respond to this paradox by generally building data corpora in an iterative process. This means that one searches contents relevant to the phenomenon explored (in this case central meaning-mediators and unusual phenomena) and keeps sampling them in each of their forms and manifestations until saturation is reached. For the example of sampling representations they state: 'Saturation is the stopping criterion: one searches for different representations only until the inclusion of new strata no longer adds anything new' (Bauer & Aarts, 2000, p. 34).

A snowball process is additionally ideally suited for an explorative design. Snowballing is a two-stage purposive sample (Huck, 2000) in that first, one turns to a social milieu that exposes minimal criteria of the meaning context in question, and second, the researcher is helped by respondents to complete the sample by recruiting further participants. Through snowballing a natural group is produced that emulates the natural context of social life in the context in question (Gaskell, 2000). A snowball process thus provides a means to reduce the risk of a biased selection of only those participants that the researcher thinks are important. It also increases the likelihood of surprise and the discovery of novelty due to the fact that selection is based on respondents interacting as a natural group.

In the present study the strategy of corpus construction combined with a snowball process meant that the snowball process served on the one hand to direct the process of recruiting people for interviews and the focus group and on the other hand to guide the

pathway for the participation in respondents' life-world. In this way, the snowball process tied the research methods together in an iterative procedure of interviewing, snowballing, participating and observing and thus allowed me to gradually build a data corpus of discourse and of experiences that would be representative of the type of things that e-business entrepreneurs say and experience in their 'life-world'. This data corpus would also provide a basis to generalise from this data to theoretical conclusions about emergent knowledge dynamics.

I have written above that in a snowball process, the researcher determines the group s/he is exploring only to a little extent. Usually only the initial access conditions and minimal criteria for further respondents are assumed a priori (Huck, 2000). In this study, I devised three criteria to recruit respondents. First, potential respondents had to be actively involved in creating a nascent small or medium-sized businesses (not exceeding 100 people) since or since shortly before the dotcom crash.

Secondly, their entrepreneurial business had to cover one of Whinston et al.'s (2001) types of business in their taxonomy of Internet-enabled business (table 4), which was, at the time of the study, one of the first classifications that captured the diversity of different business types that revolve around the selling and trading of knowledge via the Internet (DTI, 2002; Small Business Service, 2004).

<i>Types of Internet-enabled business</i>	<i>Sub-categories</i>
Infrastructure, Systems and Solution provision (B2B)	Telecommunications business Systems & solutions Infrastructure & solutions technology
Internet Intermediaries (B2B & B2C)	Information Gateways/ Content Aggregators/ Portals/ Networking-platforms Consultancies Think-tanks Skills and Recruiting Services
Internet Commerce (B2C)	Online Retailing

Table 4: Types of Internet-enabled business adapted from Whinston et al. (2001)

Whinston et al.'s (2001) taxonomy structures Internet-enabled business according to the different types of processes that Internet technology enables. Based on this logic,

there are first, those companies that enable and provide services and solutions for the network infrastructure, and the physical and electronic systems. These companies make it technologically possible to perform business activities online. These can be both telecommunications services as well as end-user networking equipment manufacturers operating on the business to business as well as business to consumer market. Secondly, there are Internet Intermediaries, who offer networking platforms and increased efficiency of electronic markets by networking and facilitating 'the meeting and interaction of buyers and sellers via the World Wide Web' (Whinston et al., 2001, p.50). For instance, these are business to business marketplaces, information portals or content providers, online brokerages and financial services. Thirdly, there is the group of Online Retailers (often referred to as e-commerce) who use the Internet as a channel to sell physical goods. For technology-specific expressions here and throughout the study, but the reader is urged to consult the glossary at the end of the thesis.

By drawing on Whinston et al.'s taxonomy, I ensured to generate potential diversity of data to be sampled. In other words, I focused the exploration on a wide range of potential sectors of entrepreneurial activity in 'knowledge businesses' and thereby avoided sampling a limited range of possible meaning and experience 'strata' (Bauer & Aarts, 2000) in e-business. It also countered the risk of sampling representations from entrepreneurial firms whose service offering was not primarily related to e-business.

Finally, London was selected as the context to conduct the exploration due to the fact that it is probably the most vibrant setting of e-business entrepreneurship in the UK and thus was likely to provide a rich source of diversity in terms of e-entrepreneurial businesses from which to recruit respondents for the study. And indeed, London is not only a business location with a most densely networked information technology infrastructure, but also it has the highest concentration of entrepreneurial business activity in the UK (Healey & Baker, 2001). Another factor was a consideration of convenience and practicality. I was aware of the fact that this PhD research project was limited in time and budget: London was therefore also selected due to my physical proximity to it.

4.3 Data collection and analysis

In this section I outline the data collection and data analysis techniques, highlighting the ways in which they informed each other.

4.3.1 Interviews

My aim to explore core dialectic dynamics in entrepreneurs' sense-making of e-business entrepreneurship after the dotcom crash necessitated a method that allowed an analysis of entrepreneurs' discourse for dialectic patterns. Semi-structured interviews (Gaskell, 2000; Kvale, 1996; Oppenheim, 1996) are an interview technique widely used in social representations research to gather discursive data from the social process of interaction between interviewer and interviewee (Farr, 1993; Gaskell, 2000). An advantage of semi-structured interviews over more structured interviewing techniques is their open-ness (Flick, 1994): the areas of sense-making of respondents is determined only to a little extent by the researcher. There is space for negotiation of meanings and crucially, for surprise (Gaskell & Bauer, 2000). Thus, interviews lent themselves to the present explorative strategy to elicit in-depth accounts that would allow to reconstruct how entrepreneurs re-negotiated core meanings of e-business entrepreneurship.

In order to cater for the aim to highlight and re-construct the dialectic dynamics of change in the sense-making of respondents since the dotcom crash, one research design considered initially was to simulate longitudinal data by conducting interviews with e-business entrepreneurs who operated before the dotcom crash and with entrepreneurs operating since the dotcom crash in order to compare their accounts. In social representations research, group-based longitudinal data is often used as a strategy that affords a genetic analysis of the dialectics of familiarisation in social knowledge. Although ideal in theory, for the present concern this approach was not suitable as there is no group source for such data. This strategy makes the assumption that there are neatly defined groups representative of the pre- and post-dotcom crash phases. As outlined above, in an explorative approach such as the present it is impossible to determine a priori what could define 'the group' of e-business entrepreneurs.

The approach I used instead to was to surface the core dialectics and their changes retrospectively, by basing the design of the interview analysis on the notion of

'themata' (Moscovici & Vignaux, 2000) and thereby targeting 'stories of development and changes in the phenomena and areas under study' (Flick, 1994, p. 1189).

Themata, according to Moscovici and Vignaux (2000), crystallise the central, most stable and familiar meanings in social representation. They are the main evaluative dimensions of sense-making as they are well-known, highly familiar social references, perceived as universally justifiable. They are

'all those modes of thought which everyday life sustains and which are historically maintained over more or less *longues durées*; modes of thought applied to directly socialized 'objects', but which, cognitively and discursively, collectivities are continuously driven to reconstruct in the relations of meaning applied to reality and to themselves.' (Moscovici & Vignaux, 2000, p. 159, emphasis in original)

Representing the core and non-negotiable meanings, they only ever change if there is a crisis or a change due to a political, economic or social upheaval. In the face of a crisis, communication becomes particularly rich as people are perturbed and motivated to talk about the shared social event; this is when themata are foregrounded in our sense-making (Moscovici, 2001b). Themata then come to operate as 'first principles', 'compelling ideas' or 'source ideas', functioning to enable the maintenance of core social representations and patterns of communication (Moscovici & Vignaux, 2000). Changes in themata, thus, represents radical change.

Themata are also traces for dialectic dynamics. As Marková (2000) emphasized, themata are the meaning currency that gives communication and interaction their typical dialectic form. They themselves take the form of dyadic oppositions or contrasts, such as illustrated by the themata of 'atomicity/continuum' or 'simplicity/complexity' in Holton's (Holton, 1978) thematic studies of the genesis of scientific theories. When we draw on themata, they pattern our understanding of the unfamiliar dialectically and as a result, we come to understand difference as convergence and divergence, as agreement or disagreement with past values, beliefs and meanings.

The notion of themata indicates a method that can operationalise the aim of crystallising central dialectic dynamics in the social representations of respondents after the dotcom crash. It provided a handle on analysing the content of e-business entrepreneurs' discourses in search of radical changes in central and non-negotiable

dialectic dimensions. Thus, I used thematic analysis of interview data to trace the dotcom crash as an event of social upheaval in its effect on core meanings on e-business entrepreneurship.

4.3.1.1 Sample

In total twenty-five semi-structured interviews were conducted over a period of three months in London (UK) in autumn 2002 (September 2002 to December 2002). Appendix 1 details the composition of the interview corpus. Fifteen of the interviews were conducted at the premises of the London School of Economics, five were conducted at respondents' firms, two at a business fair and three at coffee shops in London. In terms of the age of the firms there is a good spread, from businesses founded just around the time of the dotcom crash to the time of the study; though there are three firms that were formed slightly earlier than the dotcom crash. All of the respondents were in an active entrepreneurial role as the titles of respondents indicate. All subjects have been given pseudonyms to protect their identities.

As far as the sampling a diverse range of strata of Whinston et al.'s (2001) sub-sectors is concerned, appendix 2 shows that the snowballing process catered well for this aim: the sample includes interviewees from all but one stratum, with the majority of firms focusing on systems and solutions provision shortly followed by networking-platforms. No respondents were sampled from the sector of online retailing.

I tapped into a social milieu of entrepreneurs with a wide range of backgrounds. The majority of respondents had resigned from a larger corporation or institution, many of them had held managing positions there. A minority of cases had been made redundant. There were two cases of entrepreneurs who had come straight from university to starting an entrepreneurial firm. The general first impression was, also from the participant observation, that the social group selected was one of experienced business people who had decided to move into entrepreneurship because of the new opportunities this would offer to their private and professional lives. While there were some respondents who had been involved in e-business entrepreneurship during the dotcom boom, the majority had not had any exposure to the world of e-business before.

The criterion for ending the corpus construction is the somewhat vague criterion 'saturation' (Bauer & Aarts, 2000) as outlined above. This criterion is vague, unless one specifies what it was that saturated the corpus. Because I was still elaborating the theory at the time, it was not a theoretically driven saturation. What I experienced was a saturation of basic content, that is, the last few interviews presented few new themes or discussions.

4.3.1.2 Procedure

I introduced the research to potential participants as investigating 'sense-making of e-business entrepreneurship since the dotcom crash'. Entrepreneurs understood my concern for a sampling strategy in a snowball process, and facilitated this by suggesting other potential candidates even sometimes without me asking for it.

The first respondent was key to the snowball process. The initial access to the field was established through searching business journals, magazines and online business directories for firms and articles concerned with Internet-enabled business. Since my sampling strategy was purposive, this step was mainly informed by pragmatic considerations, such as availability and geographic proximity of the first respondent. But I was also aware of potential pitfalls and biases. People in the media are naturally only a segment of the potential 'populations' of e-business entrepreneurs. Also, people in the media may be over-researched.

The first respondent had started an entrepreneurial Internet consultancy in 1999 and was recruited through an article he had published in an e-business magazine. He not only agreed to participate in a pilot interview but also directed me to two further potential respondents. He introduced me to them as a doctoral researcher from the LSE who was writing a PhD about e-business entrepreneurship since the dotcom crash. He also stressed that I would not be affiliated to the media or had any interest in selling the study. In this way he referred me on two of his acquaintances whose businesses, he said, were particularly interesting in that they both 'survived' the dotcom crash. He also directed me to an e-business network and suggested that I might find further participants there.

What emerged from this was a process of referrals (see appendix 3) facilitated by respondents who recommended potential respondents in interviews or at further networking events. The process of snowballing resembled, as I realised later in the process, the way in which entrepreneurs practiced networking themselves. Networking itself turned out to be one of the central themes in the data corpus I was building. This was also reflected in the fact that as part of the snowballing I was recommended and/or invited to participate in seven networking events and in one business fair for entrepreneurs. What I had tapped into was a natural group of e-business entrepreneurs held together by networks.

The snowball process thus not only proved worthwhile in that it helped to sample the data corpus for the interviews but it also enabled me to emulate central experiences of networking in this milieu. In appendix 3, I have recorded the pathway of exploration that the snowballing process generated. Most people I approached were willing to participate; only two declined.

4.3.1.3 Interview topic guide

With the present explorative goal in mind, the interviews were focused on topics, yet not structured into standard questions. At the same time, the interviews were not entirely 'non-directive'. A topic guide (appendix 4) regulated the interviews, in that I determined the main themes for discussion, but remained open to the situation and flow of the conversation. It is also important to stress that the topics covered in the topic guide were not fixed beforehand, but evolved during the research and came to reflect the topics that are in the respondents' universe of meanings and which matter in the light of the dotcom crash. The strategy was to influence as little as possible and to follow the flow of the conversation rather than to dominate the dialogue with a pre-designed order.

All interviews were held in English and were tape recorded after permission to do so was obtained. Interviewees were informed about their right to withdraw from the

research and about the confidentiality¹⁵ of personal data obtained in the research. The topics from the topic guide were formed into open questions and I prompted from time to time to keep the dialogue flowing. Each interview took a different direction, depending on how much prompting was needed and whether interviewees brought in new topics; At the end, to allow interviewees to ‘unwind’ out of the interview context, I asked if they wanted to add anything not covered and made general conversation for a few minutes. All exchanges with respondents produced enjoyable exchanges. After the interviews were completed, they were transcribed verbatim for analysis.

I offered respondents follow-up discussions some time after the interviews had been conducted. These took place by email or by telephone and served either the purpose to ask respondents for potential further respondents (if I had not already done so) or to give them feedback on initial analyses.

4.3.1.4 Web-site for participant information

Throughout the research I was concerned to communicate the research clearly to respondents; I dedicated a Web-site to the task of informing about and presenting my research project. I used the link of the Web-site on my introduction to entrepreneurs online or at events on my business card. The Web-site also enabled me to maintain a process of informal conversation and feedback over the entire duration of this PhD research; I used this Web-site to report back main findings, as well as raise concerns and questions that had developed in the research. This allowed me not only to validate my research communicatively (Gaskell & Bauer, 2000), but also to push my analysis further, exploring new questions raised by the first analysis. Through this exploration, I wanted to signal to participants that I was interested in their life-world and views. A screen-shot of the Web-site is shown in appendix 5.

¹⁵ All names have been changed to keep data anonymous that could lead to an identification of participants. The study complies with the Code of Conduct & Ethical Principles Guidelines of the British Psychological Society (British Psychological Society, 2000).

4.3.1.5 *Thematic analysis*

In order to be able to analyse discursive data for themata one needs to be clear about which traces of themata to look for. Marková (2000) and Holton (1978) suggest, on a very general level, to look for thematic patterns of opposition in discourse, yet do not specify this any further. Initially and in hindsight naïvely, I approached a thematic analysis of respondents discourses with a technique close to classic content analysis of text sources (Bauer, 2000; U. Flick, 1998). This focused mainly on an analysis of the frequencies of themes in the data corpus overall. However, this proved to be grossly insufficient for my aim to account for themata. The extent to which themes appear more or less frequently merely represents a criterion for the quantity of discourse; it does not suffice as an indication for themata.

I therefore re-analysed the data, not only this time pursuing a three-stage systematic analysis of respondents' discourse, that reflected the notion that themata can be expected to be very salient in themes when people are making sense of an event of social upheaval, but also took on board that themata are deep-seated and taken-for-granted dyadic knowledge contents. As an inductive measure I assessed the salience of themes through the extensiveness of its occurrence, that is, I coded the data according to how many respondents would use a theme. As a deductive measure I searched for recurring taken-for-granted, dyadic patterns in respondents' evaluations.

In this analysis, I distinguished conceptually between 'themata' and 'themes'. Themata reflect the deductive side of the analysis grounded in theory, themes the inductive part, grounded in the data. Themata, as discussed in the foregoing part, refer to historically embedded presuppositions, culturally shared antinomies, and the deeper logic of social thought. By contrast, themes, refer to the actual 'data units' of discourse, such as conversation topics and recurring references to activities, symbols (Taylor & Bogdan, 1984). The analysis thus involves numerous themes that emerge from the informants' discourses, yet, unlike themata, these themes have no overarching generative and normative power.

The first stage of the analysis involved thematically coding respondents' discourses according to four evaluative categories. Dialectic dynamics of the familiarisation of e-

business entrepreneurship can be considered to have two sides, on the one hand, the positive and negative evaluation of the dotcom boom and on the other hand, the positive and negative evaluation of the dotcom-crash aftermath. Then, looking within each of these categories, I mapped out the most extensively used themes and analysed them for taken-for-granted, dialectic patterns such as similarities, analogies and contradiction/tensions and found that these occurred along and between certain evaluative dimensions. In this way, the thematic codes listed in appendix 12 were found. To provide procedural clarity, I outline each stage of the analysis in more detail below.

Stage one: Coding

I read through all the transcripts several times, absorbing the information and re-living the interviews (Gaskell, 2000). Passages were underlined, and brief summaries, references to other passages or preliminary interpretations were jotted on the margins. A particular concern in the analysis was initially to identify evaluative accounts in respondents' discourse. These were accounts in which respondents describe and evaluate the dotcom-crash aftermath or dotcom boom, be it positively, negatively or indifferently. I coded the themes in respondents' discourses according to the four categories of 'positive evaluation of dotcom boom', 'negative evaluation dotcom boom', 'positive evaluation dotcom-crash aftermath', 'negative evaluation dotcom-crash aftermath'. These very general categories reflected not only the theoretical framework but also the overall explorative design, in which I attempted not to impose my expectations onto the data and to remain open and flexible for unexpected themes and surprise. As Bauer & Gaskell (2000) express it, 'Pre-determined categories might neglect the rare and the absent' (p.148).

From this a first impression was won and a small number of thematic codes were identified: these were first ideas that seemed to account for a large part of the data, that were especially strongly represented in particular passages, or tied together material from different parts of the interviews. I took notes on these themes as regards their content and references to paramount quotations. For instance, already on this level of a preliminary examination, the interviews began to expose a major dialectic around the notions of collective-ness, ways of relating to other entrepreneurs and networking.

Stage two: Analysis for most extensive themes

After the interviews were transcribed from the tapes, the textual data was loaded into the software package Atlas/ti in order to systematically code the whole text corpus for themes that had evaluative content on either the dotcom boom or the dotcom-crash aftermath. There are two main advantages to supporting the coding process with Atlas/ti. First, it offers the capacity to deal with a huge quantity of interrelated themes with high degree of precision and of flexibility. Second, it enables the researcher to construct the theoretical interpretation systematically during the actual process of the coding of the data. This makes inductive and explorative analysis more possible and more precise.

The coding process consisted of cutting up of the texts into quotations, highlighting them and assigning thematic codes (such as 'value to client') to them. This resulted in the thematic codes listed in appendices 11 and 12. Appendix 11 shows a cross-tabulation of these codes in Atlas/ti, listing their frequencies in each interviews and across respondents. Appendix 12 shows the final coding frame, systematising the most common codes (most extensively shared in that it was used by the largest number of respondents) in super-ordinate theme-groups and in terms of positive and negative evaluations of e-business entrepreneurship of the dotcom boom and the dotcom crash, respectively.

Stage three: Analysis & interpretation for themata

Having so far constructed an analysis mostly from the data, a systematic effort was now made to locate the themes identified in relation to the constructs of the theoretical framework. The next step involved looking at the quotations for each thematic code and establishing significant patterns of dialectics such as similarities and oppositions, tensions, agreements and disagreements in the contents of these codes. At this point, I was looking for central underpinning evaluative dimensions. I concentrated first of all on examining links between themes within and across super-ordinate themes, looking both for agreements as well as tensions in the themes (Rose et al., 1995). I then focused iteratively on the wider picture of the common themes found and the detail of the developing analysis until no further insights were generated. This resulted in the three evaluative dimensions found, as outlined in the first section of the Findings Chapter.

4.3.2 Participant observation

The aim of analysing the dynamics of emergence in a rhizomic logic guided the decision to opt for participant observation. In addition, the present sampling strategy necessitated a method that allows to get a feel for the social group at hand. Participant observation offers such a method, allowing the researcher to immerse oneself within the social group in question, experiencing it at different times and from different positions in its natural environment (Hammersley & Atkinson, 1995).

There were two principal design considerations regarding the participant observation. At the outset, I was faced with the problem of where I could observe the life-world of e-business entrepreneurs. Which locations would be best suited to conduct a participant observation of e-business entrepreneurs' interacting as a social group? The first thing that came to mind was entrepreneurs' workplaces. However, this idea was discarded as most entrepreneurs worked individually from home as self-employed sole traders or micro-firms, and thus no insight could have been won on entrepreneurs' interaction. Instead, I opted for a strategy of using the snowball process to learn from interviewees where such interaction with other entrepreneurs would take place. This decision against presuming the place of the participant observation served the explorative character of the study: I did not limit the study's potential for surprises and new discovery (Gaskell & Bauer, 2000) a priori by restricting participant observation by an assumed location.

In exploring the field initially by means of interviews, I won the insight early that in this particular natural group entrepreneurial interaction was mainly facilitated by entrepreneurial networks, that is, more precisely, by networking that took place both online and at face-to-face events. This guided my decision to study respondents as an 'observer-as-participant' (Flick, 2003). As opposed to a complete participant or complete observer, in an 'observer-as-participant' design the researcher identifies him or herself as a researcher and interacts with the participants in their natural context as a participant. I hence studied the social group emergent from the snowball process by participating in both online and face-to-face networking.

The second design consideration concerned the operationalisation of the Deleuzo-Guattarian perspective taken in the meta-theoretical framework of this study and thus the question of which 'data' I could collect when participant-observing. What I had in mind originally was to obtain 'data' directly from respondents' 'real-time' affects and percepts (Deleuze, 1995) by gathering instances of respondents expressing emotions. I discarded this approach, however, as this would falsely assume that difference-in-itself is expressed in visible, behavioural instances of affect that can be *understood* by an observer. Recall the Deleuzian doctrine of the multiple and disruptive functioning of faculties of human reception outlined in Chapter Three: the emergence of phenomena that are difference-in-themselves can be perceived by human sense experience such as sensibility and feeling, but crucially, this perception is not subsumed to understanding - it does not report itself to understanding when it happens. To access respondents' sense experience would thus require introspection and the strategy of 'gathering' respondents' emotions would be paradoxical in a Deleuzian sense.

Instead I opted for an approach of 'thinking and writing becomings' that first, focused on my own experience rather than those of respondents, and thereby bypassed the problem of introspection, and second, rather than seeking to 'gather evidence' by collecting the 'right' data, this approach generated data in that the writing about it was considered a creation itself – a creation of a different way of thinking about my experience. The aim was to capture what was experienced as functioning and flowing, yet what did not make sense in our invested system of meaningful concepts.

This approach was an intellectual shift from a preoccupation with questions of significance and meaning to a concern with questions of function and use, from a pursuit of static evaluative dimensions and ordering principles (such as a topic guide and a coding frame) to an interest in dynamic movement and from the mapping of meaning to the mapping of flows – in fact, a creation of concepts in-itself. The model for this was the Deleuzo-Guattarian stance on philosophy as a craft:

‘The task of philosophy when it creates concepts, entities, is always to extract an event from things and beings, to set up the new event: space, time, matter, thought, the possible as events’ (Deleuze & Guattari, 1994, p. 33).

Concepts thus are not regarded as given, but created. Concepts are related to circumstances rather than to essences; they are expressive and not referential – in sum,

they are not taken to be simple ready-made a priori concepts (Deleuze & Guattari, 1987).

To 'think becoming' along these lines pointed to the possibility of escaping from 'the process of question and answer [which] is made to nourish dualisms' (Deleuze & Parnet, 1987, p. 19). It enabled me to turn to a rhizomic mode of analysis that would leave behind the 'grille' (Deleuze & Parnet, 1987, p. 19) of invested concepts – in this case, the invested dialectic concepts about networking. It offered the opportunity to concentrate on what was presented rather than re-represented (Deleuze, 1983) and thus to highlight particularly those phenomena in my experience of networking that did not 'make sense' either in relation to the 'grille' of concepts in the interview-coding frame (my own expectations) or in relation to the themata in respondents' discourse from interviews.

4.3.2.1 Procedure

In parallel to conducting the interviews, I 'observed-as-participant' in entrepreneurs' firms when interviewing, in coffee houses, a business fair and at networking events. Networking events took place in restaurants, bars, a media club and a theatre. I participated in online networking as well as in eight face-to-face events (see appendix 3) which let me experience different networking formats both offline (e.g. open evenings, structured evenings with presentations, dinner networking events, breakfast networking events, online networking) and online (e.g. online messaging, online profiles, online introductions).

When observing-as-participant, I concentrated on phenomena that were ambivalent to dialectic patterns from either my own expectations (such as in the interview topic guide) or from interview discourse. I focused on the various and startling phenomena I experienced, events which did not translate into any pre-existent concepts (in my own or respondents' discourse) and new connections that would seem counter-intuitive to be working together (according to pre-existent concepts) yet, nonetheless, worked extremely well together.

Traces for such phenomena were in emails, in postings, visualisations and announcements on networking-sites, at networking events, in personal messages and other micro-events that I experienced. I kept an online observation diary (see screenshot in appendix 6) in form of a research Weblog¹⁶. I used it to take notes after events. In writing this diary online, I additionally emulated the experience of entrepreneurs: capturing one's experiences and observations online via Web-logging was a frequent practice amongst entrepreneurs.

In the participant observation, there was a trade-off between engaging in dialogue with entrepreneurs in order to participate in their life-world and staying an outsider to explore the field with a view to focus on what was unusual. There is debate on the question as to whether differences or similarities between the researcher and the researched are to be preferred when participant observing. While it can be argued that, in order to have the subjective knowledge necessary to truly understand the life experiences of respondents, it is beneficial to be an insider to the social milieu studied (McCall & Simmons, 1969), it was preferable for the present Deleuzian approach to be 'different' to respondents to avoid the problem of overly engaging in dialogue with entrepreneurs and thus merely reinforce the discursive and dialectic dynamics of knowledge. Of course, the risk, here, is, at the same time, to fail to understand that one has *not* understood, yet I took this into account as the aim of the participant observation was not to gather 'understandings' after all. After three months of the participant observation, at the time when the interview corpus came to a saturation, I felt that if I would not close the participant observation, I would run the risk of losing a healthy balance between inside and outside perspective. Therefore, I ended the participant observation at the same time as I closed the interview corpus.

4.3.2.2 *Deleuzian analysis*

While in the thematic analysis the main tools of establishing a relevant and confident analysis were the topic guide, the coding frame and systematic analysis of data with Atlas/ti, in the Deleuzian analysis the main tool of analysis and interpretation was not a dialogue between question and answer, between topic guide, coding frame and

¹⁶ Weblogging is a form of online-publishing that allows any Internet user to publish her/his thoughts on a Web-page. Because it is easily maintained and updated it has also been described as 'mass-amateurization of publishing'.

concepts, but rather to craft a piece of writing - a creation - through Deleuzian writing. The aim was to generate an account that would enable thinking to 'get out of dialogue' (Deleuze & Parnet, 1987, p. 2), and through that to highlight the various and startling phenomena I had come across in the observation – 'somethings' that did not translate into any pre-existent concepts about networking and that would seem counter-intuitive to be working together, yet, nonetheless, worked extremely well.

In order to 'write becoming' my style of writing had to change from writing causally with a socio-historic orientation to a future-oriented, rhizomic style focused on potentialities. I had to liberate what I had experienced from previous formulations – especially from those found in the previous section – and to avoid ready-made propositions and theories. Inspired by pioneer studies (e.g. Bougen & Young, 2000; Lippens & Van Calster, 2000; Thanem, 2004; Wise, 2000) that use Deleuzo-Guattarian ideas for organisational and sociological analysis, I widened my field of scope in terms of both thoughts and words. My perspective changed. I allowed my writing to proliferate, itself moving off in different directions. Deleuzian 'rhizomic terminology' and specifically the notions of *lines*, *connections* and *individuations* helped in this regard.

First, the notion of *lines* helped to think 'Routes, not roots' (Mackay, 1997). In Deleuze and Guattari, lines provide the main routes of the rhizome. Rhizomic lines are non-attributable micro-becomings that pass 'in-between' (Deleuze & Parnet, 1987) isolated points such as the dyads of a dialectic opposition. They do not translate into pre-existent concepts and especially not the dyads of dialectic poles, they go beyond what Deleuze calls binary machines:

'There are multiplicities which constantly go *beyond binary machines* and do not let themselves be dichotomized. ... There are lines which do not amount to the path of a point, which *break free from structure* – lines of flight, becomings, without future or past, without memory, which resist the binary machine.' (Deleuze & Parnet, 1987, p. 26, emphasis added)

Lines refer to the fact that rhizomic becoming is ambivalent to fixed points or the dyads in an oppositions - they make a rhizome what it is: de-rooted. A line can be an event, an affect, a nonsense, a percept, a something, a movement. Lines can connect to anything; yet can be broken at any instant, only to take off again in any direction. In comparison to dialectic lines of progression, lines do not function in terms of lines

with a beginning and an end (Ansell-Pearson, 1997). In my thinking when interpreting, therefore, lines were thus about attempting not to look for origins or destinations, but to focus my thinking and writing on what was 'in-between', that is, on those aspects that were ambivalent to existing evaluative dimensions, and second, on future-directedness of things instead of historical anchors.

Second, I focused on *connections*. Connections, in Deleuze and Guattari, signify new combinations and assemblages arising from 'lines twisting, converging and crossing as well as diverging; not aborescent but rhizomaniac' (Mackay, 1997, p. 264). Connections are new combinations of lines which are, similarly to lines, ambivalent to pre-existent categories; their dynamism of movement is not seen as coming through historic relations, but rather in the fact that the assemblage resulting from the connection 'functions well together' (Deleuze & Parnet, 1987). A focus on connections therefore provided another way to think beyond binary machines and in a future-directed way, as they focused thinking on heterogeneous phenomena that did not allow an interpretation in terms of unity, resemblance or contradiction, but brought forth new (non-dialectic) orderings. These are orderings that Hetherington (1997) has described as ordering through similitude.

'Similitude, ..., is all about an ordering that takes place through a juxtaposition of signs that culturally are not seen as going together, either because the relationship is new or because it is unexpected. What is being signified cannot easily be attached to a referent ... Similitude is constituted by an unexpected bricolage effect.' (p.9)

Thinking in terms of unexpected bricolage effects and orderings enabled the interpretation to focus on potentialities instead of socio-historic roots, and on creation in terms of emergent conditions for new concepts instead of changes in familiar concepts.

The third Deleuzo-Guattarian concept that aided analysis were *individuation*; specifically I focused on individuations that Deleuze and Guattari call 'haecceity':

'There is a mode of individuation very different from that of a person, subject, thing, or substance. We reserve the name of *haecceity* for it. A season, a winter, a summer, an hour, a date have a perfect individuality lacking nothing, even though this individuality is different from that of a thing or a subject. They are haecceities in the sense that they consist entirely of relations of movement and rest between molecules or particles, capacities to affect or be affected.' (Deleuze & Guattari, 1987, p. 261, emphasis in original)

A haecceity is an intensity and new ordering that is becoming a new concept, yet is not defined in its emergence through the relations to other pre-existent concepts. Rather, through individuating, it gradually intensifies the energy of lines running through it and enmeshes connections in new orderings to forge a dynamic that allows them to be grasped by the faculty of understanding – in that it can be named and interpreted in meaning. Thinking in terms of individuating haecceities enabled to think in terms of the creative force of multiplying and intensifying connections which gradually become pre-conditions for novel concepts to emerge and existent concepts to be overcome.

With these Deleuzian ideas in mind, when attempting to interpret my participation in the field, different experiences popped into view. I noted these experiences. I also recorded 'somethings' such as postings, visualisations and announcements on networking-sites, personal messages, guestbook entries and other micro-events that I came across when participating. Combining these elements with the Deleuzian ideas fostered the writing of an account that follows lines, connections and individuations I experienced rather than existent concepts about networking. It is a creation of a different story about networking – one that explicates intensifications of rhizomic becomings in and around networking at the time of the study.

4.3.3 Focus group

A focus group on the topic of networking/networks was conducted at the end of the three months of fieldwork. It was informed by initial insights from both the interviews and the participant observation. With this, I did not aim to generate 'better' data by including more people into the study (Tashakkori & Teddlie, 2002) - recall that the sampling strategy was targeted at a generalisation to theory rather than to a population and that saturation of the data corpus was defined by the saturation of contents rather than the number of people. Rather, the focus group manifested the third step serving the explorative aim of the study and that operationalised the analytical framework.

The focus group served to hone in on the aspect of networking/networks as this had surfaced in the interviews and the participant observation as an important realm for both respondents' sense-making and experience of e-business entrepreneurship. 'Networking' and 'networks' were the most important themes in the interviews and the

novel phenomena found in the participant observation that did not relate to the main themata in interviews were also revolving around networking. This suggested networking as a major new social space of emergent knowledge dynamics in this milieu. With the focus group, I aimed to 'verify' this assumption. According to the framework developed in Chapter Three, if networking was such a central space of new knowledge emergence, it was to be expected that discourse about this topic would also bear traces of disruptions of central dialectics about e-business entrepreneurship. It was thus the aim of the focus group to look for disruptions of central dialectics from the interviews.

I chose to conduct a focus group as this offered an effective way to access the social milieu I had been studying throughout in a 'concentrated' fashion. Focus groups allow to replicate the social context in which people make sense (Morgan, 1993) in that they provide a 'thinking society in miniature' (Orfali & Marková, 2003). It is a debate open and accessible to all, the issues at stake are issues of common concern and the debate is an exchange of views, ideas and experiences, without privileging particular individuals or views. In addition, the focus group provided a way to emulate a natural group discussion in this social milieu with relatively little intervention through the researcher. In focus groups, interpersonal dynamics, self-presentations and justifications are brought forward in the context of 'natural others' rather than merely the researcher as the other (Gaskell, 2000). The focus group thus also helped to reduce one of the main limitations of semi-structured interviews, which is to exclude the natural dynamics of social interaction in a social group (Orfali & Marková, 2003).

4.3.3.1 Sample

I recruited respondents by continuing the snowballing process and thereby ensuring to remain, overall, within the same social milieu. I aimed at a maximum of further ten respondents. Appendix 8 details the composition of the focus group corpus. In total there were eight respondents after two potential participants had to cancel their attendance last-minute.

In a similar vein as in the data collection for interviews, the snowball process catered well for ensuring that a natural group was sampled. In addition, it aided to sample

diversity amongst participants' meaning strata. The eight respondents represented the first two segments of Whinston et al.'s sub-sectors almost equally (appendix 9). No respondent was obtained from e-commerce. In terms of the age of the firms there was again a good spread; also all of the respondents were in an active entrepreneurial role.

4.3.3.2 Procedure

The focus group was introduced to participants as being about the topic of 'E-entrepreneurship networks and networking - panacea or just hype?'. When recruiting participants, I provided information via the study's Web-page (appendix 7). It was held on a Friday afternoon at the LSE and in return for participation I offered an outline of research findings of this thesis. A reception at the beginning of the focus group set an informal tone and participants seemed to be at ease with the exercise of a focus group at the LSE. At the start of the discussion, and in order to ensure everyone's consent, I mentioned the aims of the study, explained the procedure of the focus group, and guaranteed respondents confidentiality¹⁷ with regard to all information obtained during the focus group and asked for permission to tape record. To kick off the discussion, I used a newspaper article about an e-business network (appendix 10). The discussion that emerged from this was open, controversial and lively.

Although the discussion was free-flowing and felt unforced, there were instances when this would break down. Sometimes I was positioned as an expert on issues of networking, and topics raised were directed at me in terms of clarifying the academic standpoint on this. These types of questions were dealt with in two ways: either the question was deflected and returned or I would answer in an informal manner and then remove that topic from the analysis. The latter was usually employed in topics which had clearly been informed by the fact that respondents saw themselves invited by an academic institution.

I closed the discussion following two criteria: first, I was keen to respect respondents' time and not to stretch their time longer than 1.5 hours. Second, I watched out for repetitiveness of topics and judged saturation as with the interviews by the extent to

¹⁷ All names have been changed to keep data anonymous that could lead to an identification of participants. The study complies with the Code of Conduct & Ethical Principles Guidelines of the British Psychological Society (British Psychological Society, 2000).

which at some point no new topics or opinions would emerge. Also the focus group came to a natural end after 1 hour and 20 minutes when respondents started to drift off into topics related to their weekend plans.

As in the interviews, I used a topic guide (appendix 10) to support the facilitation of the focus group. Yet, in the focus group I foregrounded this topic guide to a lesser extent. Here it served merely as an aide memoire for myself and as a guide for the introductory facilitation of the discussion. At the beginning I initiated the discussion through reading out an excerpt of a newspaper article, and as the discussion progressed, I intentionally became less and less involved in the discussion. I aimed overall at bringing a natural discussion to life, one in which the researcher plays a role as little as possible.

4.3.3.3 Focus group analysis

In Chapter Three I suggested a logic of thinking in encounters between adaptive dynamics of dialectics and opening dynamics of rhizomics in order to explore conditions for the emergence of new concepts. This implies looking at both the cuttings of rhizomic becomings in form of novel individuations of rhizomic complexity in experience and the disruptions of dialectics as those instances in sense-making where new dyads are drawn upon that do not relate (dialectically) to previous central historic concepts.

So far, in the design of the interview analysis I addressed the exploration of central dialectics in respondents sense-making, and in the analysis of the participant observation I targeted cuttings of rhizomic becoming. I aim to generate insights on newly emergent phenomena from encounters between dialectics and rhizomics. This third analysis therefore focuses on disruptions of dialectics in order to bring this together with the previous two analysis and to enable an interpretation for newly created concepts.

For this aim to explore disruptions of dialectics, I employed the Deleuzian notion of repetition: I conducted a thematic analysis that, instead of concentrating on dialectic continuity, it focused on dialectic discontinuity. In other words, I *repeated* the three steps of the thematic interview analysis in a Deleuzian sense. Repetition, if we recall,

means in a Deleuzian sense to work from within the construct of what is repeated, overturning it from within (Hayden, 1998). This is vividly illustrated in Deleuze's own writings: he uses this technique to avoid merely critiquing other authors, but to develop them further by overcoming them in repetition. This provides us with an opportunity to re-think the notion of social representational analysis. Instead of looking for what ties themata together in a functioning system of meanings (familiarisation), we look at what dissociates themata – what de-familiarises them and what lets them become socially less or entirely irrelevant.

Accordingly, I worked within the frame of the three stages of thematic analysis outlined in the foregoing section on interviews, yet, with the difference that, in the third stage, instead of interpreting recurring dialectic patterns for their function of familiarising and adapting meanings, I interpreted the themata found for the ways in which they did or did not continue the themata found in the interview analysis – in short, I interpreted for de-familiarisation.

I paid particular attention to deviations, discontinuities and disruptions of themata. Disruptions are described by Deleuze and Guattari (1987) as instances of *intensity* of movement which avoid any orientation toward a point of determination – or as Olkowski (1999) put it, intensities are what makes the 'system stutter'. Thus, here I was not looking for patterns of dialectic continuation of the familiarisation of e-business entrepreneurship (e.g. new tensions, similarities and potential syntheses), but I looked for points of rupture in the ways in which themata were drawn on in the discussion. I looked for instances where a phenomenon would be underpinned by notions which disrupt conventional and socially accepted themata by rendering them useless, in that they were ambivalent to the dominant themata. This means I looked for what was not similar, not contradicting and not challenging – in short, I explored the data for themes that were not relating to dominant dialectic patterns but rather flowing in-between them, being indifferent to them.

As indication for such disruptions I drew on the notion of 'new vocabularies' by Deleuze and Guattari (1994), which they argue provides traces for the creation of new concepts from events. For them, the creation of new concepts is inseparable from the elaboration of new vocabularies. Language is a way of acting upon the world,

actualising particular events from experience. New words and names provide new means of description of the forces which shape our present and therefore new possibilities for action. They help to counter-actualise present events and historical processes.

Thus, the focus group analysis was targeted on disruptions of meaningful dyads that could potentially have the effect of themata becoming negotiable or of little relevance and of dominant meaning-systems becoming irrelevant (and thus is overcome in a Deleuzian sense). Together with the insights provided by the previous two analyses, this third analysis enabled an overall interpretation that brings together insights from rhizomic becomings with insights on disruptions of dialectics and thus a better understanding of the emergence of new conditions for encounters between the two.

4.4 Quality criteria

There is a considerable debate about what constitutes valid and reliable qualitative research¹⁸. On the one hand, it is said that an investigation is valid if there is a high degree of correspondence between the knowledge gained and expressed in the research report and the 'objective' reality. The position that this thesis adopts however considers knowledge as a dynamic and emergent phenomenon constituted in both dialectics and rhizomics encountering each other. As such, there is no assumption of an objective reality to be accurately portrayed in this report.

Reliable data are associated with the idea of measuring. That is, when researchers concentrate on measuring, their main concern is to employ measuring instruments (e.g. questionnaires or a survey) to produce the same results when applied to the same subjects by different researchers. That way the data becomes credible, since it is assumed that if the researcher influences the way in which the subjects respond to the measuring instruments, the research results would be 'contaminated' and therefore less reliable. An approach such as the present, focused on exploration and interpretation, seeking to describe impressions from experiencing a context and to understand how people make sense of their world, does not focus on this kind of distance from the research participants.

¹⁸ For a detailed account of the different positions, see for instance Bauer & Gaskell (2000).

However, this does not mean that, in interpreting data, the issue of reliability and a possible researcher bias should be ignored. Similarly, I am aware, that there must be a way of assessing the validity of knowledge obtained from interpretative research if we are to improve the general quality and rigour of our interpretations. It needs to be possible to establish whether the research design and methods are relevant to research questions and theory as well as that the methods employed are a confident basis for interpreting and capturing what it is supposed to be capturing.

Gaskell and Bauer (2000) suggested that, rather than trying to make explorative research fit the quality criteria of the quantitative, measurement-focused paradigm, functionally equivalent quality criteria for what established the *confidence* and *relevance* of an exploration need be employed. Both in research that aims to measure and verify and in research that seeks to explore and interpret, these criteria are necessary; yet, due to the fundamentally different nature of these types of research, their quality measures should not be transposed to each other. For instance, by transposing quality measures of reliability and validity from the quantitative and measurement-focused research paradigm to the qualitative and exploration-focused one, this has in the past often led to (misguided) conclusions on the lack of generalisability (on a population of individuals) or reproducibility of findings (Bygrave, 1989). In accordance with Bauer & Gaskell (2000), therefore, I adopted six measures to establish the confidence and relevance of the present exploration, all of which have been outlined throughout this chapter. I summarise them in table 5 below.

Quality criterion	Aim	Method
Corpus construction	Confidence and relevance of findings	Purposive corpus construction through snowballing a natural group; sampling of impressions and meaning instead of people
In-depth understanding	Confidence of findings	Systematic interpretation on the basis of coding frame in thematic analysis; systematic translation of Deleuzian principles into the interpretation of participant observation
Triangulation	Confidence of findings	Combination of multiple data sources and methods of data collection and analysis
Transparency and procedural clarity	Confidence of findings	Self-reflexive documentation of research; appendices with data samples and instruments
Local surprise	Relevance of findings	Explorative design; evolutionary and open design of topic guides and coding frame; Deleuzian analysis
Communicative validation	Relevance of findings	Follow-up sessions with participants after interviews

Table 5: Quality criteria of the present study

4.5 Conclusions

In this chapter I have shown how the expanded meta-theoretical framework developed in Chapter Three has been translated into an explorative and interpretative research design. The Deleuzo-Guattarian meta-theory of rhizomic becomings necessitated a novel and innovative approach to analysis and interpretation that is different (in-itself) to orthodox social representational interpretation. While the Deleuzo-Guattarian approach is often loosely described as 'artistic' by critics, I am convinced that with the present design this study contributes an example how their thinking can be usefully employed in social psychological enquiry. In my view, the aspect that the present design particularly underscores in the Deleuzo-Guattarian approach is its capacity to overturn taken-for-granted assumptions (Bogue, 1989).

In sum, the research design comprises three types of analysis: first, a dialectic analysis of thematisation underpinned by the framework of knowledge dynamics in social representations theory; second, a Deleuzian analysis of rhizomic becomings informed by the Deleuzo-Guattarian ontology of difference and third, a thematic analysis based on a repetition of the social representations framework, with a view to highlight de-familiarisation.

In the following three chapters I present the results from all three analyses. Given the quality considerations made, the results are relevant and valuable in their contribution of a rich insight into the emergent knowledge dynamics in entrepreneurship in a particular milieu of e-business entrepreneurship. This can be relevant to other contexts in entrepreneurship, from both a practical and theoretical perspective.

Overview of Chapter Five

Chapter Five is the first of three chapters, in which I present the findings of three interrelated analyses. Chapter Five traces dialectic dynamics in entrepreneurs' discourse in semi-structured interviews. Chapter six explores rhizomic dynamics in and around social business networking. Chapter seven presents findings on disruptions of themata from the analysis of the focus group.

The research aim of this study was to explore entrepreneurial innovation from both a Deleuzian and dialectic perspective on emergent knowledge dynamics. Through the snowball process I tapped into a business milieu in which, at the time of the study, new potentialities for innovation were emergent in and around social business networks. The knowledge dynamics were based on encounters between first, a new concept and symbolic boundary around e-business entrepreneurship in opposition to dotcom entrepreneurship, and second, novel assemblages of affect and technology in networks.

The results in this chapter show the dialectic dynamics that shaped the former: a new symbolic meaning boundary around e-business entrepreneurship centring on the notion of collective, long-term and strategic business. Three central themata were found that mediated the response of entrepreneurs to the challenge of starting afresh after the dotcom crash.

5 DIALECTICS ANALYSIS: CHANGES IN ENTREPRENEURS' SENSE-MAKING OF E-BUSINESS ENTREPRENEURSHIP

'... what is important in the analyses of .. discourses, ... is really to bring to light the negotiations at work here, linguistically, on the frontier between the 'negotiable' and the 'not negotiable', between what functions as stable belief or as developing social cognition. Concretely, this is to identify, on the one hand, what gives itself 'literally', and on the other, what arises from constructive debate and shows *adaptive processes, indices of social or cultural changes*.' (Moscovici & Vignaux, 2000, p. 179, emphasis added)

This chapter focuses on the reconstruction of the dialectic dynamics inherent in respondents' discourses in interviews. My aim is to present clearly, for the reader, the themata that underpinned entrepreneurs' sense-making of e-business entrepreneurship after the dotcom crash. The question guiding this chapter is: Which core dialectics do underlie changes in entrepreneurs' sense-making of e-business entrepreneurship? Together with the two subsequent chapters, which focus on the analysis of rhizomic dynamics from the participant observation as well as on the analysis of de-familiarisation in the focus group debate, this prepares the ground for an interpretation of emergent knowledge dynamics building on both, dialectic and rhizomic dynamics.

Overall, interview respondents evaluated e-business entrepreneurship positively as a new era of business against the notion of 'dotcom entrepreneurship'. The question as to whether e-business entrepreneurship was associated with the dotcom boom was the main challenge for entrepreneurs and in response to this challenge, a new social representation of e-business entrepreneurship as collective, strategic and long-term business approach had emerged that contrasted dotcom business approaches. Interview respondents expended considerable breath debating the extent to which e-business entrepreneurship has evolved as a modern new business sector which is different to dotcom entrepreneurship in that there is a strong concern for collective-ness as well as for generating strategic, long-term client value. At the same time, respondents were keen to stress that they valued traditional business rules. Together, the meaning-system found highlighted an adaptive dynamic of social representation that served respondents

to familiarise modern elements of e-business with traditional aspects of entrepreneurial business.

At the core of this adaptive dynamic stood three interrelated themata, that respondents used in a taken-for-granted fashion when making sense of e-business entrepreneurship: *collective-individual*, *long-term-short-term* and *modern-traditional*. The first term in each thema was the privileged pole. Evaluative connotations via the poles recurred and were taken-for-granted. In other words, these themata constituted the core evaluative dimensions in respondents' ways of familiarising e-business entrepreneurship - the poles are the six positions that entrepreneurs were manoeuvring between when making sense of e-business entrepreneurship. As outlined in Chapter Four, themata are taken-for-granted, deep-seated dyads that recur in discourse. They highlight the core tensions – the central taken-for-granted dyadic antinomies – that mediate 'movements' in symbolic meaning-systems shared by a group. By focusing on themata, thus, we get a glimpse into the dialectic changes in meaning contents of e-business entrepreneurship.

Image 4 below schematises the three themata as well as changes within them, reconstructing the adaptive process of dialectic familiarisation graphically. In image 4, the boxes show the dialectic poles of themata, which are linked, through two light lines, to form evaluative dimensions (core themata). The three evaluative dimensions form the six positions (collective-individual, long-term-short-term, modern-traditional) that framed accounts when respondents evaluated e-business entrepreneurship in the light of the dotcom crash. Grey boxes indicate positive evaluation, white boxes indicate negative evaluation. Dotted lines symbolise new associations across themata. The thick arrows indicate new dyadic oppositions within poles. Themes in the poles do not reflect the entirety of all themes but rather represent strong examples of typical themes for each pole.

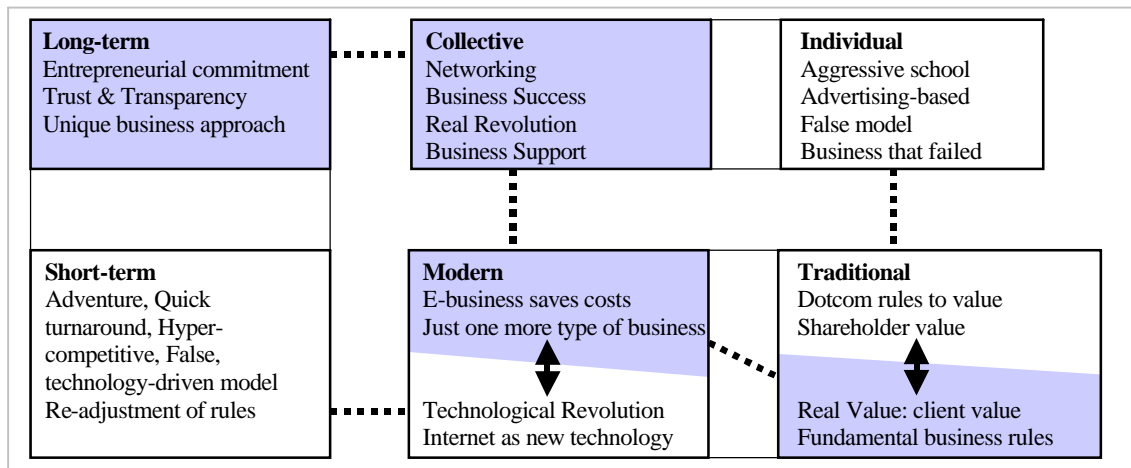


Image 4: Re-construction of the familiarisation of e-business entrepreneurship

In the following, I map out the dialectic dynamics revolving around these themata by presenting the most salient themes. It is important to re-iterate, that I distinguish between themata and themes – themes being actual 'data units' of discourse, such as conversation topics and recurring references to activities and symbols. Themata, by contrast, refer to historically embedded presuppositions and culturally shared antinomies - the deeper logic of social thought. Thus, in what follows, I present the interpretation of the most salient themes (appendix 12) for their underlying themata. Appendix 12 shows the final coding frame listing the central themes. The table shows how each one has been re-negotiated in its meaning contents, comparing these contents for their meanings before and after the dotcom crash.

5.1 Collective versus individual

The first major way in which e-business entrepreneurship was thematised in the interviews was through the thema *collective-individual*. Themes connoting collective approaches to business and a concern for the wider entrepreneurial business community were generally evaluated positively while themes that indicated an individual interest in entrepreneurship were attributed negatively. The thema *collective-individual* was used by respondents to oppose the association of their businesses with the failures of the dotcom crash: it served respondents to differentiate entrepreneurship in the dotcom-crash aftermath from dotcom entrepreneurship as a more virtuous approach to entrepreneurship – one that recognised traditional business

rules while at the same time promoting moral values and a concern for the wider business community.

The thema collective-individual framed accounts on two overall themes: the meaning of success and of networking. Examples for topics situated on the collective pole were 'working collectively', 'profit', 'business support' and 'networking', while the individual pole contained themes such as 'failure', 'false model', 'advertising-based', 'aggressive school' and 'dating game'. I shall consider these themes in more detail now.

5.1.1 Success collectively versus success individually

The collective-individual thema framed accounts on the topic of success. Respondents frequently addressed the dilemma that on the one hand, the dotcom crash meant that e-business entrepreneurship had failed, but that on the other hand, dotcom boom entrepreneurs had nonetheless achieved great personal wealth. The challenge for entrepreneurs here was generally to differentiate themselves from the negative aspects of the dotcom era. One way in which entrepreneurs addressed this challenge was by re-negotiating the meaning of success. By placing the successes of dotcom-boom entrepreneurs on the negative pole of individual-centred business, and opposing these with a 'different kind' of success – collective success – respondents re-negotiated what success meant for them: after the dotcom crash it was not enough to act in the interest of one's own firm; rather, 'real' success meant success through co-operation with other entrepreneurs.

Respondents stressed the fact that in the aftermath of the dotcom crash they were pursuing a different approach to success: they frequently emphasised that successful e-business entrepreneurship was about a genuine concern for the collective success of the wider community of entrepreneurs. Jack, the Director of a service provider since 2002, expresses this in the following account:

"Business has come to realise ... people need people now ... because e-commerce has been massive... um, it's huge, so it's only the commercially aware who are able to survive in this market. Because ... they're able to find the deals and come together and collaborate. So what you see within the small businesses is that people work collectively ... to profit. And people share now. Profit-sharing, value-sharing. Very important concepts; everyone ... no-one is getting excluded cause everyone has got relationships in place. You need to look after... so you don't want to ... everyone gets paid what they're worth." (Jack, Director)¹⁹

¹⁹ In all accounts names of respondents and events have been changed.

To work in partnership with other entrepreneurs and to care for the community of e-business entrepreneurs was predominantly represented positively. Respondents privileged knowledge sharing and relationships with other entrepreneurs in their evaluations of success over individually successful business approaches.

The theme of collective–individual also served respondents to demarcate a new era of successful entrepreneurship. Collective success was elevated morally as a vehicle to a 'different' and 'better' entrepreneurship. Consider the following statement; here Luke creates a moral link between success and 'helping people', firmly positioning success on the collective pole:

"Well, I've defined success in my own terms. I used to think success was all about money and ... building a big business. But that's not what success is all about for me. Success to me is actually the biggest ... for me it's really about helping people. I come from a really sort of service orientation." (Luke, Managing Director)

Also, Luke, the Managing Director of an intermediary firm since 1999, illustrates this new virtuous notion of entrepreneurship by distinguishing the dotcom aftermath from the dotcom boom as a new and better era of entrepreneurship - as a 'real revolution':

"This is where the revolution really begins. It wasn't 1999. This is it. If you're still around, if you've survived those years, and you're still here, you're starting up now and you've got a good solid start, you can be very successful. Because this is where it begins. But for you to succeed you need to build a sector, you need to build this area of business and there's plenty of business here for everyone, you still want to be number one for your industry. But for you to get to that point you need to help, you need to work with everyone else to build this sector up." (Luke, Managing Director)

Here Luke similarly elevates 'helping people' and the concern for the whole sector as a better and more virtuous entrepreneurship. He also positions aftermath entrepreneurship on the collective pole and contrasts it with 'those years' of dotcom entrepreneurship as firmly located on the individual pole. In statements such as these, respondents were able to create a new meaningful category of success, which can be distinguished through the degree of collective-ness from the dotcom boom approaches.

The new meaning-category of collective success was reinforced by symbolically degrading the individual-oriented business approaches of dotcom entrepreneurs. This was achieved by first, a moral evaluation of dotcom entrepreneurship as less virtuous; and second, by an emphasis of the importance of traditional business rules. As Michael, a Freelance Consultant operating since 2002, put it, during the dotcom boom,

all that was necessary was an individuals' 'wizo idea' that one could exploit economically. Consider the following statement by Michael; the excerpt was taken from his account on how success was possible during the dotcom boom:

"I mean, essentially, the model relied on people coming in with a wizo idea, going on to venture capitalists and saying this is a wizo idea and it's got dotcom in it so it must be worthwhile... venture capitalists would put in ludicrous amounts of money ... say, this is gonna change the world, they would go for an IPO a year later ... everyone would rush in ... the entrepreneurs would get their money out, the venture capitalists would get their money out and yet, none of these businesses were making profits!" (Michael, Consultant)

Here Michael opposes money-driven, 'rushed' dotcom entrepreneurship with an approach to entrepreneurship that makes profit. By underlining profitability as a salient criterion for success, the successes of dotcom firms appear less significant as the criterion of revenue had not been applied to judge success during the dotcom boom. Rather, many dotcom boom entrepreneurs had measured success in terms of turnover, advertising-revenues and shareholder value. The new image of aftermath entrepreneurship as morally better thus estranged the 'dotcom measures' for success as false. Consider the following excerpt by Patrick, Vice President of an intermediary since 2001:

"Apart from regretting that I've not made any money on the dotcom sort of a boom, my concern always was that model was a totally ... it was a false model." (Patrick, Vice President).

Against the 'false model', as Patrick calls it, of the dotcom boom, therefore, the emphasis of a new kind of virtuous collective-ness and a sense for traditional business measures such as profitability served entrepreneurs to re-establish a 'morally acceptable' notion of success that demarcated a symbolic difference against the approaches to success of the dotcom boom. This gave the context of the dotcom crash aftermath a new significance, providing the symbolic means for a fresh start to successful entrepreneurship after the failure of the dotcom past.

5.1.2 Business support through networking versus formal support

The second main theme that was framed by the thema collective-individual was networking. This theme was highly salient amongst respondents, specifically in relation to the topic of business support. Similarly to the theme of success, accounts on networking served a moral elevation of e-business entrepreneurship in the dotcom-crash aftermath as a better and more collective approach. Entrepreneurs evaluated networking in the dotcom-crash aftermath as a 'true' approach to knowledge sharing,

...serving the purpose of mutual business support in the spirit of 'free consultancy' and of 'giving more than you take'. With this respondents opposed formal and 'aggressive networking' during the dotcom boom as well as business support through governmental institutions. Overall, the paramount concern of respondents discussing networking was to elevate networking in the dotcom-crash aftermath as a genuine concern for collective-ness, while at the same time estranging dotcom networking from these positive values.

One such way in which dotcom networking was estranged was in accounts that opposed dotcom networking events as individual-centred and false. A prominent example used by respondents was 'First Tuesday networking', which had been popular during the dotcom boom. This was networking in the format of regular face-to-face events in public venues, taking place every first Tuesday of a month. They were held in an informal reception style and were mainly targeted at bringing entrepreneurs together with venture capitalists. The aim was to enable entrepreneurs to find potential investors for new start-up businesses. Many similar e-business networking events mushroomed during the dotcom boom.

This dotcom-boom format of collective-ness was vehemently rejected as an 'aggressive' and 'arrogant' style of dotcom networking that did not serve mutual business support. It was portrayed as somewhat ruthless and respondents often stressed that all that mattered was the individual interest of firms and/or venture capitalist. Respondents opposed this type of networking with an image of a different and virtuous networking morale after the dotcom crash. Consider the following statement by Eric, Managing Director of an intermediary firm since 2003.

"And I found it really disappointing that how many people there are of this very ... aggressive school where ... they are there for ...what they can get through to people and ...for me it's a far better approach ... and it's more fun... and more creative... to create a spirit of more giving cause... now in this format of free consultancy... it costs nothing to say what you think or to give... somebody some advice and it could be a vital way of building a relationship which then leads to a transaction ... so for me this is a far more effective business spirit and I think there's still a lot of people who are very much focused on... pure ... you know very much on this... so they pay lip service to this but there's always a desperate quality of what am I gonna get out of it..." (Eric, Managing Director)

In this statement, Eric describes networking before the dotcom crash as 'aggressive school' and distinguishes it from networking as representing a business spirit of 'free consultancy' and of 'giving to others'.

Thus, by contrast to the negative image of dotcom networking, networking in the dotcom crash aftermath stood for a genuine concern for the entrepreneurial community. Similarly to discussions about success, when discussing networking, respondents evaluated knowledge sharing and collective interest as positive, opposing knowledge protection and self-interest. Consider the following account by Jack.

"People need to meet people now, people need knowledge ... so people are keeping their options open... it's different than before where it was more about protecting knowledge ... because of what was going on there, the arrogance could come out arrogance is good ... protection ... but when the markets are tired people are very matter of fact... very succinct... and they're open, everyone will give you five minutes." (Jack, Director)

Here Jack elevates knowledge sharing as a modern feature of e-business entrepreneurship. He constructs dotcom-crash aftermath as 'different than before' by opposing it to an 'arrogant' entrepreneurial culture during the dotcom boom. This image of a self-interested culture of the dotcom boom is also vividly expressed in the following statement by Stephen, president of an intermediary firm since 2001.

"Now, I can ... say that people just wanted to make money with very little regard to conferring a benefit to other people but I personally wanted to focus on the good things... which is a good thing which is ... to put the seed of entrepreneurship, of free enterprise, of going out and creating value ... in the minds and souls of millions and millions of people." (Stephen, President)

Stephen elevates the 'conferring benefit to other people' as a positive aspect and thereby somewhat underscores the new evaluation of success in entrepreneurship as collective. This account illustrates how important collective-ness had generally become. An entrepreneurial undertaking was seen to be modern and positive if it was related to meanings on the collective pole. The thema collective-individual itself was usually taken-for-granted throughout the interviews.

Another salient way in which networking and business support were thematised was in accounts on governmental support agencies – 'e-enabling institutions' as some respondents called them. Respondents evaluated business support through public agencies and institutions negatively. Most accounts were about negative experiences respondents had had in obtaining support. This revolved around two themes: first, respondents' negative experiences when wanting to obtain information through support agencies and second, positive experiences of learning and obtaining information when networking and relying on the entrepreneurial community. As for the former, many respondents evaluated support agencies negatively because they felt that their business

was not understood or that particular aspects of new technology were not adequately addressed. This is exemplified in the following statement by Linda.

"There was sort of one company that ... you know ... that would, you know, there XYZ link [UK government body for small business support] and so on and I didn't find them very helpful... cause there were... fine... if you would be starting up a shop or something that they could understand... but if it's technology they didn't understand the whole thing of e-business cause it's all sort of cutting edge stuff what we are doing so they didn't understand that so I didn't find them very helpful so I picked information from different people... and it was really through contacts that I found out ah, okay this is how you do this or I'd search on the Web oh, and this is how I do that." (Linda, Managing Director)

Here Linda differentiates between business support through a national agency and support through her personal network of business contacts. Linda strongly objects to the support from the agency by attributing the way in which aspects of new technology were not understood and by emphasising that her preferred way of obtaining support for her business stemmed from her private network of business contacts.

Collective business support through networking with other entrepreneurs was preferred over formal support through public agencies. This evaluation firmly located business support through agencies on the individual pole and contrasted it with the (positive) collective pole. Consider the following statement by Peter, Founder and Managing Director of an intermediary firm since 1999:

'...but twice as important is really to keep the network together. I can talk to the XYZ link's [UK government body for small business support] adviser about IT and get just totally non-sensical information. I can go to UVW.com [network for e-entrepreneurs] and I'd talk to other small business owners that are into doing IT... and what I would get would be far more useful. I mean, the networking is the key. And you can't measure the value of good quality business information.' (Peter, Founder and Managing Director)

Another example is Eric's statement: here Eric describes his experience of taking part in a business network:

"... you'll hear many short presentations and everyone in that little community ... will help to critique the others ... and say what they thought was good, they won't say what they thought bad, they'd what you could improve ... but it is a very strong atmosphere of support and very controlled challenge." (Eric, Managing Director)

Altogether, networking served as a main symbol amongst respondents for a functioning support system and a virtuous sense of collective-ness. While governmental measures for business support were estranged by situating them on the individual pole, networking and collective-ness in a format of 'free consultancy' had acquired a new positive value.

5.2 Long-term versus short-term

"It is not enough, um, just to be successful, you have to be different. ... And being different means being successful for a long time." (Kevin, Managing Director of intermediary firm since 2001)

The second major evaluative dimension that underpinned respondents' sense-making of e-business entrepreneurship was the *long-term – short-term* thema. On this dyadic opposition, the long-term pole is privileged over the short-term. This thema was firmly linked to the collective-individual thema and underscored the positive evaluation of collective success. To embark on an entrepreneurial venture in the short-term carried similar moral weight to acting for individual purposes and was evaluated similarly as 'aggressive' and false strategy. Kevin's statement above is illustrative of this: to be successful after the dotcom crash means to be successful in the long-term.

The main themes framed by this thema were business approaches and business culture. Via the long-term–short-term thema respondents opposed dotcom entrepreneurship by evaluating business approaches and business cultures in the aftermath as different through being oriented toward long-term gain. Examples of themes situated on the long-term pole were 'organic growth', 'long-term customer relationship management', 'strategic business approach' and 'structure' while the short-term pole contained themes such as 'random selling', 'hyper-competition' and 'short-term investment'. In addition, this thema privileged a culture of 'transparency and trust', 'stamina and perseverance' over 'intuition', 'independence', 'adventure' and 'acceleration'.

5.2.1 Long-term strategy versus short-term investment

The long-term–short-term thema was most vividly illustrated in the way in which business approaches were represented: short-term investments had become re-evaluated as negative and had acquired a meaning of risk-prone business; long-term strategic approaches, by contrast, were evaluated positively as a preferable approach. One such long-term approach was organic growth. Consider the following account by Andrew, a Managing Director of a Solutions Provider since 1999:

"But what's important for the company is just really good execution, that means um, you know, let's make sure that we have customers, that we have happy customers, that we have revenues, um, that we grow organically and slowly, that we are physically responsible and that we don't overspend you know,... um, and just build a really good reputation. " (Andrew, Managing Director)

In this account, Andrew is favours a gradual, responsible approach in order to get and achieve a good reputation as an entrepreneur. His statement attempts to move away from the short-term pole of 'quick' business approaches toward the pole of long-term strategic approaches. Similarly, in the following statement, David, Chairman of an intermediary firm since 1999, evaluates the long-term approach as entrepreneurship 'for the real reasons':

"So if there's no light at the end of the tunnel and you wanna be an entrepreneur, then you have to be in it for the long haul. This is not a quick turnaround situation. No one is buying companies off any more. And if they are they're buying it at pennies on the dollar or pence on the pounds. So now, it's really about - you really want to be an entrepreneur, for the real reasons." (David , Chairman)

Organic growth was morally evaluated as responsible and considerate, while a short-term approach was seen as seen negatively because it was aimed at a quick turnaround only.

5.2.2 Self-actualisation versus adventure

Another theme that was framed by the long-term–short-term thema was the question of entrepreneurial culture. Respondents constructed the entrepreneurial culture of the dotcom boom negatively by situating the dotcom boom on the short-term pole. The dotcom boom was evaluated negatively as a business culture of speed and of short-term concern. It was often referred to as 'dotcom bubble' and respondents associated with it an era that was not about business, but merely about short-term decision-making driven by new trends in digital technology. In other words, dotcom culture was seen as accelerated and un-considered decision-making culture. The following statement by Enrico, editor in an intermediary firm since 1999, voices this representation.

"It was sort of yeah, hyperventilating... like ... I mean it accelerated to the point of ... um, there was a culture of ... just do something, if it's the wrong choice, as long as you do something quickly, you know, um, ..." (Enrico, Editor of dotcom firm)

Here the topic is acceleration. Enrico puts emphasis on quick decisions, implying that there was no room for considered, long-term decisions.

However, at the same time, there were accounts by respondents who had been running a firm during the dotcom boom that showed that the concern for long-term approaches was a relatively recent representation. These respondents often voiced the 'old' notion

of the dotcom boom as an exciting adventure, which once was very desirable and running a firm during the dotcom boom was a positively attributed business spirit. This is illustrated in the following account by Daniel, CEO²⁰ of a Service Provider since 1999 and CEO of a dotcom business that had gone bankrupt with the dotcom crash.

"It's amazing how people, myself included got swept up in it. Um, I miss it. I miss the bubble! One of the things I miss he most is Cosmo.com. I used to visit that service so many times, all the times ... my friends and I would talk about this and we say geese those were the good days and we had so much excitement and fun, and everyone thought that we could change the world and that it is so exciting. " (Daniel, CEO & Founder)²¹

While Daniel clearly shows emotional attachment to dotcom entrepreneurship, he also distances himself from it by using metaphoric language that portrays the dotcom boom as a short-lived movement. The image of the bubble implies instability and short-livedness, while the notion of 'getting swept up' in the dotcom boom implies a notion of passivity in the sense that the dotcom boom imposed itself on entrepreneurs, with entrepreneurs being the passive victims of a wave of new technology.

The image of the 'accelerated', 'hyperventilating' and technology-driven dotcom culture was strongly opposed with a new culture of entrepreneurship; a long-term culture of trust and transparency, a new spirit which has a visionary, long-term approach to self-actualisation. Linda, Managing Director of a Solutions Provider since 1998, voices this in the following account.

"I mean, I don't know I've changed my mind really because if you would have asked me 2 years ago ... when there was the whole sort of dotcom boom and everyone was millions of pounds I probably would have said... um, yes I want to grow the company within 3 years and sell it and retire ... but now 2 years later I've seen a lot more and um, I am not so sure anymore... cause I really do love the company and I think if I did sell it what would I do... and would I go and work for somebody else and also I love growing it really and I am quite happy to keep being in the company and to keep that up and see what happens over time so I do definitely want to grow it but not to be a huge multi-international firm ..." (Linda, Managing Director)

Linda stresses that she prefers a long-term approach over a short-term approach and underscores this by stressing the opportunity of self-fulfilment that the long-term approach offers to her in comparison to a working in a larger firm.

In a similar vein, yet far more sympathetic to the idea of larger business, Jack singles out trust and transparency as values of a new business ethic of Web-based business:

²⁰ Chief Executive Officer

²¹ All names have been changed to keep data anonymous that could lead to an identification of participants. The study complies with the Code of Conduct & Ethical Principles Guidelines of the British Psychological Society (British Psychological Society, 2000).

"Transparency! It's promoted transparency. People now realise that, um, there's a different type of ethics promoted in the Web-based world... I think, the thing with the small businesses is that there's a greater element of trust cause um, more... big businesses um, it's normally targeted by established players. So, it's not as likely for a new consultancy to work with big business and... when you deal with smaller players it's a completely different perspective. You don't cold call and what have you. " (Jack, Director)

Jack emphasises the link of small business to established big businesses; thereby Jack's account evokes an image of small Web-based firms being trustable because they deal with established large companies. Using big business to signify long-term commitment, Jack locates small business on the long-term pole. At a later point in the interview, Jack reinforces his opposition of short-term approaches by strongly opposing dotcom entrepreneurship:

"No! We don't brand ourselves as a dotcom. Yeah, we brand ourselves as a technology venture, with financing and an interesting business model and technology. It just happens to be that our technology um, the information that our technology generates is available over the Internet." (Jack, Director)

Here Jack differentiates his business as a technology venture from dotcom entrepreneurship. By stressing that e-business entrepreneurship is just like any other type of business, Jack represents the Internet as part of a general strategic business model, rather than as the main purpose of the business. He subordinates the Internet to the business goals of the firm and thereby re-negotiates technology from a main impetus for business to merely one out of many aspects that play a part in modern entrepreneurial e-business.

The long-term–short-term thema served respondents to re-evaluate the dotcom business culture and business approaches as negative and to distance aftermath business approaches from the image of 'dotcom'. This ties in with the re-negotiation of success as collective. Together with the new image of individual entrepreneurship as false model, this negative evaluation of dotcom entrepreneurship as short-term enabled respondents to symbolically construct a new meaningful category of entrepreneurship, one that prefers collective, long-term and strategic approaches and thus distinguished their businesses symbolically from dotcom entrepreneurship.

5.3 Modern versus traditional

The third main evaluative dimension in the interview corpus was *modern–traditional*. This thema framed accounts on the question of the extent to which e-business was a modern business as well as on the theme of traditional business rules. First, respondents symbolically highlighted aspects of e-business as modern that signified collective-ness whilst they degraded the significance of new technology (as signifier for 'short-term'). Second, a new distinction was made between traditional business rules of entrepreneurial business that were associated with long-term concern and those that were associated with short-term and individual benefits.

Accounts underpinned by the modern-traditional thema had a reinforcing effect of the positive evaluation of the poles 'collective' and 'long-term' and the negative evaluation of the poles 'individual' and 'short-term'. This thema showed how, overall, a re-alignment of modern with traditional aspects took place, which demonstrated most vividly the adaptive effect of the dialectics dynamics in entrepreneurs' discourses. Respondents were symbolically aligning modern aspects of e-business with traditional aspects of entrepreneurship and in this process, the meaning of both poles, modern and traditional themselves changed. In this way, e-business entrepreneurship after the dotcom crash could be symbolically differentiated from dotcom boom entrepreneurship.

5.3.1 Modern e-business: collective-ness versus new technology

"I would say there is a misconception that e-business is just some sort of great thing when in fact it's just another business just like every other business." (Stephen, Managing Director)

The evaluative dimension modern-traditional was used when respondents' topic was e-business and specifically the question what constitutes the main modern characteristics of e-business. The significance of new technologies was being re-negotiated from the main and particular aspect of modern e-business (e-business as technology-driven) to a rather 'normal' feature of business that did not differentiate e-business as such. As illustrated by Stephen's statement above, the connotation of e-business as something

special was strongly rejected. By contrast, Stephen presents e-business as 'just like every other business'. Similarly, respondents were concerned to estrange e-business from its dotcom image to be 'technology-driven'. This is expressed by Martin, a Director of an intermediary firm.

"But the hype and the bubble - and let's face it, there are a hundreds of companies that are worth 1% of what they were worth you know two years ago, um, there are a lot of those companies – has that actually changed the economy? Not remotely compared to the macro issues! You know, the Internet is just one more type of business ... and ...there have been some big failures, there have also been some big companies that took a look at the Internet, maybe tried something out, threw sensible money at it, lost that money, ... went back to bricks and mortar and are still perfectly okay. So, you know, this, the Internet has not been a ... and has never been perceived as something crazy, life-changing ... it's not! It's a new medium, and it's been treated as a medium and it's not the defining factor in the changes in corporate culture... that we've had. Um, and ... I speak as a really early Internet entrepreneur." (Martin, Director)

Martin voices the familiarisation of the idea of using the Internet for business: by evaluating the Internet as a 'medium' and 'just one more type of business', as not 'life-changing' and not 'crazy', he constructs an image of the Internet as a regular feature of modern entrepreneurship. Similarly, other respondents attributed the positive aspects of the Internet mainly from a commercial perspective rather than from a technological angle. In the following excerpt, Andrew, the Managing Director of a Solutions provider, highlights the power of the Internet to automate and thereby to offer a business to save costs.

' ... um, on what we offer we are always looking for things to improve ... the speed of communication and processing to help companies to reduce costs and so on. But that's more automating processes that are... today maybe partly automated but not as automated as they could be cause companies, banks and so on don't recognise the power of the Internet.' (Andrew, Managing Director)

Against the background of the dotcom boom where for many entrepreneurs the new technological features of the Internet were considered to be the main business assets and this had considerably impacted on their firms' strategies, now the commercial aspects of entrepreneurship as a business type and a business community were in the foreground.

New technology was less relevant overall in respondents' accounts for an evaluation of e-business entrepreneurship as 'modern'; rather, the notion of modern e-business entrepreneurship had been linked in a new way to the collective pole. New technologies were subsumed to this notion. This is illustrated in the following statement:

"So I guess that came before the Internet but of course the Internet has transformed the power of bringing people together. It's arguable each way whether that's a continuation of the past or something distinctly new." (Eric, Managing Director)

Here the topic is the way in which the Internet has changed ways of interaction in entrepreneurship. In a similar vein as Martin's and Stephen's accounts above, Eric positions the Internet as something non-revolutionary and normal. Rather than underscoring the importance of new technology in modern e-business entrepreneurship, Eric stresses the Internet in its 'power of bringing people together' which locates the modern element of the Internet on the collective pole rather than on the short-term pole which is associated with the technology-driven model of dotcom entrepreneurship. Thus, via this new connotation of modern, the collective pole was further underscored in its positive meaning and the short-term pole was enhanced in its negative meaning.

5.3.2 Traditional business rules versus dotcom rules to value

Respondents had not only begun to differentiate the meanings of 'modern' in terms of what modern e-business meant, but also they were distinguishing positive from negative meanings of 'traditional' aspects of entrepreneurship. Especially salient hereby were positive evaluations of traditional business rules. Respondents distinguished business rules that had been used during the dotcom boom from fundamental, traditional business rules in general business. The two other themata, collective-individual and long-term – short-term were drawn on to make distinctions. For instance, entrepreneurs elevated business rules such as 'generating real value' and a concern for long-term client value as fundamental by locating them on the long-term pole. At the same time, business rules that had connotations of mainly generating individual benefit were attributed to the 'false' and 'short-term' business approaches during the dotcom boom. Again, overall, this served to estrange dotcom entrepreneurship: entrepreneurs particularly opposed business rules that had emerged during the dotcom boom by evaluating them as 'merely' serving an individual firm's interest rather than the long-term benefit of the entrepreneurial community. In the following statement, Alan, Business Development Director of a Service Provider since 1997, contrasts 'basic' principles of revenue profits with 'new rules to value' during the dotcom boom:

"In terms of ... most people could see that it was not sustainable... cause all the basic principles of revenue profits went out if the window cause it was a new phenomenon and they were applying new rules to value ... those sort of companies, cause the grey area was that how do you value something which has never existed before." (Alan, Business Development Director)

Here Alan concedes that new rules had been necessary during a period of novelty, implying, however, that this was an exception in the short-term and that certain 'basic principles' such as revenue profits have nonetheless priority. Other respondents voiced the negative evaluation of dotcom rules more vehemently. Enrico, for instance, positions shareholder value firmly on the short-term pole as a typical dotcom measure.

"The thing is that I think the look for shareholder value where millions were put in and they are not obviously gonna be taken out within a year or two, you know, most people would probably find the concept of shareholder value almost like...you know they would probably laugh if you mentioned it." (Enrico, Editor of dotcom)

This negative evaluation of dotcom values is centred on the notion of 'a year or two', implying its negative value through it existing only temporarily for a short period of time. This short-term image of dotcom rules was opposed with client value achieved through strategic effort and through adhering to fundamental rules that would ensure long-term client relationships. Consider the following statement by Patrick:

"Long haul. You have to have a good view of the long haul. You have to be ready to go the distance. You have to be conservative in your spend. You have to do multiple things. I mean, it's just like my business here. ... You need to focus on a need. People don't focus on a need sometimes. There were doing ... they thought they had a need ...it was often a technology finding a customer. Or finding a solution. Or a problem I should say. " (Patrick, Vice President)

Patrick advocates a traditional measure of focusing strategically on business demand by firmly situating it on the long-term pole. Fundamental business rules such as strategic planning, market analysis and aiming for client value were thus re-negotiated positively by foregrounding their long-term character (rather than their individual-centred nature).

Overall, e-business entrepreneurship was presented in a context of collective concern for the business community, of generating client value and profitable business and of strategic long-term business growth. This was preferred over a meaning context of individual and short-term interest, determined by business measures such shareholder value. Both evaluations contained connotations of 'modern' and 'traditional' - entrepreneurs were in the process of establishing a new synthesis of modern and traditional business aspects. More precisely, modern aspects of collective-ness in e-

business were aligned with traditional strategic and long-term entrepreneurial business measures.

With this new synthesis, simultaneously a new tension emerged. More precisely, due to the new distinctions that were made with regard to meanings of both the modern and traditional poles, a strong non-negotiable distinction had arisen that symbolically decoupled e-business entrepreneurship from dotcom business which was represented as short-term, individual-focused business approach signifying 'false business models' driven exclusively by new technologies and short-term measures.

5.4 The new symbolic boundary around e-business entrepreneurship

A new symbolic meaning boundary had emerged around 'e-entrepreneurship in the dotcom-crash aftermath', which was taken-for-granted and served entrepreneurs to oppose the business approaches of dotcom entrepreneurship. It represented aftermath entrepreneurship as 'better', more virtuous era of e-business entrepreneurship oriented towards collective, long-term and strategic business approaches. By contrast, dotcom entrepreneurship was differentiated as involving false and aggressive business approaches, which were associated with short-term strategies and individual interest. In essence, this new concept of e-business entrepreneurship and the symbolic differentiation from dotcom entrepreneurship served entrepreneurs to cope with the challenge of having to start afresh after the dotcom crash, while being publicly associated with the failures of dotcom entrepreneurship. It balanced modern aspects of e-business with traditional aspects of entrepreneurship, thereby overall familiarising e-business entrepreneurship with the idea that it was 'just another type of business' that needed to be handled with traditional business approaches to long-term client value. The new concept of e-business entrepreneurship is depicted schematically in image 5. The themes listed are examples; they are not representative for the entire data corpus.

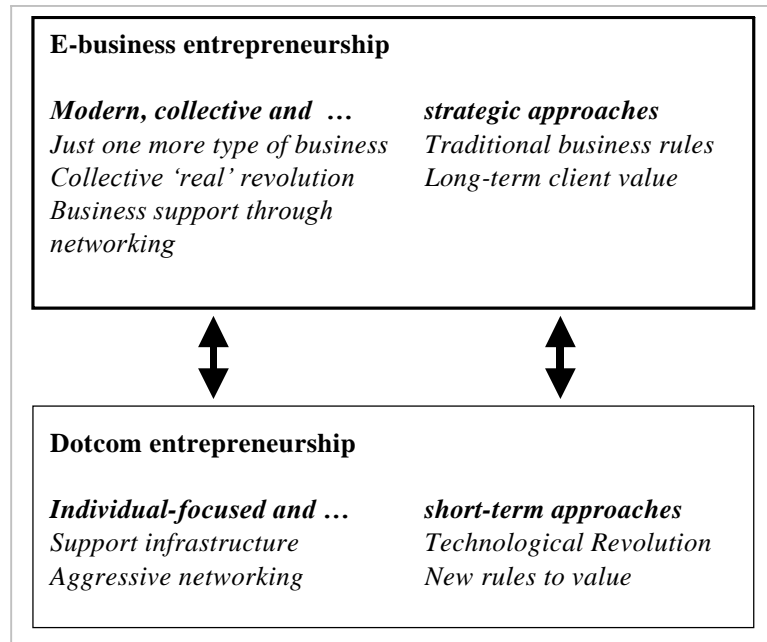


Image 5: New concept of e-business entrepreneurship

The black arrows in image 5 signify the new tension that emerged with the dialectic dynamics of aligning modern meanings of e-business with traditional meanings of entrepreneurial business: the synthesis of modern with familiar aspects had brought forward a new meaningful opposition.

The thematic analysis has highlighted a dialectic dynamic of adaptation and familiarisation in respondents' discourse in response to the challenge of starting afresh after the dotcom crash: the unfamiliarities in the concept that people associated with e-business had become familiarised in traditional notions of business and allowed the negotiation of a new concept, a new collectively endorsed representation of e-business entrepreneurship. This served entrepreneurs to construct e-business entrepreneurship as modern whilst not losing sight of traditional business values, yet, at the same time being able to distance oneself from the negative dotcom image.

Thus, the new symbolic meaning boundary enabled respondents to adapt their sense-making to a new situation and to re-establish a functioning meaning-system that provided order, continuity and predictability in the dotcom-crash aftermath – it

provided entrepreneurs with a shared reference system (Deaux & Philogène, 2001) on the basis of which they could justify their actions and decisions.

5.5 Conclusions

This analysis confirms both strengths and shortcomings of dialectic analysis for an understanding of knowledge emergence. As for the strengths, I argued in Chapter Three that an analysis of dialectic knowledge dynamics can highlight how the emergence of new social knowledge is facilitated by the conceptual, meaningfully mediated realm of social construction. The above analysis illustrates this. The analysis surfaced a social 'change in perspective' (Zizek, 2004): it showed the emergence of a new concept of e-business entrepreneurship from an angle on the core tensions and meaning-dyads that mediate this change. The dialectic analysis provided a 'snapshot' of the central dyadic oppositions that moved entrepreneurs' social representations of success, of business approaches, of new technologies and of interaction with other entrepreneurs. From numerous interlocking discourses, a new concept of e-business entrepreneurship emerged that was underpinned in its dynamic of becoming by a core set of themata, deeply embedded in respondents' sense-making.

The analysis also demonstrates how the dynamics of social representation are functional in providing a shared frame of reference in the business context of the dotcom-crash aftermath. The new social representation of e-business entrepreneurship enabled entrepreneurs to establish a new *sensus communis* and a way of coping with the unfamiliarity of having to start afresh after the dotcom crash. By re-presenting existing concepts on the opposing pole of central themata and by establishing a new dialogue between previously contradictory concepts, entrepreneurs were dealing with the challenge of being associated with the failures of the dotcom crash.

The dotcom crash was thus mainly a challenge of finding a new meaning and sense of identity as a business community. In this sense, the findings from this chapter strongly disagree with the interpretation of the dotcom-crash aftermath in existing research. In Chapter One and Two I showed how the challenge of e-business entrepreneurship in the dotcom-crash aftermath was mainly interpreted as a problem of education and knowledge implementation. In the light of the findings above, however, it becomes

clear that in this particular milieu, entrepreneurs were not concerned about individuals' skills gaps, but rather about the absence of a common reference system and sense of collective-ness as a business sector.

Nonetheless, the insights from this first analysis also show how an exclusive focus on dialectic knowledge dynamics limits an explanation of the creative forces in knowledge. It traps the analysis in a conceptual and socio-historic mode of interpreting knowledge dynamics. While the dialectic analysis overall yielded a historic view on the conceptual adaptation and continuation of certain key concepts in entrepreneurs' sense-making and lets us better understand how entrepreneurs adapt certain key concepts in the light of the challenge of the dotcom crash, however, these insights do not address the dynamics of the emergence of unprecedented concepts. From the findings above we do not gain insights on dynamics that might stem from new combinations and dynamics unrelated to existent concepts.

The next analysis is dedicated to this purpose: by turning to a Deleuzian logic of thinking about becoming, we concentrate on non-dialectic and discontinuously patterned dynamics grounded in experience and examine its role in the emergence of new concepts.

Overview of Chapter Six

Chapter six explores rhizomic dynamics in and around social business networking. Particularly, the Deleuzian analysis highlights two unprecedented assemblages that individuated in the particular networks this exploration tapped into: the personal profile page and the network chairman. The results show how the becoming of these phenomena is 'in-between' invested meanings about online networking, trust and leadership how this opened up new creative potentialities.

6 DELEUZIAN ANALYSIS: RHIZOMIC BECOMINGS IN POST DOTCOM-CRASH NETWORKS

'There are no longer binary machines: question-answer, masculine-feminine, man-animal, etc. ... The wasp and the orchid provide the example. The orchid seems to form a wasp image, but in fact there is a wasp-becoming of the orchid, an orchid becoming of the wasp, a double character since 'what' each becomes changes no less than 'that which' becomes. The wasp becomes part of the orchid's reproductive apparatus at the same time as the orchid becomes the sexual organ of the wasp.' (Deleuze & Parnet, 1987 , p. 3)

In this chapter, I begin to move beyond what e-business entrepreneurs talk about within the 'grille' of dialectic, socio-historic concepts (Deleuze & Parnet, 1987), and begin to cultivate potentialities emergent from rhizomic becomings. I present an account of my experience when participating in entrepreneurs' social milieu from a Deleuzian perspective on becomings. The principal aim is to trace new combinations of (dialectically seemingly) un-related 'somethings', emerging and 'working well together', passing 'in-between' dominant dialectic dyads in order to trace the creative process of the emergence of novelty.

In the Deleuzian analysis, two phenomena became individuated in a Deleuzo-Guattarian sense of haecceities: the *personal profile page* and the *network chairman*. At first sight, they seemed to form images of new technology and of a new form of leadership at networking events; yet, they were far more multiple. Particularly, they had a capacity to affect and to be affected in a Deleuzian sense – it was through them that a new sense of entrepreneurial reputation and trust emerged. They were phenomena that moved in-between invested concepts about networking; they bypassed dyads such as online/virtual versus real/offline and business versus private.

Just like the double-character of the assemblage of the wasp and the orchid, the *personal profile page* and the *network chairman* were 'double-captures' in that they

connected lines of technology and lines of affect²² in new ways; they were 'between the two, outside the two, and ... [flowed] in another direction.' (Deleuze & Parnet, 1987, pp. 6,7). Their becomings were *technology-becomings of affect* and *affect-becomings of technology*. This created a dynamic in which 'what' each becomes changes no less than 'that which becomes' (Deleuze & Parnet, 1987, p. 3): technologies of networking on the personal profile page became part of entrepreneurs' 'real' business reputation and socialising apparatus at the same time as friendship as a technology became the main catalyst of a new network business-machine: it was in the network chairman, that these new becomings became machinic in the form of a new route to successful business.

In what follows, I present my Deleuzian interpretation of these becomings. Throughout the interpretation, I focus on how things *become-other* and *assemble* rather than on what things *are*, *resemble* or *might have evolved from historically*. As outlined in Chapter Four, this analysis is not focused on conceptual comparisons, socio-historic roots, similarities or contradictions, rather it aims to highlight emergent dynamics that are discontinuous and non-dialectic, running in-between existent dialectic dyads.

6.1 The personal profile page

Amongst the seven networks that I came across in the snowballing process (appendix 3), two networks - Ecademy and Ryze²³ - stood out as becoming something different. While most networks would use their Web-site to provide information about networking and advertise forthcoming networking events, on the sites of Ecademy and Ryze the main visible aspect were personal profile pages of members.

Both Ecademy and Ryze offered free membership that could be acquired via an online registration. Membership could be upgraded to an advanced service (providing special member search functions) for a monthly fee. Upon registration, members were assigned a personal Web-space - the personal profile page - through which one could publish all kinds of information about oneself and one's business. Essentially, the

²² The term affect here refers to the Deleuzian interpretation of affect as a capacity of movement and creation - see section 3.3.1: 'Affects ... are becomings that spill over beyond whoever lives through them...' (Deleuze, 1995, p.127).

²³ Firm names are included with permission of Ecademy and Ryze.

personal profile page allowed one to create a profile of oneself and then seek out for connections with 'friends' and 'friends of friends' online. One was offered a range of networking and introduction tools such as a personal message and guestbook feature, tools to introduce one's contacts to other members, 'lists of friends', message boards and participants lists for networking events. At the time of the study, both networks had membership numbers in the ten thousands. In table 6 below, I have summarised their key features.

<i>Network</i>	<i>Number of members</i>	<i>Founded</i>	<i>Mission</i>
Ecademy.com	20,000 in 2002	1998 in Greater London	'To build the world's largest Trusted Business Network by connecting people to each other – enabling knowledge, contacts and opportunities to be shared for World Wide Wealth' (quote from Web-site, 2002)
Ryze.com	'network now numbers in the tens of thousands' (quote from Web-site, 2002)	1996 in the USA; in the UK since 2001	'Extending members' business networks' (quote from Web-site, 2002)

Table 6 : Characteristics of Ecademy and Ryze

The personal profile page was at the centre of networking activities in both networks: it was in and around the personal profile pages of members of these two networks that I discovered a buzzing universe of interaction amongst entrepreneurs - it was here that e-business entrepreneurship took place.

Browsing through personal profile pages, one was presented with a rich and colourful patchwork of sites – an ever changing array of personal microcosms of knowledge, ambition and experience. On the personal profile page, network members posted their profiles, biographies and photos, listed their vitals, favourite quotations, hobbies, previous jobs and future career interests. Besides a small standardised part of the page (on Ryze.com, for instance, the top of the personal profile page features a pre-structured space where entrepreneurs list their 'have's' and their 'want's'), the larger part of the personal profile page was open to the content preferences of the entrepreneur. Image 6 shows the top section of a (randomly selected) personal profile page on Ryze.com.

Screenshot not reprinted due to missing Copyright

Image 6: Randomly selected Personal Profile Page on Ryze.com (2005)²⁴

Via the personal profile page two lines of becoming intersected: *a technology-becoming of friendship* and a *friendship-becoming of technology*. Lines of technology running through various tools of contact and communication and lines of affect emerging from online communication crossed each other in new ways and became each other. Friendship became a technology at the centre of networking that, at the same time, became part of entrepreneurs' socializing apparatus and allowed new routes to trust. This let the personal profile page emerge as a 'real' aspect of entrepreneurs' reputation, rather than merely a 'virtually' existing Web-page.

6.1.1 Friendship becoming a tool

There was a strong focus on friendship in Ecademy and Ryze. In both networks, contacts that network members made were called 'friends' and these were the main 'currency' of networking.

²⁴ Screen-shots of Web-pages of Ecademy or Ryze have been restricted to those that contain content that is in the public domain. No confidential content or content that could lead to an identification of participants has been included.



[Click here to invite a friend to Ryze](#) and help grow your network!

Image 7: Cut-out from Ryze

As the slogan in image 7 exemplifies, a large amount of creative energy intensified around different technologies that enabled network members to make friends online via the personal profile page. There were a variety of 'contact management tools' such as private messaging, guestbook features, special interest sub-groups, Weblogs and message boards – all of which could be used to generate new contacts.

These tools opened up ones personal network to an unlimited array of contacts. Once registered with Ryze and Ecademy, one was immediately connected to the online universe of personal profile pages and could browse the pages of other entrepreneurs in related business fields or sub-networks. One could say hello to anyone - either by leaving a message in their guestbook, or through a 'private message' system. One could also directly contact 'friends of friends'. Equally, one's own page could be accessed by all other members of a network; it was also searchable via a search tool.

This sheer limitless potential of expansion of one's personal network was variously crossed by several tools that make one's contacts publicly visible. The tool at the centre was the *list of friends*. It was a tool featured on each personal profile page, embedded into an automatism that tracked one's online interactions. More precisely, the list of friends was a dedicated space on the personal profile page that was automatically generated: whenever two network members requested and confirmed their contact online, it added the names of one's contact to a list on both personal profile pages.

'... "If there's someone with whom I have common business interests, I add them to my list of friends, and then a link to their page appears on my page," explains Kaup's friend Anne Fitzpatrick, Executive Director of the Boston-based Rock & Roll Library and a Ryze user.'

Excerpt from "The Press on Ryze", published on Ryze.com, 2002

Image 8 below shows a cut-out from the lower section of a (randomly selected) personal profile page, depicting the list of friends, the guestbook and a list of sub-networks that this member is involved in.

Screenshot not reprinted due to missing Copyright

Image 8: Cut-out from a personal profile page on Ryze.com: list of friends, guestbook and sub-networks

A common way of interacting, therefore, was to contact other entrepreneurs by browsing their personal profile pages, and subsequently sending a guestbook note or personal message. As part of my own participation during the study, I registered my own personal profile pages on both networks, and as a result, I would frequently receive networking messages from other network members such as the following.

Ryze Guestbook entries

Anurag Mehra, 12/10/02

Hi Alex, I have just started an e-learning company myself. Do check it out. Let me know if you need anything.

Anurag

Karen Edelman, 10/25/02

Hi Alex – Just dropping by to say hello. Your profile is very interesting. Stop by my site perhaps my services would be useful for you at some point.

Karen

Once a first contact was established, the online system automatically offered the option to 'request or confirm friendship' with new contacts. Such confirmation would then result in the name of the contact being displayed on the list of friends, generating a link

to that contact's personal profile page from one's own page. On Ryze, additionally, this visibility of one's contact was reinforced graphically, featuring thumbnail photographs of one's contacts (image 9). It illustrated the chain of people via whom one was connected to other entrepreneurs.

Screenshot not reprinted due to missing Copyright

Image 9: Cut-out from Ryze.com: visualisation of friendship

The technology-becoming of friendship was a becoming that let friendship become a tool for entrepreneurs – a technology of making business contacts that integrated the personal profile page into the socialising apparatus of entrepreneurs. In these networks, making business contacts online is no longer attributed via the notion of face-to-face versus online, and also not exactly via virtual versus real. Rather, here business contacts became friendship qua network and this becoming was in-between these categorisations – it arose as a new connection, a new assemblage of friendship and technology.

These ways in which lines of technology and lines of affect became enmeshed created new conditions for rearrangements in lines of affect that would otherwise depend primarily on face-to-face interaction. Online interaction became a viable medium to establish trusted relationships amongst entrepreneurs.

This finding is in agreement with scholars (e.g. Lash, 2000; Rheingold, 1994; Tucker & Jones, 2000) who argue that there is a new form of trust in online interaction. Rheingold (1994), for instance, notes that there is increasingly an emotional attachment to an apparently bodiless and physically disparate way of engaging with others via computer-mediated social groups. The argument is that the

absence of physical proximity is less and less the main condition for trust and emotion. Rather, online communities feel like authentic communities due to the social leverage they offer to their members – a leverage that is not automatically fulfilled by the use of online technology, but that must be learned and developed together by the people interacting via a virtual community.

In the present case, a social leverage of trust had emerged that hinged on new micro-becomings of visibility that became connected to friendship and that let physical proximity become less relevant for the type of interaction entrepreneurs were after. The technology-becoming of friendship became the new condition for trust in that it forged new orderings through enhancing one's reputation.

6.1.2 Technology becoming trust

The becoming of the personal profile page was not merely a technology-becoming of friendship. The lines of technology that ran through the network took another route of crossing lines of affect: there was also a friendship-becoming of technology in that the visualisation of one's list of friends created a new ordering – an ordering of similitude, which, like an unexpected bricolage effect, combined online network technology with trust in a new assemblage that worked well together, even though they might, 'from the standpoint of another perspective' (Hetherington, 1997, p. 43), not be seen to do so. The sheer limitless and rhizomic expansion of one's list of friends was crossed by an affect-becoming of technology which engendered trust. The fact that the so called friends one had made on the networks were publicly visible had an effect of limiting and structuring the rhizomic becoming of one's connections on the network through a new mechanism for reputation.

What emerged was that networking online became part of entrepreneurs' technology to establish reputation and to be considered a trustworthy business partner. The technology of the network became part of one's 'real' personal reputation. A mechanism of 'vetting each other online' arose that functioned much like a quality filter for establishing trust to other potential contacts.

Ecademy Networking Message

Check your personal reputation with fellow members Fellow Ecademist,

Now you can check your personal reputation with fellow ecademy members in your personal ecademy network:

<http://www.ecademy.com/module.php>

The more a network member could 'prove' via the quantity of 'friends' on the list of friends and via the amount of guest-book sign-ins that s/he 'had' friends, the more this person was deemed trustable and successful. The technology of visualisation of one's contacts thus also became an affect-becoming of technology in that the visualisation of the quantity of friends was the central 'organ' of the network – a large list of friends online emerged as a quality criteria for trustworthiness. A phenomenon of networking was emergent that worked for entrepreneurs without being rooted in concepts of trust via proximity or shared history. It was a becoming that enhanced one's reputation via the trust that people had developed in the visibility of the amount of business contacts.

This becoming was also vividly illustrated by the way in which *networking events* were enmeshed with the list of friends. Even though these events were face-to-face meetings, they were closely intertwined with trust via the list of friends. They functioned like an extension of the list of friends and thus potentially of one's trustworthiness and reputation. This extension centred on the *list of participants*. The list of participants was one of the various tools to prepare for an event. On both Ecademy and Ryze, one could register online in order to participate at a networking event. At the time of the study, there were events in London, but also increasingly nation-wide and internationally. Usually, they took place in the evenings, either biweekly or monthly, at different venues (bars, media clubs, cafes or serviced meeting spaces).

Through members registering their participation online, a list of participants was automatically compiled that was openly accessible to all network members *before* the event. This again created a new aspect of visibility that not only bypassed traditional

notions of distributing lists of participants²⁵, but also further amplified the new notion of trust via the list of friends. The list of participants featured a thumbnail-profile of each participant and was directly linked to the personal profile pages (and thus the list of friends) of the participants. Thus, one could scan through the people one would meet at the event, vet them and their reputation (qua list of friends), and establish first contact before the face-to-face event. This reinforced the effect of similitude that the list of friends had – it underscored the ordering of network members' reputations through the fact that one's visibility as participants extended one's trustworthiness as a potential business partner. Networking events thus increased the potential of extending one's reputation and list of friends.

There were various other tools that intensified this new form of trusted networking – these ran not only between real versus virtual but also in-between business and private in that they extended the list of friends into entrepreneurs' private life as well as their everyday life 'outside' the network - the friendship-technology 'became entangled' with the 'real' everyday life of entrepreneurs. For instance, even when one was not logged on to the networking site, one would receive regular email announcements and statistics documenting 'how well one had done' in terms of one's personal reputation. Consider the following example below.

Email: « Ryze stats »

HITS

Your Ryze page: 6* (cumulative)
 Average Ryze home page: 91*
 Average Ryze home page w/photo: 260*

To increase your hits, add a photo on your Ryze homepage, at:
<http://www.ryze.org/photo.php?lr=weekly>

FRIENDS & GUESTS

Friends you link to: 0
 No Friends Yet?? GET THE MOST VALUE out of RYZE by leveraging your Friends' Networks:

<http://www.ryze.org/invite.php?lr=weekly>

Friends linked to you: 0*
 Guestbook entries: 0
 Contacts: 0

²⁵ As part of my fieldwork, I was snowballed also to traditional business referral networks and local business networks which were mainly face-to-face networking events. Here the list of participants was either only obtainable *after* events or at the event on condition of a fee.

Networking messages such as this one linked the visibility and reputation qua list of friends to network members' life 'outside' the network. In addition, there were e-mail notifications informing network members about a 'movement' on their personal profile pages, such as for instance when another member had visited their profile, had made a guestbook entry or had issued a 'request for friendship'.

Profile Visit

Alexandra,

Steve Collins has looked at your profile. <http://www.ecademy.com/>

You can see who else has looked at your profile here:-
<http://www.ecademy.com/>

Ecademy - Connecting Business People <http://ecademy.com/>

These lines of online networking produced a becoming which spilled over the boundaries of the Web-site into the daily routine of entrepreneurs to check their email messages. Networking emerged as something that was neither only virtual or real, neither in the space of the network or the outside space – it was in-between these categorisations.

The friendship-becoming of technology was in-between real and virtual in another way: it was running between business and private networking. There was no distinction between private acquaintances and those one would make for business. Contacts made in Ecademy and Ryze could be for any purpose or reason and personal messages sometimes had a feel of online chats to close friends, yet, at the same time, usually involved some form of assertion that for future business opportunities one would keep each other in mind.

'As a newly-appointed CEO, I have special needs for business contacts. Thanks for creating Ryze! I've not only made many great business contacts, but also lots of personal ones! Great job.' *Bob Glass, CEO, Creative Science Systems*

Excerpt from "Member Testimonial Section", published on Ryze.com, 2002

On personal profile pages, entrepreneurs also posted photographs of friends and acquaintances in leisurely settings such as in homes, holidays, restaurants – or even, in some cases at private events such as weddings. The striking aspect here was that often

friends from the network were shown in the private context of the entrepreneur's life: the friendship-becoming of technology had begun to cross over in another way into entrepreneurs' 'real life': entrepreneurs did not distinguish between their network contacts and their private friends any more – rather, in Ryze and Ecademy this had become an irrelevant categorisation.

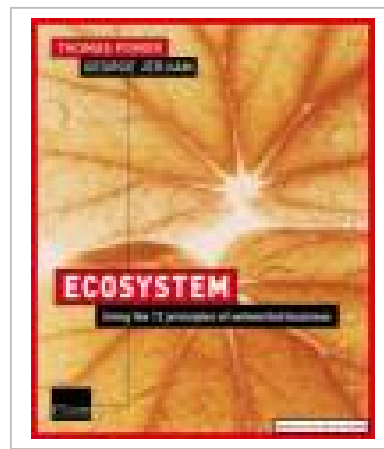
Together, these new connections of affect and technology bypassed traditional categorisations of networking into business and private, into real and virtual and thereby forged the conditions for new orderings. The personal profile page allowed becomings that were in-between the flow of real and the virtual, blending them together in a new, different form of business-private interaction. This created the conditions for a new form of 'trusted business' that enabled entrepreneurs to create a new basis for their reputation, new contacts and partnerships. A new form of business networking had emerged, at the centre of which stood trust via the personal profile page. This was a powerful new vehicle to create a capacity to affect and to be affected – and thus for new concepts to emerge.

But this new capacity of the personal profile page was not only useful for entrepreneurs: at the same time as these network-becomings became part of the personal reputation of entrepreneurs, the affect-becoming also became a core vehicle for the network itself. This was vividly illustrated in a particular intensification of the technology-becoming of friendship and the friendship-becoming of technology on Ecademy through the *network chairman*.

6.2 The network chairman

The becoming of the *network chairman* emerged on Ecademy only. While the founder of Ryze did not play any particularly special role in both the online interaction or at networking events, the figure of the network founder of Ecademy was altogether different. On Ecademy, its founder had become established as a 'special networker': he was the network member with the greatest number of contacts. He referred to himself as 'super-networker' and 'network chairman'. His figure emerged with a great intensity and capacity to affect: in the social milieu of entrepreneurs I had tapped into, almost every respondent considered they knew him personally or had heard of him.

As soon as one joined Ecademy, one 'met' the network chairman: the Ecademy founder was omnipresent in both online networking and at networking events. On the Ecademy Web-site site, there were various books (examples are images 10 and 11), 'guru-comments' (see appendix 15 for an example), announcements, postings and slogans by the network chairman. At networking events, the network chairman would commence and facilitate each event; he would give speeches, lead debates, invite meetings with him and introduce network members to each other. Also, he sent regular email networking-messages to all members.



Images 10 and 11: Sample publications by the network chairman²⁶

The network chairman was an intensification of the technology-becoming of affect and the affect-becoming of technology. Like an offshoot of these becomings, in the network chairman the list of friends radicalized in becoming not only the focal point of the network chairman's reputation, but also the central vehicle for a new network-machine of desire for connections. The network chairman became machinic in that he amplified the new routes to trust and business reputation as central vehicles of a new form of network business.

²⁶ Names and images are mentioned with permission of Ecademy and are restricted to images that are published online.

6.2.1 Becoming super-networker

The network chairman radicalised the technology-becoming of friendship. For the network chairman, making new contacts was the main and day-filling activity. Specifically, his concern was to increase the quantity of contacts on his list of friends; an aspect which he underscored regularly via online announcements, email or in his speeches in networking events.

'It is my belief that you need 1,000 people in your network for each £100,000 you wish to earn each year. If you are crazy like me and wish to earn £1m each year then yes you need 10,000 people in your network!' *Excerpts from Guru-comment by Thomas Power published on Ecademy.com in 2002 (see full excerpt in appendix 15)*

To generate as many contacts as possible was a salient message on Ecademy and one could also very easily make contact with the network chairman. The network chairman regularly pro-actively invited new contacts with him by contacting all members online or by inviting them by email to arrange meetings with him, for which he advertised special days at public venues.

Fellow Ecademist,

If you would like to Network with me, I am regularly at the new IOD at 123 Pall Mall. Simply email John Bromley if you wish to book in for a 30 minute Networking slot. I hope to see you next Wednesday evening at The Media Club for our monthly networking evening. Warm regards,

Thomas Power - Chairman²⁷

Ecademy networking message, 2002

For the network chairman, the list of friends had become more than merely part of his personal reputation – it had become part of his business reputation as network leader. I have shown in the previous section how the affect-becoming of the personal profile page creates a new form of trust that runs between private versus business and between virtual versus real. For the network chairman, more radically, the new affect-becoming of trusted networking became 'real' in that the activity of 'generating contacts' and displaying them visibly had begun to extend into his real life in form of himself

²⁷ Names are included with permission of Ecademy.com

embodying trust through his list of friends. He emerged as a trusted and respected network leader through the list of friends.

This was also evident at networking events. While at Ryze events there was no formal agenda or structure, Ecademy networking events had a set agenda for each event, much like the example below.

Ecademy Networking message

ECADEMY LONDON NETWORKING EVENT - "Research in Motion - Blackberry" WEDNESDAY
2nd OCTOBER, 6.30pm - 9.30pm, THE MEDIA CLUB, LONDON
<http://www.theacademy.com/module.php?mod=event&op=registration>

A reminder you are most welcome to join us at our next networking event with guest speaker Mr Charles Meyer, Director and Vice President Europe, Research In Motion UK Limited, makers of the Blackberry device.

Many thanks to everyone who has already registered, you can view attendees so far here:<http://www.ecademy.com/>

You can also now print the list of attendees in your network as well and all others for this event (including photos so you can find them!)<http://www.ecademy.com/eventlist.php>

Agenda:

6.30 - 7.30 Ecademist Networking
7.30 - 7.40 Ecademy Announcements
7.40 - 8.00 Charles Meyer - Director and Vice President Europe,
Research In Motion UK Limited
8.00 - 8.15 Questions from the floor
8.15 - 9.30 Ecademist Networking

Admission is free of charge to all Ecademists - Register here:<http://www.theacademy.com/> Please note these meetings are restricted to Ecademists, if you have friends or colleagues who wish to attend please ask them to join the Ecademy BEFORE the event: <http://www.theacademy.com/>

At networking events, the network chairman performed the role of a leader: He opened each event with a short speech, facilitated the event, introduced the guest speaker and led a plenary discussion after the guest speaker's presentation. His announcements usually included highlights of his experiences in networking; for instance, at the above event he talked about his newly acquired contacts and what he had learnt from them. This was followed by pro-active suggestions about whom he thought his newly acquired contacts should meet. In the open networking in the remainder of the evening he acted as someone who introduced people that had shared concerns.

While this form of network leadership intensified the list of friends, at the same time, it was not assuming a role of authority, nor a role of formal network leadership that was defined in advance, but was becoming something different at each networking event; the network chairman was a figure that was assembling and reassembling with the many contacts he made – his network leadership was distributed across all personal profile pages and his reputation (list of friends) became a catalyst for the reputations of others.

At networking events, for instance, the network chairman presented himself as a 'lead learner' rather than an all-knower. At each networking event, he would stress that the most important aspect for him was to listen to the new people he met each week and to learn from them. He vehemently underlined that he would not have all the answers. Instead, at each speech at the beginning of a networking event, he would present new questions that had emerged in his many meetings with fellow networkers.

It is at this point that the personified leadership image becomes rather strained; the network chairman became real not via his embodiment of a leader figure and not via his personal vision and plan. Rather what emerged was the intensification of the technology-becoming of the network chairman's list of friends as an assemblage of network leadership that was distributed across many network members' lists of friends: the lists of friends of network members assembled network leadership. The central organ of this becoming was a new form of desire – the desire for more contacts. Desire, Deleuze (1987) writes is

'the real agent, merging each time with the variables of an assemblage. It is not lack or privation which leads to desire: one only feels lack in relation to an assemblage from which one is excluded, but one only desires as a result of an assemblage in which one is included' (p. 103)

To be a friend of the network chairman had become highly desirable for networkers: during the participant observation, I contacted the network chairman through the network to ask for permission to conduct a study on his network, as a result of which I was connected to him via my list of friends. Once I was linked to the network chairman via the list of friends, I received requests from other entrepreneurs to be introduced to the network chairman as a 'friend of a friend'. In other words, once one had the network chairman on one's list of friends, one had

enhanced one's reputation as a networker - one was part of the network chairman's capacity to affect others and could thereby boost one's own potential of contacts.

Thus, the technology-becoming of the list of friends in the network created the conditions for desire that fuelled the becoming of not only the network chairman but through him, the network itself. The network chairman not only intensified the visibility of the list of friends that created a new ordering of reputation for himself, but it was also the visibility of the network chairman as a friend on one's list of friends which individuated as an ordering device for network leadership – as something that amplified the desire for more contacts and for more 'network reputation'. In short, what emerged here was a business-machine.

6.2.2 Networking business-machine

'The winner of the game is the one with all the names.'

Excerpt from Thomas Power's personal profile page, Ecademy, 2002

The desire for more contacts forged a network business-machine that sold utterances by the network chairman. Machines, in Deleuze (1987), are intense individuations that emerge from assemblages that have the potential to shape new binary patterns which govern the distribution of roles. Here, a machine had emerged that produced simultaneously an ever-growing desire for contacts and an ideology to feed this desire through utterances on how to make contacts. As I have illustrated at the beginning of this chapter, the network chairman would publish books on networking and would advertise them online; he would distribute manifestos via e-mail and would hold speeches about networking and the networked world. Increasingly, these utterances would emerge with a price tag, which complemented his income from subscription fees (optional alternative of additional networking tools on Ecademy). This is illustrated in the offer of 'networking coaching classes' below.

"More and more people are realising that networking is the new marketing and that the old marketing mediums of TV, press, sales promotion, direct mail and telemarketing have run their course and just don't work anymore.

Broadcast Capitalism is being superseded by Network Capitalism where organisations and brands attract you to join "their Network". Within the next decade Network Capitalism will become mainstream.

The first of these Coaching Classes will be held on 28th November 2002 at the Media Club in London UK - places are limited to 12 per session. Thomas' Networking sessions begin at 10am and finish at 1pm.

Cost: £99.00 + VAT"

Excerpt from Ecademy Networking Message, 2002

Utterances, as Deleuze (1987) writes, 'do not have as their cause a subject... The utterance is the product of an assemblage – which is always collective, which brings into play ' (p. 51). Here the new assemblage of the network business-machine brought forth utterances about networking itself – it was not only at coaching classes that one could learn about 'network capitalism', as the network chairman called it, but also in manifestos that were regularly disseminated through networking messages, announcements, emails and in guru-comments on Ecademy.com. These were typically about the network chairman's values and his views on networking. Consider an example of such a manifesto below - the network chairman would also frequently repeat messages such as these at speeches at networking events and in books.

"Future government of society worldwide will be based upon systems like Ecademy which are ideal for overseeing large groups of diverse people globally in a loosely affiliated casual manner with maximum freedom at the edge of the network. This is not about government this is about instant trust, connection, support and trade. ...You are witnessing in your lifetime Ecademy become a global phenomenon as a disconnected society uses this place to re-connect with kindred spirits and provide much needed support and trade. You will witness this talked about in the media worldwide and it is purely a response to 40 years of information sharing, media and technology disturbing our traditional community spirit and creating unnecessary paranoia and fear. Don't believe me? Just stick around and watch."

Excerpt from Thomas Power's personal profile page, Ecademy, 2002

Utterances such as this one above reinforced the desire for contacts and further elevated trust qua network. Vocabulary like 'instant trust', 'maximum freedom',

'loosely affiliated, casual manner' and 'support' create an air of a free and supportive community of friends that is not about control, but rather about 'instant' help and support from others. However, at the same time these utterances create the network chairman as a focal point and 'knowledge-bearer' about networking. The network chairman's utterances intensified the affect-becoming of technology: his figure underscored the new route to trust as a new success model of business. Together, the trust that assembled around the network chairman and the desire for the more contacts via the list of friends became the main vehicles for the network itself as a business.

Ecademy had become what the network chairman called a self employed network for-profit (SEN). This was a new type of business that, at first sight, was reminiscent of a guru-network organised by a pyramid-shaped hierarchy of control; yet, it did not exactly fit this concept. It was a hierarchy-becoming that did not rely on top-down mechanisms of control or visible representations of power; rather, it assembled new mechanisms for disciplined behaviour of network members that was far more subtle. It was a becoming that functioned through disciplining people from within - as Rose (1989) phrased it, by governing people's souls.

This network machine-becoming was not planned or controlled top-down by the network chairman – at least not initially. Rather, it became a mechanism of discipline through the capacity of the network to create desire: it affected people's sense of friendship and belonging and its capacity to enhance reputation via the list of friends. What emerged was a new form of disciplined behaviour of making business contacts – 'regulated' by the desire for more 'friends' that would enhance one's business reputation. In other words, this discipline emerged from within (Rose, 1989) – from the combined effect of every single network member's desire for more contacts. At the same time, the desire for more contacts and the enhancement of members' reputation had a centralising effect around the network chairman. He was deemed to be the 'most trusted' and most reputable networker as he had the highest number of contacts. This gradually let the assemblage of affect and new networking technology intensify into a form of organization that became a platform for the network chairman to sell utterances.

Thus, a business-machine had emerged that was fuelled by the desire for contacts via the list of friends and that had begun to assemble the network chairman as a vehicle for a new type of centralised type of business. Network reputation and the list of friends of the network chairman were the main technologies of this business-becoming. While the list of friends became part of entrepreneurs' reputation and networks emerged as a new route to trustworthy business interaction, at the same time, the desire for friendship and trust generated the network chairman as a main vehicle of this network business-machine.

The new form of business emerging in this way was neither purely network nor purely business, it was neither about private acquaintances nor about formal business contacts and it was neither exclusively virtual nor only face-to-face – it was a becoming of a new form of a 'real' managed network-business that moved off into a new direction: Ecademy bypassed other concepts of networking (and was in this sense even different to Ryze²⁸) in that it forged a new business assemblage altogether, hinging on an emerging dynamic of trusted business interaction as well as a new hierarchy-becoming of network leadership qua trust and self-managed discipline of friendship-generation by members. It showed first signs of centralisation and structure in form of a pyramid-shaped hierarchy of reputation, which suggested the emergence of a new type of business management qua network.

6.3 New potentialities for knowledge emergence in networks

In his reading of contemporary society as a highly technologically mediated network society, Castells (1996) suggests that in informational networks a culture of 'real virtuality' emerges. This is a reality in which 'appearances are not just on the screen through which experience is communicated, but they become the experience' (Castells, 1996, p. 373). The findings presented here show how two particular post dotcom-crash networks *became* such real virtualities. In these networks, real and virtual became each

²⁸ While in Ryze there was also managed networking in terms of disciplining network members via the desire for more contacts and the new ordering of trust through the list of friends, in Ecademy managed networking was far more machinic and centralised. In Ecademy a pyramid structure was emerging as well as new ways of charging people for networking services. By contrast, in Ryze neither was developing. In Ryze, the only source of income for the founder (who was hardly visible) were optional subscription fees.

other, enmeshed friendship with elements of online technology in new ways, forging newly ordered phenomena of trust and managed network business, which - crucially - were significant in the experience of entrepreneurs, even though they might not have had directly related to existent concepts of networking at the time.

This experience of real virtuality of networks created potentialities for the emergence of new concepts. This was evident in two ways. First, I tapped into a universe of lists of friends, online contacts, networking events, participants lists and network announcements that were all 'not exactly' phenomena of merely virtual communication, but rather created real conditions of fluidity and ambiguity that enabled entrepreneurs in these networks to overcome (relate less to) existent concepts of business interaction and business relations. Entrepreneurs' social life was no longer mainly connected via a local community of businesses, but came via the list of friends and network messages; via lines of online networking technology that got intermingled in new ways with 'real' friendship. Similarly, reputation and business credibility were no longer merely hinging on face-to-face relations. In short, the becomings of the personal profile page crystallised in a new double-capture of affect and Internet – which forged new potentialities for entrepreneurs to enhance their business reputation through online technology.

Secondly, the network chairman was not exactly a phenomenon of 'leadership' in a conventional sense. It was not a personified notion of leadership, such as leadership by committee, formal top-down control, formal hierarchy or decisive action. It was not a leadership that imposed a vision or plan of a leader on networkers. Rather, the network leadership found here was a kind of 'leading in-between' and 'from within' that was distributed across all personal profile pages and was upheld through the amplification of the desire for more contacts. 'Friendship' with the network chairman had arisen as a trusted route to business reputation and, in turn, this route assembled a new condition for successful business: demand for more contacts. A humming business-machine of networking was emerging in Ecademy which successfully sold networking to its members. It was fuelled by the desire for contacts, the disciplined (from within) behaviour of members 'making friends online' and the figurehead of the network chairman who became an ever greater platform for the commercial inclusion of

additional entrepreneurs into this machine. Ecademy arose as a novel hierarchy-becoming of a managed network business that successfully sold itself to entrepreneurs.

The emergence of these new potentialities shows how new conditions for creation and movement emerged not merely through tensions between concepts, but rather through the assemblage of previously unrelated phenomena. Both the new route to trust and reputation and the new notion of network leadership and managed network business have emerged through the combination of elements that had previously not been dialectically related. Online communication and online networking had not been used in the business domain as a means for 'real' business reputation and they had also not been linked to face-to-face networking. As is evident in the analyses of entrepreneurs' discourses from interviews, networking was either associated with online networking or with informal, offline networking and both were taken to be separate concepts. Similarly, traditional networking communities on a face-to-face level had not been used to sell networking before.

In sum, the present Deleuzian analysis has been invaluable to surface the creative forces of e-business entrepreneurships and to discover becomings in and around personal profile pages and the network chairman; it has enabled a characterization of networks in their rhizomic and multiple nature as emergent becomings. What Deleuze has called individuation by haecceity has proven to be useful to show how the becoming-other of networks is made up of lines; lines that cannot be confined within the rigid limits of fixed beginnings, roots or ends and that carries people across the thresholds of previous concepts.

This underlines my critique in Chapter Three of the very ubiquity and endless utility of the dialectic idea as a way to address emergent dynamics. I suggested that its appeal may conceal moments and movements where more unexpected effects are taking place. And indeed, in the present case, there were new twists in the dynamics of two particular types of post dotcom-crash networks, where a Deleuzo-Guattarian reading has aided an understanding of the spaces for further explication, of the potentialities of networking (rather than their socio-historic evolution), which would not have been possible in a dialectic mode of interpreting.

The present analysis was only possible by keeping the analysis itself 'in-between' – bypassing what Deleuze (1987) calls the 'grille' of invested dialectic dyads (such as online versus offline or business versus private life) when interpreting. Through thinking less in terms of similarities, agreements or oppositions, but rather in terms of movements, flows, lines, connections and individuations, networking could be explored in a different logic that re-focused attention to new combinations of previously unrelated aspects, to the creation of novelty and the machine-becoming of new combinations. This mode of engaging with data did not dictate the story that emerges, and indeed, that has not been the objective. Rather, in following the paths that the Deleuzian philosophy suggests, this chapter has promoted an exploration in the spirit of rhizomic connections in an attempt to estrange the conventional and taken-for-granted, while opening the interpretation up to the discovery of new emergent concepts. This aids our analytical possibilities of discovering provisional connections between disparate patterns as well as to distinguish creative and emergent dynamics from dynamics that might merely reproduce and re-create existing concepts. A rhizomic analysis gives us a handle to describe the microcosm of becomings, which might not be realised conceptually at the time, but which bears first individuations in experience that allow us to 'see' newly emergent conditions for new concepts.

6.4 Conclusions

As we have seen in the previous chapter in the dialectic analysis, the notion of business networking emerged in interview discourses as mainly significant in its difference in relation to pre-existent concepts – particularly, in comparison to networking in dotcom boom entrepreneurship. Through differentiating a new kind of dotcom-crash aftermath networking from existent concepts of networking, entrepreneurs had found ways to come to terms with their shared history and thus, had begun to face the challenge of being associated with the negative image of business practices during the dotcom boom.

From the perspective of rhizomic dynamics taken in this chapter, however, it becomes clear that networking was more than just a phenomenon of conceptual change in respondents' discourse: networking was a highly significant experience for entrepreneurs that was not merely important in its symbolism of collective-ness against

the dotcom boom but rather also because networking created new potentialities for the emergence of new concepts and for existent concepts to become less relevant. Specifically, networking was highly significant for entrepreneurs in that its experience connected trust and online technologies in new ways and thereby allowed entrepreneurs to embark on new routes to business reputation, leadership and network business-management. Hence, the Deleuzian perspective allowed me to surface the microcosm of the creative forces of movement inherent to the experience of networking: in social business networking, conditions of fluidity and ambiguity had emerged in new assemblages, machines and desire, which provided a generative frame for the emergence of new concepts – in short, it provided the conditions for the emergence of new knowledge.

These findings pose new questions. If networking was a realm of the creation of potential new concepts, it can be expected that individuations like the network chairman and the networking business-machine would manifest themselves in the disruption of existing language-codes, forging new dialectic patterns when emerging as new concepts. In fact, as I have argued in Chapter Three, dialectic becoming can not only be expected to be variously disrupted by these becomings, but rhizomic dynamics can also be expected to be variously cut by dialectics, in that human sense-making cuts into rhizomic movement enabling people to speak and make sense about it. This would enable the de-familiarisation of existent concepts, paving the way for the emergence of new concepts.

In the present case, given that networking emerged as highly significant in both emergent dynamics of adaptation and opening, and given the extent to which the individuations of the personal profile page and the network chairman had already intensified and become machinic, it was to be expected that the becoming in and around networks had, in this milieu, contributed to the articulation of new vocabulary to describe these and thus to the emergence of new discourse. This is what I set out to explore with the focus group. As described in the next chapter, the focus group was designed to hone in specifically on the discourse amongst entrepreneurs about the phenomenon of networking. Particularly, I sought to investigate disruptions of dominant concepts about networking that had been found in the interviews.

Overview of Chapter Seven

In Chapter Seven, I report the analysis of the focus group data. The results show how a new concept of network management was emerging which disrupted the social representation of network participation and with that, the salience of the opposition of networking during the dotcom boom. Networking as a measure of business management was a significant experience that had begun to affect discourse - respondents were problematising and experimenting with new ways to use networking as a service offering and competitive advantage over larger firms.

7 DISRUPTIONS OF EVALUATIVE BOUNDARIES: CRACKS IN THE DIALECTIC SYSTEM

'It must not be said that language deforms a reality which is pre-existing or of another nature. Language is first, it had invented the dualism. ... We must pass through .. dualisms because they are in language, it's not a question of getting rid of them, but we must fight against language, invent stammering, not in-order to get back to pre-linguistic pseudo-reality, but to trace a vocal or written line which will make language flow between these dualisms, and which will define a *minority usage of language ...*' (Deleuze & Parnet, 1987 , p. 34, emphasis added)

This chapter reports the third analysis that is presented in this thesis: it outlines findings on the de-familiarisation of dominant themata from the analysis of the focus group. The question guiding this chapter is: which disruptions of dominant dialectics about networking were salient in the focus group and how do they stand in relation to the rhizomic becomings of networking? This analysis builds on the findings from the previous two analyses that highlighted networking as a significant phenomenon both in the discourse and in the experience of entrepreneurs.

Recall the research aim of this study: by exploring emergent knowledge dynamics from both a Deleuzian and a dialectic perspective, I seek to highlight encounters between the two in order to account for new conditions of innovation. The previous two analyses have shown how first, how a new meaning-system and symbolic boundary around e-business entrepreneurship in opposition to dotcom entrepreneurship had emerged, and how second, novel combinations of affect and technology assembled in new potentialities for new concepts in networks. While I have looked at rhizomic becomings and their individuations in experience in the previous chapter, this third analysis is to explore points of rupture in the ways in which central themata about networking were drawn on and to look at how these confirmed or disconfirmed the significance of the rhizomic becomings found.

For this, I turn again to a thematic analysis of discourse; however, here, language is interpreted in a Deleuzian sense – it is posited as an experiential force that can

potentially break down dialectic schemata of certainty and representations. Concretely, rather than interpreting for dialectic relations amongst themata, I looked for instances of deviation, of indifference and ambivalence; moments where language flowed in-between central dyadic oppositions. For this, nonetheless, I had to still, first of all, surface central themata. Thus, I repeated a thematic analysis in a Deleuzian sense: I interpreted themata for de-familiarisation.

Respondents' discussion was framed by the two themata *trust-distrust* and *effective-ineffective*. The first term in each thema is the privileged pole. Overall, focus group respondents represented networking positively. Networking was seen as a business-enhancing activity as long as it supported trust and long-term business benefit. On the one hand, the discussion about networking was found to be supportive of the main themata in the interviews; both themata continued the dominant opposition of the dotcom boom - specifically, in this case the opposition of dotcom approaches to networking. Yet, on the other hand, the debate was intersected by new vocabulary and deviated at times from the dominant meaning-system. Particularly, in discussion that was framed by the effective-ineffective thema, there were instances where the evaluative boundary of the new concept of e-business entrepreneurship (as collective, strategic and long-term business in opposition to the dotcom boom) was crossed and where slight deviations had begun to sneak in. When respondents discussed new ideas about effective networking and problematised experiences of networking as a business management tool, they were gradually breaking away the dominant discourse and system of representation about networking.

The two core themata are schematised in image 12 below. The boxes in image 12 show the dialectic poles of the two themata, which are linked, through two lines, to form evaluative dimensions (themata). The two evaluative dimensions form the four positions that framed the focus group discussion (trust-distrust, effective-ineffective) and that discussants used to evaluate networking. Grey areas indicate the positive evaluation of poles, white boxes indicate negative evaluation. The white gap within the effective pole indicates a point of rupture within the effective-ineffective thema. The themes listed in each pole do not reflect the data corpus in its entirety.

<p>Trust Informal networking events Online networking More contacts & better judgement of people</p>		<p>Distrust Formal networking in large corporates Breakfast meeting: don't get to know people Aggressive dotcom etiquette</p>
<p>Effective Sharing knowledge Learn & obtain experience Job-search</p> <hr style="border: 1px solid white;"/> <p>Networking as profitable service Less rigid business New business possibilities</p>		<p>Ineffective No business value The more networking, the less business Pressure/ exclusion</p>

Image 12: Themata underpinning the focus-group debate about networking

In what follows, I outline the dynamics of de-familiarisation running in-between these two themata in detail. Appendix 14 shows the final coding frame. As in the interview analysis, the themes from the focus group debate were analysed for underlying, deep-seated themata. However, rather than interpreting these themata for dynamics of adaptation and familiarisation, here the interpretation was focused on highlighting deviations, discontinuities and disruptions of central themata. Particularly, I looked for what Deleuze & Parnet call 'minority usage of language': I looked for respondents elaborating new ideas, using new vocabulary, creating new names – in short, I looked for new meaning-contents that did not relate (dialectically) to central concepts about networking.

7.1 Trust versus distrust

The trust-distrust thema framed debate about the cultural difference between the format of networking in e-business entrepreneurship in the dotcom-crash aftermath and networking formats of other business arenas, such as the dotcom boom, larger business or traditional entrepreneurship. Specifically, respondents' concern was to differentiate networking in the dotcom-crash aftermath as a new and more trustworthy networking

culture against the dotcom boom. As in the interviews, the thema trust-distrust served to uphold the dominant opposition of the negative dotcom image: respondents negotiated a morally 'better' version of networking events by contrasting them to the 'arrogant' self-interested style of informal dotcom events. 'Trustworthy', 'honest' and 'true' are examples for associations on the privileged pole of trust, 'dishonest', 'cheating' and 'look over your shoulder' are examples for evaluations of the pole of distrust.

The debate framed by the trust-distrust thema can be grouped into two themes: 'informal networking events' and 'online networking'. Informal networking events were represented as more trustworthy in opposition to dotcom events as well as the formal style of networking in large corporates. In addition, online networking was evaluated as trustworthy in opposition to face-to-face events of more traditional networking formats such as business referral networking.

7.1.1 Trusted networking versus dotcom events and corporate networking

The first main theme framed by trust-distrust was the question of how informal networking events in the dotcom-crash aftermath were distinct and different to dotcom networking and other traditional, more formal networking formats. Like in the interviews, the similarity with dotcom approaches was the greatest challenge to entrepreneurs. Hence, when entrepreneurs were debating the topic of informal networking events, one of the dominant themes was the differentiation of events in the dotcom-crash aftermath from dotcom boom networking events.

The theme of 'informal networking events' was specifically salient in the focus group debate as one day before the focus group, such an event had taken place: a Christmas party for all small-business networks in London. It was an open evening event in a bar in London's Soho that was organised co-operatively by Ecademy, Ryze and other similar social business networks in the London area. Four of the focus group respondents had attended. Specifically, the format of the event - open, unstructured and informal - created much debate as it was very similar to dotcom networking events.

The thema of trust-distrust served respondents here to re-negotiate informal networking in the dotcom-crash aftermath as 'different' to that during the dotcom

boom. In the following exchange between Mark, a research officer and editor of an online news service, Elizabeth, a Co-founder of an advertising design firm and Derek, a CEO of an online research service, Derek uses the Christmas event (called the Redside) as an example in a discussion that compared networking events in the dotcom-crash aftermath with dotcom networking events.

Mark: "one of the best ones I went to ... was really like ...I left my firm... and like all the people I knew lost jobs, companies closed down whatever, you know... there were three sort of parties ... we all met there, hadn't seen for months and everyone was drunk ... it was so much fun, everyone was honest to everyone else about what they've gone through ... over the last 3 years and you know all the hype they had pushed out, all the hype they'd received, who sort of cheated them, who they cheated, it was a real catharsis. And after that everyone started again ... you know, okay we gotta get up our systems, it kind of went back to business as usual after that."

Elizabeth: "Didn't they have pink slip parties in the States or in San Francisco especially where people had different coloured spots on their T-shirts. I just got fired, I am looking for a job, I can employ you or something. I think it was really a good idea..."

Mark: "This is a new branch... networking events as group therapy so to speak (laughs)."

Derek: "I do wonder whether there.... I went to the Mais [e-business network] thing... a couple of weeks ago and that to me did feel more um, I don't know whether it's the organisers ... that one felt more like one of those kind of schmooze fest things where people are looking over your shoulder kind of thing. Whereas others, you know, the Academy to ...the Redside [Christmas event]... last night weren't like that. I think that's true and you feel that."²⁹

Mark and Elizabeth mainly associate informal networking events with dotcom events such as 'First Tuesday events' and 'pink slip parties'. First Tuesday events stand for events on the first Tuesday of a month where dotcom entrepreneurs mingled with potential investors. Pink slip parties emerged shortly after the dotcom crash and served entrepreneurs who had gone bankrupt to meet potential new employers or other entrepreneurs with whom potential new ventures could be started. Both are used as strong symbols for the negatively evaluated 'hype' of aggressive networking during the dotcom boom.

Specifically Derek's account illustrates how entrepreneurs were differentiating networking events: informal networking after the dotcom crash was positioned on the trust pole and evaluated it as positive. Derek differentiates the Christmas event as a positive, 'true' form of networking on the basis of the thema trust-distrust. Events like the Christmas party are deemed as a 'honest' form of networking, while informal dotcom events were opposed as events 'where people are looking over your shoulder'.

²⁹ In all excerpts from the discussion, names of respondents and events have been changed.

Another way in which informal networking events in the dotcom-crash aftermath were evaluated as more trustworthy than dotcom networking was by positioning its opposite - 'formal networking' – on the distrust pole. The main symbol for formal networking used here was networking in large corporate firms. Discussants opposed rigid and structured formats of formal networking as not trustworthy. The following exchange evolved after one respondent had posed the question whether networking in e-business entrepreneurship was special. Anne is Director of an online association management firm and Isaac is Director of an online research service.

Derek: ". I don't think necessarily ... it's any business you know. It might ... more sort of suited to sort of smaller businesses cause they ... do want to meet ... as part of belonging to things but it's um, not um, I think, um, I don't know, it's certainly ...a lot of communities are just user based... the big companies, interestingly they are the ones that never actually post themselves, I think it is ... I mean, particularly .. in terms of the consulting side...the big 4 type... and we have got loads of people from Beccenture ... in our forums. They never contribute. And I think that"

Anne: (laughs)

Derek: "I think that cause, you know, they are those big corporations where they've got ... more ... that type of ... ,you know, you get an email, you know, that long - and that's the interesting and different kind of cultural thing and they're just petrified when they post anything or get ... so there is for that reason ... big companies are kind of interested but ... their employers they themselves ... people feel they don't have the authority to get involved."

Isaac: "Especially the big consultancies ... cause you are not sure who ...I mean the amount of knowledge that is tugged away in smaller groups ...my experience is that they are tugged away in a big glass office building in the city and the ... quality of some of the projects that are being delivered is not always that good."

Anne: "I do think maybe they are not into the spirit of networking, which is to give and take."

Isaac: "They are much more about exclusivity, aren't they? ..."

The topic here is whether the size of the business and the degree of the formality of the business indicates a 'spirit of networking'. With 'spirit of networking' Anne refers to a virtuous form of networking that is special in small businesses. The opposition is between people, working in a large corporation who 'don't have the authority to get involved', 'who never contribute' and whose projects are 'not that good' and 'smaller businesses' who 'do want to meet'; between formal networking in large businesses and a sincere culture of networking in e-business entrepreneurship. The former is associated as 'exclusive' and the latter as 'give and take', suggesting a much more close and trusting culture of networking in smaller businesses. This opposition was taken-for-granted; these discussants are using the trust-distrust thema to re-negotiate the new

form of informal, open collective-ness after the dotcom crash as 'better' than networking in larger non-entrepreneurial firms.

7.1.2 Trust in online interaction versus trust in face-to-face networking

The second theme framed by the trust-distrust theme was online networking. In a similar vein as above, the theme of trust-distrust served the opposition of dotcom entrepreneurship. Dotcom networking was strongly attributed to online networks that had originated in the context of the Silicon Valley in the United States at the height of the dotcom boom during the second half of the 1990s. Respondents evaluated the latter as negative by underscoring its culture of distrust – the particular theme being whether or not it depends on physical co-presence that one can develop trust. For instance, as regards online networking, discussants were particularly concerned about the issue of judging other entrepreneurs. The following exchange exemplifies this.

Derek: "some ... people ...they are opening up a little bit... and sometimes you can tell from the company name... and I guess what's interesting is ... now you can see age, name and gender and everything which is actually... I think it is quite different cause you do make judgements of people ... you can't help it you'll make some sort of judgement and I think that that's quite interesting and quite liberating particularly if some people may be feeling strange or intimidated in the real world... and are real demons of communication on the online thing. But it's interesting you judge people sort of on the online thing ... on what they say on the whole... and how you perceive that they know what they're talking about, what they say."

Isaac: "I can say that as well actually, I have people who are incredibly confident in social situation ... but very reticent to contribute to an email forum."

Anne: "I just find it very bizarre. ... that you make business with people... you've never met before.. "

Isaac: "Yes, ... I mean, or I haven't met them over a long period of time..."

Anne: "Yes, sure but I think even then I think um, I'll try and meet them personally before..."

Isaac: "Well, some of them don't live in this country. So..."

Anne: "Okay..."

Isaac: "It also depends on the kind of business you get ... you obviously... the other thing which I actually thought about people... wanting to... you know, I think a lot of people especially since the ... last year... you know, having to work in small groups, having to rebuild their websites... having been laid off and just generally ... and use agencies just generally ... that's why I think there has been... as much focus on digital networks which can be ... which is another way of ... instead of sitting at home thinking I like to work in that sector... you know... desperately wanted to be a Web-designer... and then by joining a group ... getting contacts etc..."

Here the topic is the extent to which one actually meets other entrepreneurs when networking online. While Isaac and Derek agree on the fact that online networking can help to better 'judge people', Anne counters their views with the absence of 'face-to-face' contact. Anne's argument against 'business with people you never met' highlights that the idea of face-to-face as an important theme on the trust pole.

Isaac tries to diffuse Anne's challenge by creating a link to the effective pole – he argues that through online networking new business value can be created. In highlighting that through online networking he is able to meet people 'that one would otherwise not have met' and in pointing to the fact there are more possibilities for new contacts and for new business through online networking, he is able to get Anne's agreement. Nevertheless, Isaac partly reverts to the dominant meaning of online interaction by linking it to the dotcom context in the last statement, locating online networking in the context of a post-bankruptcy job search.

Online networking was also further strengthened in its positive evaluation as trustworthy through the fact that at various points in the discussion, the value of face-to-face networking in traditional business referral networks such as breakfast networks was estranged. Concretely, traditional networking formats were negatively evaluated on the trust-distrust theme, even though they were strongly associated with 'face-to-face networking'. Consider the following statement by Ana, a founder of a web-design firm, about the traditional networking format of breakfast networking. Breakfast networking events existed traditionally in the small business sector as local community networks and mostly served business referrals.

Ana: "...it is essential; what I've noticed so far is...so ... like ... when I meet once a month for a breakfast meeting and then you meet once a week in a weekly meeting and it's social events and in that case I think it's always easy to meet people... but I don't think it creates so much ... you don't get the chance to actually get to know the people"

Here Ana problematises breakfast networking by arguing that despite one meets entrepreneurs face-to-face, one actually does not 'get to know' each other. Ana questions the positive value of 'face-to-face' and re-constructs it negatively by situating it on the distrust pole, attributing it as a superficial form of interaction. Ana's account indicates that even though there was overall a strong value of the importance of meeting business contacts 'face-to-face' in order to establish trust, this was nevertheless seen critically and not all face-to-face networking events were, in this respect, seen as

a guarantee to establish trust. This underscores the significance of the findings from the previous chapter of the new assemblage of trust in the particular combination of real and virtual in Ecademy and Ryze. If entrepreneurs were this sceptical and nevertheless trust was functioning well in Ecademy and Ryze, this suggests that Ecademy and Ryze are indeed very special and different (in a Deleuzian sense) to the extent that they were successful in generating a capacity to create trust that other networking formats lack.

In this respect, more radically, the notion of 'face-to-face' contact was even further degraded as not necessarily a pre-condition for trustworthy business contacts. It was not only Isaac who suggested new ways of how online networking could provide trust. Consider the following account by Francesco, Director of a design and architecture firm – he advocates a view that in some cases better contacts are made precisely because one does not meet people face-to-face.

Francesco: "But in this now it's much more...human... in a sense in a strange way cause you can't see them ... it's only quite a few times that you get the kind of marketing buzz ...and you get crucified when you do that... you just don't get away with that and ... it has to be more honest and open and I think that that's quite refreshing and a quite different way of ...building a profile of yourself and it does work. I mean, I ... have done certain kinds of business with people where I came across people ... online, but hat said ...that's usually the kind of business where you don't really need to meet people... I mean...somebody sells in-house systems in our agencies...you pay for the idea and there is no real need for any of the parties to meet and ... I have recently read some books on partnership... and I actually met ...a chap... the sort of American Internet Marketing Guru and ... I think a lot of the online thing is to kind of qualify ...you are kind of building an awareness about business people about things but most business though certainly in consulting that I've done is always only ever,... offline... you can't, you are buying the person... you are not able to do it... online is basically a way to sort of you know... people can show their business and you get to know them... so it is a sort of marketing type function I guess in that sense."

Here Francesco singles out online interaction as enabling a better way of interrelating amongst entrepreneurs. He argues that by 'not seeing people', and thus, through the absence of face-to-face contact, a better judgement of people is possible. Set against the background of the dotcom boom during which online networking mainly emerged, and given the positive traditional value of face-to-face, this attribution Francesco makes is quite radical. Also Ana's evaluation of face-to-face as negative is striking in this respect, as earlier in the discussion she had argued for its positive value.

Thus, while overall the debate centres on a reinforcement of the tension between dotcom-crash aftermath and dotcom boom, these latter examples show deviations from

the way in which networking is represented as trustworthy. There is a dominating and strong representation of face-to-face networking as trustworthy which is illustrated by Anne's accounts as well as by the way in which Isaac's narrative is quickly drawn back into the dominant representation of online interaction as distrustful. The fact, however, that Ana uses an example of a traditional breakfast networking event (rather than a dotcom example) to oppose face-to-face networking and Francesco and Isaac both come to think of advantages of online networking for trustworthy contacts over face-to-face meetings, suggests that the dominant representation of face-to-face networking as trustworthy (in opposition to the dotcom format of networking) has become less relevant.

In sum, the trust-distrust thema reinforced the collective-individual thema from the interviews – further elevating the strong focus on morality and common virtues of e-business entrepreneurship found in the interviews: respondents represented networking as a symbol for the new, virtuous collective-ness of e-business entrepreneurship. They were keen to stress that both informal networking events and online networking were modern and trustworthy ways to interact with other entrepreneurs. Yet, while overall the trust-distrust thema in the debate of online networking and informal networking events served respondents to distance themselves further from the dotcom image, there were also deviations from this dominant tension. Face-to-face contact with others had become less significant in the representation of networking as trustworthy and online networking was stressed as trustworthy embedded in a new discourse about the effective-ness of online interaction. This deviation becomes clearer if we look at the second, interrelated thema: effective-ineffective.

7.2 Effective versus ineffective

The effective-ineffective thema framed discussion about the question whether and how networking contributed to business value. Two overall themes can be distinguished: on the one hand entrepreneurs discussed business value through participating in networking, and on the other hand they articulated new ideas about how to generate business value through managing a network. Examples for themes on the positive pole are 'learning and obtaining experience', 'knowledge sharing', 'job search', 'networking

as profitable service' and 'new business possibilities'; on the negative pole associations were themes like 'the more networking, less business' and 'no business value'.

It was here, in the evaluation of networking as effective, that disruptions of the dominant meaning-system of e-business entrepreneurship became more clearly visible: while there were themes about the business value from a point of view of participating in networks that continued the long-term–short-term thema, there were moments of intensity that let the dynamics of familiarisation of e-business entrepreneurship stutter and become de-rooted. Specifically, this was the case when three of the discussants advocated a perspective on networking as strategic business measure. Respondents were problematising and articulating their experiences with new ways of managing networks: not only did they advocate a different perspective (that of network managers rather than participants), but also were they negotiating a new concept of networking as a chargeable and profitable service as well as a strategic device of business management. In this process, the dominance of the tension between aftermath and dotcom networking was discontinued.

In what follows, I outline first, those contents of the debate framed by the effective-ineffective thema that upheld the dialectic against the dotcom boom; second, I show instances where the dialectic of e-business entrepreneurship as represented against the dotcom boom was disrupted and discontinued.

7.2.1 Networking as long-term investment versus short-term benefits

The first theme about networking as producing business value was one that reinforced the long-term–short-term thema from the interviews. Entrepreneurs discussed the benefits of participating in 'new aftermath-networks' such as Ecademy or Ryze. Overall, they saw networking as long-term investment into their business rather than something that paid off in the short-term. The majority of discussants agreed that there was no gain from networking in the short-term but rather elevated it as most effective for business in the long-term. For instance, discussants pointed out that networking allowed them to learn about e-business, obtain new contacts and gain initial experience through co-operating with other entrepreneurs in projects. Others pointed out that

networking allowed knowledge sharing and the filtering of information. Consider the following account by Isaac:

Isaac: "there is so much information from everywhere that it's almost impossible and you can find people through ... every search engine and you have thousands of links come back and I mean, I think, and the network group is kind of a filter of the best sources of knowledge... I am a specialist and ... lists there are also ... loads... of specialist lists... there's only a few sites where there's a choice... of bits of information that I can define... "

In the following exchange between Isaac and Mark, another two such long-term business contributions are discussed:

Isaac: "So another angle... that's the market angle. There's an insurance angle aswell. I mean, particularly if you are a small business and you get stuck on contract law or employment law or ... dodgy suppliers or clients and initially ... to back up things with a dozen people that have been through that... that have been in exactly the same position, which can be somewhat ... re-ensuring. And this is a strong reason for doing that as well."

Moderator: "And have you experienced that?"

Isaac: "Oh yeah! In all sorts of situations ... help that ... is legal ... or the client isn't paying ... and that has been interesting to watch. I don't know if that is that important in other business area ."

Mark: "There's a sort of an ethical reputational lever ... especially in a sort of popular group like Isaac's, you know someone who gets a bad name there can probably pack up and go home, you know."

Isaac: "I mean some people had reputations ... that are merely due to what they have done on the list... but it is really quite,...you can be quite surprised, for instance who talks a lot ... and talking very ... light-heartedly is often the most formal ... and works in central London, and somebody else is gonna be formal ... and is working from home."

Here Mark and Isaac construct networking as effective for business by pointing out the long-term benefit of support from other network members. This confirms the positive evaluation of long-term collective-ness and a culture of mutual support from the interviews: business support by fellow networkers is evaluated as positive by situating it on the long-term pole. However, the notion that Mark advocates introduces new vocabulary: the notion of a 'reputational lever' does not relate to the themes found in the interviews, but rather resembles the becoming of 'reputation through the list of friends' that was found in the Deleuzian analysis.

Later in the discussion, the notion of reputation through online interaction recurred, and it was again advocated by Mark. This time, Mark used it in a different context and from a different perspective. Consider the following exchange between Isaac and Mark.

Mark: " ... you know just sort of building the community is a very delicate thing and if you just make one wrong - move you know, CC everyone in the list once. That's it! They are never back again. And it is the same with that. As soon as one person goes in and just puts a press release on or whatever or that is spinned that is ... the reputation won't be rebuilt again.

Isaac: The thing about the software is again it's not quite the product where everything works ... the software has to work... you don't want it to crash... that is why it works so well for that... that's why even with 10 years of development it won't be as it is supposed to ,... but it'll be alright as soon as you let people ...

Mark: It's really embarrassing... you almost feel the pain in reading someone's posting."

Here the topic is the importance of the software when 'building online communities' as well as the potential risks for the reputation of entrepreneurs. The perspective taken here is no longer one of participants: Mark and Isaac both advocate the point of view of network managers. Also, the topic is not related to the dominant opposition of meanings of dotcom entrepreneurship; rather, it is rooted in their experience of managing message boards and community features on the web-sites of their firms.

When this perspective of managing networks first occurred in the debate, it was not picked up on by other discussants. Also in the further discussion, it somehow ran through the debate, intersected it but did not dialectically relate to the dominant debate mediated by the opposition of the dotcom boom. Moreover, it was only advocated by the three respondents: Derek, Isaac and Mark.

While nearly everyone in the focus group had experienced traditional business referral networks (such as breakfast networking), dotcom boom-networks (such as First Tuesday events) and aftermath-networks (such as Ecademy and Ryze) from a perspective of participants, Derek, Isaac and Mark had experience in 'managing networking'. They had integrated new 'community management tools' into the Web-sites of their firms. Derek, for instance, the Director of an e-business consultancy firm that provides UK e-business professionals with access to information and advice on online marketing and e-business, had devised several online new online user forums for registered users that allowed users to post and exchange content through his site. His firm had more than 18,000 registered users and over 80 corporate members. Normally, the firm charged for access to its premium content via subscriptions, both individual and corporate. It At the time of the study, however, Derek was trying out

new ways in which he could make use of online exchange forums for his business. He had begun to experiment with new features of online interaction as a way to manage and generate new demand for subscriptions. Similarly, Mark and Isaac had integrated message-board and discussion group features on their firms' Web-sites and were testing new ways in which this could benefit their business.

While these three respondents were elaborating on their experiences with these new network management features, there was, however, no exchange about this theme with the other discussants. Accounts would either only be responded to amongst the three or there would be laughter, astonishment or no response at all from the others. This phenomenon became clearer at a later stage in the debate when Derek advocated the notion of 'networking as a strategic business measure'. It was here that the dominant dialectic about networking was disrupted more forcefully.

7.2.2 Networking as strategic business measure

The second theme framed by the effective-ineffective thema was the notion of networking as strategic business measure. It was here that disruptions of the dominant representation of networking became more visible. There were several instances in the discussion where the notion of 'networking as a strategic business measure' was thematised in relation to ways in which to produce business value. This theme was advocated by three discussants (Derek, Isaac and Mark) who took a different perspective: they were evaluating networking from the perspective of 'network managers' rather than participants in networks. In addition, their discourse did not relate to the way in which the other participants represented networking on the effective-ineffective thema, which was mainly the viewpoint on long-term benefits of using networks. Consider the following excerpt. Here Derek introduces the notion of networking as a strategic business measure for the first time.

Derek: "The value I think will become increasingly niche and I think there is a limit to the number ... probably ... because the communities that the people will network through will become smaller and smaller but become more and more relevant and it might be um, I think it is a good example of the avatars ...and that kind of things, exactly of how I would see it of where it is gonna go that you want to find 100 people that are really relevant to you ... and are exponentially more relevant than meeting 1 million of people who aren't and so ... it starts ... to have this pyramid effect where you start to ... where we see it is in our forums. We have forums ... the user can't see it really we basically cream off the sort of the best people or the people most interested in ..."

Elizabeth: "Who does that?"

Derek: "I do."

(everyone laughs)

Derek: "Yeah I mean just on the profile you can just allow, you can say well this person can see more inside or whatever it is or we invite people to events... so... to pick people up and say we wanna talk to you and there you go ... there gonna get value out of it as well ... cause it's a small kind of focused thing. Um, I don't know we will see what happens on the whole scene... I think that's gonna be a tricky one... in e-biz . I just can't see everyone ... have a relationship with ... Nike online ... and that part of all these different communities is ... staying who they are. And habbohotels ... will set a context for ... seeing certain brands , and brands... and I think there is certainly gonna be an explosion in communication... modes... multi-media and all that sort of stuff. Chat and bla bla bla that will certainly happen but those communities are based on real world friends and contacts and ... I think the most interesting are is the business ... particularly cause for the technology ... things like Web services... and things coming on."

Derek introduces new vocabulary such as 'picking up people', 'business interest groups', 'pyramid effect', 'habbohotels' and 'creaming off the best people'. He also advocates a new notion of allowing different users different levels of access to data. Specifically the idea of 'creaming off the best people' was new to some of the other respondents and Elizabeth's reaction as well as the group's attempt to diffuse this notion with laughter underline this. Derek's perspective and experience was not picked up by the other discussants – after Derek's second account, I had to probe to re-animate the discussion.

Derek problematises networking in a new context: that of general business management. While up until this point in the discussion, the history of dotcom entrepreneurship stood in the foreground and the main concern was to re-negotiate networks as different to networks in dotcom entrepreneurship; by contrast, here, this opposition was irrelevant. Rather, Derek's concern was to actualise his experience of 'creaming off people' in networks and to problematise networking as a strategic success factor of e-business entrepreneurship that might be relevant as a competitive advantage in a market of large corporates. This is also illustrated in the following account by

Derek where he proposes the idea of 'managed networking services' as a professional business service:

Derek: "...there is a growing market for providing sort of networking services as well. Not just the training courses, more around ... a certain community management online you know which is... that standardised... that is much more of interest now so there are whole organisations who do that on behalf of big corporates. They basically run communities and that's everything from the software platform through to the people skills which is what you are saying, it's quite specialist skills... to be able to manage a community. "

Derek's language is radically different to the discourse that other respondents used when voicing representations of network participation. His language is one of network management rather than network participation and his vocabulary indicates a way of experiencing networking that does not resonate with the experience of the majority of respondents, as they do not share this language. Words like 'pyramid effect', 'habbohotels'³⁰, and 'network relationship management' (see the subsequent quotation below) specifically point to the fact that he was coming to terms with of new ways of organising networking that resembled elements of the centralised network business-machine and hierarchy-becoming of Ecademy. The fact that he talks about a 'pyramid effect', and 'habbohotels', for instance, not only communicatively validates the interpretation of Ecademy in Chapter Six, but also indicates a notion of networking that is similarly centralised around network managers.

Habbohotel.com, for instance, is a virtual chat room that looks at first sight very open and unstructured, but, in fact, imposes a set of pre-defined formats of interaction on users. Once one registers, one 'becomes' a Habbo and one can walk, dance, eat, drink and chat in the cafes, restaurants, swimming pools and games rooms of the Habbo hotel. However, in so doing, one's virtual Habbo identity is in constant visible comparison with other Habbos, who might have more or less interactions and friends. In order to become more popular, the Web-site offers its users regularly to purchase 'habbo coins' that can be used to decorate and furnish their personal hotel rooms. If users have their own room, they can host their own party and this might help to gain more friends.

³⁰ Habbohotel.com is a virtual hotel designed for 13 to 18 year olds in the US. Registered users are assigned avatars in form of Habbo characters via which they can move around the hotel and can make new friends. There are various online interaction tools, such as a messenger, an email system, a chatroom, virtual rooms to socialise with friends or to meet new people. For advanced functions of connecting with other habbos, members have to purchase habbo coins online.

The similarity with Ecademy is striking; specifically, in that it also builds on a disciplined behaviour of networkers that is not steered by formal control but rather by the more subtle generation of desire for 'having many friends' through aligning people's spirit (Rose, 1989) with the business-machine of the network (in this case of selling habbo coins). However, at the same time, Habbo hotel is a more pre-structured frame of interaction than Ecademy – there are only certain components (rooms, items of clothing, furniture, avatars) that can be combined by users. Unlike Ecademy, users cannot introduce new elements that are not pre-defined by the Web-site. Also, there is no link to the 'real world', meaning Habbos meet only in the virtual hotel. This makes the Habbo hotel less open than Ecademy in terms of its potential becomings.

Thus, even though Derek's discourse resembles elements of the business-becoming of Ecademy, it was at the same a slightly different notion of network management that Derek advocated here. While in Ecademy there was a pyramid structure emergent through the fact that those people with the largest number of contacts *became* those with the greatest reputation and capacity to affect (headed by the network chairman), Derek was elaborating on ways in which he could create differences between 'relevant' and 'less relevant' networkers for his business. Thus, Derek was articulating the notion of *designing* a pyramid effect *himself*: the fact that he voices this together with notions such as 'network relationship management', suggests that he was unlike Ecademy moving into a direction of a pre-designed strategy to align people's networking habits with the goals of his firm.

But it was not only Derek's discourse that deviated from the majority representation of effective network participation. Throughout the further discussion, there were several instances where the discussion was alternating between on the one hand, the articulation of 'networking as a strategic business service' and on the other hand, the continuation of the dialectic around networking against the history of networking during the dotcom boom. The two debates were not related: there were no links of agreement or opposition – rather they were running alongside each other with the discussion shifting between these two concepts. Consider the following example. This exchange unfolded after I had asked discussants what they made of networking events.

Mark: "I have actually been to a recent networking event.. and there were sort of graduates who ... they went on a week's networking course you know how to sort of really you know work the room, you know ..."

(all laugh)

Mark: "and eh, and you know, the etiquette was for sort of business... and to who and what and which country – and you know, and they're doing it to..."

Derek: "That is something like ecademy... that's about all network... internal NRM – Network Relationship Management ... Peter Shower has become a super networker or something ..."

(all laugh)

Ana: "It's too much pressure, isn't it? It's like you go to this networking event and go with this... and you have to do really well and you have to behave in a certain way and then the bit of fun that is there about it, that you can talk to anyone and meeting people you wouldn't know, you .. you know you can still be spontaneous and ... talk to people and ... you know people feel you have an agenda.

Mark: It is really funny one of the sort of most ... comments I got back ... cause Setimperative used to do a sort of weekly editorial every Friday – a sort of roundup of the week's news... and the best response I ever got was ... when First Tuesday was closed ..down... there's sort of this thing about the First Tuesday look which is like to look at someone but actually you are actually you are looking at 3 people behind him and sort of you know masquerading as a VC to get other people's business ideas ... all sort of and it was incredible how I got ... a lot of emails and lots of people saying what are you talking about, thank God somebody mentioned it and had the courage to say this so you know there is very much of that and I think that was the ultimate undoing of a lot of these thing.

Isaac: That is horror... think someone was describing that as ... the worst careers fair cattle market horror!

Mark: Yeah. And I think after that there was a real drop off to I mean sort of attendance of these very big ones at the time and the one ... one of the best ones I went to ... was really like ...I left my firm... and like all the people I knew lost jobs, companies closed down whatever ... "

At the beginning of this exchange, Mark and Derek respond to the question by discussing training events on the 'etiquette' of networking and Derek uses the example of Ecademy as a networking business that sells such events. The theme is network management and network management training from a point of view of strategic business management. Derek also uses new vocabulary such as 'super networker' and 'network relationship management'. Ana, however, responds by upholding the theme of trust-distrust: she evaluates networking events from the perspective of a participant and argues that they cause too much pressure. Ana's account is reinforcing the trust pole. Her concern brings the discussion back to the evaluation of networking in relation to the dotcom boom which is illustrated in the subsequent statements by Mark and Isaac: the debate shifts back to the theme of First Tuesday events and comparisons of

networking events before and after the dotcom crash. It is striking hereby that while at the beginning, Isaac's and Mark's topic was the management of networking, when the debate swings back to the opposition of the dotcom boom, Isaac's and Mark's account do no longer thematise networking as a management device but rather also shift to the perspective of participating in networking.

What emerged here was a separate dialectic dynamic that was not rooted in concepts of network-participation, but was arising in the articulation of the new experiences that some of the entrepreneurs had in managing networks. The theme of networking as strategic business measure did not continue the dominant dialectic of effective network participation versus the ineffective dotcom boom networks; rather, it disrupted the dominant representation of networking and began to anchor the thema effective-ineffective in an different, unrelated meaning-system of networking as a form of business management.

7.3 De-familiarisation of the dominant representation

I suggested in Chapter Three that one can think of encounters between rhizomic and dialectic becomings as a creative force, which, at the level of dialectics, disrupts existent representations by discontinuing the dominant discourse. Crucially, such encounters are not dialectic relations in the sense of contradictions, tensions or similarities. Rather, they are oscillating movements, wavering between novel 'somethings' individuating in discourse from what was experienced and disruptions of dominant dialectics of existing concepts.

The present findings confirm this perspective: the discussion that unfolded was an oscillation between two dynamics: on the one hand, there was the dialectic reinforcement of the dominant representation of effective and trustworthy network participation by the majority of discussants, which further enhanced the opposition of networking during the dotcom boom and underscored the dominant symbolic boundary around e-business entrepreneurship as collective, more virtuous and long-term business approach. On the other hand, a new and unrelated concept of network management was developing in discourse by a minority of entrepreneurs who articulated their experiences with managing network features on the Web-sites of their

firms. The latter had begun to forge a new, separate dialectic around the theme of networking as a means of effective business management and was represented as competitive advantage in a market of large corporates.

Similarly, but less forceful, this oscillation was also manifested in the discussion about the notion of the 'reputational lever' that intersected the debate when long-term business value was debated. The discussion swung back and forth between on the one hand, long-term value through participating in networking and on the other hand those instances when new vocabulary was used to describe the idea of business value through managing the networking of other entrepreneurs online. In image 13 below, I have schematised the two concepts of networking that the focus group debate oscillates between.

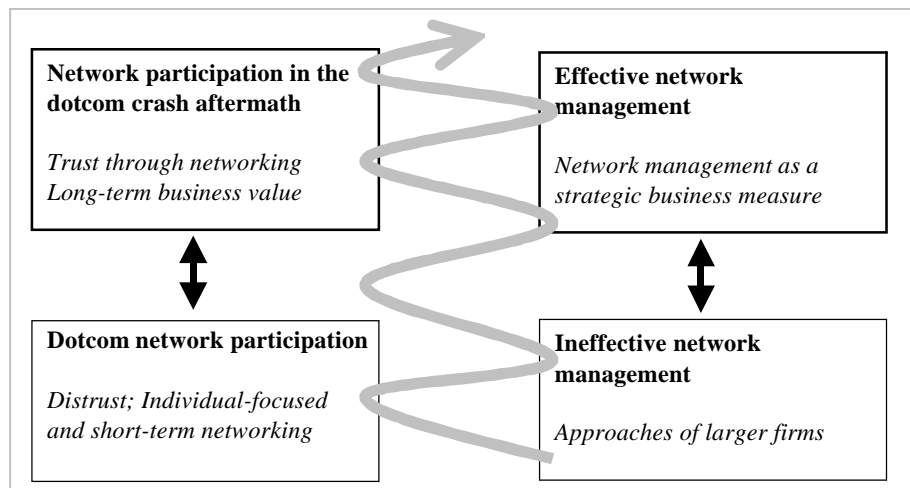


Image 13: Concepts of networking that focus group debate oscillated between

The new concept forging around the notion of network management variously encountered the dominant representation of networking in that its articulation disrupted the otherwise highly salient representation of network participation after the dotcom crash versus dotcom boom networking. This disruption created movement: new potentialities emerged for discourse to be 'freed up' from the dominant theme of the shared history of the dotcom boom and thus for some respondents to break free from the dominant discourse. A new dialectic of effective network management had begun to forge that was represented by (at the time of the study) a minority of entrepreneurs as a new competitive advantage of e-business entrepreneurship over larger business.

In essence, the focus group highlighted how two unrelated dialectic meaning-systems ran alongside each other in this milieu and how, in encountering each other, open up the milieu to the creation of new concepts. However, this creative force was only creative in the sense of a successful business innovation for 'network managers' – with the new representation of 'network management' and the hierarchy-becoming of networking à la Ecademy came also a new distribution of roles. While the concept of network participation was empowering for entrepreneurs in a reputational sense of gaining 'instant trust' and credibility, as Ecademy would have it, it was only network managers such as Derek or the network chairman of Ecademy who moved into a direction of generating profit from networks.

This business-becoming of networking and the new focus on management was further underlined by the new roles of network managers and participants: as Humphreys et al. (1996) suggest, the split into the subjects that are to be managed and the task of managing is a role separation that is deeply embedded in the last two centuries of organisational psychology and is an indication of a powerful mechanism to manage human beings on the basis of subjective experience rather than formal control. As we have seen in the case of Ecademy as a business-machine, there were first indications of control becoming rhizomic, in that the desire for contacts that this machine created allowed for the network chairman to sell and promote his ideologies. Similarly, Derek in the focus group voiced in several accounts his experience with controlling and steering the networking of people on his firm's Web-site.

Overall, therefore, the intersection of the dominant dialectic meaning-system with the new notion of network management had the effect of first, discontinuing the salience of the representation of e-business entrepreneurship as collective, strategic and long-term approach; second, of disrupting the dominant perspective on networking from the perspective of participants and third, of rendering the traditional importance of face-to-face interaction as main criteria for trust less significant. Together, these dynamics made the historic view of the importance of networking against the history of the dotcom crash less salient – it was becoming de-familiarised. This, in turn, enabled some of the discussants to break away from their shared past and move into a new direction, which was, for these entrepreneurs, to explore new business opportunities through network management.

7.4 Conclusions

'... new concepts must relate to our problems, to our history, and, above all, to our becomings' (Deleuze & Guattari, 1994, p. 27).

Given the previous two analyses, this third analysis confirms that the emergence of the new concepts of trust and effective business management through networking was not merely constituted in the discovery of similarities and differences with historic concepts. Rather, the emergence of new concepts was also engendered by the creative potential generated in the becoming-other of networks which allowed entrepreneurs to break out of old concepts and set off to a new terrain of meaning. The focus group underscored the core finding from the rhizomic analysis in Chapter Six that social business networking was a significant realm of emergent knowledge dynamics, which opened up the social milieu to the creation of new concepts.

Specifically two findings illustrate this. First, the fact that the aspects of reputation through online interaction and a new salience of new approaches to network management were important to discussants in the focus group underlines the significance of the experience of networking as a creative force that disrupted the dominant symbolic boundary of e-business entrepreneurship. Second, the salience of trust and the 'reputational lever' through online interaction amongst entrepreneurs suggests in a similar vein as the findings on the becoming of trust and reputation through the personal profile page in the previous chapter that there is a new notion of trusted business interaction emerging, which is not distinguishing between online and offline and between virtual and real any more.

Thus, the focus group underlined the contribution that a Deleuzo-Guattarian perspective on rhizomic becomings can make to our understanding of dialectic analysis: here it has enabled an analysis of the dynamics of de-familiarisation and emergent features of new concepts, whereby we can gain a better understanding how a social representational system moves forward in a creative and future-directed sense. If we recall the argument by Wagner (1998) in Chapter Three, social representations do not merely co-exist, compete and dialectically replace each other, but they do also

dominate and exclude each other. In the present context, we can see how a dominant representation had begun to be intersected by a less mature representation that was being shaped at the time of the study. Through both encountering each other, new phenomena, previously unrelated, gradually become part of entrepreneurs' experience and sense-making.

In sum, the three analyses allowed a better understanding of the creative force of emergent knowledge dynamics in this milieu: it is not only the adaptive force of the realigning of core traditional with modern meanings of e-business and entrepreneurship, but also the disruptive force of de-familiarisation produced in the experience of new assemblages of affect and technology in networking that enabled the milieu overall to 'move on' and develop novel concepts of business management.

The emergent knowledge dynamics depended on both the shared history of entrepreneurs and on the becomings in experience. On the one hand, emergence was mediated by the historical challenge of being different to dotcom entrepreneurship and on the other hand, it was emerging from new assemblages of affect and technology becoming significant in the experience of networking. Thus, the opening up that the experience of networking provided was invaluable for this milieu to create a new sense of e-business entrepreneurship as competing against other types of business, not merely against its own history. This is what created new conditions for innovation here: a new dynamic was engendered via which entrepreneurs started to understand and tackle e-business entrepreneurship in novel ways.

Overview of Chapter Eight

This chapter wraps up the conceptualisation of emergent knowledge dynamics outlined throughout the thesis and brings it together with the findings presented in the previous section. It highlights the practical contribution that the present perspective can make to intervention and policy in e-business entrepreneurship. It outlines limitations as well as theoretical, methodological and practical implications and gives recommendations for further research.

8 CONCLUSIONS AND IMPLICATIONS

I have arrived at the end of a journey on which I set out by drawing attention to the need for a more dynamic account of knowledge in entrepreneurial innovation. In this final chapter I conclude this study by summarising first, the theoretical angle I have developed and the opportunities it holds for further development in social psychology. Second, I underline the results of the empirical analyses that this novel framework has enabled and the methodological innovations that were employed to achieve this. Third, I address core limitations of this study and point out implications and prospects for future research. Fourth, I make the empirical findings relevant to the practical challenge of support and intervention in e-business entrepreneurship, highlighting potential pathways for policy.

8.1 Summarising the argument

The thesis has looked into how we can explain emergent knowledge dynamics in innovation in a radically changing context of contemporary business – e-business entrepreneurship. I explored these dynamics through first, the ways in which people adapt their shared reference system of sense-making to new and unfamiliar conditions and second, through the ways in which the difference that is constantly produced in our experience of the material world creates new conditions for the opening up and disruption of existing frames of reference. I proposed a logic of encounters between these two perspectives, arguing for an angle on knowledge emergence as a pattern of oscillation between disruptive rhizomic opening and adaptive dialectic closure.

The theoretical and methodological perspective throughout the thesis has been to approach innovation as a dynamic phenomenon of knowledge emergence, in the process of which novelty emerges and previous concepts are rendered less relevant (are overcome). Therefore, the thesis set out to explore existent schools of thought on knowledge in entrepreneurial innovation from its origins in economics and economic

psychology to its more recent conceptualisations in organisation and management theory as social processes and/or processes of interaction.

The ways in which the dynamics of knowledge processes are – implicitly or explicitly – implied in the reviewed streams of research, however, present limitations for an exploration of knowledge emergence: the main perspective taken is one that associates innovation with the qualities of the entrepreneurial individual, where the individual is understood to have some stable knowledge prior to the innovation s/he creates. Even though authors in recent interdisciplinary literatures stress knowledge creation in interaction and turn to more social and dynamic perspectives, knowledge creation is nevertheless mainly examined from a perspective that assumes knowledge to originate in individuals and to be transferred in an unchanging fashion between individuals in practice. Knowledge is abstracted from experience and is seen as an expression of a disembodied mind of individuals, existing in a separate sphere to the social and material worlds. This leads to perspectives that implicate an understanding of innovation as either a problem of the management of individual skills deficits or of knowledge diffusion and/or knowledge transfer.

With this, I have questioned Cartesian assumptions about knowledge underpinning existing streams of theorising on entrepreneurial innovation. One is the perspective on knowledge as an attribute of the human mind, as something that people can possess as a static unit and that can be transferred between people. The second is the radical separation that these studies assume between subject and object, taking the perspective of the observer on actors' knowledges. Both assumptions imply conceptualisations of knowledge that portray entrepreneurial innovation as a process of knowledge transfer and/or diffusion either between human minds or between different spheres such as theory and practice, knowledge and experience. Despite the recent growing awareness of authors for the need to develop toward more social and process-oriented perspectives, the overall logic of knowledge processes remains focused on the management of presumed knowledge objects, perceiving entrepreneurial innovation as a problem of knowledge implementation from an outside 'objective' analytical perspective.

Against this backdrop, I have argued for a meta-theoretical approach to knowledge dynamics and particularly, to the dynamics of new knowledge emergence in innovation. Focusing on the way we think logically about how movement comes about in knowledge, I argued, enables new ways of thinking about the role of social and experiential dynamics in the emergence of new conditions for innovation. The perspective I have taken on knowledge dynamics moved away from Cartesian assumptions and turned to an onto-epistemological framework that built, first of all, on the dialectic meta-theory of social representations theory. To be able to account for knowledge emergence, in a second step, I scrutinised ontological implications of a dialectic view on becoming. I stressed the ontology of becoming in the material world in addition to a dialectic ontology of the evolution of meaningful concepts, arguing that the dialectics of social knowledge construction mediating our sense-making is not un-mediated itself. It is inseparable from an ontology of becoming that we encounter in experience and that continually crosses and disrupts the human world of social sense-making and without which dialectics seems somewhat ungrounded, self-referential and always only explaining closure and adaptation.

This has led me to make a proposal about the importance of two different ontological dynamics of becoming which play a role in knowledge emergence in innovation: first, the dialectic ontology of becoming in the human world based on processes of social representation in communicative interaction and second, the ontology of becoming in the material world based on the capacity of affects and percepts emerging from unforeseen, discontinuous connections and assemblages.

The first is the dialectic ontology of the becoming of 'being' based on triadic systems of mediation in I-other-object relations. Thinking and speaking in dyadic patterns, making sense in antinomies, is an expression of this dialectic becoming and social representations theory has been employed as a conceptual framework that centrally builds on this ontology: the emergence of new concepts is seen as mediated by the dialectic between new and existent meaningful concepts.

Dialectic becoming is an adaptive dynamic which accounts for the ways in which shared meanings evolve in relation to their socio-historic conceptual roots. Central concepts in people's shared social knowledge changes continually in people interacting and making sense together; specifically, meanings are re-negotiated as

people come to terms with unfamiliarity in communicative interaction. As social representations theory suggests, new meanings evolve in the ongoing dialectic between unfamiliar and familiar, continually transforming shared social stocks of knowledge. Yet, crucially this transformation takes place within the boundaries of the socially accepted frame of existing concepts and social references. This becoming can be characterised as a tree-like evolution of shared meanings. What continually emerges are new symbolic categories, new ways of perceiving 'old' key concepts, that help people to make life more predictable and familiar. Some of the shared meanings become so important in this ongoing process of re-presentation and re-negotiation that they become central, continually re-uttered themata on the basis of which people interpret new experiences and to direct action. Particularly the dialectic patterns of contradiction, tension and similarity serve people here in providing discursive strategies and the continuity necessary for people to understand their social reality and to make sense of changing conditions.

The second is the ontology of becoming in the material realm in a meta-physical sense. Here I employed the Deleuzo-Guattarian philosophy of becoming, drawing attention to creative forces that, although they are not perceived immediately in understanding, affect our sense experience and potentially disrupt our sense-making. Multiple differences that repetitively and discontinuously emerge in the material world bring forth rhizomic movement that enables new possibilities for novelty and change.

Rhizomic becoming in a Deleuzo-Guattarian sense is a disruptive dynamic that creates conditions for emergence by discontinuing existent dyadic oppositions and introducing radical multiplicity into phenomena which we see traditionally approach as discretely bounded, conceptual and linearly evolving. It is an ontology of becoming that lets us think in terms of flows and combinations of essentially a limitless range of phenomena rather than merely of existent concepts. I have singled out particularly the emergence of lines, new connections and assemblages of unrelated phenomena. These can potentially individuate in becoming-other – becoming neither the one or the other, but becoming different in-itself. We have seen in the empirical part of this study, and I will outline this in more detail in the next section, how such becomings forged new desire and machinic haecceities, which means that certain assemblages intensified and disrupted existing concepts which, as illustrated by the case of Ecademy and Ryze had

the capacity to affect many entrepreneurs and give permanence to new phenomena of in-between-ness such as the personal profile page and the network chairman.

This medium of experiential movement is what social construction feeds from, or better, that language 'cuts' into when novel concepts are created. Becoming-other does not challenge existent concepts in a dialectic sense; rather it turns them upside down, runs in-between them, and 'makes a difference' in affecting people in sense experience. In fact, and as it emerged in the empirical case, it was a new form of desire for contacts which secured these becomings and gave them their permanence as assemblages. Becoming-other in a Deleuzian sense is an active and positive force that energises language and creates the conditions for new words being used, new combinations being made which potentially lets us perceive existent concepts as constraining, letting them become less relevant in sense-making.

It is in this possibility of variation and of disruption of processes social representation in experience that I located the creative force that drives knowledge emergence in innovation. I argued that innovation takes place through the dynamics of de-familiarisation rather than familiarisation and adaptation – essentially, by this I mean the forces that let us bypass pre-existent meanings in a Deleuzian sense, thereby creating new combinations and potentialities for the emergence of new concepts.

However, against the radical rejection of dialectics in the Deleuzo-Guattarian ontology of becoming, I argued that this force of de-familiarisation also needs the symbolic resources of dialectic meaning creation in order for new conditions for innovation to emerge. The thesis I forwarded is that both the dialectics of human sense-making and the experiential possibility of discontinuity and disruption play a crucial role in the emergence of new concepts. I suggested that it is in encounters between the two, in the disruption of central dialectics and in the cutting of rhizomic wanderings by human sense-making that new knowledge emerges.

Emergent knowledge dynamics in innovation, from this perspective, can be understood as an oscillating movement between dialectic closure and rhizomic opening, between adaptation and creativity, which brings novel 'somethings' to the fore. Some of these 'somethings' forge new dialectics and emerge as new concepts whereas other familiar

ones are set aside and become less relevant in a specific context. This is a dynamic in the sense of a discontinuous rhythm of opening up and closing down, producing a spiralling pattern of movement.

In essence, with this perspective I argue that dynamics of continuity and of disruption both need be considered if we are to better understand the dynamics of the emergence of new concepts. The crucial aspect of this perspective is therefore that while conceptually knowledge and experience are seen as intrinsically interrelated, meta-theoretically they are granted their own logic of becoming – in short, they are thought of without subsuming both to the same principle of dynamics.

With this meta-theoretical argument on emergent knowledge dynamics, I questioned fundamental ontological assumptions inherent to social representations theory. The subordination of the ontology of becoming to a dialectic epistemology of becoming is, in my view, the main meta-theoretical limitation of social representations theory as it explains both epistemic and ontological dynamics of change through the principle of dialectics. The argument by social representations researchers thus that social representation is interrelated with the experiential and material realm is right – however, and crucially, we cannot conceive of this interrelation unless we grant this experiential realm its own patterns of becoming and do not assume that just because our thinking functions dialectically, our sense experience does so, too. With this modification in our meta-theoretical assumptions we bring back on the analytical radar all those phenomena in experience that do not fit the pattern of pre-existent meaning systems.

If social representations theory is to overcome this meta-theoretical weakness, a change in direction is called for. Perhaps one of the barriers which must be overcome if change is to be achieved, is the desire to promote social representations theory as complete explanation of dynamic social change phenomena. To an extent, theorists in the social representations tradition are guilty of meta-theoretical myopia, which has been manifested in a persistent ignorance of dynamics other than the Hegelian one as alternatives to the Cartesian paradigm. There is an ironic sense in which theorists have come to adopt Hegelian dialectics as an unquestioned alternative to Descartes and are determined to keep this distinct in opposing the Cartesian paradigm. This is hampering

the theory's further development, when in fact, as I hope to have shown in this study, it could be opened up to other dynamics.

I now turn to the empirical findings to delimit the analytical stance I have developed and to show its implications for possible further research.

8.2 Emergent knowledge dynamics in e-business entrepreneurship

'... during this time, while you turn in circles among these questions, there are becomings which are silently at work.' (Deleuze & Parnet, 1987, p. 2)

The preceding empirical analyses and their findings can be seen to offer support to my argument in Chapter Three for a spiralling logic of encounters between dialectic and rhizomic dynamics. The findings shed new light on the way in which in this specific milieu new concepts were emergent in the encounters of rhizomic becomings of affect and technology in social business networking with core dialectic themata, which, together, had begun to 'make a difference' in a Deleuzian sense both an experiential and dialectic sense.

In my exploration of these differences, the empirical chapters have progressed from first, an account of the ways in which entrepreneurs familiarised e-business entrepreneurship after the dotcom crash to secondly, Deleuzian writing capturing unusual assemblages from participating in respondents' milieu and to thirdly, a repetition of social representational analysis surfacing de-familiarisation in entrepreneurs' discourses. Thereby, I combined a historically anchored description of conceptual mediation with a future-directed account of non-dialectic becomings and drew them together by showing how both had begun to affect each other in the ways in which e-business entrepreneurship was made sense of.

The combination of these three analyses has made explicit both the adaptive dynamics of entrepreneurs trying to understand, rationalise and make sense of their reality and the creative dynamics in the experience of this particular business milieu. On the one hand, there was the force of the common history of dotcom entrepreneurship - the dynamics that, in a Deleuzian sense, were locked in the 'grille' of socially invested dialectic dyads: entrepreneurs dialectically re-negotiated and adapted existing meanings of e-business and entrepreneurship to the context of the dotcom-crash

aftermath. On the other hand, there was the creative experiential force of networking that produced new combinations and assemblages of affect and technology and shaped a new sense of trusted business interaction, leadership and network management. I have summarised both dynamics in table 7 below.

<i>Adaptive dynamics</i>	<i>Disruptive dynamics</i>
<ul style="list-style-type: none"> ➤ Shared dialectics against the image of 'dotcom entrepreneurship' ➤ Re-negotiation of e-business entrepreneurship as collective, trustworthy and long-term business after the dotcom crash 	<ul style="list-style-type: none"> ➤ Everyday experience of novel combinations of affect and technology in networking ➤ New becomings of trust and reputation through technology of personal profile page ➤ New business-machine and leadership becoming through network chairman

Table 7: Summary of adaptive and creative dynamics

In encountering each other, both adaptive and creative forces brought forth new conditions for the emergence of new knowledge. Thus, as the analysis showed, it was neither the shared notion of e-business entrepreneurship as a better, more virtuous collective and long-term business approach after the dotcom crash, nor the familiarity and adaptation achieved through the shared reference system against the dotcom boom that created the conditions for new concepts to emerge. Rather, it was through de-familiarisation and the disruption of existent concepts of 'dotcom entrepreneurship' that fostered movement – enabled by points of rupture, breaks and discontinuities engendered by the becoming-other of networks. In networking, e-business entrepreneurship became an entirely different assemblage for entrepreneurs. Networks emerged as providing new conditions for multiple, ephemeral and flexible combinations of affect and technology. This produced the necessary conditions for a discontinuation of core meanings – it specifically disrupted existing conceptions of trust, business reputation, leadership and of business management - and allowed for new potentialities for innovation to emerge in these areas.

In what follows, I summarise the emergent knowledge dynamics and the particular emergent concepts in order to draw conclusions on the wider context of the significance of the findings.

8.2.1 The emergence of new concepts and new conditions for innovation

At the time of the study, four particular new concepts emerged: first, a new notion of trusted business interaction; second, a new concept of business reputation through networking, third, a new form of network leadership and fourth, networking as a concept of business management.

First, a new form of business interaction emerged that integrated trust with online interaction. This disrupted the representation of trust via face-to-face meetings. As the interview analysis showed, e-business entrepreneurship was primarily represented by entrepreneurs through re-negotiating existent meanings of running a business in this sector in opposition to the dotcom boom. Collective-ness and trusted, long-term business strategies ranked high in this regard: trust was associated with credible and transparent business. As the focus group highlighted, such credible and trusted business was mainly seen as being established in face-to-face contact with other entrepreneurs. There was a strong dyadic opposition between face-to-face interaction and 'virtual' online communication.

In the becoming-other of Ecademy and Ryze, however, this dichotomy had become less relevant. Here trust emerged from new assemblages of friendship and networking technologies which individuated in the visibility of one's contacts on the personal profile page. Lines of affect and lines of technology crossed each other in new ways that were ambivalent to the dialectic oppositions between virtual versus real world and business versus private life relationships. They individuated in new assemblages such as the personal profile page: a new dynamic emerged that engendered new potentialities for trusted interaction. Friendship and trust acquired a new technological character at the same time as technologies such as the list of friend became gradually part of the 'real world' of social interaction of entrepreneurs. Thus, business interaction in the real and virtual worlds became enmeshed such that it allowed entrepreneurs to establish flexible and ephemeral conditions for new business contacts and future partnerships independently of face-to-face contact. Thus, via networks, people, places and ideas could be linked into new combinations, generating a new sense of 'real virtuality' (Castells, 1996), through which entrepreneurs were able to develop a new

sense of trust into establishing business relations flexibly with other members of the network without necessarily knowing them personally.

Secondly, with this new assemblage of trust, a new concept of business reputation emerged. Given the fact that a new basis for trust had emerged that ran in-between real and virtual, the visibility of one's 'list of friends' and online activities also became more and more part of entrepreneurs' real socialising apparatus. Gathering contacts via tools such as the list of friends on Ecademy and Ryze became a major business activity that was deemed as contributing to entrepreneurs' trustworthiness and credibility for future business. The basis for trusting and contacting others was thereby no longer primarily the question of qualifications and experience. The more contacts one could visibly display on one's list of friends and the more guestbook entries and participants lists one was lined to, the more credible one became and thereby 'sufficiently trustworthy' of potential collaboration and partnership.

This effect of a 'reputational lever', as one respondent called it in the focus group, through the list of friends emerged as a new way in which entrepreneurs could tackle the complexity of e-business and constant change. It enabled entrepreneurs to be permanent connectors and learners, but crucially, less by making claims on niches or specialisations, but more by keeping one's radar for opportunity open into all possible interdisciplinary directions. Entrepreneurs thereby helped one another to grow out of their comfort zones and forge an interdisciplinary and multi-agency web of contacts. However, the enhancement of business reputation via online networking also radicalised in a different, more structured and forceful dynamic of business-becoming as was illustrated by the case of Ecademy.

Thirdly, in Ecademy the new assemblages of trust and business reputation intensified in an amplification of the process of contact-making through the network chairman. A desire for contacts had emerged together with a becoming of a new form of leadership. This form of leadership arose from on the one hand, the dispersed assemblage of network members' lists of friends and on the other hand, the new figure of the network chairman at networking events and in utterances online. It was an intensified assemblage of the new notions of trust and reputation that radically disrupted notions of leadership, such as leadership through formal authority, formal structure or rank.

Leadership did not function here through a top-down structure, plan or vision. Rather, for the network chairman, leading was less about decision-making than about managing the flow of the desire for contacts – he was thereby automatically enhancing his own reputation as the 'one with the most contacts' and generating more demand for networking. It was a new form of leadership through a hierarchy-becoming that emerged through a new and integrate effect of the new form of trust in networks.

Fourthly, the desire for more contacts and the network chairman as amplifier of trust were becoming machinic in a new form of network business in Ecademy. This was a business-becoming of a network that bypassed existent concepts of networking and forged a new business type altogether. A network business-machine arose that was a hierarchy-becoming of the assemblages forging through entrepreneurs continuously making more contacts. While it maintained an image of an open, flexible and lean network of contacts, it was at the same time beginning to show first signs of a pyramid-shaped structure (with the network chairman at the top) and disciplined behaviour of network members that continually reinforced this machine. The network chairman had begun to sell utterances about network management to his network members and thus, for him, the network had become a successful source of income rather than merely a support network for advice and information.

The focus group confirmed the significance of the discovery of this new type of managed network. It showed how, similarly, amongst a minority of discussants a new concept of network management emerged and how this concept was becoming anchored in a new dialectic of network management as a strategic advantage over other business sectors such as larger business. While these entrepreneurs were not running network businesses as such, they had nevertheless begun to problematise the aspect of managing networking strategically on their firm's Webs-sites and anchored this symbolically as a success factor against larger business. Their discourse was mainly informed by the experience of experimenting with new tools to steer and manage networking. The articulation of this experience disrupted the dominant representation shared by the majority of respondents of network participation. By contrast to the dominant representation, these respondents had begun to make sense of networking as a concept of business management and as a measure to make one's firm generally more competitive and effective - for them, the perspective on networks as a participant as

well as the symbolic opposition of dotcom networking (which was dominating the other respondents' discourse) had become irrelevant.

It was the fact that the rhizomic becomings of networks encountered and thus discontinued the dialectic anchor of e-business entrepreneurship against the dotcom boom that had freed up entrepreneurs to explore new possibilities and to follow a new sense of co-experiencing and experimenting with networking. For some, this dynamic had established new conditions for successful business innovation: people like the network chairman of Ecademy or the focus group participants who articulated their experience with managing networks had created a basis for revenue through a new type of network business.

8.2.2 The wider context: why networks matter

According to the results of this study, networks such as Ecademy and Ryze play a central role in the emergent knowledge dynamics that bring forward innovation: it was through these networks that new concepts of business management emerged and that new conditions for trust through online interaction were created. This supports literature that argues that in recent years, networks have come to the forefront of knowledge creation and innovation management (e.g. Castells, 1996; Wittel, 2001). If this is the case, how has this study shown what is different about these networks today? After all, has networking not existed for a long time; in fact, have networks not always been at the centre of the very fabric of human sociality?

The answer is not merely in the developments of new information and communication technologies and their determination of new business opportunities. The answer is also not exclusively, as suggested by economic researchers and as reviewed in Chapter Two that through networks, knowledge can disseminate more rapidly and on a global level. This would be reductionist and implicitly deterministic. Rather, as this study suggests, it is the way in which the recent wave of new ICTs has been incorporated into the human fabric of sense experience and affect and in the way in which this has addressed fundamental shortcomings of both networks and online communication. For instance, what the networks in this study have tackled is the inability of networks to manage contacts and connectivity beyond a certain threshold of size and complexity, but

crucially, by, at the same time, addressing issues of anonymity and the risk of people taking false identities in online communication. In other words, the networks that were found in this study scrutinise the absence of a basis for trust in digitised interaction. As the findings have shown, this combination of sheer limitless technological expansion of contacts with trust and stability enabled the network to become a double-capture in a Deleuzian sense – a phenomenon of organisation of openness and creativity, but also of organisation and certainty. This is what made them become the focal point for knowledge dynamics of concept creation and thus of innovation.

On the one hand, networks offer conditions of fluidity and ambiguity that are needed for lines of technology and human affect to become enmeshed and to thereby overcome existent meaningful concepts and enable innovation. Networks do not exist in a fixed structure and fixed relations, rather they configure and reconfigure through the very assemblages that are their results. Networks are flexible configurations of becomings; they exist only in becomings - in combinations and assemblages; they are not rooted in centrality and structure. With them also knowledge assembles and re-assembles. Rather than being a fixed attribute in a person or a unit-like asset of a network, knowledge arises as a fluid, rhizomic phenomenon which shifts and changes in different combinations and in different assemblages.

On the other hand, networks such as Ecademy offer an inbuilt pattern of continuity and control. As we have seen, in the examples in this study, control was inbuilt to networks not via top-down or bottom-up mechanisms of consensus generation, but rather via a different, reputational mechanism that hinged on contact visibility and the desire for new contacts. It created a sense of responsibility for one's own microcosm of contact-making and reputation. As we have seen in Ecademy this dynamic intensified in a self-maintaining mechanism of leadership and hierarchy-becoming - it reinforced a movement of a new business and leadership apparatus that became empowered as a new successful and profitable business. Also, as the discourses within and about the network illustrated, networks allow for language to cut into new assemblages, experiment with them and publish one's views in ever new dialectics on the network itself. This was illustrated not merely by the utterances of the network chairman, but also the fact that entrepreneurs were conversing about networks in ever changing topics online and at events. Dialogues were however also always disrupted by new

contacts and new combinations so that as a result, there were no longstanding, moulded network representations.

Thus, these networks found in this study were so significant to entrepreneurs because they allow for both rhizomic and dialectic becomings without one of them letting dominate the other. This is why – and this is what this study has illustrated – innovation in e-business entrepreneurship in this particular milieu hinged for some entrepreneurs on networks such as Ryze and Ecademy. These network crystallise the essence of the understanding that in order to innovate knowledge needs to be created and that in order to create knowledge, both adaptation and disruption as well as opening and closure – in short, both dialectic and rhizomic movement - are necessary.

However, as was illustrated by Ecademy, there might also be potential dangers resulting from these network-becomings. Even though networks such as Ecademy have no dominant hierarchical structure, they can potentially become 'apparatuses of power' (Deleuze & Parnet, 1987, p.21). By this I mean power that is constituted at the very micro-levels of experience and desire and that gradually grows into power in a sense of status or function. As we have seen especially in Ecademy, it became apparent that the upwards dynamic of the combination of the list of friends and the network chairman created a new powerful pyramid-shaped assemblage of business reputation which created a platform for the network chairman to disseminate his ideology and views, fuelled by networks members' desire for contacts.

Two years after this study, one can see that this pattern has continued: Ecademy is today (2005) operating on an international level with a large sub-network in Asia and an overall membership number of 61,000 members. It has introduced several additional paid-for membership packages and successfully sells a range of training and consulting services on network management. Today, parts of it resemble a very stringent and structured top-down organisation. Does this mean that its openness and flexibility of networking has partly been compromised by the business-becoming of the network? Are there potential dangers of such a hierarchy-becoming of a business-machine? What comes to mind are issues of privacy and data protection of the data contained about entrepreneurial firms. Also, on a more general level, what are implications of the rapid expansion of these networks for the functioning of an

economy? More studies are needed on these questions. Specifically, longitudinal studies would be beneficial to provide more insights on strengths and weaknesses of the power-becoming of networks such as Ecademy.

8.3 Limitations of the study

The insights produced in this study – as with every piece of research – are limited. As strongly as I would have liked to encompass and explain everything, I am now obliged to face the limitations of my own efforts.

First, I have used a geographical criterion - Greater London in the UK – in the snowball process. Given the internationality of e-business entrepreneurship, and in hindsight, this criterion limits this study in that it does not allow the data to capture the social milieu of e-business entrepreneurship in its character of a networked and global meaning-context that exists irrespective of whether or not respondents are based in London. Thus, the impact of the technological becoming of the Internet is absent from the interview and focus group data and thereby compromises the confidence of the data to have fulfilled the aim to select a natural group of e-business entrepreneurship.

This was, in part, compensated for by the Deleuzian analysis. This analysis involved the discussion of the technology of the personal profile page and the new assemblages from its lines of technology getting enmeshed with lines of affect. However, also here I find limitations. Even though the Deleuzian analysis drew on overall three months of my experience in participating in the social milieu in interacting with entrepreneurs at networking events and in online networking, the analysis and interpretation of my experience of networks was carried out with a rather small number of two networks only (Ecademy and Ryze). Even though this was justified by the particular explorative design of this study and by the particular nature of networks that were snowballed, future research is timely that examines further examples of networks. There was also a slight imbalance in my data corpus in favour of impressions from online interaction in the two social business networking sites. In future research, hence, it would be useful to include more network types into the Deleuzian analysis. Moreover, a problem here was that online communication is mainly mediated in language and thus the gathering of impressions is automatically skewed towards discourse which concentrates attention

on dialectic logic. This limitation leaves space for idiosyncrasy in the interpretation. Much of the interpretation therefore remains explorative and suggestive rather than definitive. It must be among the ambitions of further studies to collect even larger quantities of data and diversify the samples, something which would allow comparison with the rhizomic dynamics found in this study.

A further limitation that is related to the above is that the basis of generalisation which the study offers can be improved in future studies. While I am confident that the thesis makes a contribution to the understanding of emergent knowledge dynamics, I recognise that the contribution is explorative and therefore necessarily provisional in nature. As outlined in Chapter Four, the aim of this exploration was clearly to generalise to theory only; and in favour of the findings counts the literature pointing in a similar direction. Yet, the present findings on e-business entrepreneurship can only with caution be generalised to other social milieus of e-business entrepreneurship. Although I speculatively interpreted the findings in the light of the theory developed and even though I have found that the emergent concepts found are firmly associated with findings by Castells (1996) on a culture of 'real virtuality', I am, nonetheless, hesitant in generalising these results. This study is an interpretation of the data grounded in theory. But I am aware that interpretations are always possible interpretations. I believe that this study provides an inspiration for a new approach to the enquiry of knowledge dynamics and that this is one of the core areas where its contribution lies.

Finally, I have attempted to develop theory in this thesis. This is always a risky endeavour but one, I would argue, that is most necessary with regard to the present concern. Social psychology has for too long limited the scope of its contribution to the understanding of social phenomena as existent in the human and social world of meaning and has turned its back on the material context of lived sense experience. But this is not only a problem of social psychology; it exists on a wider level in the social sciences and even in anthropology, the home of studies on experience, this urgently needs to be addressed as Moore (2004) has recently pointed out. I strongly agree with Moore's arguments and believe that we must look at new ways to study what is *presented* rather than exclusively exploring what is *represented* in the social. By linking the theory of social representations with a Deleuzo-Guattarian ontology of

becoming, I hope to have contributed a step in this direction. Also by highlighting the social psychological relevance of the work of Deleuze and Guattari, I believe to have drawn attention to important links between the emergence of knowledge and becomings in experience. However, at the same time, much remains to be done. I now turn to consider the implications and prospects of this thesis for future research.

8.4 Prospects for future research

This thesis suggests further work in a theoretical, methodological and practical sense. First, this study implicates an approach to policy and intervention that focuses to a greater extent on conditions for knowledge creation rather than exclusively educational measures. Secondly, on a theoretical level, the links between social representation and sense experience have yet to be explored in more detail. In addition, the dynamics of de-familiarisation seem a promising new research aim for future studies wishing to further explore the relations between different social representations beyond dialectic co-existence. With regard to the further development of research methodology, it is timely to dedicate more attention to methodological issues of studying sense experience in its 'unknowable' aspects.

8.4.1 Prospects for policy and intervention

This research was inspired by the growing criticisms of recent UK policies targeted at entrepreneurs in high-technology business. Furthermore, as I have shown in Chapter Two, the assumptions about knowledge taken in existent research imply that research questions and research design are inevitably shaped by a logic of thought that sees innovation as either a problem of skills deficits or of the management of the diffusion or transfer of knowledge units. Thus, solutions to these problems are expected to be either educational measures exclusively focused on individuals' knowledge or measures that are targeted at bridging theory and practice, cognition and interaction. I have argued that this has crucial implications on the ways in which intervention and support for entrepreneurship is designed, as well as on the direction of existing human and economic resources to facilitate such a process.

The UK support infrastructure for entrepreneurship has been developed into a system of individual support aimed at entrepreneurs of all professional backgrounds. Given the proposed perspective on emergent knowledge dynamics and the findings presented in this thesis, how can business practice and policy potentially benefit from this study?

Fundamentally, findings challenge notions of addressing entrepreneurial business performance through targeting skills gaps in traditional business knowledge as exclusive levers to innovation. Equally, the assumption that improvements lie mainly within educational interventions targeted at individuals must be challenged. Finally, the findings suggest new pathways for policy in terms of a focus on first, networks as an example for dynamic conditions of creative knowledge emergence and second, a stronger focus on dynamics of knowledge creation rather than knowledge maintenance. Arguments by knowledge management research and by policy-targeted KAB research will be discussed here in relation to the findings in order to set the context for outlining the scope for interventions.

First, by examining the thematisation and content of the identified evaluations of e-business entrepreneurship, the dialectic analysis in Chapter Five highlighted that sense-making about e-business entrepreneurship is mainly underpinned by a dynamic of negotiating a meaningful difference in opposition to the image of the dotcom boom and that in this context, entrepreneurs were well aware of the need to re-align modern e-business with more traditional business measures; the findings did not support the assumption that entrepreneurs had skills gaps in the area of traditional business knowledge or would be overly focused on technology-focused business approaches, as suggested in policy-targeted research.

The findings highlight that rather than rooting evaluations of e-business entrepreneurship exclusively in modern business concepts, entrepreneurs in this study drew interchangeably on both traditional and modern business concepts, re-negotiating them in their sense-making toward a new co-existence of modern meanings of e-business with traditional meanings of entrepreneurship. Respondents specifically elevated strategic business measures that connoted long-term value creation and an interest in client value and rejected traditional meanings of entrepreneurship as individual-driven business concern with a short-term interest. Also, new digital

communication technologies - traditionally associated as the main driver for e-business - were represented as a less significant aspect of the business; it was presented as merely one factor amongst many that matter in business.

Secondly, one could argue that the findings support the argument made by theorists in organisation and management theory (reviewed in Chapter Two) that innovative ideas are shaped in practice. However, while practice meant for organisational and knowledge management researchers mainly social interaction with others, the present findings highlight a much larger scope of 'practice'. The emergent concepts found in this study demonstrated specifically that there was much more at play than merely knowledge creation in communicative interaction. In fact, the emergence of new concepts such as network management were informed by the disruption of existent knowledge through becomings in experience. Specifically, in this respect, a business-becoming of networks enabled a disruption of the strong focus of dominant social representations on a symbolic opposition of the dotcom boom – it allowed entrepreneurs to break away from this way of making sense and to open up the milieu to new ways of approaching and making sense e-business entrepreneurship. Thus, new knowledge arose not only from the socially mediated, human realm of interaction, but also, as the Deleuzo-Guattarian framework on rhizomic becomings highlighted, new concepts were forged in the experience of new combinations of previously unrelated phenomena such as online technologies and human affect.

As we have seen in the case of Ecademy, it was the new ways in which previously unrelated aspects of real and virtual, business and private aspects of interaction could be experienced that gradually let the virtual context of the World Wide Web become real and meaningful in interaction. New functioning assemblages emerged that, in some cases, as the focus group has underlined around the concepts of network management, individuated into new dialectic dyads, machines and role constellations. Hence, what was important was not so much the co-presence of two or more actors in groups in order for knowledge dynamics to occur, but rather the context of networks that allowed previously unrelated lines of becoming to be assembled and to disrupt existent dominant dialectic themata. This is why, for instance, the personal profile page became so important for entrepreneurs. It was at the centre of new orderings of similitude, new bricolage effects of previously unrelated phenomena such as online

communication tools with 'friendship' and a new desire for business reputation. Hence, it was not mainly the fact that entrepreneurs had previous knowledge that generated potential for new innovation, but rather the experiential lines of becoming that created new potentialities for existing knowledge to be disrupted.

Thirdly, Chapter Five highlights that respondents had begun to make sense of e-business entrepreneurship in terms of a collective approach to success; the notions of a more virtuous approach to business and an honest concern for the community of e-business entrepreneurs were strongly valued. However, this is not reflected in policy-making and support infrastructure today. As outlined in the introduction and in Chapter Two, the main focus of policy-research and of today's support infrastructure is on improving the knowledge of the individuals. In this respect, the present findings expose the uni-directional and one-dimensional character of research based on the KAB model. As we have seen in Chapter Two, policy-targeted research informed by the KAB model suggests that entrepreneurial behaviour can be directly predicted from insights on individual entrepreneurs' knowledge.

This is where the findings on networks and on networking are especially interesting. Findings here clearly suggest that a paramount concern for entrepreneurs was knowledge creation as a community of e-business entrepreneurs. First, the centrality and salience of networking in entrepreneurs discourse indicated that networks mattered to people. Second, the new assemblages that forged at the time of the study in Ecademy and Ryze around trust, network leadership and network business reinforced this. As shown by this study, networks were the social space where knowledge creation took place. A strong argument can be made that while e-business oriented policy is mainly targeting support for individual entrepreneurs, these could benefit considerably from a greater focus on the newly forging communities of e-business entrepreneurs, targeting the support of networks and especially the processes of knowledge creation in these.

The findings showed that in networks the focus was less on knowledge management in the sense of maintaining presumed knowledges of entrepreneurs but rather on generating the conditions for the ongoing creation and self-organisation of interconnected knowledge. The Deleuzian analysis of Ryze and Ecademy highlighted

how the focus on contact-making in these networks has generated a culture of situational and flexibly available knowledge through the management of trusted contacts. The aspect of 'knowledge possession' was not salient amongst the respondents in this study; rather, what emerged was the a culture of entrepreneurs managing their trustworthiness and credibility via their networked-ness. In this way, entrepreneurs ensured learning, future knowledge, business support and partnership with other entrepreneurs. The dynamics of knowledge creation found were centred on 'making contacts' rather than on the accumulation of knowledge 'units' (as suggested by economic and organisational research reviewed in Chapter Two) – entrepreneurs had no interest in accumulating or 'storing' knowledge.

At the same time, findings on respondents' discourses in Chapter Five showed that entrepreneurs represented the governmental support infrastructure negatively. Overall, respondents reported negative experiences in obtaining information through support agencies and preferred the support by other entrepreneurs in networks over public support. More radically, in the participant observation, there was no indication that the governmental support infrastructure would be part of entrepreneurs' everyday lives. The main finding was that the everyday knowledge creation processes amongst entrepreneurs were taking place in networking, rather than via part-taking in educational measures. The findings therefore suggest that it is reasonable to assume that more investment in individual-targeted educational measures would not necessarily lead to 'better knowledge' and more potential innovation in the UK.

Overall, therefore, the findings focus attention on the need for a greater focus on the support of networks and entrepreneurial communities in policy and intervention and a lesser focus on pre-designed educational measures targeted at individuals. However, given the fact that present findings are merely based on one particular case of an entrepreneurial milieu that draws attention to networks, it is timely to conduct further research based on the initial characterisation of networks in this study. More research is needed into the ways in which the social and experiential factors of networks create the conditions of knowledge emergence.

A clear agenda of aspects to be addressed in further research can be identified. The overriding and urgent concern is the refocusing of policy efforts from targeting

individuals to targeting experiential conditions for knowledge creation in entrepreneurial business communities and networks. Immediate solutions may lie in exploring the feasibility of expanding the governmental support schemes to networks and perhaps supporting or even integrating governmental efforts with existing networks. A feasible scenario would be, for instance, to involve policy-makers in similar ways in entrepreneurial life as I did as a researcher in this study: to immerse them in the knowledge creation process by embedding governmental agents in the world of networks. This would make it easier for the government to identify areas of financial support as well as issues that need addressing.

A visit back to Ecademy's Web-site two years after the study provides the example: BeyondBricks, a government-funded initiative to provide support to newly founded firms in e-business, is today an integrate sub-network in Ecademy. When I initially came across BeyondBricks at the beginning of this study in 2002 (appendix 3), it was a DTI-backed support organisation which hosted several one-off events nation-wide to promote entrepreneurship in the UK. These events, however, were not salient in discourse amongst respondents. Having participated in one of their events, efforts appeared on the whole to be of educational and promotional nature targeted at making e-business entrepreneurship more popular. BeyondBricks also featured an 'e-entrepreneurship portal' (beyondbricks.com), which was a Web-site that featured reports on e-business as well as a message board tool for entrepreneurs. However, at the time, the message board was not used by entrepreneurs - in fact, most of the time it was empty. By contrast, today, BeyondBricks is integrated into Ecademy as a sub-network called 'The Beermat Entrepreneurs'. It is much frequented - buzzing with activity and debate - in the style of Ecademy.

A second area for improvement is the absence of a clearly communicated business community identity of the e-business entrepreneurship sector. As outlined in Chapter Four, at present there is only limited knowledge about the population of e-business entrepreneurs. The DTI (2002) estimates, that contrary to popular media coverage, there are 'fewer than 1,500 internet-focused businesses in the UK'³¹ and states that there 'is a gap in quantified data on the number of internet-focused businesses in the UK.' (p. 10). Also, as was illustrated by the example of the Global Entrepreneurship

³¹ Businesses that actually generate 80% or more of their revenue online.

Monitor (GEM) in Chapter Two, a large part of existent research on e-business entrepreneurship focuses either on the general UK population or the dominant and popular notion of 'dotcom businesses', which encompasses a much larger scope of business than that of e-business entrepreneurship. As we have seen in the findings, a paramount issue for entrepreneurs was to be identified as a business sector that is different to dotcom entrepreneurship: respondents wanted to be seen as different in their business approach, culture and sought to be recognised as a 'serious' business sector by other business types such as large corporates. Thus, a continuing identification of e-business entrepreneurs as 'dotcom businesses' would only counteract entrepreneurs' attempts to distance themselves from the dotcom-image. Again, improved communication of government with stakeholders in networks as the central hubs of knowledge creation seems a promising way forward for an improved approach to address e-business entrepreneurship as a business sector.

Finally, this study suggests an approach to policy and intervention that focuses to a greater extent on establishing conditions for knowledge creation rather than exclusively educational measures. Applied to the study of entrepreneurial innovation, the approach developed in this thesis suggests that, as an alternative to focusing on the kinds of knowledge that innovation demands, attention should focus on the conditions through which new creative sense-making can be achieved. Because of the changes that are occurring in e-business entrepreneurship touched on at the beginning of this thesis (such as the development towards a more global, digitised and knowledge-oriented economy), contexts and forms of innovation are changing significantly. Rather than asking 'What sorts of knowledge are needed in contemporary e-business entrepreneurship and how may entrepreneurs harness them?' the question thus becomes 'how can conditions of flexible knowledge creation be established that would foster future innovation?'

8.4.2 Theoretical and methodological prospects

The theoretical and meta-theoretical stance I developed throughout this thesis, confirms important elements of both the theory of social representations and the Deleuzo-Guattarian philosophy of becoming; yet, it equally poses new conceptual and methodological questions.

First, there is the need to examine the relationship between social representation and sense experience on a conceptual level. While this thesis has merely drawn attention to the need to take into account faculties of reception other than sense-making and understanding on a meta-theoretical level; on a conceptual level, specifically the Deleuzian part of the meta-theory developed in this thesis points to the possibility of enriching theorising on feelings and intuition. The question of how people intuitively sense or feel when they experience have so far been neglected in terms of their relations to social knowledge emergence. As I have argued in this thesis, knowledge emergence is a process taking place not only within the symbolic and meaningful boundaries of knowledge construction but also mediated by the wider frame of sense experience in the material and physical context. This mediation is not to be understood as an 'outside' context of constraints upon social construction but rather to be assumed at the very centre of knowledge emergence through human sense experience interrupting and potentially discontinuing sense-making. The latter, specifically, points to the prospect of developing research on human affect and intuition in such a way that these are not exclusively explored in a logic of human sense-making and understanding, but also in a logic of experience.

For instance, affect is only just beginning to be incorporated into social representational studies. As indicated in Chapter Four the study of human affect presents considerable challenge as this is a multi-dimensional phenomenon – some choose to distinguish analytically between the sensate nature of 'feelings' and 'emotions' as the social display of feelings (Harré & Parrott, 1996; Lupton, 1998). Both are complex phenomena that span disciplinary divides and attention. So far, specifically the physical and embodied nature of emotions has received relatively little attention (de-Graft Aikins, 1994). At the same time, these characteristics and its relative novelty to social representational studies present the prospect of contributing to a critical social psychological analysis which both challenge and develop analyses that separate knowledge from emotion, knowledge from embodied experience and sense experience from understanding.

A greater focus on sense experience and human affect also points to the opportunity of new methodological inroads to incorporate what is perceived in experience

empirically. As indicated in Chapter Three, social representational work has concentrated on the study of culturally negotiated signification of sense experience, such as discourse by people about their feelings. The focus hereby is on what is observable and meaningful about sense experience, based on the assumption that those experiences that matter to people are immediately understood and can therefore be meaningfully expressed. However, even though we might be able to interview people about how they feel, sense experience might not always make sense or might not always be expressed or known in meaningful patterns. As I have indicated in Chapter Four, some feelings are real and play a role in our everyday experience, even though they might not be perceived by the faculty of understanding and might not be observable, identifiable and controllable in language.

In this regard, the route that this study has taken by drawing on the Deleuzo-Guattarian liberation of sense experience from its subordination to understanding seems promising in a methodological sense. As we have seen, Chapters Five, Six and Seven have been an illustration of what could be developed into a new method of the explorative enquiry of knowledge dynamics. Far from being complete, these chapters have merely presented a first attempt in this direction. Somewhere between explorative thematic analysis and Deleuzian writing, between the dynamics of familiarisation and de-familiarisation, these chapters have been a first attempt in connecting Deleuzian analysis with classic social psychological analysis for social representation and have themselves been something of a rhizomic journey connecting points of a story rarely narrated as such. Crucially, by combining a social representational analysis with Deleuzian writing, I was able to re-focus attention from familiarisation to de-familiarisation of meaning and shifted from a mode of 'providing evidence' in the analysis to a process of writing as creative data production about my own experience, which let me bypass the dilemma of the observation of sense experience.

Indeed, observation may reveal little an actor's perceptions, physical condition, and immediate and cultural context, each of which may provide insight into the emotional context and process of knowledge emergence. A greater focus on creative and iterative methods of data production rather than data gathering and observation could pave the way here for a timely re-thinking of qualitative research methods. In particular, while human affect might not be knowable, more work on different and multiple

characteristics of affect - as displayed, disguised, experienced, embodied and socially constructed - presents the prospect of contributing to debates in critical social studies both challenging and highlighting the constraints of dialectic analysis.

A second prospect for future research is to develop social representations theory in a sense of disruption and de-familiarisation of existing meaning systems. As I have shown in Chapter Three, social representations theory has been critiqued for its lack of a critical account on how social representations serve people to resist and overcome existent knowledge systems such as dominant or traditional ones. I have taken a first step in this study by expanding the theory's meta-theory in order to be able to think in terms of de-familiarisation instead of the dynamics of familiarisation only. I have shown how this different way of thinking can shed new light on how existent meaning systems can be creatively overcome through disruption. 'Overcoming' here has not meant that these meanings do not 'exist' any longer, but rather they are de-familiarised, becoming less relevant as social references for sense-making. In this way, it became clear, specifically in Chapter Seven, that we can account for the process of how one dialectic meaning system (in this case held by a minority) can render another one (here the dominant meaning system) less relevant. Based on this meta-theoretical fundament developed here, more work with a particular focus on disruption presents the prospect of contributing to the social representational research gap of accounting for what social representations 'actually do' in society, highlighted by Howarth (2005) in Chapter Three, specifically in a sense of tackling the question of the empowerment and disempowerment of social groups.

Moreover, the Deleuzo-Guattarian stance advocated here is specifically interesting for notions of power. The study of the micro-becomings around networks has exemplified this: a focus on the disruptions and de-familiarisation of social representation has generated a better understanding of how new sources of discipline and trust assembled and how overall this empowered the generation of a new concept of network business management, which showed first signs of structure and control, as was illustrated by the hierarchy-becoming in the new business-machine of Ecademy, the disciplined behaviour of network members in both Ryze and Ecademy steered by the desire for more contacts as well as (as shown in the focus group) a new role distinction between 'network participants' and 'network managers'. Generally therefore, I see an area with

great potential for the further development where social representations theory can benefit from the Deleuzo-Guattarian angle for the study of process of empowerment and disempowerment. If social psychological enquiry is to contribute to our understanding of the contemporary economic realm, given its radical changes and developments, a greater focus on forces that disrupt and create new structures of control from a perspective of becomings might open up new inroads to an understanding of the more subtle and 'invisible' processes of power.

With this study I hope to have highlighted first steps in this direction. While one step has certainly been the development of the present meta-theoretical frame, another one has been manifested in the methodological operationalisation and the empirical example of a Deleuzian analysis of a particular case of new type of network. The empirical part, and I hope this became apparent in the second half of this thesis, has not been a call to close the present meta-theoretical frame down to a 'general model' of researching emergent knowledge dynamics. On the contrary, methodological and interpretative rigour are not the same as closing concepts down and the task that the empirical study has rather been to demonstrate at an empirical example where the strength and limitations of both logics of analysing dynamics – dialectics and rhizomics - lie.

As this study reaches its end, I am convinced of the importance of the issues raised in this thesis and to the important role that social psychological research can play to provide a basis for identifying further research priorities. And as there are always new economies emerging, there is a need now, perhaps more than ever to turn to the power of disruption and to study their newly emergent potentialities and possibilities. Disruptions and creativity are constitutive of what innovation is and looking at their form and content is crucial to assess contemporary experience of knowledge in terms of preserving a *sensus communis* by at the same time creatively moving forward and innovating.

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GLOSSARY

The following is a glossary of specific terms related to Internet enabled business that appear throughout the thesis.

Dotcom boom	Economic hausse in the mid 1990 for companies and investors in the dotcom/ e-business and new technology sector.
Dotcom-firm/ dotcom	Company with a Web-site the domain name of which is suffixed '.com'.
Dotcom-crash	The collapse of the e-business and Hi-Tech stock-markets in 1999/2000, manifested in a collapse of stockmarket indices worldwide that traded new technology and dotcom values, such as the Nasdaq in the USA and the Neue Markt in Germany.
ICTs	Information and Communication Technologies; this term is often used to symbolise the new digital ICTs that emerged with the rise of the Internet.
Internet	Technical term: A global network connecting millions of computers to exchange data and use of applications. The WWW (World Wide Web) is a specific system of servers on the Internet, based on HTTP, not the entire Internet (there are for example also the systems: FTP and SMTP).
Network introducer system	Type of Internet technology for networking: Group of people collaborating and sharing ideas over an electronic network (e.g. the Internet).
Off-shoot	Part of a traditional company that has separated in order to focus on specific business segment.
Shareholder value	Term signifying the value of a firm via its capital value on the stockmarkets.
Start-up	Newly founded company in Internet-enabled business.
URL (Uniform Resource Locator)	Technical term: identification address of a Web-site on the World Wide Web.
Venture Capitalists (VCs)	Investment firms which provide funding dotcom firms. For instance, venture capitalists can provide finance by holding an equity stake of a dotcom firm.
Web-page	Smallest unit of a Web-site
Web-site	General term for a collection of files accessed through a web address, covering a particular theme or subject, and managed by a particular person or organisation.
WWW	World Wide Web: Graphical User Interface of the Internet

APPENDICES

Appendix 1: Composition of the interview corpus

Firm	Interviewee name³² and title	Business type	Founded
1.	John, CEO	Intermediary	2001
2.	Kate, Founder	Service Provider	1999
3.	Enrico, Editor	Intermediary	1999
4.	Goerge, President	Service Provider	1999
5.	Kevin, Managing Director	Intermediary	2001
6.	Marc, Managing Director	Service Provider	1996
7.	Peter, Founder and Managing Director	Solutions Provider	1999
8.	Richard, Managing Director	Intermediary	2001
9.	Christine, CEO	Intermediary	2000
10.	Sally, Executive Director	Solutions Provider	2001
11.	Clive, Managing Director	Solutions Provider	2001
12.	Linda, Managing Director	Solutions Provider	1998
13.	Miriam, Managing Director	Intermediary	2002
14.	Alan, Business Development Director	Service Provider	1997
15.	Patrick, Vice President	Intermediary	2001
16.	Michael, Consultant	Intermediary	2002
17.	Jack, Director	Service provider	2002
18.	Stephen, President	Intermediary	2001
19.	Martin, Director	Intermediary	2002
20.	Andrew, Managing Director	Solutions Provider	1999
21.	Luke, Managing Director	Intermediary	1999
22.	Daniel, CEO and Founder	Service Provider	1999
23.	Eric, Managing Director	Intermediary	2003
24.	Andre, Managing Director	Solutions Provider	2002
25.	David, Chairman	Intermediary	1998

³² All names have been changed to keep data anonymous that could lead to an identification of participants. The study complies with the Code of Conduct & Ethical Principles Guidelines of the British Psychological Society (British Psychological Society, 2000).

Appendix 2: Diversity of meaning strata sampled in interviews

Criteria for Diversity adapted from Whinston et al. (2001)	Number of representatives in corpus
Infrastructure, Systems and Solution provision (B2B)	
Telecommunications business	1
Systems & solutions	8
Infrastructure & solutions technology	3
Internet Intermediaries (B2B & B2c)	
Information Gateways, Content Aggregators, Portals, Networking-platforms	7
Consultancies	5
Think-tanks	0
Skills and Recruiting Services	1
Internet Commerce (B2C)	
Online Retailing	0
Total	25

Appendix 3: Pathway of exploration through snowball process

The table shows the sequence of interviews (white fields) and events (grey fields) as they occurred through the snowball process. In total, there were 25 interviews and 8 events at which I participant-observed.

	Date	Activity	Description	Referred to by
1.	23.9.02	Interview: John, CEO	Interview at London School of Economics	Pilot interviewee
A	26.9.02	Networking event	'Beyond the Idea: Sustainable Entrepreneurship', one-day event hosted by e-entrepreneurship portal beyondbricks.com, in West London Theatre	Pilot interviewee
2.	30.9.02	Interview: Kate, Founder	Interview at London School of Economics	Pilot interviewee
B	02.10.02	Networking event	Evening networking event hosted by eacademy.com, e-business network, in central London Media Club	Kate
3.	01.10.02	Interview: Enrico, Editor	Interview at London School of Economics	Beyondbricks networking event
4.	02.10.02	Interview: George, President	Interview at London School of Economics	Ecademy networking event
5.	09.10.02	Interview: Kevin, Managing Director	Interview at firm's premises: small venue with 4 employees in City of London	Beyondbricks networking event
6.	10.10.02	Interview: Marc, Managing Director	Interview at firm's premises: small east London venue, 20-30 employees, London Shoreditch	Enrico
7.	10.10.02	Interview: Peter, Founder and Managing Director	Interview at London School of Economics	Beyondbricks networking event
8.	17.10.02	Interview: Richard, Managing Director	Interview at London School of Economics	Beyondbricks networking event
C	19 & 20.10.02	Business Fair	Two-day Business Fair for Entrepreneurs in Exhibition Venue in east London	George
9.	19.10.02	Interview: Christine, CEO	Interview at Business Fair 'Business Start-up Exhibition 2002'	Marc
10.	19.10.02	Interview: Sally, Executive Director	Interview at Business Fair 'Business Startup Exhibition 2002'	Marc
11.	23.10.02	Interview: Clive, Managing Director	Interview in Coffee Shop, central London	Business Start-up Exhibition
12.	24.10.02	Interview: Linda, Managing Director	Interview at firm's premises: medium-sized venue, 50-100 employees in central London	Sally
13.	28.10.02	Interview: Miriam, Managing Director	Interview at firm's premises: small venue, 10-20 employees in London's Shoreditch	Business Start-up Exhibition
D	29.10.02	Networking Event	Evening networking event 'Ryze London Business Networking Mixer', in East London Bar	George

	Date	Activity	Description	Referred to by
14.	21.10.02	Interview: Alan, Business Development Director	Interview at London School of Economics	Ecademy networking event
15.	31.10.02	Interview: Patrick, Vice President	Interview at premises of firm: small central London venue with 1 employee	Alan
16.	31.10.02	Interview: Michael, Consultant	Interview at London School of Economics	Beyondbricks networking event
17.	01.11.02	Interview: Jack, Director	Interview in Coffee Shop, central London	Ecademy networking event
E	05.11.02	Networking Event	Busygirl.co.uk Evening Networking Forum: 'Accelerated futures: Contacts, opportunities, success', at Central London Business Venue	Christine
18.	04.11.02	Interview: Stephen, President	Interview at London School of Economics	Ryze networking event
19.	05.11.02	Interview: Martin, Director	Interview at London School of Economics	Ryze networking event
20.	06.11.02	Interview: Andrew, Managing Director	Interview at London School of Economics	Ryze network
F	06.11.02	Networking event	Evening networking event hosted by ecademy.com, e-business network, in Central London Media Club	2 nd networking event
21.	09.11.02	Interview: Luke, Managing Director	Interview at London School of Economics	Kevin
22.	11.11.02	Interview: Daniel, CEO and Founder	Interview at London School of Economics	Ryze Network
23.	11.11.02	Interview: Eric, Managing Director	Interview at London School of Economics	Ryze Networking Event
24.	26.11.02	Interview: Andre, Managing Director	Interview at London School of Economics	Ryze Network
G	27.11.02	Networking Event	Breakfast Networking Event 'BNI (Business Network International) Visitors Day and Business Breakfast', North London Venue	Ryze Networking Event
25.	04.12.02	Interview: David, Chairman	Interview at Networking Venue: Central London Media Club	1st Ecademy networking event
H	18.12.02	Networking event	Evening networking event 'DECOM' Central London restaurant	Ryze Network

Appendix 4: Interview topic guide

I What is the story of your firm/ How did you get involved in entrepreneurship?

Prompts:

- Story, age, initial idea, how long have you been entrepreneur, reasons for running own business?
- What does running your own business mean to you?

II What is your take on e-business entrepreneurship in the wake of the dotcom crash?

Prompts:

- What matters most about your entrepreneurial business and why?
- What comes to mind when you think about the past/future of the sector?
- What is most important in e-business entrepreneurship? Any advice you would give to newcomers?
- Overall, what would you say is the difference to small e-business a few years ago?
- What would be different in your business if the dotcom crash had not happened?
- Overall, what are important criteria according to which e-business entrepreneurs run their businesses at the moment?
- Are there things that clients/ partners need to be sensitive about when dealing with your business milieu?

III What are challenges in your business on a daily basis?

Prompts:

- How does a typical day look like for you?
- How do you deal with ...obtaining new customers, employees, competition, other entrepreneurs, public or private services for e-business support?

IV Is there anything you would like to add?

Appendix 5: Web-site for participant information

LSE
Research on the social psychology of knowledge in economic life
Institute of Social Psychology
More on this study:

- [Initial Results](#)
- [Participating firms](#)
- [Results from pilot work](#)
- [Earlier study 2001](#)
- [Network](#)

[On the Author](#)

Knowledge emergence in entrepreneurial innovation: exploring e-business in London

This research project investigates knowledge in entrepreneurship from a social psychological perspective. It looks at the qualities of entrepreneurship as a phenomenon of knowledge emergence rather than on the individual traits or activities of entrepreneurs. With this, this study addresses the absence of empirical research on entrepreneurship as regards its dynamics of knowing that create new innovation.

This study argues that in order to better understand how new resources for successful innovation emerge, we need to look at the dialectic dynamics of social knowledge negotiation as well as the non-dialectic dynamics of experience of entrepreneurship.

The example of e-entrepreneurs in London, operating since the dotcom crash, was studied through interviews, a focus group and participant observation. Results show how the re-negotiation of entrepreneurship hinges centrally on networks. Networks were also central to a process of de-familiarisation of existent meanings which opened the business milieu up for new creative routes to success.

UPDATE

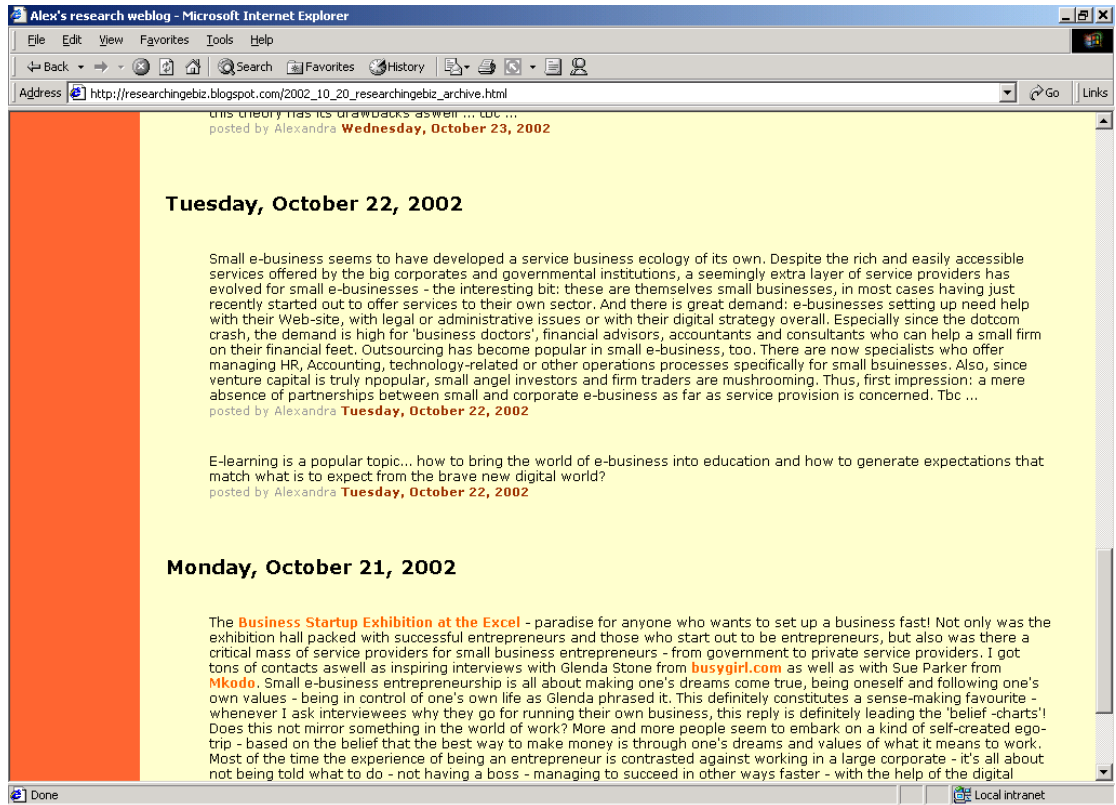
October 2003: You are invited to participate in the second part of fieldwork by contributing your views [here](#).

February 2003: [Findings](#) from fieldwork that was conducted from September to December 2002 are now online. I would like to take this opportunity to thank all the participants for their time and great contributions! Special thanks go to [The Glasshouse](#)

6 December 2002: [focus group](#) on 'E-entrepreneurship communities, networks and networking - panacea for entrepreneurial success or just hype?'

Done
Start | Postings... | secondhalf | LSE Rese... | EndNote... | http://do... | http://do... | FEB31ULT... | Microsoft... | Local intranet | 15:57

Appendix 6: Excerpt of online observation diary



Appendix 7: Online information about focus group

Doctoral research study - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites History Print Copy Paste

Address <http://personal.lse.ac.uk/steinbea/focusgroup.htm> Go Links



Call for participation

[Back to the homepage of the study](#)

[Details on the focus group](#)

FOCUS GROUP

**E-entrepreneurship networks and networking -
panacea or just hype?**



Friday, 6 December 2002
16.30 hrs - 18.00 hrs
Venue: London School of Economics, room S318

You are invited to a facilitated group discussion on your experience and ideas on e-entrepreneurship networks.

This focus group offers you a forum to discuss this issue with 7-10 other entrepreneurs. The session will be facilitated by [Alexandra Steinberg](#) and the outcome contributes to her [study](#) on e-entrepreneurship. The session will be tape-recorded and contents of the discussion are subject to strict confidentiality.

Click [here](#) for more details.

Please click here for the [participating firms](#).

Appendix 8: Composition of the focus group corpus

Firm	Interviewee name ³³ and title	Business type	Founded
R1	Mark, Editor	Service Provider	1999
R2	Derek, CEO	Intermediary	1999
R3	Elizabeth, Co-founder	Service Provider	2001
R4	Anne, Director	Service Provider	1998
R5	Ana, Co-founder	Service Provider	2001
R6	Francesco, Founder and Director	Intermediary	1998
R7	Emma, Managing Director	Solutions Provider	1997
R8	Isaac, Director	Intermediary	1998

Appendix 9: Diversity of meaning strata sampled in focus group

Criteria for Diversity adapted from Whinston et al. (2001)	Number of representatives in corpus
Infrastructure, Systems and Solution provision (B2B)	
Telecommunications business	
Systems & solutions	3
Infrastructure & solutions technology	
Internet Intermediaries (B2B & B2c)	
Information Gateways, Content Aggregators, Portals, Networking-platforms	4
Consultancies	1
Think-tanks	
Skills and Recruiting Services	
Internet Commerce (B2C)	
Online Retailing	
Total	8

³³ All names have been changed to keep data anonymous that could lead to an identification of participants. The study complies with the Code of Conduct & Ethical Principles Guidelines of the British Psychological Society (British Psychological Society, 2000).

Appendix 10: Focus group topic guide

Networking: Panacea or just hype?

I Introduction

- Personal introduction and introduction of firm
- Personal experience of networking in day-to-day context

II Evaluation of networking

Suited and booted

The way to win friends and influence people in e-commerce is to schmooze with them via the web. Mike Butcher reports

Thursday September 26, 2002, The Guardian

Even as the light has long dimmed on the dotcom boom, and the feverish partying is now just a faint hangover, the technology crowd is massing once more. But this time, instead of clamouring at the bar at a packed-out First Tuesday event, Britain's e-business people are hitting the web sites before hitting the bars. This time it's not about WANs, Wi-Fi or wireless networking, but real live networking, enhanced and aided by web sites built specially from the ground up to connect people. ...

- Panacea or just hype?
- Specificities and rationale.
What is new about networks?
- Advantages/ disadvantages for business/ entrepreneurship.
What difference does it make? Networks and success?
- Networking and knowledge/ success.
Does networking hold benefits in terms of knowledge/ succeeding in business?
- Variety of types of networks.
What is your take on the variety of types of network/ and popularity of networks?
- Future of networks

III Is there anything you would like to add?

Appendix 11: Theme frequency and extensiveness in interview corpus

HU: Thematic Analysis Interviews

Codes-Primary-Documents-Table: Cross-tabulation of themes (lines) with interviews (columns) with each cell counting the occurrences of the theme in the interview. Sums are computed for each row and column. The table shows the frequency of a theme overall in the corpus, the frequency of occurrence per interview, and the extensiveness of a theme across respondents.

Code-Filter: All
 PD-Filter: All

CODES	PRIMARY DOCS																									Totals
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Accelerated environment	2	3	2	1	5	5	0	1	5	2	10	7	7	12	8	0	6	2	6	0	2	0	1	6	4	97
Adventure	2	2	0	2	1	5	3	1	3	1	7	0	1	1	2	2	3	2	0	0	6	1	7	2	8	62
Advertising-based	0	7	4	1	0	0	1	0	0	2	0	4	2	9	0	1	4	1	17	2	1	8	0	0	3	67
Agreed framework	1	0	2	0	1	3	0	2	1	0	3	3	1	3	1	0	0	1	0	6	0	0	3	0	1	32
Being the best	0	0	2	0	0	0	1	0	0	2	2	0	1	0	0	0	0	3	1	0	0	1	0	1	1	15
Bubble	4	1	1	1	2	0	0	3	0	5	0	3	28	0	0	5	1	5	3	1	2	2	0	0	0	67
Building reputation	0	0	0	0	1	0	0	3	1	1	1	0	1	3	1	0	0	3	0	0	1	0	0	0	0	16
Business approach	0	0	5	1	0	0	0	3	1	0	0	0	0	2	1	1	1	1	0	0	2	4	0	0	1	22
Business that failed	3	0	0	1	0	1	2	2	1	3	2	1	2	2	0	0	1	5	11	0	0	6	8	0	11	62
Business ... chance	8	6	3	9	4	5	3	18	6	8	8	21	41	6	13	5	6	6	9	3	8	35	12	2	11	256
Business partners	4	5	1	10	1	0	1	0	7	2	1	6	4	0	2	3	0	6	10	6	5	3	0	0	0	77
Business relations	1	3	9	3	7	3	1	11	5	8	4	13	6	7	10	3	1	1	2	4	2	8	2	1	6	121
Calling	1	0	1	1	1	0	0	0	0	1	0	2	16	0	0	5	1	7	3	1	1	2	0	1	0	44
Change-the-world	0	0	0	1	2	0	1	0	0	2	2	2	0	0	4	0	0	4	0	0	0	2	0	0	2	22
Commitment & Involvement	1	0	3	1	2	3	1	6	0	1	2	1	3	6	3	3	0	2	3	0	2	0	0	0	1	44
Complexity and challenge	2	0	3	0	11	0	3	0	0	0	4	1	1	2	4	0	0	0	2	0	0	1	0	1	0	35
Comradeship	3	4	2	2	3	0	1	2	3	6	2	5	3	3	1	0	7	4	3	0	2	2	1	0	19	78
Confused by support	9	4	6	6	10	2	2	5	5	3	7	3	8	2	4	3	3	1	7	3	5	15	3	2	7	125
Consultancy as business	7	3	0	2	0	0	5	10	0	0	0	9	2	1	5	0	1	1	2	0	3	1	2	0	0	54
Create new knowledge	1	0	2	2	9	0	2	0	1	8	11	20	8	6	2	0	0	1	1	3	6	6	2	3	9	103
Create value & make money	7	1	5	5	1	3	7	5	3	6	9	8	3	3	1	3	2	3	12	2	6	15	0	9	6	125
Creating value	1	0	4	1	0	1	3	5	3	1	11	6	3	2	1	0	1	1	3	4	1	13	0	3	4	72
Credibility	1	7	1	1	0	2	0	3	0	0	2	5	1	1	4	0	3	2	0	0	0	2	0	3	0	38

PRIMARY DOCS																										
CODES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Totals
Culture of success	3	0	1	6	1	0	0	1	1	3	1	1	0	2	5	0	0	3	1	0	3	4	1	0	2	39
Customer payment	0	1	2	5	5	2	0	5	1	6	0	4	2	5	1	2	4	2	6	0	5	0	3	1	6	68
Customer relationship	4	4	5	7	7	5	0	15	5	11	6	23	31	6	9	3	4	2	3	3	4	14	11	2	9	193
Cycle of events...	3	4	2	1	8	0	0	0	5	1	2	3	1	4	1	1	6	1	4	1	0	4	0	1	0	53
Decision criteria	9	4	0	5	7	2	0	4	1	2	2	1	3	14	18	3	1	8	7	3	3	4	2	3	2	108
Discipline & Devotion	0	0	2	0	0	1	0	2	0	0	0	4	0	0	0	0	0	0	0	0	2	0	1	0	0	12
Dotcom boom	2	0	0	0	0	0	1	0	1	0	1	4	3	6	0	0	0	1	0	0	0	4	0	1	8	32
Dotcom bubble mindset	3	0	3	3	3	1	1	3	8	13	7	4	6	4	1	3	1	9	1	0	13	18	5	2	1	113
Dotcom-crash aftermath	4	1	3	3	4	4	4	6	1	6	2	6	0	6	3	3	2	3	5	1	3	2	7	1	4	84
Dotcom entrepreneurship	9	1	4	8	5	5	10	5	10	1	4	6	12	21	4	1	6	9	13	3	9	10	6	3	13	178
E-business	4	1	4	0	11	0	7	5	2	3	1	2	13	0	0	3	0	4	1	0	0	0	9	0	3	73
E-business just one more..	4	1	4	0	11	1	7	5	4	5	1	3	13	5	0	4	1	5	1	0	0	0	9	0	3	87
E-business saves costs	7	1	4	0	11	1	7	5	2	3	1	2	14	1	1	4	0	4	1	0	0	0	9	0	3	81
E-enabling institutions	4	2	0	0	1	0	1	2	2	2	0	2	3	0	1	1	5	2	2	1	1	1	2	1	0	36
Effective networking	5	4	6	10	7	8	1	13	12	11	13	41	46	5	3	5	9	9	4	3	8	21	52	11	24	331
Experience	4	3	2	3	1	2	2	5	1	1	3	4	9	3	12	5	1	3	6	1	3	17	1	0	2	94
Experience in larger buss.	4	4	5	4	1	4	2	7	1	1	6	4	18	3	13	9	1	3	9	1	3	23	3	6	3	138
Freedom & Creativity	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	2	0	0	1	7
Getting funding only ...	2	2	2	9	2	22	7	5	5	3	11	2	3	18	6	1	7	12	13	1	7	6	7	0	6	159
Happiness & Enjoyment	7	5	3	5	14	14	5	9	8	3	2	6	26	8	4	12	3	17	6	1	3	13	8	2	18	202
Having a client	30	12	9	4	13	15	6	1	3	6	2	1	5	5	24	16	10	9	6	3	6	1	3	3	5	198
Having a vision	6	3	8	5	2	1	2	2	10	5	3	19	4	0	4	4	1	3	8	1	8	3	3	11	10	126
Having references	3	0	2	0	1	0	0	4	1	0	0	0	2	1	1	0	4	0	0	0	0	0	0	0	0	19
Hyper-competitive	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	5
Improvement	1	0	0	0	2	3	1	1	0	0	0	2	2	1	2	1	1	1	1	2	0	1	1	1	0	24
Independence	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	1	9
Learning	4	4	4	4	3	2	1	3	3	6	2	4	15	4	4	3	5	8	7	4	21	7	25	2	1	146
Long-term commitment	0	0	0	1	0	0	0	0	0	0	2	1	0	1	0	0	0	0	0	0	0	1	0	0	5	11
Methods for control	3	1	5	1	0	0	1	5	3	1	0	1	0	5	1	1	2	0	1	2	4	0	1	1	0	39
Modern business	13	4	1	2	4	1	15	2	3	9	6	5	8	7	2	5	1	11	6	2	3	11	6	4	6	137
More successful in afterm.	2	1	2	0	2	0	0	1	3	5	6	0	3	0	0	2	0	0	0	0	2	2	1	1	2	35
Negative image	0	1	0	0	1	1	0	0	2	0	1	0	1	0	2	0	0	0	0	0	0	0	1	0	0	10
Network chairman	0	0	0	0	2	1	1	0	0	0	0	8	2	1	0	0	0	1	0	0	1	1	1	0	1	20
Network of e-businesses	9	4	11	8	19	9	14	16	12	13	9	21	29	3	2	5	2	14	5	3	9	9	40	7	22	295
New business opportunities	6	6	6	0	18	6	7	7	6	10	9	3	17	1	2	5	0	6	3	1	5	5	23	1	13	166
New population	3	5	1	1	1	0	0	1	2	1	4	0	2	1	0	3	0	0	2	0	1	2	1	0	2	33
New priorities	10	0	2	1	1	0	1	2	0	0	0	0	0	2	1	2	1	0	2	0	1	1	1	4	3	35
New rules to value	1	1	4	1	0	1	5	4	1	2	9	6	3	2	1	0	1	2	2	2	3	15	0	6	5	77
New ways of connecting	2	2	2	0	4	6	1	5	3	17	5	11	11	14	1	9	4	5	5	2	7	12	16	0	16	160

PRIMARY DOCS																										
CODES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Totals
New ways of networking	10	5	9	15	8	12	3	15	16	12	14	42	49	7	6	8	15	13	11	6	8	23	55	11	26	399
Offering value to clients	2	2	7	3	11	3	0	11	5	3	7	10	13	7	0	3	1	7	0	5	4	13	5	1	11	134
Organic growth	14	2	4	5	3	0	1	0	4	3	4	1	2	8	8	4	4	5	7	4	5	1	0	5	3	97
Outstanding performance	0	1	0	2	2	3	1	1	1	2	0	4	1	3	2	0	1	11	2	0	0	3	1	0	1	42
Perseverance & Effort	3	6	3	10	6	5	5	8	5	2	4	7	8	5	5	2	9	12	14	3	4	10	9	2	18	165
Personal referral	2	0	1	0	1	0	1	4	3	2	0	0	4	0	1	1	0	2	1	1	0	0	0	0	0	24
Perspective	6	4	0	2	0	3	1	3	3	2	1	8	8	0	1	3	6	4	3	4	7	3	2	1	6	81
Power of connecting	9	4	7	3	19	11	14	11	7	10	7	9	15	5	0	4	0	11	4	3	8	9	25	1	14	210
Profit	6	0	1	4	1	2	2	2	2	4	0	2	0	1	0	3	1	1	10	0	3	0	0	3	1	49
Promotion of entrepr.	0	0	0	1	0	0	3	2	0	2	0	1	3	0	0	5	0	1	0	0	4	0	0	1	0	23
Public recognition	0	0	0	0	2	2	0	0	2	2	1	0	0	1	0	0	2	1	2	0	4	6	0	1	0	26
Quick turnaround	3	9	6	1	0	0	2	1	2	2	2	4	2	11	1	1	6	1	31	3	2	8	0	2	3	103
Rainmaker	6	2	3	10	5	4	2	24	5	4	2	2	3	4	3	7	2	3	2	1	4	1	14	0	3	116
Rainmaking	12	3	7	15	6	8	7	19	9	10	3	8	1	5	11	10	6	8	7	4	7	9	11	0	3	189
Re-adjustment of rules	0	0	1	3	4	9	1	2	1	1	2	7	0	0	1	3	0	0	2	0	0	1	1	0	1	40
Real revolution	0	1	1	3	3	2	1	0	0	0	1	2	3	5	2	0	0	0	4	1	2	0	1	0	2	34
Re-definition of networking	5	2	7	11	3	4	0	13	8	9	12	59	46	13	5	6	6	7	5	5	12	18	43	13	32	344
Responsibility for buss.	7	9	4	4	4	4	2	5	4	7	2	4	13	4	6	2	6	2	5	5	5	12	1	3	4	124
Risks	1	1	0	1	2	5	2	1	3	1	3	0	0	0	1	0	5	0	1	0	5	0	5	3	8	48
Role model	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	2	0	1	0	0	0	3	0	0	0	10
Roles and responsibilities	3	3	2	6	4	2	9	6	4	2	7	7	7	3	4	7	2	4	2	1	3	4	3	5	2	102
Sales deals	11	1	1	6	1	5	1	4	5	3	5	9	7	2	8	3	5	2	6	0	0	6	6	0	2	99
Self-actualisation	1	1	2	2	0	0	0	0	2	2	0	2	6	2	1	0	0	4	0	0	20	3	11	1	1	61
Sharing knowledge	12	7	7	10	5	9	8	11	12	6	2	30	23	8	6	7	13	14	11	8	20	8	12	5	7	261
Stamina & Perseverance	0	0	0	0	0	0	0	2	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	6
Structure	0	1	3	0	1	0	0	3	1	1	0	2	2	1	0	0	0	0	0	2	0	5	1	0	1	24
Structure & intuition	0	1	0	2	0	0	0	3	0	3	0	0	2	1	0	0	0	1	8	0	1	0	1	0	1	24
Structure and assignment	0	1	3	0	1	0	0	3	2	1	0	2	2	2	0	1	0	1	0	2	0	5	2	0	2	30
Success through profit	10	7	6	7	5	2	2	3	6	3	7	5	13	11	6	7	9	12	8	3	4	14	3	8	2	163
Taking responsibilities	1	2	0	1	0	0	2	0	1	0	4	0	0	1	1	1	0	1	0	0	2	1	1	0	0	19
Targets & plans	11	10	7	9	2	0	6	3	3	2	11	6	10	3	0	0	8	4	5	2	9	7	6	1	4	129
Technology-determined	6	1	2	5	3	3	0	17	13	4	9	10	8	12	3	0	0	4	17	3	10	6	3	0	8	147
Transparency & trust	0	4	0	1	2	0	0	8	0	2	1	2	6	0	2	1	2	0	3	2	1	0	0	0	0	37
Trend	0	0	0	0	0	0	1	1	2	0	1	3	1	5	0	0	0	1	3	0	0	3	1	0	7	29
Unique proposition	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
United decisions	1	0	0	0	1	3	0	2	0	0	1	3	1	1	0	0	0	3	0	6	0	0	3	0	0	25
Use support infrastruct.	4	4	0	1	3	1	15	4	2	1	6	2	3	6	1	0	1	3	4	5	9	7	2	3	5	92
Value-generating community	6	16	16	9	5	5	7	10	10	2	10	8	8	5	16	4	8	7	3	7	8	15	0	10	5	200
Venture capital funding	2	0	0	0	0	0	3	0	0	3	2	0	1	6	2	0	1	7	9	0	0	0	1	0	5	42

PRIMARY DOCS																										
CODES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Totals
Ways of organising	0	1	0	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	2	0	0	0	0	9
Wealth	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	6
Totals	395	248	280	315	366	264	265	459	318	337	346	593	744	390	309	250	252	386	432	176	384	547	533	194	493	9276

Appendix 12: Thematic codes from interview corpus

<i>Thematic codes</i>	<i>Dotcom boom</i>	<i>Dotcom-crash aftermath</i>
<i>Positive evaluation</i>	<p><u>Business success</u> Individual Wealth Freedom & Creativity Technological inventions</p>	<p><u>Business success</u> Working collectively Customer payment Profit</p>
<i>Negative evaluation</i>	<p>High turnover Advertising-based False model Business approach that failed</p>	
<i>Positive evaluation</i>	<p><u>Networking</u></p>	<p><u>Networking</u> Effective networking Learning e-business New ways of connecting New ways of networking Content brokerage</p>
<i>Negative evaluation</i>	<p>Aggressive school Dating Game Venture capital</p>	<p>Being associated with the dotcom hype</p>
<i>Positive evaluation</i>	<p><u>Business support</u> Funding through capital markets Venture-capital funding</p>	<p><u>Business support</u> Personal referral and recommendation instead of marketing; Public recognition Building reputation; Network of e-businesses; Power of connecting people; Getting funding only when needed</p>
<i>Negative evaluation</i>		<p>E-enabling institutions Confused by support infrastructure Risks</p>
<i>Positive evaluation</i>	<p><u>Revolution</u> Technological revolution</p>	<p><u>Revolution</u> Real revolution</p>
<i>Negative evaluation</i>		
<i>Positive evaluation</i>	<p><u>Business approach</u> Taking risks</p>	<p><u>Business approach</u> Organic growth; Long-term customer relationship; Roles and Responsibilities; Strategic approach; Having done big business; Sharing knowledge; Structure and assigned responsibilities; Taking on business responsibility</p>
<i>Negative evaluation</i>	<p>Quick turnaround; Short-term investment/ sales of firm Hyper-competitive Technology driven Random selling</p>	

<i>Positive evaluation</i>	<p><u>Entrepreneurial culture</u> Independence; Following one's calling; Emotional relationship with firm; Change-the-world adventure</p>	<p><u>Entrepreneurial culture</u> Transparency and trust; Long-term commitment and survival Stamina & perseverance; Happiness & enjoyment; Culture of success; Self-actualisation; Comradeship Create new knowledge; Having and maintaining a vision</p>
<i>Negative evaluation</i>	<p>Intuition; Trend Hyper-competitive Yes-culture Accelerated environment Dotcom bubble mindset</p>	
<i>Positive evaluation</i>	<p><u>Value</u></p>	<p><u>Value</u> Long-term creation of value; Client-Value United decisions Unique proposition</p>
<i>Negative evaluation</i>	<p>Shareholder-value Advertising New rules to value</p>	
<i>Positive evaluation</i>	<p><u>Business rules</u></p>	<p><u>Business rules</u> Fundamental business rules Business doesn't come through chance Credibility</p>
<i>Negative evaluation</i>	<p>Re-adjustment of rules New priorities</p>	
<i>Positive evaluation</i>	<p><u>E-business</u></p>	<p><u>E-business</u> E-business saves costs Just one more type of business</p>
<i>Negative evaluation</i>	<p>Technology-determined content generation</p>	

Appendix 13: Theme frequency in focus group

Extracted from Coding with Atlas/ti
 HU: Thematic Analysis FocusGroup

 Codes-Primary-Documents-Table

Code-Filter: All
 PD-Filter: All

CODES	PRIMARY DOCS	
	1	Totals
Breakfast meeting: don't get to know people	2	2
Networking in large firms	4	4
Differentiates smaller from larger business	7	7
Exclusion	1	1
Filter of information	8	8
Fluidity and new business possibilities	1	1
Job-search	2	2
Learn & obtain experience	2	2
Less rigid and structured business	1	1
Meet people that one would otherwise not meet	3	3
More contacts/ business/ clients/ customers	8	8
More objective judgement of people	1	1
Networking as profitable service	7	7
Networking has always been around	3	3
No business value	1	1
Pressure of networking/ dotcom etiquette	6	6
Sharing knowledge	3	3
Supports new trends in society	4	4
Taken seriously by large corporates	1	1
The more networking the less business	2	2
Vetting people & establishing trust	9	9
Totals	76	76

Appendix 14: Thematic codes from focus group corpus

	<i>Negative evaluation</i>	<i>Positive evaluation</i>
<i>Thematic code</i>	<p><u>Networking format</u></p> <p>Networking in large firms Breakfast meeting: don't get to know people Pressure of networking/ dotcom etiquette Exclusion</p>	<p><u>Networking format</u></p> <p>Differentiates smaller from larger business Vetting people & establishing trust Meet people that one would otherwise not meet More objective judgement of people More contacts/ business/ clients/ customers Supports new trends in society</p>
<i>Thematic code</i>	<p><u>Business value</u></p> <p>Networking has always been around No business value The more networking, the less business</p>	<p><u>Business value</u></p> <p>Learn & obtain experience Job-search Sharing knowledge Filter of information Taken seriously by large corporates Networking as chargeable/profitable service Less rigid and structured business Fluidity and new business possibilities</p>

Appendix 15: Example of 'Guru-comment' by network chairman

published on ecademy.com, 9.11.02

"Many members have asked me this month to address the questions as to why I network, how I network and what the secrets are to my kind of networking:

The first question you need to ask yourself is how much money do you wish to earn each year? Networking is a very precise science based purely on numbers.

What are the costs of your kids' schools, your mortgage, your holidays and your running expenses? Without this question answered you cannot determine your networking activity level.

It is my belief that you need 1,000 people in your network for each £100,000 you wish to earn each year. If you are crazy like me and wish to earn £1m each year then yes you need 10,000 people in your network!

In other words each person you know is worth £100 per annum to you either directly or indirectly. Remember the money is in the links not the nodes. Too many people assume from this that I am talking about selling pensions to my family and friends, I am not. The value of nodes (close contacts) is that they lead you to links (distant contacts). The money, your money, resides in the distant contacts not the close contacts. Very few people I meet recognise this fact and continue to focus on their close contacts for money. This is wrong.

Close contacts for knowledge, distant contacts for money is the rule.

I am not talking about network marketing here and I certainly am not talking about selling Amway washing powder.

Just in case you missed that, network marketing is NOT my thing!

I am talking about people networking, I am talking about connecting with people and listening to and learning from what that they say. I am talking about making detailed notes in little black books, often verbatim notes on what is said during the series of questions.

Questions, questions, questions is the secret to gathering knowledge and only open questions will do i.e. questions that start with who, what, why, when, how, where and which. If you haven't read Rudyard Kipling perhaps you should.

We live in a world where everyone seeks knowledge, contacts and deals . This is the new economy; this is the knowledge based economy. This is the so called high-tech, high wage economy that Tony Blair often refers to. Personally I believe this is utter nonsense as the internet is the most powerful deflationary economic network ever witnessed by man on earth. Prices are falling and the price paid for labour i.e. your salary is also falling and fast.

However it is certainly true that knowledge is the new money.

Knowledge is thus what you need to gather, exchange and trade in order to get money.

Without lots of knowledge you won't eat in the new economy, fact!

Knowledge comes from people, books, websites, events, networking, reading, listening, observing, asking questions, pondering, debating, perusing and sharing. I also think knowledge comes from going to watch Chelsea beat West Brom 2-0 at Stamford Bridge and drinking beer with your mates.

I find that the most powerful knowledge comes from listening to people. So I personally focus my mind on meeting 1000s of people and listening (very) carefully to them.

I have met 4,000 of the 13,000 Ecademy members since 1998 when we started this business network.

I can only meet 1,000 members per year. This is my capacity. John Bromley makes sure I maintain 20 meetings per week, every week and 80 meetings per month, every month ...except August, this is our holiday month. I believe in having a month of work in August, (I think it's that French thing)

How do I get 20 meetings per week?

It's quite simple really I write to members and say "May I come and see you please?"

Very few members refuse the opportunity of a meeting with me, why? Because I can guarantee to bring them knowledge, new knowledge that they don't know or had never considered.

Thus I bring and give value, if I didn't no-one would be interested in seeing or listening me. In other words those who give, receive. Those who take never get a thing but loneliness in old age.

This is the new economy, face up to it, it isn't going away, it's simply going to grow, so if you want to eat well, get used to doing your 20 meetings each week to gather your knowledge (money).

Have I mentioned that knowledge is money in a different form?

I know 1000s of people, literally 1000s. I write to them and ask them if I can come and see them. Very few ever say No, but some do. I am not fazed in the slightest by rejection, I simply ask again another time under another guise with another angle, (I literally have an unlimited range of angles)

I do this relentlessly week in and week out. Fortunately for me I have a wonderful personal assistant in the form of John Bromley (my brother in law and a former policeman so he keeps very accurate records) who takes care of my manic schedule and books all these appointments into my diary. John also looks after all our money and as a result we never have any debt!

Every now and then perhaps once a week I get the chance to do a speech at a conference. To me public speaking is like resting. I don't have to ask questions, I can just talk. I can present what I currently know which is a vast amount of present knowledge. It's almost most like a hard disc unloading its data. It feels good, very good and it's very emotionally uplifting. I laugh a great deal at myself and I laugh with the audience. To speak is to rest.

People come up to me after I have finished speaking and say "where did you learn all that stuff?" and I say "it's because I read a book a week and meet 1,000 people each year."

Why do I religiously meet 1,000 people per year?

The reason is quite simple, networking works.

Every £1 you invest in networking generates £5 in income for you and your team. How simple is that?

Shall I say that again?

Every £1 you invest in networking generates £5 in income for you and your team. There you go, just in case you missed it the first time.

But what I notice is that many people around me just pay lip service to my theories. They say things to me like "it's a nice idea Thomas but I don't need to do as many meetings as you because I am far more focused and targeted than you are". It is not me they are fooling, it is themselves. Networking is not selling and selling is not networking.

Selling is about transactions.

Networking is about knowledge.

These are different concepts do not confuse them or you will neither network nor sell effectively.

Selling is about closing and cutting a deal.

Networking is about opening and gathering information.

You can clearly see how different selling is from networking.

Many people think I am crazy to do this volume of meetings, to have such a huge network of people to meet with and learn from.

In the new economy knowledge is money and people are knowledge, thus people are money.

If you play that forward then the winner of the knowledge game is the one with the most people in their network. Put finer:

“The winner of the game is the one with all the names”.

Think about that for a moment. Ponder. Absorb. Take a deep breath.

“The winner of the game is the one with all the names”.

Each day as a result I spend time looking at the members who have just joined the Ecademy and I think to myself ...hmmm I would like to meet him or her and listen to their opinion on that. Then I drop them a little note saying “may I come and see you please?” and John books the date into my diary.

The concept is noddy simple....

The hard work associated with networking is that I have to work 80 to 100 hours each week and this is very difficult to squeeze into a family of three children. I hope I get the balance right, you need to check with Penny if I do or don't. I am keen to know what she says so please email her on pennypower@compuserve.com. After all Penny thought of this thing.

In answer then to those questions addressed at the beginning of this article.

Why I Network?

I Network for knowledge, because knowledge can easily be exchanged for money. Without knowledge in the new economy you will not eat and neither will your family. This will become critical in the next 20 years, right now I am a freak within 20 years I will be boring mainstream.

How I Network?

I relentlessly maintain a simple model of 20 meetings per week, 80 meetings per month and 1,000 meetings per year. This I remind you is only possible because of the backup and support I have from John Bromley. I recommend you get yourself a John if you wish to maintain this pace. Make sure he's old and wise and a former songwriter and policeman :-)

And lastly:

What are the secrets to my kind of networking?

I use the Ecademy each and every day hunting for new people to gather knowledge from.

I contact people and say “may I come and see you please?” using the Network button.

I cc John Bromley so John knows what I have said and who to follow up with.

I visit these members. I always like to visit their location, their offices, their home as you can tell a great deal from a place particularly a home or private residence. I have a very sensitive nose, you can tell a great deal from the smell of a place, (my mother told me this and she's right).

I ask endless open questions using the who, what, why, when, how and which formula. I try never to ask a closed question like, will you, could you, do you, have you and so on?

I listen very carefully to what I hear. I write copious notes in my little black books that Penny buys me from <http://www.moleskine.co.uk/> these are my favourite books, now I have hundreds. I recommend you use books that you can cherish not these silly books from WHSmiths which have no intrinsic value.

I make sure I buy and read a book from Amazon each week so I have plenty in my mind to prompt my questions. I have read every book on the Internet available so now I read anything Amazon recommends to me.

I visit perhaps 10 new websites a week to avoid going rusty or stale. It is so easy to go rusty or stale.

And finally and most importantly did I mention I always meet 20 people a week, 80 people per month and 1,000 per year.

I hope you enjoy networking like me with fellow Ecademy members; it really is great fun having friends the world over.

Warm regards,

Chairman of Ecademy