

1.0 - ABOUT THIS PAPER

Mary Midgley (1989)¹ defines the aim of philosophy as “trying to restate the basic connections of things” (p.248), and its craft as “the art of finding the centre of the problem” (p.250). In those terms, this present work’s general subject area is the **philosophy of business knowledge**, and its particular focus is on understanding **the role knowledge plays in strategic management**. Yet for centuries, philosophy has pulled back from ‘live’ issues, “in the plaintive hope that this would make it look more like science” (p.107), leading (for example) to a philosophical (‘epistemological’) idea of certain knowledge as “Justified True Belief” - inapplicable to typical business contexts, where ‘justification’ is *costly*, ‘truths’ are *debatable*, and ‘belief’ is *conditional*.

In short, while **business knowledge** is *dirty and uncertain*, philosophical knowledge is *clean and certain* - and seemingly unconnected to real life. In his later years, Wittgenstein (trying to distance himself from his earlier, more naïve work), proclaimed “We want to walk, so we need friction. Back to the rough ground!” (1958, #107).² This paper, then, tries to map the ‘rough ground’ of business knowledge by first constructing a conceptual toolkit for understanding the structure of knowledge, and then applying that toolkit to a set of strategic management texts.

To build its toolkit, this work reviews a broad range of literatures on business knowledge: these might be best described as elements of a loosely-connected research programme focused not on philosophy’s *certain knowledge*, but rather on *uncertain knowledge*. One might parallel this difference with the tension between (certainty-based) Newtonian

¹ **Midgley, Mary** (1989). “Wisdom, Information & Wonder”. London: Routledge.

² **Wittgenstein, Ludwig** (1958) “Philosophical Investigations”, trans. G. E. M. Anscombe. London: Basil Blackwell.

physics and (uncertainty-based) quantum mechanics, and (more relevantly) the conflict in business between *controlled / monolithic / deterministic* and *uncontrolled / diffuse / indeterministic* worldviews (between ‘The Cathedral and the Bazaar’,³ one might say).

At first glance, the difference between *certainty* and *uncertainty* might appear to be merely linguistic, or perhaps even illusory - to the point where one might reasonably wonder whether *certain knowledge* and *uncertain knowledge* are merely two sides of the same coin. Yet as we shall see, the two worldviews behind them are radically opposed, powerfully entrenched - and deeply at war.

1.1



BACKGROUND

Business theory is built on two opposing worldviews: **deterministic** (which views the world like a *game of billiards*) and **indeterministic** (which sees the world as a *chaotic casino*). What does this tell us about *business knowledge*?

Though *business* dates back millennia, modern joint-stock companies only began with Britain’s Great Companies Act of 1862:⁴ and though Hoopes (2003)⁵ also highlights the early role of management manuals for slave owners, the idea of *business theory* arguably dates only to Frederick Taylor’s Scientific Management in the 1880s and later. This was an era of radical new ‘sciences’ (like biology, economics, and even Marxism), where the **deterministic** worldview was in the ascendant.

By combining empirical analysis with job simplification and job specification, Taylor built a stopwatch-centred view of business practically indistinguishable from modern operations theory - importantly, he also ushered in an era of bottom-up (ie detail-centric)

³ **Raymond, Eric S. (1999)** "The Cathedral and The Bazaar", <http://www.tuxedo.org/esr/writings/cathedral-bazaar/>

⁴ **Micklethwait, John; Wooldridge, Adrian (2003)** "The Company : A Short History of a Revolutionary Idea", Modern Library.

⁵ **Hoopes, James (2003)** "False Prophets: The Gurus Who Created Modern Management and Why Their Ideas Are Bad for Business Today", Perseus Publishing.

business theories, and was arguably the first widely published modern business guru. Lately, Taylor's focus on 'harvesting' the tacit knowledge on the shop-floor has also gained interest⁶ within the Knowledge Management literature. However, within this mechanistic management style any intangible, uncontrollable factors (like *uncertainty*) were necessarily painted out of the picture. Here, **machines** recur as the dominant metaphor for organisations (as famously described by Gareth Morgan (1998)⁷ and Peter Senge (1994)⁸), where both people and knowledge are viewed simply as predictable cogs. *Certain knowledge* dominates such thinking - especially when business tries to emulate science.

But what of more contemporary, more **indeterministic** theories of business (like organism / brain / culture, Morgan's other main metaphors)? These typically propose that the positive accumulation of 'success factors' (intangible attributes like *reputation, positioning, brand awareness, culture, vision, leadership, entrepreneurship, or quality*) causally leads to success. They walk a tricky rhetorical line between the *indeterminism* of such attributes and the *determinism* of their claimed results - yet this is the dominant theory-generating template adopted by modern business gurus.

Knowledge itself has long been seen as one of these critical (yet ill-defined) success factors, from Alfred Marshall (1890) who thought it "the most powerful engine of production",⁹ to Hayek (1945)¹⁰ who considered it economically important. However, many indeterministic business theorists now see it as something useful for organisations to *accumulate* - Peter Drucker's (1992)¹¹ flat assertion that "[k]nowledge assets are the capital assets needed to create wealth" captures the essence of this (increasingly pervasive) 'knowledge-as-capital' viewpoint (discussed in Chapter Two). Yet it is

⁶ See: **Spender, J.-C.; Kijne, H.** (eds) (1996) "Scientific Management: F.W. Taylor's gift to the world?" Boston, MA, Kluwer.

⁷ **Morgan, Gareth** (1986) "Images of Organization", Newbury Park, CA: Sage Publications.

⁸ **Senge, Peter** (1994) "The Fifth Discipline", Currency.

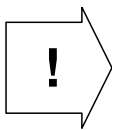
⁹ **Marshall, Alfred** (1890) "The Principles of Economics", Macmillan.

¹⁰ **Hayek, F.** (1945) "The Use of Knowledge in Society", American Economic Review, 35. pp.519-30

¹¹ **Drucker, Peter F.** (1992) "The age of discontinuity". 2nd revised edition, New Jersey: Transaction.

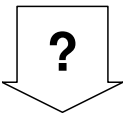
uncertain knowledge which dominates thinking here - and the question of what it means to accumulate something uncertain (i.e. how to account for it) is difficult to answer.

In summary, even though the usefulness (and reusability) of knowledge has become the business orthodoxy, what is knowledge? Dewey & Bentley (1949)¹² considered “[the] word ‘knowledge’ ... a loose name. ... We shall rate it as No. 1 on a list of ‘vague words’” (p.48), and argued that a “*prolonged factual enquiry*” would be needed to determine what knowledge actually is. Many have tried; however, most attempts have been started from the logic of a particular discipline¹³, before reaching out ‘sideways’ towards other parallel theoretical strands, giving rise to concerns of bias in reasoning and presentation. In contrast, this present work tackles the same question by compiling a broad (cross-disciplinary) picture of business knowledge, and then hunting *beneath* the various accounts for the key questions (and answers) that bind them together - looking for the **roots** of knowledge, not being distracted by its leaves.



Business theorists of all flavours now consider the accumulation of knowledge as driving business success: yet as worldviews have moved from *deterministic* to *indeterministic*, business knowledge has silently transmuted from *certain* to *uncertain*. This paper takes as its challenge the task of discovering what this subtle (but deep-rooted) shift in emphasis means, particularly in the area of strategic management.

1.2



AIMS & OBJECTIVES

What practical *aims and objectives* should this work structure itself around to achieve its goal of understanding the *roots* of business knowledge, and their relationship with strategic management?

This paper’s aim is (by exploring related literatures) to propose a theoretical account of

¹² Dewey, J.; Bentley, A.F. (1949) “Knowing and the known”, Boston: Beacon Press.

¹³ ...such as Human Resources, Sociology, Economics, or Knowledge Management...

the structure of business knowledge, and to refine that into a useful conceptual toolkit for applying to actual input texts. However, that alone would be insufficient: experience suggests that such a set of ideas should also be tested it out in order that we may gain more understanding of (and confidence in) them.

The question naturally arises as to what **data-set** to use: as a single input text would be too narrow, it seems that a good data-set would comprise a heterogeneous set of input texts. However, it was far from obvious at the outset of this project how the structure of knowledge might satisfactorily be tested via questionnaire (whether quantitative or qualitative). Nick Bontis (1998)¹⁴ took such an approach for his broadly similar empirical test of an Intellectual Capital model, and claimed to have detected a strong connection between the different types of knowledge: but (methodologically) his claim of causality (rather than just correlation) from a single convenience sample¹⁵ seems too strong.¹⁶

It was therefore decided to use a **secondary source** for the data-set, but one with a particular focus on strategic management: and so the source chosen was Henry Mintzberg's 'Ten Schools' of strategic management, as famously elucidated in his book "Strategy Safari" (1998).¹⁷ The idea was that each of the ten "schools" forms a well-defined data-point (or 'cluster') within a 'strategy-space' - and, implicitly, defines its own discourse and/or business logic.

Mintzberg's book is completely mainstream (it is used as a textbook on many business courses) and has an ethnological [i.e. pro-model] and postmodernist [i.e. anti-theory] sensibility (he claims to be celebrating "good practice, not neat theory" [p.372]).

¹⁴ **Bontis, Nick** (1998) "Intellectual capital: an exploratory study that develops measures and models". *Management Decision*, 36/2 [1998] pp.63-76

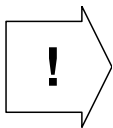
¹⁵ ...of MBA students...

¹⁶ To be precise, the problem is that a proper assessment of Intellectual Capital requires a high-level strategic overview of a firms, which few (whether MBA students or not) have. So, it seems hard to determine from questionnaires whether you are assessing a real economic phenomenon - or merely building up correlatory pictures of shared myths.

¹⁷ **Mintzberg, H.; Ahlstrand, B.; Lampel, J.** (1998) "Strategy Safari: A Guided Tour Through the Wilds of Strategic Management", The Free Press, New York.

Structurally, the book describes ten parallel views (“schools”) of strategic management, arising from his (well, **anthropological**) observations of strategy practice: even Booth (1998)¹⁸ concedes that the multiplicity of perspectives in the strategy process literature has possibly led to this “balkanization” (p.257) of paradigms. Booth argues that much talk of incommensurability is misplaced, falling far short of any “crisis”: yet points to Mintzberg’s Ten Schools as possibly the best extant example of it.

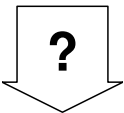
Finally, according to Peter Berger (1963),¹⁹ “*It can be said that the first wisdom of sociology is this. Things are not what they seem*” (p.14) - and so (arguably) the main challenge for any foundational account is to help reveal that which lies beneath the surface. If a hallmark of a good theory is that it adds to (and deepens) your knowledge of a subject (rather than simply repackages what you already know back to you), then that is clearly an attribute towards which this should aspire.



This work’s **objectives** are therefore not only to build a conceptual toolkit for understanding business knowledge, but also to test it empirically against Mintzberg’s Ten Schools. Given the toolkit’s primarily theoretical focus, it should be adjudged successful if it can be shown to have sufficient power to throw light on what *separates* the use of knowledge in Mintzberg’s ten schools, in a way complementary to Mintzberg’s own descriptions.

1.3

METHODOLOGY



By what means should these objectives be achieved? What structure should this paper have?

In the general American business school tradition, this dissertation’s structure would typically recapitulate the well-known Hegelian triad of thesis (theory), antithesis

¹⁸ **Booth, Charles** (1998) “Beyond Incommensurability in Strategic Management: A Commentary and an Application”, *Organization*, Vol 5(2). pp.257-265.

¹⁹ **Berger, Peter** (1963) “*Invitation to Sociology*”. Bantam Doubleday Dell.

(empirical test), and synthesis (conclusions). However, following Karl Popper (1959),²⁰ that would often seem to inspire **bad science**, in that it sets out to *corroborate*, rather than to *falsify* - and is often *superficial*, in that important assumptions underlying both thesis and antithesis can remain unexpressed and unchallenged.

Alternatively, the more continental style of dissertation (which typically explores a **problematic** [a set of open-ended questions within a well-defined historical context] before suggesting an explanatory resolution) attracts the charges of being overly historicist and too loosely focused.

I see these two general approaches as **complementary**: and, in the spirit of the overall programme, have tried to integrate them both into a coherent whole, where a loose problematic (of the issues) → critical analysis (of the literature) to produce a focused problematic → analysis-inspired theory → critical test → explanatory conclusions.

While the **first stage** of this methodology involves choosing what literatures would be relevant, the **second stage** treats the problematic not as its starting point, but rather as the particular knowledge to be created. In the **third stage**, a new theory is devised to respond to the questions comprising the problematic: while the **fourth stage** comprises choosing a data-set to test out the new theory (in this case, Henry Mintzberg's celebrated 'Ten Schools' of Strategic Management work) before reconciling the two. Finally, the **fifth stage** draws conclusions from the entire exercise. What should also be clear from this diagram is one of the key ideas of the work itself - how *problems (uncertainties) lead to knowledges*, and how *knowledges lead to problems (uncertainties)*.

²⁰ **Popper**, Karl R. (1959) "The Logic of Scientific Discovery", Hutchinson, London

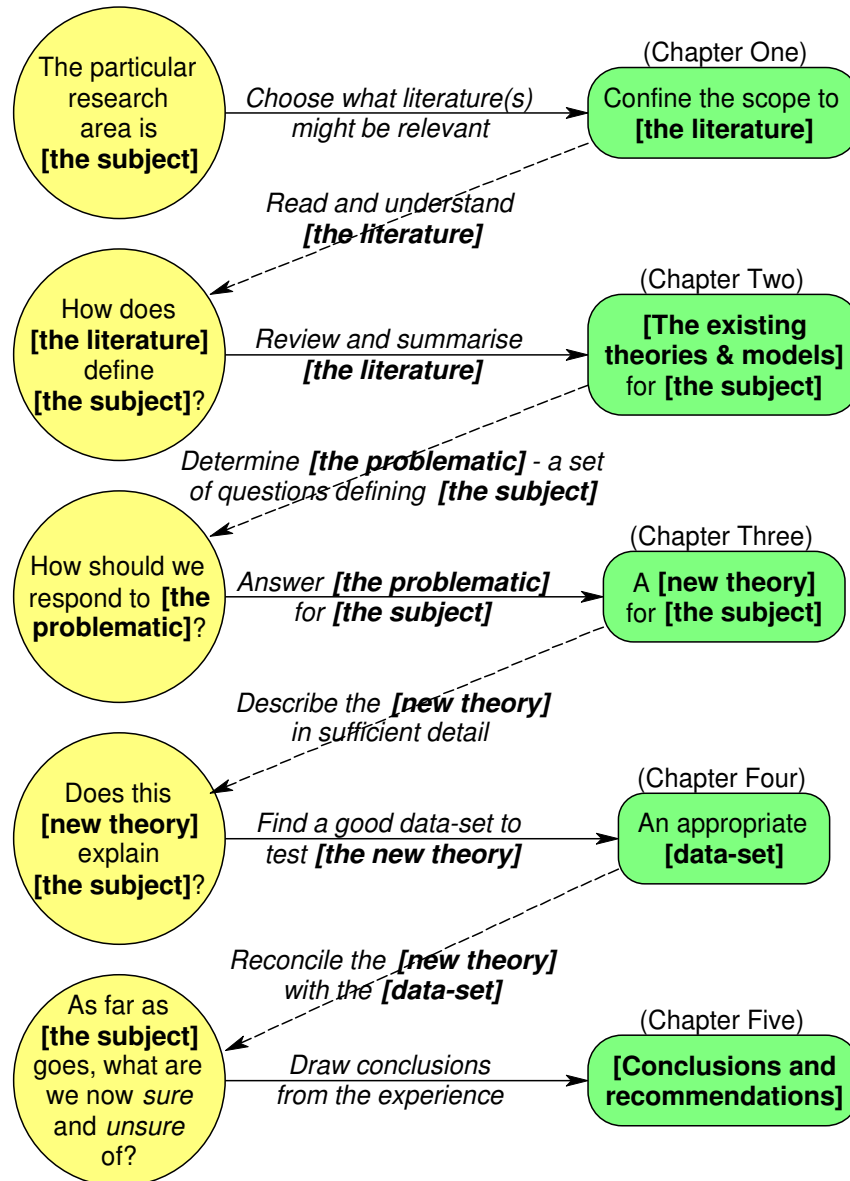


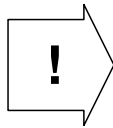
Figure 1a: The methodology used for this work

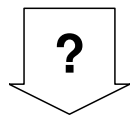
However, the methodology as described is fairly generic: ‘filling in the blanks’ (though some terms will be defined along the way) gives:

[The subject]	Business Knowledge
[The literature] (Chapter 1)	Knowledge Frameworks: part of <i>Knowledge Management</i> , built on <i>Intellectual Capital</i> and <i>Sociology of Knowledge</i> literatures.
[The problematic] (Chapter 2)	(1) Why do positive & negative knowledges exist? (2) How is ideology embedded in knowledge?
[The new theory] (Chapter 3)	(1) The tension between two related knowledges is “uncertainty” (2) We call tensed (past/present/future) uncertainties “Keatsian” (3) Knowledges are responses to the three Keatsian uncertainties. (4) Ideology defines which knowledges / uncertainties are valid
[The data-set] (Chapter 4)	Henry Mintzberg’s ‘Ten Schools’ of Strategic Management
[Conclusions] (Chapter 5)	(a) That we are immersed in both dialectic & modern ideologies (b) Business expresses (and exploits) our inability to differentiate (c) Appreciating this can emancipate you from ideology’s grip

Table 1b: How the present work follows the proposed methodology

The final challenge of this first chapter, then, is to decide the **scope** of the research: what literatures should be examined to build up a picture of business knowledge?

 The methodology employed here merges the American (analytical) tradition with the continental (*problematique*) tradition, and so proposes a five-stage process (mirrored in the chapter structure).

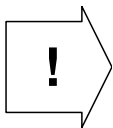
1.4  **SCOPE**
What literature(s) would be most relevant to understanding *certain* and *uncertain* business knowledges?

While philosophy (and specifically the field of epistemology) focuses on *certain knowledge*, the majority of the sources reviewed here are taken from modern business and sociological literatures, and can be thought of as focusing instead on *uncertain knowledge*. These include **Knowledge Management** (*the study of practical knowledge use in organisations*), *Intellectual Capital* (*the study of strategic investments in knowledge*), and the *Sociology of Knowledge* (*the study of knowledge-using behaviours*).

Where to begin? The Knowledge Management literature would seem to be a good starting

point - but this has long been bedevilled by the persistent criticism that its theorists have failed to agree on a definition of knowledge. As we shall later see, this arose because the field itself was a hybrid formed at the junction of several other fields (such as *Information Management* and *Organisational Theory*). To resolve this tension, it therefore spawned the '**Knowledge Frameworks**' literature, a specialist subfield tasked with building frameworks for knowledge broad enough to account for all the heterogeneous notions of 'knowledge' implicit in the field: this forms the closest theoretical locus for this study.

However, Knowledge Frameworks papers are typically (descriptive) models of knowledge-defining behaviour: by way of contrast, this work attempts to build not only a (prescriptive) theory sufficient to account for business knowledge, but also one broad enough to account for existing models. To achieve this, we must (like the various modern capital theorists discussed in the next chapter) '**follow the money**' - that is, examine the knowledges in which businesses invest (often called *intangible assets*, but actually *intangible capitals*), and trace them back to the roots of their value. We must also understand the important role that sociological accounts of knowledge (specifically to do with ideology) plays within the Knowledge Management family of literatures.



While the scope of this work is centred on the **Knowledge Frameworks** field, its actual remit is much broader. To understand business knowledge, we must understand *intangible capital*: why is it that businesses invest in knowledge? And what, exactly, is '*ideology*'?