13 A critical reflection and some conclusions on OLI

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Introduction

When I was in kindergarten, my teacher taught me that the way to learn about a new object was to ask five basic questions: Who or what, when, where, why and how? I have always believed that the OLI (or eclectic) paradigm was about a subset of those questions. The 'who or what' is, of course, the multinational enterprise (MNE). While John Dunning's writings often start with a definition of the MNE, the focus of the eclectic paradigm from its beginnings up to the present day has been O (why?), L (where?) and I (how?).

For me, the OLI paradigm is best understood by reading three out of the dozens of books that John Dunning has authored over the past 25 years: *International Production and the Multinational Enterprise* (1981b), *Explaining International Production* (1988a) and *Multinational Enterprises and the Global Economy* (1993a). Each book pulls together and synthesises Dunning's writings from the previous period.[1]

In the concluding chapter to this book on the eclectic paradigm, what I would like to do is provide an overview of the development of the OLI paradigm as seen through my 'lens', and link the book chapters to its development. My thesis is that OLI should best be seen as a *way of looking* at the phenomenon of multinational enterprises and their activities. OLI addresses three of the five kindergarten questions – the why, where and how of MNE activities. Each of these questions can be addressed at a different level: macro (big picture, country), meso (mid picture, industry) or micro (firm, top management team). As examples of the why-where-how questions I list some of the research questions that have or currently do engage international business scholars in Table 13.1.

I argue that the OLI paradigm has been most successful at the macro and meso levels, and less so at the micro level, but I do not see that as a

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- Macro (big picture, country level) questions:
  - O: Why do MNEs exist? Why are MNEs a successful organisational form?
  - L: Why are some countries a home, and others principally a host, to MNEs? How has the pattern of international investment across countries changed over time? How does regional integration affect the pattern of FDI and international production?
  - I: How do market imperfections affect the pattern of international production? How are transactions costs related to the firm's optimal mode of entry into foreign countries?

- Meso (industry level) questions:
  - O: Why are some industries dominated by MNEs and others are not?
  - L: What are the changing patterns of international production in the semiconductor (or other) industry? Why do certain industries cluster geographically together?
  - I: Why are certain modes of entry more predominant in one industry than another?

- Micro (firm, top management team) questions:
  - O: Why do firms differ? How do these differences affect their performance? Why do some firms choose to become MNEs (engage in international production) and others do not? How do O advantages relate to differences in firm performance? How does the management of knowledge flows within the MNE network affect its performance? Why is one firm better able to manage its O assets than another?
  - L: How does an MNE's locational choices affect its performance?
  - I: How are modes of entry choices related to firm performance?

Figure 13.1 macro, meso and micro research questions in international business.

weakness. Paradigms do not have to explain everything, nor does the 'big tent' of OLI have to shelter all theories under its umbrella.

This chapter is organised as follows. First, I address the issue of what is OLI – a paradigm, theory or model? I argue that OLI has moved from a theory to a paradigm, the pre-eminent one in the international business (IB) field. Second, I look at the development of OLI from its beginnings in the 1970s to its latest evolution, highlighting major changes and new directions. As the IB field grew and developed, and as today's global economy emerged, the OLI paradigm faced new challenges. It evolved in response to these challenges similar to the way that a 'tent' needs to grow to accommodate more 'children' underneath it. I argue that OLI has gone through four stages: Mark I (moving from a theory to a paradigm) and three challenges: Mark II (deepening the paradigm), Mark III (OLI and alliance capitalism) and Mark IV (OLI and strategic management). Insights from the chapters in this book are incorporated into each of these different stages. Lastly, I conclude with some thoughts about new extensions and challenges to the OLI paradigm.

What is OLI?

OLI has been called, variously, a framework, paradigm, theory and model.2 Which is it? Let us start with a framework, which can be defined as a basic, conceptual structure of ideas. Frameworks establish structures for thinking about ideas. Nested within the concept of a framework is a paradigm. Paradigms, according to *Webster's Dictionary*, are philosophical and theoretical frameworks within which theories, laws and generalisations, and the experiments performed to test them, are formulated. A paradigm is an archetype for modelling and solving problems. Inherent in a paradigm are basic assumptions about the nature of problems and how they are to be approached. In sum, paradigms are the way that we think about problems, a set of background assumptions against which theories are developed.

Nested within a paradigm are theories. A *theory* is an organised system of accepted knowledge that applies in a variety of circumstances to explain a specific set of phenomena; in other words, a theory is a general statement of cause and effect relationships between phenomena. Theories are explanations of observations or laws.[3] Theories normally consist of assumptions, causal laws ('A causes B') and/or hypotheses ('we expect A to cause B'), and explanations for the causal laws or hypotheses ('A causes B because A causes X, which causes Z, which causes B').[4]

Lastly, theories are modelled by using mathematical relationships to formalise the relationships between assumptions, causal laws or hypotheses, and explanations. A *model* is a description or analogy used to help visualise something (e.g., an atom) that cannot be directly observed. It includes a system of postulates, data and inferences presented as a mathematical description of an entity or state of affairs. Models describe observed behaviour but simplify by ignoring certain details.[5]

It is clear that Dunning originally saw OLI as a theory, in particular, as an *eclectic theory*, drawing together different strands of economic theories of international production. His early writings consistently refer to the 'eclectic theory of international production'. It is not until the late 1980s that Dunning adopted the term 'eclectic paradigm' and began to argue that other theories (e.g., internalisation) were partial explanations that focused on particular issues with respect to international production.[6] OLI was the theoretical framework under which theories could be developed about particular aspects of international production. Dunning (Chapter 2: page •••) makes this point quite clearly:

> The purpose of the eclectic paradigm is not to offer a full explanation of all kinds of international production but rather to point to a methodology and to a generic set of variables which contain the ingredients necessary for any satisfactory explanation of particular types of foreign value-added activity.
>
> (Dunning Chapter 2: •••)

Tolentino (Chapter 7, page •••), in her review of the evolution of OLI, also argues that OLI was originally a theory that evolved over time into a paradigm. She sees OLI now as:

> [A] general framework of analysis that explains the level and pattern of foreign value-added activities of firms, and/or of countries, and allows for the co-existence of complementary and alternative theories in the discipline of international economics in a logically consistent manner without being inextricably wedded to any one particular approach.
>
> (Tolentino Chapter 7: •••)

Dunning (2000b) makes the strongest case for arguing that OLI is not only a paradigm, but also the reigning paradigm – or 'envelope' – for all economic theories of the MNE. He reviews an enormous literature of IB theories, grouping them under the O, L and I 'sub-paradigms'. The article concludes that OLI is the reigning paradigm of MNE activities because: (1) the value of OLI is greater than the sum of the theories that can be contained under the envelope (i.e., the whole is greater than the sum of the parts); (2) OLI continues to offer value-adding generic hypotheses about MNE activity despite the growing complexities in O advantages; (3) the paradigm continues to address significant problems; and (4) there are no other IB paradigms that are serious contenders to OLI. Thus, OLI has grown from a theory to a 'big tent'.

How did OLI metamorphasise from a theory into the reigning paradigm of international production? Were the changes internally or externally driven? How influential were external critics relative to changes in institutional realities and the emergence of the global economy? In the next section of this paper, I examine changes in OLI, pinpointing key turning points in the development of the paradigm.

OLI: from a theory to the reigning paradigm

Mark I: developing the OLI paradigm

The fundamental puzzle that started the three decade-old history of the OLI paradigm were questions such as: Why do firms invest overseas? What determines the amount and composition of international production? From the beginning, the eclectic paradigm has been preoccupied with explaining the origin, level, pattern and growth of firms' offshore activities.

The early development of the OLI paradigm came from Dunning's searches across different literatures for answers to these questions. Dunning (1973), for example, is an enormous literature review, focusing on lessons about MNEs and international production drawn from surveys and theories of capital flows, international trade, location, industrial organisation and market structure. He defines the MNE as 'an enterprise which operates and controls income-creating activities in more than one country' (Dunning 1973: 290). The paper proposes two new lines of research. The first was that scholars should shift their question from 'why international production?' to explaining the growth rate, geographic and industrial patterns of multinational enterprises. Second, researchers should focus on the distinctiveness of MNEs and their forms of market penetration, by country and industry.

In his 1976 Nobel Symposium lecture in Stockholm, subsequently published as Dunning (1977), the first version (Mark I) of the OLI paradigm had begun to take shape. Dunning (1977 1979) outlined the components of the OLI paradigm as three conditions that determined whether or not a firm would engage in FDI.[8]

The first condition – O – answered the 'why go abroad' or 'how is it possible to go abroad' question. O advantages (primarily from possession of intangible assets) were characteristics of MNEs that gave them a net competitive advantage over other firms supplying particular foreign markets. O advantages were broken into three types:

1 Type 1: advantages that do not arise from multinationality but are advantages that any firm may have over another producing in the same location; i.e., advantages stemming from size, monopoly power and better resource capability and usage. These enable the firm to achieve more technical or cost efficiency or more market power than another firm.
2 Type 2: advantages from being part of a multi-plant enterprise, such as economies of scale in non-production overheads (e.g., centralised accounting) and access to internal resources at lower cost than on the external market (e.g. internal borrowing).
3 Type 3: advantages that come specifically from multinationality, such as wider opportunities and the ability to exploit differences in factor endowments and markets across countries; such advantages increase along with the number of foreign countries in which the MNE has operations and the diversity of their economic environments.

Dunning recognised that type 1 advantages were potentially available to all firms, but type 2 and 3 advantages came from being part of a multinational group rather than a *de novo* enterprise (Dunning 1981b: 27).[9]

The second condition – I – answered the 'how' or 'by which route' question. I advantages meant that it was more beneficial to the firm to use its O advantages internally rather than lease or sell them in the external market. Dunning (1977 1979) saw the incentives of firms to internalise activities as twofold: to either avoid the disadvantages (or capitalise on the advantages) of imperfections in external mechanisms (market or government) for allocating resources or capitalise on the advantages. Market imperfections were either structural or cognitive. Structural imperfections arose when there were barriers to competition, transaction costs were high, or the economies of interdependent activities could not be fully captured by the market. Cognitive imperfections arose whenever information about products was not easily available or was too costly to acquire. Government intervention in resource allocation (e.g., R&D subsidies and patents, differences in corporate income tax rates across countries) also provided reasons for internalising cross-border activities.

The third condition – L – answered the 'where' or 'why do firms produce in one country rather than in another' question. L advantages meant that it was more profitable for the firm to use its O advantages together with factor inputs outside the home country. Dunning (1979) simply listed L advantages (e.g., spatial distribution of inputs and markets, transport and communication costs, government intervention, psychic distance) without grouping them.

Mark II: deepening the OLI paradigm

Throughout the 1980s and 1990s, the eclectic theory was deepened in several ways, but at least four dominate, in my view: responses to criticisms by internalisation theorists, the investment development cycle, applications to different industries, and incorporating geography. The first was Dunning's response to counter-arguments that internalisation theory, not OLI, was *the* reigning explanation for international production. The second was Dunning's attempt to make OLI more dynamic in terms of explaining changing patterns of FDI over time as a function of economic development. The third broadened the focus of OLI from manufacturing to services. The fourth changed the focus of the L component from the country level upwards (regional integration) and downwards (clustering).

OLI and internalisation theory

The eclectic theory did not meet with universal acceptance. The strongest criticisms came from the proponents of internalisation theory (see, for example, Buckley 1981, 1983; Rugman 1980). They argued that market failures in international intermediate product markets were both necessary and sufficient to explain the existence of MNEs. Since Dunning's O advantages were neither necessary nor sufficient, internalisation theory should be seen as the *theory of the multinational enterprise.*

As a response, Dunning made the first of several accommodations to his critics. Dunning (1983) reorganised the O advantages into two groups: Type 1 advantages were relabelled as Oa (asset) advantages and types 2 and 3 were grouped and relabelled as Ot (transactional) advantages. While Oa advantages were unchanged, Ot advantages

> . . . mirror the capacity of MNE hierarchies, *vis-à-vis* external markets, to capture the transactional benefits (or lessen the transactional costs)

> arising from the common governance of a network of these assets, located in different countries.
>
> (Dunning 1998a: 42)

This was a direct attempt to incorporate transaction costs into O advantages. O advantages are summarised with the nice statement:

> . . . O advantages of MNEs stem from their exclusive possession and use of certain kinds of income-generating assets; their ability to co-ordinate separate value-added activities across national boundaries; and their capacity to reduce environmental and foreign exchange risks.
>
> (Dunning 1988a: 25)

The criticisms continued, however (see, for example, Buckley and Casson 1985; Casson 1987). Dunning (1988a) explicitly addresses the criticisms of the internalisation school. In a section entitled 'Criticisms of the Eclectic Paradigm', he asks 'are competitive or ownership advantages necessary to explain international production?' (1988a: 42). His response is to differentiate between the capability and the willingness of MNEs to internalise markets. O advantages provide the *capability* to internalise markets whereas I advantages provide the *willingnes*s. He also criticises internalisation theory for assuming market imperfections are always exogenous to the firm. In Dunning's paradigm, market imperfections can also be endogenous because MNEs can erect barriers to entry and exploit their monopoly power in cross-border markets.

Making the macro level dynamic

From the beginning, Dunning was interested in explaining changes in the pattern of international production, addressing the research agenda he posed in his 1973 article. The answer was the *investment development path* (Dunning 1981a, reprinted in 1981b, Chapter 5). Dunning argued that the net FDI position of a country depended on its firms' OLI advantages. Countries in Stage 1, at the lowest level of economic development, have very little inward or outward FDI because their firms' O advantages are weak or non-existent and the country's L advantages are either weak or unexploited due to weak institutions and infrastructure. As per capita income rises, shifting the country into Stage 2, FDI is attracted into the country. By Stage 3, domestic firms have strengthened sufficiently to move abroad themselves; eventually by Stage 4, the country becomes a net outward investor. In later work, Narula (1993) added Stage 5,[10] where inflows and outflows moved into balance. The overall pattern, therefore, is one of shifting from a host country to balanced FDI inflows and outflows.

Dunning continued writing on this topic (see, for example, Dunning 1988, Chapter 5; Dunning and Narula 1996: 1-41), but the topic has not received the attention that his work on other subjects (e.g., alliance capitalism) has received. Perhaps this is because inward and outward flows of FDI have become much more equal for OECD member countries (where the bulk of FDI occurs) so that international business scholars accept the investment development path as straightforward. More likely, it is because micro – not macro – research questions are currently in fashion in the international business literature.

However, IB scholars who study developing countries and emerging market economies continue to explore the macroeconomic implications of the eclectic paradigm. The chapter by Ozawa and Castello (Chapter 4) provides a good example of how OLI can provide a theoretical foundation for 'MNC-cum-government driven endogenous growth'. The authors see MNEs and governments as co-drivers of economic growth, turning L disadvantages (growth constraints; savings, foreign exchange and human resource gaps; macro-organisational weaknesses) into new opportunities for O appropriation by MNEs. Thus, virtuous circles of economic development can emerge through the interactions of government policies and MNE activities.

From manufacturing to services and beyond

From the early days of OLI, Dunning argued that the paradigm applied not only to manufacturing but also to services and natural resource industries. Perhaps the first application of OLI at the meso level was to the international hotel industry (Dunning and McQueen 1981; Dunning 1988a). An important piece is Chapter 10 in Dunning (1993b) on the globalisation of service industries, which I often ask the students in my graduate MNEs seminar to read.

In this book, Piscitello (Chapter 12) provides a good example of applying OLI to the financial services sector. She use proxies for the O, L and I advantages of Italian banks to empirically test the locational patterns of their foreign branches and offices over the 1990s. O advantages are proxied by bank size and international experience, I advantages by the need to follow the customer (Italian manufacturing FDI in the host country), and L advantages by host country market size and risk, and industry characteristics. The author finds that O and I advantages and the presence (absence) of an international financial centre are the primary factors determining banking location.

Perhaps the most interesting industry study is Dunning and Wymbs (Chapter 11) and their application of OLI to electronic commerce. The authors argue that the Internet is a facilitating technology that acts as a catalyst for business networks, disrupting traditional borders and boundaries for firms, industries and governments. However, they believe that the basic tenets of OLI continue to hold even in a world of e-commerce.

Clusters and regional integration

A fourth broadening of the OLI paradigm was directed at the locational or country-specific advantage. Dunning's original formulation of the location advantage was a simple list of country-specific items that could induce international production (Dunning 1979).[11] Later, these items were grouped (Dunning 1988c, 1993a) into the ESP paradigm: Environment (resources, stage of economic development, cultural/historic background), System (institutional framework) and Policies (macro, macro, general and FDI policies).[12] His own efforts to the contrary, Dunning has continued to argue that insufficient attention has been paid to location by international business scholars. Dunning (1998) is a plea for IB scholars to engage in more research on the L component of the eclectic paradigm.

Throughout this period, Dunning's primary OLI focus was the *country* level. However, Dunning, from very early on, was interested in location at other levels of analysis. Dunning's work on location at the sub-national level goes back at least to 1981. Dunning (1981b, Chapter 9) asked whether FDI strengthened agglomeration tendencies within the United Kingdom, and explored the effects of locational subsidies on regional economic development patterns.

At the supra-national level, a continuing preoccupation has been regional integration. The first piece, to my knowledge, was Dunning (1988a: Chapter 11).[13] In this chapter, he explored the linkages between the integration of corporations (goal: improve profits and long-run competitiveness) and the integration of countries (goal: increase efficiency, resource usage and competitiveness). He argued that cross-border integration by MNEs facilitated, and created a demand for, cross-border integration of countries, and vice versa.[14]

In later work, Dunning (1993a: Chapter 17; 1993b: Chapter 15) explicitly examined the linkages between MNEs and regional integration, focusing on the European Union, the Canada–US Free Trade Agreement and the NAFTA. Dunning (1994), which compared and contrasted the roles MNEs have played in NAFTA and the European Community, was particularly well argued. However, perhaps his best-known work on regional integration was Dunning (1997), the huge, two-part literature review and analysis of FDI and European integration, pre- and post-EC 1992, in the *Journal of Common Market Studies*. Most recently, Dunning (2000a) incorporated both interests – sub-national and supra-national location – in an edited volume that focused on clustering and agglomeration.[15]

Mark III: OLI and alliance capitalism

As early as 1982, researchers had begun to notice two new trends in international production. The first was a shift by firms, from using one of the two polar modes of entry (markets or hierarchies) to intermediate modes such as equity joint ventures, subcontracting, and R&D alliances. The second, which was tied to the first trend, was the emergence of non-traditional MNEs from developing countries, in particular, East Asia. Non-traditional MNEs were much more likely to use joint ventures than wholly owned subsidiaries as an entry mode (Giddy and Young 1982). Dunning (1984) dealt explicitly with non-equity forms of 'international involvement' and their implications for OLI.

Perhaps the best piece marking the change was Chapter 13 in Dunning (1988a) on 'The New Style Multinationals – Circa the Late 1980s and Early 1990s', which began with the prophetic statement:

> There are gathering signs that the internationalisation of value-adding activities by enterprises has reached a new watershed in its evolution . . . the MNE is now increasingly assuming the role of an orchestrator of production and transactions within a cluster, or network, of cross-border internal and external relationships, which may or may not involve equity investment, but which are intended to serve its global interests.
>
> (Dunning 1988a: 327)

The creation of these 'new-style MNEs' cried out for an explanation, one that John Dunning clearly wanted to fit within the OLI paradigm. A first response was to broaden the definition of international production to include any 'value-adding activity owned or controlled, and organised by a firm (or group of firms) outside its (or their) national boundaries' (ibid.: 1). This enabled international production to include modes of entry such as joint ventures and strategic alliances.

Chapter 13 provided a nice discussion of three major drivers of the new-style MNEs (the introduction of information technologies; the increased importance of non-market forces especially government policies for international production; and the rise of international alliances). Porter's value chain was used to illustrate the range of value-adding activities that can occur within the MNE network.[16] A discussion of networks followed. After reviewing alliances and networks, Dunning argued that 'the conceptual and analytical structure of the paradigm remains largely unimpaired', but worried that 'its operational usefulness decreases as the complexity of the variables making up the OLI configuration increases' (ibid.: 342). He concluded with the observation that MNEs should now be seen as 'organizers and co-ordinators of clusters of cross-border producing and transacting activities; to which a latitudinal dimension, which embraces a series of co-operative inter-firm relationships is added' (ibid.: 345).

In 1993, Dunning's major opus, *Multinationals and the Global Economy*, was published (Dunning 1993a). Inter-firm relations were examined in detail in Chapter 9 with a full discussion of the variety of entry modes. Technology-based alliances were also analysed in Dunning (1993b: Chapter 8).

The definitive piece was Dunning (1995) on 'Reappraising the Eclectic Paradigm in the Age of Alliance Capitalism', where he separated old-style hierarchical capitalism from new-style alliance capitalism and compared their O, L and I advantages. He argued that hierarchical capitalism was akin to an 'exit' strategy (replacing the external market with the internal hierarchy) whereas alliance capitalism was similar to a 'voice' strategy since firms adopt cooperative solutions within the market. In conclusion, Dunning argued that firms and governments needed to focus more on innovation and to recognise that firms go abroad to acquire O advantages as well as to exploit them. Alliances ('voice') should also be seen as an efficiency-improving mode of entry and a way to enhance competitiveness.

Mark IV: OLI and strategic management

OLI plus S?

The third major challenge to the OLI paradigm appeared in the mid-1980s; however, this challenge was a theoretical one, not empirical. International business scholarship had been dominated by economists throughout the 1970s and 1980s; with the emergence of strategic management as a separate discipline, strategy scholars began asking questions and developing theories that were drawn from disciplines such as sociology, psychology and labour relations. Initially, strategy research focused on domestic firms, but scholars such as Michael Porter, Sumatra Ghoshal, Christopher Bartlett and Michael Hitt began to develop a new subfield in international/global strategic management, linking strategy with international business. Could OLI expand to incorporate this new discipline?

Dunning's first attempt to incorporate strategy into the OLI paradigm (Dunning 1993b: Chapter 4) compares and contrasts OLI with strategy. Perhaps the most telling statement is:

> From the economist's perspective, strategy related variables are most often treated as part of the 'unexplained' (or unexplainable) variables, whereas they are the main subject of interest to the business analyst.
>
> (Dunning 1993b: 83)

Recognising that strategy is missing from the eclectic paradigm, Dunning's solution was to add it on at the end as a 'dynamic add-on', creating OLIS. He recognised that OLI could induce strategy, but that strategy could also affect OLI. He argued that firms with different OLI configurations would adopt different S. As a result, he concluded that S should be added to OLI as a fourth component. An appendix at the end of the chapter detailed the components of O, L, I and S (where S includes 10 topics such as technology, sourcing, HRM, marketing).

Personally, I have never liked this attempt to weld strategy on at the end of OLI. It does not work. Going back to my kindergarten questions at the beginning of this essay, strategic management, as a discipline, addresses all the 'Who, what, where, when, why and how?' research questions. Strategy questions, however, are micro questions at the level of the individual firm, or even go inside the firm to focus on the entrepreneur, top management team or board of directors. Strategy therefore cuts across all the kindergarten questions, but at the micro level. The OLI paradigm, on the other hand, has been focused on the why, where and how research questions, primarily at the macro and meso levels. If we think of the kindergarten questions as a matrix with who/what, where, why, how and when as columns and macro, meso and micro as rows, OLI fits primarily into the why-where-how columns and macro-meso rows; whereas strategy, as a discipline, crosses all the columns but primarily at the micro row level. Therefore, for me, adding S as the last 'column' in OLI does not and cannot fully integrate strategy into the eclectic paradigm.

Along a similar vein, Guisinger's revision of the OLI paradigm to OLMA (Guisinger, Chapter 6) attempts to shift OLI down to the micro level of the firm by replacing I with M (mode of entry) and adding A (adaptation of businesses processes to the environment) to the end, where A is basically S (strategy formulation and implementation). As such, OLMA suffers from the same problems as OLIS.

A more promising route to accommodating strategic management within OLI would follow the same approach that Dunning adopted with Porter's diamond of competitive advantage, where he incorporated international dimensions (defined as multinational business activity) into each of the diamond factors (Dunning 1992). Dunning (1988a: Chapter 12) began this process of linking OLI to strategy by reviewing eight different disciplinary approaches to international production – ranging from strategic management to law and economic history. In each case, he showed how insights about international production from a discipline could be included under the O, L and I 'umbrella'. He concluded that the eclectic paradigm was 'robust' and 'offer[ed] a powerful tool of analysis' for understanding MNE activities (1988: 325).

In this volume, Devinney, Midgley and Venaik (Chapter 8) also provide an example of how strategy and the OLI paradigm can be integrated. The authors argue that the eclectic paradigm pays insufficient attention to what goes on inside the firm; that is, to the role played by managers and the dynamic evolution of the MNE. Recognising that O, L and I affect S and that S also affects O, L and I, they develop a theory where OLI is both exogenous and endogenous. The initial environment (O, L and I) determines the set of all possible strategic orientations for the firm. The MNE's existing structure acts as a constraint, determining the technologically feasible set of strategic orientations open to the MNE. Managers' beliefs about the feasible set then determine the strategies they choose. As the

MNE's managers implement their chosen strategy, this in turn affects the firm's OLI advantages. Because certain strategies dominate others in terms of profitability and market contestability, MNEs make adjustments over time to move to the optimal position. Thus, strategic considerations and managers' beliefs are incorporated into the OLI paradigm. In my view, the intertwining of strategy and OLI in this chapter has potential, but needs to be 'fleshed out' through application to particular strategic decisions.

The chapter by Oxelheim, Randøy and Stonehill (Chapter 10) suggests how this can be done in terms of financial strategies. They argue that a firm's financial strength affects its ability to engage in FDI. Finance-specific strategies can be either proactive (efficiency-based) or reactive (arbitraging market imperfections). Proactive financial strategies generate OLI advantages that can be exploited through international production. What is missing from this chapter is managerial beliefs, which link the feasible set of strategies to the chosen strategy (see Devinney, Midgley and Venaik, Chapter 8). The juxtaposition of these two chapters, to me, suggests the way that OLI might better incorporate strategic decision-making. (The Oxelheim, Randøy and Stonehill chapter is important for a second reason: the OLI paradigm underplays the financial aspects of international production. The effects of exchange rate changes, over/under-valued currencies and international financial management are seldom examined through the OLI lens; this chapter is a rare and welcome exception.)

Another comment linking OLI and strategy should be made here. The 'bottom line' for strategic management scholars is firm performance; that is, how strategy affects financial and market returns to the firm. The links between OLI and firm performance are particularly slim in the international business literature. This is not surprising: OLI outlines advantages and disadvantages of international production; the link to firm performance is not straightforward unless one makes the simplifying assumption that the greater the OLI advantages, the better the performance. Benito and Tomassen (Chapter 9) begin the process of 'unpacking' the relationship between OLI and firm performance by applying the resource-based view to the OLI paradigm. This enables them to create an inventory list of performance implications for each component. The next step would be to operationalise this list and engage in empirical tests.

There have been few empirical attempts to explicitly link the eclectic paradigm to firm performance. Robins, Tallman and Fladmoe-Lindquist (2002) applied OLI to the performance of joint ventures in Mexico. Interestingly, they argued for and found evidence of some resources provided by the US parent to the Mexican joint venture actually *reducing* the venture's performance. This suggests that not all OLI factors must have positive impacts. Eden, Thomas and Olibe (forthcoming) also examined the influence of O and L advantages on the performance of US MNEs. They decomposed L into two components measuring firm depth (foreign market penetration, foreign production presence) and one measuring depth (country scope). The authors concluded that both financial and market performance of US MNEs over 1990–4 were positively related to O and L variables, but that breadth was more important than depth. Clearly, more research linking OLI and firm performance would be a useful addition to the literature.

Motivations for international production

Dunning (1988b) in his restatement of the OLI paradigm, recognised that the link between OLI and strategy could be made through firm-level motivations for international production. The O factors answer the 'why' question in terms of general Oa and Ot motivations. However, once one begins to think of MNE activities in terms of the value chain, individual plants, products and factors, the actual motivation – or *strategy* – behind establishing any particular value-adding activity abroad becomes important. Thus, focusing on motivations at the individual activity or investment level can be the link between OLI and strategy.

Dunning (1988b: 13) provided perhaps the first 'cut' at these motivations, outlining what he called the 'three main forms of international production': market seeking (import substituting), resource seeking (supply-oriented) and efficiency seeking (rationalised investment). A fourth category – strategic asset-seeking FDI – was soon added, reflecting the increased use of knowledge-based strategic alliances within OECD countries (Dunning 1991). By 1993, Dunning (1993a: Chapter 3) had identified four basic types of international production: natural resource seekers, market seekers, efficiency seekers and strategic asset or capability seekers.[17]

Throughout the 1990s, strategic management scholars wrestled with the research question: why do firms differ and how do these differences affect their performance? Perhaps the dominant explanation was the resource-based view, which argued that the long-run competitiveness of a firm depended on its resources and capabilities (Barney 1991). Initially, the resource-based view focused on domestic firms, but IB scholars soon began to make the link between resources and capabilities in the strategy literature and ownership advantages in OLI.

Dunning (1999) addressed the resource-based view in the context of globalisation of economic activity during the 1990s. He argued that the world was shifting from hierarchical to alliance capitalism, where, at the end of the twentieth century, knowledge, regional and global activities and intra- and inter-institutional alliances were of increasing importance. He recognised that the resource-based view and evolutionary theories of the firm were close relatives to the O in the OLI paradigm, but the strategic management theories took as their focus the creation and upgrading of these advantages, whereas the eclectic paradigm focused on their exploitation.

Recognising that the eclectic paradigm needed to encompass the growing importance of knowledge-based FDI, Dunning (1993a) again revised the paradigm. While the motivations for FDI (the 'why') were still seen as *exploitation* of the firm's O advantages, the purpose of the actual investment was now defined as *seeking* or *acquiring* either products (market seeking FDI) or factors (resource, efficiency and strategic asset-seeking FDI).[18]

Two chapters in this volume focus explicitly on OLI and the resource based view. Madhok and Phene (Chapter 5) argue that the OLI paradigm was useful when firms were beginning to internationalise, but is less useful now that many firms have multiple foreign affiliates. Now, the key source of competitive advantage is creating and managing a 'knowledge portfolio'. They see OLI as focused on explaining the home-country firm as an institution as compared to firms from other countries, rather than on a specific firm. The key issue, from their perspective, is knowledge management, both in terms of asset exploitation and asset seeking.

Maitland and Nicholas (Chapter 3) argue the resource-based view ignores location-specific differences in firm resources and capabilities because they are not unique to a particular firm. Their solution is to incorporate institutional theory into OLI. Reviewing the new institutional economics (NIE), the authors argue that NIE could replace OLI as an explanation of country and industry patterns of international production. That is, rather than incorporate institutional theory under the 'OLI big tent', the authors make the audacious proposal that NIE replace OLI!

Reconciling the tension between exploitation and acquisition within the motivations for international production, first identified in Dunning (1993a) has been a key preoccupation of his recent work. For example, Dunning (2002) broadened the 'OLI envelope' to encompass the resource-based view by including relational assets within the O variable. He split firm-specific advantages into tangible and intangible assets; intangible assets into intellectual and relational assets; and relational assets into private and social assets. Relational assets were defined as facilitating assets that had to be used jointly with the relational assets of another actor. After reviewing the implications for the OLI paradigm, Dunning concluded that O needed to be modified to include the creation, coordination and sustenance of relational assets; L, the presence/absence of networks of related activities; and I, a greater focus on cooperative non-equity economic linkages, particularly networks. Lastly, in this volume, Dunning (Chapter 2) now argues that incorporation of asset-augmenting FDI into the eclectic paradigm requires reconfiguring the traditional OLI variables, but leaves the overall paradigm intact.

Conclusions

My review of the OLI paradigm and its evolution over the past 30-plus years supports Dunning's contention that OLI can be and is an 'envelope' or 'big tent' for all theories that address the 'why, where and how' of MNE activity (Dunning 2000b). The paradigm has shifted its focus from explaining international production as the exploitation of OLI advantages through wholly owned foreign subsidiaries in manufacturing to a rich, complex analysis of globalised businesses at the beginning of the twenty-first century.

The chapters in this book point to ways in which the OLI paradigm is being interpreted and altered by international business scholars. Many of these contributions focus on strategic management and the need for OLI to better incorporate the resource-based view and managerial perspectives. In terms of my matrix (see Figure 13.1) of macro, meso and micro levels of analysis, the thrust of these extensions is at the micro level. One advantage of moving down the level of analysis is the increased ability to perform econometric analysis; that is, we can examine how OLI affect firm strategies and performance using firm-level data rather than FDI statistics. However, a fully fledged integration of strategy into OLI even of the resource-based view into OLI has yet to appear. The chapters in this volume point the way, but more work is needed here.

Second, I agree with the authors in this book that OLI should better integrate insights from institutional theory. The new institutional economics is a vibrant and thriving discipline, crossing management, economics, sociology and law. Institutional theory has brought new insights into international business literature, for example, liability of foreignness, relational capital, public corruption, and property rights. One can speculate how liability of foreignness and public corruption, for example, could quite easily be incorporated into the 'OLI big tent'. However, I do not agree that NIE should, or even could, replace OLI as the reigning paradigm of international business.

Third, the focus on international finance, bringing finance back in to OLI, is a welcome sign. As international business researchers increasingly adopt the tools of finance (e.g., real options theory, foreign exchange exposure, currency unions) the OLI model needs also to redirect its attention to risk and uncertainty in connection with the financing of international production.

To restate my initial thesis at the beginning of this chapter, the focus of OLI was and remains the 'why, where and how' of international production. The chapters in this book focus primarily on *deepening* the OLI in terms of these three questions by incorporating the micro level of analysis (the firm and its managers).

Let me suggest, as a counterpoint, that the eclectic paradigm might also usefully be *broadened* by an explicit focus on the 'when' question; that is, the issue of timing of international production.[19] International business and strategy scholars are increasingly preoccupied by timing issues; for example, *de novo* versus sequential FDI, FDI as platform investments, incorporating real options theory into IB research, the 'big step' hypothesis, the recent issue of *Academy of Management Review* on timing.

Perhaps it is also time to go back to the 'what' and 'who' questions. As the boundaries of the MNE grow ever more fuzzier, what is and is not an MNE? Cantwell and Narula (Chapter 1) also raise the 'fuzzy border' question. With the growth in non-equity cooperative alliances and networks, where does the hierarchy stop and the market begin? As ownership becomes less important, does control remain the critical dividing line? Earlier debates on this topic have been spirited. For example, Wilkins and Schröter (1998) examined free-standing companies, firms set up in one country for the purpose of doing business outside that country. The hotly contested debate among Wilkins, Hennart, Casson and Corley about free-standing companies is a wonderful way to introduce graduate students to the question of what is and what is not a multinational enterprise.[20] Perhaps it is time for a discussion about whether alliances and networks are MNEs and where inter-firm trade stops and intra-firm trade begins.

A second angle on the 'what' and 'who' question is the growth of multinationals from emerging markets and developing countries. Whether in the form of family conglomerates (*chaebol*, *grupo*), East–West or North–South strategic alliances or born global firms, MNEs from the East and South have been under-explored in the international business literature. Partly this is because 80 per cent of FDI comes from and goes to OECD countries; but the lack of high-quality statistics also hampers scholarly research. There are lessons from earlier work that could prove useful here. Kojima argued in the 1970s that MNEs from Japan were different from Western MNEs. This argument was refuted both by OLI and by later events that showed Japanese MNEs, as they matured, began to behave like Western firms (Kojima 1978; Dunning 1980). Giddy and Young (1992) also argued that developing country MNEs were non-traditional. My suspicion is that 'new-style MNEs from emerging market economies' will come to look increasingly like Western MNEs (e.g., shifting their corporate strategies from unrelated to related diversification), but this remains to be seen.

In conclusion, this chapter has attempted to do two things: provide an overview of the development of the OLI paradigm over the past 30-plus years and consider the chapters in this volume in light of that paradigm. In terms of my first goal, I have touched on only a small segment of Dunning's enormous volume of research in international business, and have perhaps missed several important contributions.[21] However, I hope that this chapter testifies to the resilience and robustness of OLI in the face of the theoretical and real-world storms that have occurred since Dunning first proposed the eclectic theory in 1976. In terms of my second goal, it is clear from the chapters in this book that the OLI paradigm has a life of its own outside of Dunning's work. William Arthur Ward once wrote: 'The pessimist complains about the wind; the optimist expects it to change; the realist adjusts the sails.' The OLI paradigm is a testimony to the ability of John Dunning and scholars such as the authors in this book to 'adjust the sails'. OLI is alive and well!

Notes

1 My latest purchase, the two-volume set of Dunning's selected essays, *Theories and Paradigms of International Business Activity* (2002b), is also a 'must have' since the first volume gathers together many of Dunning's OLI writings in one place from 1973 to the present. There is one problem with the *Selected Essays*; they have been updated from the originals in places, making it harder to trace Dunning's own theory development from one paper to the next. For example, Chapter 4, 'Explaining the international direct investment position of countries', published originally in 1981, contains references to 1993 publications. A second problem is that some of my favorite OLI readings (e.g., Dunning 1979; 1988a: Chapters 11 and 13) are missing.

2 For example, in this volume, OLI is referred to as a framework (Maitland and Nicholas) and as a theory evolving into a paradigm (Tolentino). Dunning in his earliest OLI writings (1977, reprinted in 1981, page 33) shares this uncertainty about where OLI fits; 'the eclectic model can be perceived as a general theory of international production in so far as it provides an analytical framework for explaining all forms of such production'.

3 *Laws* are generalisations about observed regular relationships between two phenomena, from which we can generalise about what we expect to happen (e.g., the law of one price or Gresham's Law).

4 According to Van Evera (1997), a good theory has large explanatory power, importance, parsimony and a wide explanatory range. A good theory is applicable to the real world, clearly framed and satisfying. A good theory should be, in principle, falsifiable. It should have prescriptive richness and explain important phenomena.

5 As a result, models allow complex systems to be understood and behaviours predicted, but may give incorrect predictions for situations outside the model's assumptions.

6 The first major statement of OLI as a paradigm is Dunning (1988b), which draws his previous writings on OLI together, shifting from eclectic theory to paradigm.

7 Dunning (1981b) pulls together his first eight years of publications on the MNE, organised into three topics: OLI, impacts of MNEs on home and host countries, and lessons for governments.

8 To recap the three conditions: (1) It possessed net ownership advantages over firms from other countries in serving a particular national market (O advantage). (2) It was more beneficial for the firm to use these net ownership advantages itself rather than sell or lease them (I advantage). (3) These net ownership advantages were more profitably exploited when used with factor inputs outside the home country (L advantage).

9 This distinction was important later for incorporating, first, internalisation theory, then strategic management and finally, sequential FDI into the OLI envelope.

10 Published as Narula (1996).

11 These included the spatial distribution of inputs and markets; prices, quality and productivity of inputs; transport and communication costs; government intervention and policies; infrastructure; psychic distance; and scale economies.

12 Personally, I also teach L as broken into E + S + P but use a different grouping that I find more intuitively appealing: E(economic), S (socio-cultural) and P (political-legal). This is closer in spirit to Guisinger's breakdown of the international environment (this volume).

13 This is a short chapter, but it has always been one of my favourites.

14 We now refer to these processes as investment-led and policy-led regional integration.

15 Piscitello (this volume) is also notable as an empirical piece using OLI to predict location.
16 And right side up too – upstream activities are at the top and downstream at the bottom, rather than moving from left to right horizontally! Thus, horizontally integrated activities can be shown horizontally (e.g., the component supply stage in Figure 13.1 on page 340) and vertically integrated activities in a vertical direction. See also Chapter 9 in Dunning (1993a) for a full discussion of value chains in MNE entry and expansion strategies.
17 Other motives (escape, support and passive investments) are also discussed although they appear to have been dropped from subsequent Dunning papers, leaving only the first four. In the OLI paradigm, the key verbs used to describe motivations are exploit and acquire; however, there are other verbs such as arbitrage (market imperfections) and avoid (risk) that now are seldom heard.
18 Originally cast as exploiting O advantages, the eclectic paradigm now includes seeking O assets. Note the shift from *advantages* to *assets*, which may come from the resource-based view. Dynamic capabilities should be next.
19 Although I do believe that paradigms do not have to explain everything, nor does the ' OLI big tent' have to shelter all theories under its umbrella.
20 See also Contractor and Lorange's new book where Dunning (2002a) appears.
21 For example, I deliberately omitted the *World Investment Reports*, where Dunning has served for many years as the lead intellectual scholar, and his work on MNE-state relations and the benefits and costs of FDI, which are tangential to the OLI paradigm.

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