The Places of IKEA: Using Space as a Strategic Weapon in Handling Resource Networks

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Abstract:
The purpose of this paper is firstly to discuss the *spatial aspects* involved in handling resources like products, facilities, organizational units and business relationships, and secondly to develop an *analytical framework* over the interplay between places and resources in a business network context. This framework is developed on basis of IKEA's experience in using space as a strategic weapon to affect resource costs, revenues and development. The focus is on the spatial features embedded into resources and on how IKEA exploits these features over a complex *network of resources* that cross the boundaries of many firms and countries. The heterogeneous and constructed nature of space and places is reflected into many, also contradictory, facets transmitted to resources. The proposed analytical framework is grounded on a distinction between *micro*-places (e.g. retail stores or factories), *meso*-places (e.g. areas within cities) and *macro*-places (i.e. whole regions or countries).

1. Introduction: place, resources and IKEA

Places and spatial issues are central to the life of every company, from the moment in which they are born and throughout their various development stages. A relocation, the opening of a new branch office, factory or store, maybe in a foreign country, and the start of a relationship to a supplier from a certain region: all this signs often important moments in a company's life that can signify key turning points in its history. Such historical moments are however just the top of an iceberg: every company interplays *constantly* with various places, even without being fully conscious of this in every moment. Places affect companies' lives, but companies, alone or in interaction with others, also affect places. This interplay with places happens through the various *resources* that firms daily handle, like *products*, *facilities*, business *units* and *relationships* (Håkansson & Waluszewski, 2002). IKEA is no exception to this rule. But what makes IKEA peculiar is the *many ways* in which it relates to space and places.

Being a furniture distributor, IKEA "shapes" places like our homes and the sites where it exhibits its products. Purchasing these products from over 50 countries and selling them to over 30 countries in four continents, IKEA ideally binds together thousands of different locations. Connecting geographically over 2,000 suppliers (just to mention the first-tier ones) with 180 retail stores requires at least 20,000 transport corridors, i.e. as many as the routes officially covered by IKEA's logistic network. In between this complex network of places is IKEA, with its own many "private" places it owns, like its large distribution centres, retail stores, purchase offices and headquarters. All the space-related aspects of the resources mentioned above strongly matter for IKEA's costs, revenues and development possibilities. Accordingly, IKEA uses space, at different aggregation levels, and its various public and private places as *strategic weapons*, i.e. to accomplish certain goals about resources.

Against this background, the purpose of this paper is, firstly, to discuss theoretically the issue of place and, secondly, to develop an *analytical framework* for studying the interplay between

resources and *space* and how this can be used strategically. This framework is developed using as an illustration IKEA's experience with space and places. The paper is organized in the following way: Section 2 provides a review of the theoretical ideas about spatial issues developed within the fields of economic geography, business studies and history of science. Section 3 digs deeper into the heterogeneous and interacted nature of place and its relation to resources. Section 4 presents how IKEA deals with space and places. Section 5 suggests a framework to analyse, from a strategic perspective, the spatial issues in *resource networks*. Section 6 concludes the paper with a reflection on how IKEA uses space and places.

2. Place and space: an independent or dependent variable?

Places, sites, space, spatial structures, locations. These are all germane terms used in social sciences to tackle a common issue: *where* human endeavours occur and how important is this "where"? One can go even further and ask: "how does this *where* affect human endeavours?" For instance, business studies and economic geography have studied the different performances of firms depending on where and how close to each other they are located. Porter (1990, and 2000: 253) points at the advantages of being located inside a geographic cluster that can be as wide as whole countries. More than one hundred years ago, Marshall (1890) had already stressed the advantages of proximity between firms involved in similar or related businesses: this idea was further developed by researchers in the *industrial district* tradition (e.g. Brusco, 1989). Also research on international business has been particularly attentive to spatial dimensions, especially with reference to multinational companies (MNCs). Hofstede (1983) reviews how the specific country of origin of MNCs entails different cultures, which relate on turn to different managerial styles and strategies. This affects also the MNC's performance when cultures and managerial styles differ from those dominant in the countries where its subsidiaries are located (Ibid). Moreover, the various locations where these large firms perform their current business activities affect their performance: this issue reflects how different places and sites can be utilised in the frame of MNCs' worldwide strategies. Such "locational" aspects as societal and infrastructure provisions or international transport and communication costs are stressed by e.g. Dunning (1995: 476, 479-480, and 1998: 49-54). At a more fine-grained level of analysis, country-specific advantages imbue also the local *networks* that embed the subsidiaries of MNCs (Forsgren et al., 2000: 52-55): these local embedding structures can contribute to developing the knowledge and competence of local units (Ibid: 55), but they also create problems when headquarters try to control the latter (Andersson & Forsgren, 1996, and Andersson, 1997).

So, economic geography and international business research implicitly studied why firms choose a specific location or, simply, why they happen to be located there: what kinds of advantages were they seeking? Porter (1990) stresses the *local* nature of competitive advantages, making of place an important variable to explain why some firms perform better than others. Economic geographers focus instead on the reasons why many firms, especially SMEs, appear to be *co-located* inside local clusters or industrial districts. Malmberg & Maskell (2002) review traditional explanations for co-location, like access to raw materials, cheap labour, nearness to markets or urbanization economies. But still, these authors claim that this does not explain why clusters of firms with similar or related businesses co-locate, as it often happens, in areas far from raw materials, cheap labour, end-markets or large cities and logistic nodes. Agglomeration of similar and related businesses seems to offer *different types of* advantages in coordinating the economic activities of the firms that co-locate (Ibid). These advantages regard not only *reduced costs*, but also the possibilities to easier access and jointly

develop *tacit knowledge* (Ibid: 438-442): the argument is that only by being close, geographically, culturally and socially, is it possible to observe, compare, imitate and understand each other on deeper and more hidden knowledge aspects.

A common trait among all the approaches reviewed above is that place or space is treated as an *independent* variable affecting businesses, social interaction, knowledge creation etc. But place or space can also be treated as a *dependent* variable: this happens if we ask the question "why is a place what we see? What is behind it? Which processes made of a place what it is today?" Many authors in the field of *history of science*, relying on inspirations from architecture and sociology, point that places are "designed" through a process of social construction and interaction. In this research field, places are often exemplified by *physical buildings* such as laboratories (Gieryn, 1998, and 1999) or university buildings (Rothblatt, 1997). The process through which space and places are constructed and shaped is, in some cases, quite evident, like when new laboratories are designed and built: here architects, trustees, financers, politicians and users (i.e. scientists) interact to give a concrete shape to the building (Gieryn 1998). In other cases the process that imbues a specific place with meanings and symbolic values stretches over centuries and is by no means consciously controllable by single individuals, like in the case of old or traditional university buildings (Rothblatt, 1997). Whatever the nature and time span of the process that creates and shapes places, it results in the creation of spatial "structures" that on turn also *affect* any type of social interaction: from scientific knowledge creation (Ophir & Shapin, 1991), even in its connection with broader societal aspects like isolation and civic engagement (see Hannaway, 1986, on the laboratories of Tycho Brahe and Andreas Libavius), to the exercise of power, connected to space by panoptic mechanisms (Foucault, 1979).

3. Interacted and heterogeneous places: what happens to resources?

While suggesting the constructed nature of space, the literature within history of science recognises however also the effects it has *on* human endeavours, i.e. the aspect of places pointed by the economic geography and business literature. Space and place are not only a dependent variable, created by social construction and interaction, but also an independent variable *affecting social processes*. For instance, scientific buildings like laboratories or departmental sites, being used as symbolic weapons, affect power and legitimacy conflicts between research groups (Widmalm, 2001). So, we can conclude that *spatial* structures and *social* structures "interplay": the latter shape the former as much as the former constrain and affect the latter, in a constant interaction process. The result of this process is that places (physical buildings, cities, regions and nations), being socially shaped and "interacted", are highly *heterogeneous* (Foucault, 1986: 23). Their features are never given and fixed once and for all, but are highly variable, depending 1)on the social processes and structures in which places are immersed and 2)on which other places they get connected with physically, symbolically, metaphorically or economically. This heterogeneous and multidimensional nature of space and places is explicitly recognised also in recent contributions from the business network perspective: Håkansson, Tunisini & Waluszewski (forthcoming) stress how places are *shaped by* and simultaneously *affect* the interaction between firms and, especially, how firms combine their resources. Being heterogeneous, these places can both *enable* and *constraint* inter-firm interaction and their resource combinations (Ibid).

This is a rather innovative view on the role of space in business life: the ground idea is that space and resources "interplay", i.e. affect each other: an important part of resources'

heterogeneity (Penrose, 1959) depends on the places to which they are related, while these places are shaped by the very resources they include. In other words, certain features become first *embedded* into places and space, while places "interplay" with social structures and processes. Then, these features affect, on turn, also the *resources* and "objects" (people, newspapers, products, ideas etc.) that are physically *located inside* or symbolically *related to* these very places and sites. To summarise, the features of heterogeneous spaces and places get also embedded into the physical and social resources related to these locations. In particular, such key resources for doing business as *products*, *facilities*, *organizational units* and *business relationships* (Håkansson & Waluszewski, 2002) acquire space-related features from the places and sites to which they are associated. Firms can therefore actively or tacitly (indeed even unconsciously) exploit these place-related features of the resources and "objects" important for their businesses. Exploiting these feature is however not a matter of linearly or straightforwardly "managing" the space-related features of resources. Things are more complex than so, because of two main reasons related to the connection between places and resources:
1) the very same place or location can embed into a single resource *conflicting* features, in relation to different "managerial" goals or to the *resource interfaces* (Håkansson & Waluszewski, 2002) that surround a certain resource;
2) every resource is simultaneously exposed to *more than one* specific social or physical place: these different places can therefore embed conflicting features into the very same resource.

In order to systematise how an actor like IKEA utilises space and places as strategic weapons, we need to specify what *types* of places, sites and locations we are dealing with. Place and spatial issues can, in fact, be studied at three different analytical levels: a *micro*, a *meso* and a *macro* level. These three levels are tightly anchored to *geographical spaces*, physically delimited from others at the same level and from the other levels. Micro-spaces and micro-places are those locations physically constrained into a building, like an office, a factory, a laboratory, a distribution centre or a retail store. Analysing places at this micro level focuses on the construction, design and functional details of such artefacts and on the social processes unfolding inside these contained spatial structures (see Gieryn, 1998, and 1999, or Brandt & Sloane, 1999). Meso-spaces and meso-places are larger assemblies of buildings, including also the interconnections between them, like villages, cities or university campuses. Thus, besides including many micro-places, meso-places include also the *connections between* micro-places, both the physical ones and the symbolic ones: for instance those connections signifying power relations, like the rigid organization of a city during a plague (Foucault, 1979: 195-199). The physical and symbolic structures and connections within a same meso-space need not be attuned and reinforce each other; on the contrary, they can counteract each other: for instance, Lindqvist (1997) shows how missing transportation links negatively affected the inclusion in the social texture of Stockholm's scientific community of a monumental building conceived as a strong symbol to unify this community.

Finally, macro-spaces and macro-places are the largest arenas where one can analyse spatial issues. They extend to whole regions, nations and countries. These are not simply a physical collection of meso-places and their links, but result from the aggregation also of cultural, historical, ethnical and political aspects binding together, in more or less coherent ways, these larger aggregates. Shifting from a macro-place to another originate a fourth level of analysis, a "global" or "trans-national" level. However, it is enough for our analytical purposes here to consider this level simply as a logical extension from the macro-level. The three levels of space reviewed above are not only "spatial scales" (Livingstone, 1995: 27) where to study

social processes; but all the three types of places - the *house*, the *city* and the *country*, in the terminology used by Beckman (1999) - have properties that become embedded into the resources transiting or anchored to them, in physical sense, or symbolically related to them.

Before moving to an empirical illustration of these issues, a note should be made about the conceptual difference between "place" and "space". *Place* is more or less a synonym of "site" and "location": it identifies, within a larger *space*, a constrained point, located at a certain *distance* from other places (Agnew & Duncan, 1989: 1). So, while the notion of place originates from the idea of a non-dimensional single point (even though we treat places here as highly heterogeneous and multi-dimensional points), the notion of space refers to an at least two-dimensional *area* and *structure*. As it was shown above, in the three levels of space and place (micro, meso and macro), this distinction may be no longer necessary, since meso-*places* (e.g. a city) include many micro-*spaces* (e.g. many houses), so that places can be regarded themselves as spaces. The concept of space becomes however useful if one is interested in what goes on *inside* a place: then the single point (i.e. the place) on a map can be recognised as "containing" something and becomes a space. Moreover, the concept of space is useful for *relating different places to each other*, to see how "distant" or close they are from each other. Distance is indeed a spatial concept relating different points in space.

This discussion about place and space need not be restricted to *physical* places and spaces: it holds also for more "metaphorical" spaces. For instance: a "business network" (Håkansson & Snehota, 1995) can be considered as a space connecting different actors that occupy certain places or, better, "positions". The network is itself composed of nodes and their connections, which makes of it a spatially inspired metaphor. However, while "business networks" correspond to a "meso" level of analysis (as opposed to microeconomics and macroeconomics), they do not coincide with meso-spaces, but include elements that are spread across micro, meso and even macro-spaces. As pointed by Markgren (2001), the firms tightly interacting within a business network are often not located near each other. Business networks *connect* indeed elements, i.e. firms and their resources, belonging both to widely distant and to very nearly located places.

Section 4 provides now an empirical illustration of the theoretical ideas developed in section 2 and 3. The empirical material was collected through 70 in-depth interviews at various IKEA units and suppliers, mostly in Sweden and Poland, and written sources like newspaper clips and internal material. Visits at a dozen of IKEA stores and offices (in Sweden, Poland and Italy) and production sites complete the empirical sources. Even if the material was collected in the frame of another study (Baraldi, forthcoming) not focussing on spatial issues, its depth and richness allows covering and discussing also this topic: in fact, the interviews and direct observations captured a wealth of relevant spatial dimensions of the investigated resources. The empirical material presents the importance of micro, meso and macro-places in IKEA's efforts to handle resources. The various examples are used as *illustrations* pointing at a series of relevant issues that are then brought together in an analytical framework in section 5.

4. Resources and space in the IKEA universe

This section reviews how IKEA uses the space-related features of various internal and external resources during its current business activities and to sustain its development. Resources are presented according to the so-called "4Rs model" that classifies them into *products* (IKEA's own and the related components), *facilities* (like the equipment and

buildings used in production, distribution and communication), *business units* inside and outside IKEA and the *business relationships* between these units (Håkansson & Waluszewski, 2002, Wedin, 2001, and Baraldi & Bocconcelli, 2001). Each of these four resource types is clearly marked by the space and places they are associated with, physically or symbolically. IKEA is however not a passive beholder of how these spatial features are or become embedded into the resources that it handles or that affect its business: IKEA strives also to have embedded in the four resource types those spatial features that are *favourable* to its various managerial goals, in terms of costs, revenues, reputation, development possibilities etc. However, spatial features unfavourable or conflicting for such purposes also regularly emerge that IKEA needs to cope with. Let us now delve into how this all happens with a few examples from the IKEA "universe" of places and resources.

4.1 IKEA, shaping and creating the places and the space for resources

IKEA is constantly engaged not only in *using* strategically various places, but also in *creating* and *shaping* them, especially at the micro and meso levels. IKEA is, in fact, in a special position for *shaping* spaces and places: at the micro level, the products developed and sold by IKEA enter physically customers' homes and contribute to shaping and "designing" the very use environment. But IKEA actively designs and builds also other micro-places: first of all, what is more apparent to an external beholder's eye, its own retail stores, in which important functional and symbolic features are embedded in order to obtain favourable economic consequences. But IKEA actively constructs also other more hidden places, like its distribution centres or the factory it increasingly owns. IKEA has own architects, production and logistic experts that design and supervise the creation of all the above facilities. More indirectly, IKEA affects also how the factories of its independent suppliers are constructed, by creating pressures to have them invest in particular machines or to introduce specific production processes. In extreme cases, IKEA and its suppliers *jointly* invest in equipment, which increases IKEA's possibilities to affect such micro-spatial issues as factory design, production flows and work organization.

IKEA designs and shapes also meso-places, including the links between sets of facilities and buildings it operates or on which it is dependent, owned by its suppliers or logistic partners. Many of IKEA's business units are agglomerated in the same or adjacent buildings (e.g. a retail store and a nearby purchase office, like in Warsaw or Milan). This aggregation inside the same meso-space is particularly evident in the Southern Swedish town of Älmhult, where IKEA's story began 50 years ago. Today, Älmhult is an important centre for many business functions within IKEA's universe: the key strategic function of product development has its main business unit, IKEA of Sweden, located here with a workforce of 600. But many other units, more than 10, are present in Älmhult, bringing to over 2,500 people the number of "Ikeans" working in this small town of about 15,000 inhabitants. Älmhult is the largest stable agglomeration of IKEA employees, covering about 4% of a workforce spread on over 70 countries, including purchase offices, logistic centres and retail units.

Apart from this functional and hierarchical role towards the periphery of IKEA's "empire", Älmhult has also an important *symbolic* value. This is the place where the first IKEA store was opened in 1958, where representatives from all 180 IKEA stores gather twice a year to meet product developers and see concretely IKEA's product news and where selected executives are sent to participate to IKEA's own carrier development courses. The influence of IKEA on such a place like Älmhult is easy to understand, but IKEA's effects stretch also to

other places that it has "met" later on during its development and international expansion from the 1970s onwards. The urban landscape where IKEA's stores are located results usually totally transformed by the opening of a new IKEA unit: starting from *very* "green field" sites (in many cases literally among open fields, in the outskirts of major cities), these locations become filled with infrastructures, like parking places (often directly built by IKEA), and so much human activities and traffic to attract also other retailers to co-locate. This favours, on turn, also IKEA, since it further increases the traffic volumes to these meso-places. The shopping area "Kungenskurva", where IKEA's flagship store is located in Stockholm, catalyses a retailing volume of SEK5 billion per year. IKEA affects meso-places also by inducing its suppliers to localise their production facilities or service centres nearby IKEA's units. In extreme cases, suppliers can cross country borders to be "near" IKEA. For instance, the Swedish coating technology provider Becker-Acroma "followed" IKEA to Poland by opening a local technical support office as soon as the mass of IKEA-owned factories or first-tier supplier in this country reached a critical mass. IKEA-related production sites in Poland are now so many and widespread across the country, that the Poznan office of Becker-Acroma is no longer enough to "service" all of them and new local offices may be soon opened.

4.2 IKEA, using the place-related features of resources

Let us now review how IKEA *uses* the features embedded into products, facilities, units and relationships, respectively. As already mentioned, IKEA also actively intervenes to *shape* some of these spatial features; so it will be pointed also for which resources IKEA more actively does this and for what reasons.

4.2.1 The importance of place for products

IKEA's products are all designed in Älmhult, even though a team of international designers is involved, including professionals from e.g. Denmark, UK and Holland. IKEA strives however to keep a common identity and image across all its products. This product identity is constructed not only around IKEA's style, look and product concept, but also around such macro-spatial aspects as the Swedish (or Scandinavian) style and choice of e.g. light wood sorts. The Swedish culture is also strongly embedded into IKEA's products in another way: they all bear typical Swedish names (e.g. first names and cities) and carry this identity wherever they are sold around the world; even in countries where such names as "Lack" (a line of sofa tables and shelves) or, even worse, "Jerker" (a line of desks) could make people frown or laugh. IKEA applies to all its products another Swedish feature: the furniture certification "Möbel Fakta", which has gradually obtained international recognition. Design, names and certifications are however just the tip of the iceberg for IKEA's product, accounting only for their external appearance: their internal construction details and technical solutions are instead seldom decided centrally in Älmhult and just a Swedish issue. Instead, various places (at micro, meso and macro level) affect these properties that are then fundamental to define the core feature of IKEA products, responsible for their sales success, i.e. their *final price*. IKEA is a "production-led retailer": this means that components and construction details for each single product are usually defined in *close interaction with* one or more suppliers, on their shop floors and, consequently, in thousands of locations. All these micro-places spread around the world contribute to specific features of IKEA's products, especially important from a technical and economic point of view to keep retail prices low.

But also macro and meso-places have an important impact on these products' costs, since many of these costs are related to the country where they are produced. This holds in

particular for labour costs, pushing IKEA to purchase from low wage countries, and transportation costs, pushing IKEA to purchase from countries located near its major output markets in Europe. The very same low wage country of origin can however embed into IKEA's product also "negative" symbolic features, whenever low wages are associated with child labour or exploitative work practices. In the long run, macro-places like the country of origin can therefore have both negative and positive economic, material and symbolic consequences for IKEA's products. IKEA has limited possibilities to actively affect these aspects of macro-places, its only choice being leaving them and avoiding its products being connected with negative place features.

As for transportation costs, IKEA products are very *transport-sensitive*, because of their low value per unit of weight or volume, the two key dimensions affecting transportation costs. Exploiting space to reduce labour and transportation costs creates however implicit conflicts, since countries that can embed low production costs into products (e.g. India or China) are usually those farther away from output markets and imply high transportation costs. Certain specific meso-places, like restricted areas in Poland (e.g. near Poznan), allow attaining a balance between the two opposing pressures: they offer good logistics connections with major markets and a local network of suppliers and sub-contractors that are both cost-efficient and technically proficient. But IKEA could "solve" the implicit trade-off between low production costs (requiring large scale centralised production and/or the inexpensive labour existing in certain restricted areas) and transportation costs (requiring short distances to retail stores) only by introducing a particular product concept and technical solution: its furniture products are sold to customers unassembled and inside "flat packs" that allow filling transportation means more efficiently.

This strive to reduce space-related costs in transportation is extreme in a products like "Lack", a series of tables and shelves: these are made out of "empty" wooden structures that are accordingly easier and cheaper to transport across the many countries separating the production sites in Poland and the homes of each single customer around in the world. But whereas flat packs offer certain advantages to overcome spatial-related problems, they may conflict with other place issues, both in the micro-place of customers' homes and at macro-level. The flat pack concept was at the origin of a scandal around the bestseller "Billy" bookcase that risked hitting hard on IKEA in the early 1990s: hazardous chemicals like formaldehyde were exhaled once consumers opened in their homes the cellophane wrapping "Billy". IKEA had to intervene then by requiring all its suppliers to change lacquering technology. But flat packs can still create "problems" in customers' homes. It is in fact in these micro-places that consumers are confronted with the task of assembling together the single parts inside the flat pack to obtain a furniture ready for use: while some accept this "inconvenience" others find it tedious and may be deterred from buying IKEA's products. Quite interestingly, there are differences from country to country: while the do-it-yourself idea behind IKEA's furniture is well accepted in central and northern Europe, it is much less so in southern Europe (e.g. in Italy and Spain).

Space and places are important not only for IKEA's final products, but also for their *raw materials* and *components*. Their geographic origin affects firstly their costs and functional features. When IKEA's purchase offices have identified advantageous (for cost and quality) sources of certain materials in a certain area, IKEA pushes then for its suppliers also in other areas to utilise such sources. For instance, the supply of larch wood that IKEA identified in China was considered as so interesting that all product developers at IKEA of Sweden and the suppliers worldwide were invited to make use of it. IKEA is also aware of potential *negative*

effect deriving from certain macro-places of origin of raw materials. In order to protect its corporate identity and how customer perceive its products, IKEA developed a strict environmental policy based, among other ideas, on refusing wood from rainforests and areas endangered or overexploited. IKEA also actively participates in replanting programs for the trees felled to satisfy its needs of supplies. As for components, their symbolic associations with specific places are much less important than for raw materials and finished products. What counts the most for IKEA is to guarantee regular streams of components to the factories producing its products. When production phases are outsourced to sub-contractors, these usually need to be located nearby IKEA's first-tier suppliers.

4.2.2 The importance of place for facilities

Some of the space-related features of facilities have already been implicitly considered while reviewing the importance of place for products, since many of their space-related features (e.g. costs) are transmitted to products *via* the facilities involved in producing or distributing them. Let us start by reviewing IKEA's own *distribution facilities*, moving then to *IT systems* and *manufacturing facilities* and, finally, to *transport means*. Distributing its products in over 30 countries in four continents required IKEA to invest heavily in 25 Distribution Centres (DCs) and 180 retail stores. DCs are large warehousing facilities reaching 300,000 m^3 in volume, constructed and equipped to receive, handle and assort products to be dispatched to retail stores located in the geographic areas they are responsible for. On a macro-level IKEA enters new countries first with retail stores and waits with introducing a DC hub only when other stores are opened and product flows has reached such volumes to justify the over SEK1 billion investment for a DC. In defining the meso-level connections between DCs and retail stores IKEA is also concerned with efficiency issues: most retail stores are grouped within a radius of 600 km from a DC hub, to contain transport costs and ensure precise and timely deliveries. Retail stores are on turn located in specific cities depending on key geographical and demographical indicators: only large and mid-sized cities justify an IKEA store (costing up to SEK1 billion to establish); to the point that IKEA prefers opening two or more stores in the same city rather than spreading them too much, for transport cost reasons. The idea is that customers should be prepared to travel 300 and more kilometres to visit and IKEA store. At the meso-level of each city, retail stores are located in the outskirts, where real estate prices are low, large parking places can be built and access to major highways is secured: in this way IKEA exploits the place immediately surrounding its stores.

Also in designing the details of such micro-places as its DCs, IKEA is very concerned with ensuring efficient product flows through them and easy docking of transport means, like trains and trucks. The same holds, even to a larger extent, for retail stores: these micro-places, covering surfaces of up to 55,000 m^2 are particularly important, because they are the physical space where customers come in contact with IKEA and its products. IKEA conceived and shaped them in order to have customers flowing through the various areas of the store, following an ideal path that funnels them through a showroom-like environment and to the "take-yourself" warehouse and, finally, to the cash lines. Also the "private" parts of retail stores are carefully conceived and organized in order to allow incoming products to be as soon and smoothly as possible placed in exhibition or in the storing areas. All IKEA retail stores and DCs are "replicas" of the first ones that IKEA opened in Älmhult, respectively, in 1958 and 1965. All retail stores, in particular reproduce the basic architectural, aesthetical and, especially, functional features tested and developed during the expansion of IKEA on its home market. From Sweden, IKEA stores inherited in fact a series of interesting features visible to all visitors (over 200 million per years): the blue and yellow of many stores' exteriors, the restaurant serving Swedish delicacies and the attached "Sweden shop", present

in all stores, from Singapore to Chicago. All these features shaping the store's micro-space are applied with great precision according to very detailed internal routines, like those prescribing how IKEA stores should place the flags near their entrance. All these compulsory details create a great uniformity among all IKEA stores towards final customers, some aspect of which are symbolically related also to, Sweden, the macro-place of origin of IKEA.

IT systems are important facilities enabling IKEA to communicate across the large distances separating its various units and suppliers. Apart from a few local variations of a couple of IT systems (among the over 50 used by IKEA), these are standardised from a country to another, just to enable interlinking and coordination. By using across over 500 business units these homogeneous systems, their models and the routines they support, IKEA obtains the important result of homogenizing how these units work around the world. IT systems like EDI and order systems have important *indirect* space-related effects on other resources (see e.g. Baraldi, forthcoming): for instance, the increased order volumes they allow and the shortened reaction time to orders they require has obliged some supplying units to build or enlarge their warehouses to store for quick deliveries increasing quantities of finished goods. Macro-level considerations play an important role here: not surprisingly such warehouses were built nearby factories in countries with low real estate costs like Poland. However, these complex effects emerge within IKEA's logistic and supply *networks*, where production capacities are unbalanced. Within these meso-level spaces IKEA tends to stimulate capacity expansions where this is more favourable, for micro (e.g. an unused warehouse), meso (e.g. a warehouse well connected to transportation facilities) or macro (e.g. a warehouse just in Poland) reasons.

Despite its large investments in production facilities since the 1990s, IKEA still owns just a marginal part of the manufacturing equipment used to produce its products. These are owned by a network of over 2,000 suppliers spread across almost 60 countries. IKEA uses the space-related features of these facilities in two main ways: by exploiting their *geographical location* and their *area of origin*.

1)The location of production facilities is important because it affects the quality and costs associated with their *operations* and with *transporting* their outputs to final markets. Country specific, macro aspects affect e.g. the associated labour costs and skills. However, countries where facilities can be operated at low costs are often far away from final markets, which entails large transportation costs. Though in some cases, like for China, low operation costs and access to good and inexpensive raw materials (e.g. Chinese larch) can overcome also very expensive transport: despite its distance China is IKEA's largest supply country, covering 14% of its purchases. But also meso-spaces are important for facility operations and transportation costs: IKEA relies in fact on localised networks of multiple suppliers and their related sub-contractors, all equipped with advanced machinery and highly skilled personnel, even in countries with high labour costs like Sweden. For instance, the Sydpoolen network, spread in southern Sweden, produces, among other products, the bestseller "Billy" bookcase, a highly standardised and large volume assignment that requires large technology investments and tight coordination among all the firms involved.

2)The area of origin of the manufacturing facilities, owned by IKEA or by its suppliers, is important because it embeds into them specific technical features and costs, including initial investment and following maintenance and operations costs. A few areas of origin dominate here: most NC-millers and bordering machines come from Italy (e.g. Biesse) or Germany (e.g. Homag); the same holds for lacquering equipment, made for the most by the Italian Valtorta, Sorbini and Cefla or by the German Eisman and Bürkle. Competence and know-how from these specialised countries or from more restricted areas inside them (e.g. the Pesaro area for Biesse) result embedded into these machines.

Transport means play a function in relation to space similar to IT systems, i.e. to allow to overcoming *physically* the distances separating the nodes in IKEA's production and distribution network. For this purpose, IKEA utilises almost exclusively transport facilities owned by its logistics partners and selects the means most adequate to cover each specific transport route among its over 20,000 corridors. This means that trucks usually cover shorter routes, like those between DCs and retail stores, while trains and ships cover the longer ones separating suppliers from DCs. Transport equipment needs to be as place-independent as possible, just because its function is *connecting* different and widely distant sites, which requires standard interfaces, like those of the containers shipped across four continents. However, the efficient utilisation of these facilities is affected also by factors spread across the three spatial levels: at the micro level, loading on trucks or railway wagons requires adequate docking stations at IKEA's DCs and retail stores; at the meso level, IKEA's DCs and even suppliers' large warehouses need to be connected to efficient inter-modal transport infrastructures; at the macro level, country-wide motorways and railroads affect the efficient performance of transportation, so that when these macro infrastructures are poor like in many Eastern European states, they can cause delays or damages to IKEA's products.

4.2.3 The importance of place for business units

Starting from IKEA's *internal units*, these are over 500 and spread across more than 60 countries. Quite interestingly these are very marginally marked by the country where they are located, since IKEA strives to maintain *homogeneity* in routines, identity and corporate culture across all these units (a task to which also common IT systems contribute, as mentioned above). Despite strong cultural differences associated with various countries (see e.g. Hofstede, 1983), entering an IKEA office in Milan, Warsaw or Stockholm presents more similarities than differences in work style, hierarchical relations and interior design. For instance, IKEA's unwritten rule about "casual" dress codes makes IKEA's offices in Italy much more similar to any other IKEA's office than to a typical Italian office. The differences among IKEA's units depend instead much more on their specific and diversified tasks: retailing for retail units, purchasing for purchase offices, logistic coordination for certain staff units and product development for the "strategic" unit IKEA of Sweden.

While the above units are minimally affected by their location, IKEA locates them instead in those areas that appear as most suitable for their diversified tasks. Purchase offices are opened in those countries where interesting purchase opportunities, for raw materials, components or finished products appear. Other units are placed in countries offering favourable taxation rules: to these units are accordingly transferred most of the profits generated by IKEA worldwide. Some units are also concentrated in the town of Älmhult, symbolising the centre of IKEA's product development and retail universe, as opposed to the financial centre located in Holland and Luxemburg. The strategic unit IKEA of Sweden orchestrates from Älmhult also the pattern of interaction between the above units: most of communication must go through this centre before going back to the various units in the periphery.

In interacting with external units located across the over 60 countries where IKEA operates, either as purchaser or as retailer, local idiosyncratic aspects emerge instead more clearly and can be accordingly more explicitly utilised by IKEA. As for suppliers, IKEA selects some of them because of such macro-spatial aspects as their location in countries with inexpensive work force and raw materials or geographically near its final markets. But what counts the most is that IKEA differentiates greatly among the space-related features it searches in its suppliers. Most of IKEA suppliers are located in three countries: China, Poland and Sweden. Chinese units have access to inexpensive and qualitative raw materials and low-cost labour;

Polish suppliers have good competence, relatively advanced technology, lower-than-average labour costs and proximity to IKEA's most important markets in Europe; Swedish units have very high competence, long-term experience and excellent technology. Swedish suppliers are accordingly involved in most technical development projects, because of their proximity to IKEA of Sweden and their ability to cooperate on complex technical issues, like the lacquering suppliers Becker-Acroma and Akzo-Nobel. IKEA interacts also with logistics partners, but it does it on a global scale. Their national identity is less relevant than for other types of suppliers: their key space-related features IKEA is interested in is the widespread presence of these units, controlling terminals across most countries through which IKEA's products transit. A final type of units that IKEA interacts with is NGOs (non-governmental organizations). Especially when these are widely known global players like Green Peace, they can contribute to strengthen IKEA's identity as a firm concerned with such key issues as the global environment: IKEA cooperated on initiatives like forest replanting programs or the development of chlorine-free catalogue paper (see Håkansson & Waluszewski, 2002) with Green Peace, giving them global coverage and great visibility in the media.

4.2.4 The importance of place for business relationships

The business relationships IKEA has to its suppliers and logistics partners and those between other firms in the business network around IKEA are all important because they allow IKEA to use the many spatial features of resources reviewed above. These relationships link IKEA's units to other external units located in many different places: they are channels through which IKEA can be "present" in and exploit other places without being *physically* there. Relationships themselves are not "located" anywhere", but are important bridges to overcome spatial, cultural and competence distances between IKEA and its partners. However, "overcome" does not mean to eliminate these distances, which are indeed what IKEA is looking for when finding suppliers located in so many different places. Even if IKEA established 40 purchase offices in 33 countries in order to create spatially (and culturally) closer "interfaces" to over 2,000 suppliers, in about 55 countries, the combined function of all these relationships is to exploit the particular spatial features of single supplying units, each so different from each other. In fact, a certain level of "distance" between IKEA and its suppliers and among suppliers themselves is necessary to ensure some *variety* in the place-related features of the competences, facilities and inputs associated to these units. It is then IKEA's task to *combine* this variety, which it access through its relationships, in ways favourable to its strategic goals (e.g. keeping low prices, improving deliveries, expanding sales etc.).

IKEA provides many examples of the fact that being located close to each other does not facilitate relationships nor automatically leads to good ones. It is self-evident today that IKEA, having only 14% of its suppliers located in Sweden, is attracted to partners located far away from home, provided they can offer cost or quality advantages. However, IKEA started establishing relationships with Polish suppliers as early as in the 1960s, when it was satisfied with the price and quality levels of its Swedish suppliers back home. Relationships to these suppliers became instead impossible to maintain because all other Swedish furniture retailers imposed to Swedish suppliers a "veto" on supplying IKEA, seen by the competitors in its home country as too big a threat. It was therefore this type of boycott that "obliged" IKEA to establish new relationships in places different than Sweden. The "veto" disappeared however and IKEA could "return" to Sweden after a decade: here it (re-)established relationships with local suppliers, though often based on different premises than those to foreign ones. Today, Swedish suppliers are those most regularly involved in cooperation projects about complex technical issues: for instance, IKEA created a joint venture physically located in southern Sweden and involving Swedish furniture producers and lacquering suppliers to quickly solve

the “Billy” bookcase formaldehyde problems in the early 1990s. This would have certainly been more difficult to accomplish far away from Sweden and the key actors involved, since they all had to regularly meet “around” a key test facility. Other factors than nearness to IKEA’s home bases are however more important to explain close cooperation with specific suppliers: the very recurrent joint development projects with the Polish supplying units belonging to Swedwood, IKEA’s production arm, show how common goals, shared values, authority and power relations can count more than physical proximity.

However, close relationships, developed in a specific geographical context like Sweden play important roles also in other countries. The same Swedish lacquering suppliers involved in the joint venture mentioned above supply also abroad many plants supplying IKEA. In this sense, IKEA is capable of transferring to new geographical contexts relationships developed elsewhere. Handling these many relationships and accessing through them different places creates also conflicts for IKEA. Many of these space-related conflicts appear at the level of the resources these relationships connect, such as products from suppliers located in sites that allow low costs but entail high transportation costs. But also relationships themselves can be in conflict just because of “spatial” reasons: usually IKEA does not utilise two suppliers for the same product in the same geographic region, even if these two would be the best ones in the world for that product. Using co-located parallel suppliers is usually ruled out by the problem of having two suppliers neither of which can reach sufficiently large production volumes to “minimise” its production costs. This first disadvantage could not be counterbalanced by reduce transport costs, since the two co-located suppliers would burden each product with the high costs of providing the whole world from a single location. Relationships can conflict also for “political” reasons opposing macro-places: ideally linking IKEA’s Israeli franchisee with suppliers from Muslim countries implies obvious conflicts.

5. Analysing the spatial aspects of resource networks

The examples extracted from IKEA’s experience with space and a multitude of places illustrate the importance of space for handling resources. While some specific places can be affected by IKEA, most of them cannot; but still they somehow affect IKEA’s possibilities in managing resources like products, facilities, business units and relationships. Places and space affect key aspects of resources of pivotal economic and managerial importance. An indicative list of the effects of space on resources includes: costs and revenues, manageability, efficient utilisation, development and identities and symbolic values of resources.

1)The *costs* and *revenues* associated with resources. For instance, the costs of IKEA’s products depend largely on the factory and the country where they are produced and their sales on the building (i.e. IKEA’s stores), the city and the country where they are sold. Also a facility’s operations’ costs are affected by its location (for instance because of different installation, construction, electric power and manpower costs) and by the places from which it receives its inputs; on turn, its revenues (i.e. output volumes) are related to the places that a facility connects, depending for instance on the closeness to customers or to other “receiving” facilities. Also the economic performance of organizational units and relationships is partly affected by the places to which they are related. The costs of units include locally determined ones like labour costs, defined at the meso and macro-level. But since units are connected and interact with other units (e.g. suppliers and customers) located in other places, their costs depend also on the places where these other units are located: for instance, purchasing from suppliers located in certain areas exposes a unit to the place-related costs incurred by these

suppliers. Places impact also the revenue side, starting from the very building where a unit is hosted and moving to the various places where customers are located: customers in certain places can be off-limits (because of e.g. place-specific trade barriers, economic or socio-technical reasons), while those in other places can be a major source of revenues.

2)The *manageability* of resources. This issue refers to how resources can be controlled and coordinated. No matter whether they are internal or external to a firm, the more geographically dispersed the various resources are, across many different places (at all three analytical level), the more difficult it should be to control and coordinate them, compared to having them all included within the same place.

3)The efficient *utilisation* of resources. For a firm like IKEA, efficiency regards especially the physical flows of resources and the communication and information flows connecting units. These aspects are clearly affected by the *distances* that physical resources need to travel and that information flows need to cover. Such distances include the physical micro-distances of internal and in-store logistics and the physical macro-distances separating countries and continents; while the cultural micro-distances within and between buildings (and the units that occupy them) and the cultural macro-distances between units located in different countries or regions can affect information flows. The cost advantages of certain places can easily turn into disadvantages because of the distances they entail from other places where resources need to be transferred or where information needs to flow.

4)The *development* of resources. What possibilities or hinders for recombining them in new ways derive from spatial factors? Here having "distant" resources that interplay is not necessarily a problem, as it was for manageability. In fact, distance can open for new influences and for new resources not present in the *nearest* local environment: think of the Swedish and Ikean expertise in developing cost-efficient products combined with Chinese larch. However, to obtain a concrete development these distant resources need to be brought somehow together, in the same place, in order to be practically tested and recombined together. Not surprisingly, IKEA's product developers travel so much to "meet" local suppliers and their materials, often on their shop floors. When new solutions are locally found, production then happens in places widely separated from where e.g. a new product will be eventually utilised.

5)The *identities* and *symbolic values* associated to resources. These softer factors can however also have clear economic impacts in terms of conquering sales, losing reputation or customers. For instance, IKEA is aware of the negative associations that places like child-labour factories and countries can create for its products and its whole corporate image. On the positive side, instead IKEA's own micro-places like its retail stores are extremely important to create its identity, which relies on turn on a many Swedish symbols.

Places affect these five key aspects of resources, and many more, by creating both possibilities and limitations (indeed even obstacles) to managerial actions. However, many of these effects are greatly complex and hard to identify. Here, a straightforward analytical framework is suggested that can help tracing these effects (and the associated possibilities and limitations) for each single resource type, across various *spatial scales* (Livingstone, 1995: 15, 27). The following analytical grid of figure 1 combines the three analytical levels for space with the four resource types, into a 3x4 matrix.

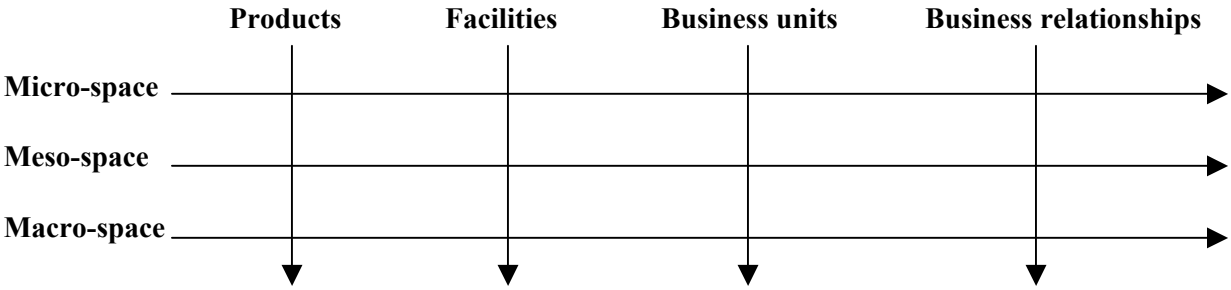

Figure 1: The Space-Resources analytical grid

While the purpose of the grid on figure 1 is not to define unilateral causal relations between variables (resources and places), it can prove useful to analyse how the issues of *costs and revenues*, *manageability*, *efficiency*, *development* and *symbolic aspects* of resources are affected by the three levels of space. For each of these five indicative items, the grid can help identifying positive or negative effects associated with micro, meso or macro-places for a particular resource type. A first, straightforward, way to apply this "Space-Resources grid" is simply to *specify* (i.e. identify as a specific physical site or broader location) and *count* the number of micro, meso and macro-places that affect e.g. a product or a unit. One can then proceed with defining *how much* a firm has "invested" (in terms of time and finance) in each of these places for the considered resources: this can provide a broad view of the patterns with which a firm utilises space and places. The sheer number of places and investments in specific places indicate, respectively, the *variety* and *heaviness* (Håkansson & Waluszewski, 2002) in a firm's space utilisation patterns. Section 6 will apply this reasoning to IKEA.

In order to see how place is utilised as a "strategic weapon" it is however also necessary to perform a deeper type of analysis within the Space-Resources grid. One could evaluate how much the single identified and specified places impact on the five issues suggested above (costs and revenues, manageability, efficiency, development and identities and symbolic values of resources). This exercise should point at *how important* specific places are for the various resources and at *why* they are important, also in the light of the investments made in each of these places. However, it should not be forgotten that when a firm tries to handle these spatial aspects, they often create *conflicting* pressures on resources. While the Space-Resources grid offers no solution to these space-related conflicts, it still can help to highlight them. Many of these conflicts derive, in fact, from the *processes* through which space-related features become embedded into resources (see section 3 above): these processes are highly complex because they involve the various "interfaces" (Håkansson & Waluszewski, 2002: 190-200) between resources. For instance, the place-related costs of such a simple resource as a product derive from all the facilities handling it, from its inputs, from the know-how of the units handling it and from the volumes exchanged with specific suppliers and customers. All these resources around the product have "cost features" associated with their geographical location or origin: the country of a supplier, the rural or urban location of a facility, the competence of a particular local workforce etc.

It is not easy to unravel the processes by which spatial features are embedded into resources; and it cannot certainly be done on a simple matrix like the Space-Resources grid of figure 1. Strategically using space is clearly difficult not only because of the limits to *affecting* places, but also because of the *complexity* of the effects that places create on resources and their potentially conflicting nature, obliging firms to accept trade-offs. No single "optimising" solution for such complex and conflict-ridden resource networks like IKEA's can ever be found in relation to spatial issues.

6. Conclusion: places and resource combinations

The view on spatial issues presented in this paper transcends the approach to space as a given or as an independent variable, typical in economic geography (see Malmberg & Maskell, 2002) and in business studies (Porter, 1990, and 2000). Places and the spatial features of resources were considered instead as *strategic weapons* that firms can, within limits, affect and that they can exploit for pursuing various goals. However, places and spatial features are not easily "tamed" and manageable objects: they embed conflicting features into one and the same resource, oppose resources to each other and often require trade-offs when they are actively utilised. IKEA's experiences in using places show how these strategic weapons can be sometimes directly shaped by IKEA, as it often is the case for such micro-places as retail stores or interior designs in customers' homes. However, IKEA has much more limited possibilities to shape meso-spaces and, especially, macro-spaces. Nonetheless IKEA actively utilises important features that the latter types of spaces embed into the resources it handles. More precisely, IKEA combines many place-related features that micro, meso and macro-spaces reflect on such resources as products, facilities and units. Business relationships are important linkages between units that facilitate this process of combination and that implicitly connect different places and the resources associated to them. IKEA approaches places in a dual way: by using them as stable "bases", but also by keeping them "at a distance".

As for the first aspect, IKEA is not afraid to strongly relate itself to certain specific places. It does it in order to take advantage of the *spatial friction* (Håkansson, Tunisini & Waluszewski, forthcoming) that embeds specific features in the resources located in or associated with certain places, but not with others. By *investing* in facilities, units and relationships "placed" in certain locations, IKEA becomes heavily related to these micro, meso and macro-places. Based on this, IKEA can also create and exploit symbolic associations, irrespective of whether it still is physically related to these places. IKEA's products are still perceived as very Swedish, even if only 14% of them are actually made in Sweden. As for the second aspect, IKEA tries to overcome the limitations that *spatial friction* (Ibid) could create in the *short run*, for coordination, and in *the long run*, by having or being related to resources that are *too* spatially embedded in one single place. In the short run, IKEA needs to overcome the problems that distance creates in coordinating among all the widely geographically dispersed resources it handles. For this reason, IKEA strives for homogeneous practices, culture and routines among its internal units, for a uniform profile towards customers all over the world and for reducing the negative effect of distances on product flows and internal communications. In a long-term perspective, IKEA avoids the effects of too much spatial friction by relating itself (via its relationships, the placement of its units and the facilities it utilises) to *many different* micro, meso and macro-places at the same time.

So, IKEA's investments in terms of places are both *heavy* and *varied* (Håkansson & Waluszewski, 2002): this allows IKEA to get out the most of each single place with which it is directly or indirectly related, while maintaining a certain degree of flexibility. The patterns of space utilisation reviewed in this paper are certainly not unique to IKEA: they characterise most large firms that have, over long time periods, been operating in many different places, especially as multinationals. The approach proposed here could certainly provide a more fine-grained view of the complex and conflict-ridden ways in which such firms gain advantages, by exploiting and affecting places. Conducting this type of research is however demanding from a methodological point of view: the units of analysis become networks of resources spread across multiple levels of space and covering them requires a large amount of detailed, often qualitatively collected, empirical material.

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