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**THE REALITY OF BRANDS:
TOWARD AN ONTOLOGY OF MARKETING**

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Summary

The ontology of marketing, particularly the question of what products and brands are, is still largely unexplored. The ontological status of brands hinges on their relationship with products. Idealists about brands see perceptual or cognitive acts of consumers grouped under the heading ‘brand awareness’ or ‘brand image’ as constitutive for the existence of brands so that, in their view, tools of the marketing mix can influence relevant mental dispositions and attitudes. Brand realists, on the other hand, reject the view of brands as mere marks or names and interpret them as emergent products with properties that afford branding in the sense of Gibson’s ecological psychology. Brand strength is a function of the degree to which brands occupy defensible niches in product space. Branding as a process involves changing external or internal boundaries of products. Several arguments are proposed in favor of brand realism. The fragments of an ontology of marketing are developed in a broadly Aristotelian framework. Brand realism has significant implications for a new understanding of issues ranging from the effects of advertising to financial brand valuation, the nature of trademarks, and marketing strategy in general. It permits one to treat brand equity as a real phenomenon not dependent on associations, attitudinal states such as brand loyalty, or spurious constructs such as brand character or personality.

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1. INTRODUCTION

Consumer goods, and particularly brands, are part of our common-sense world. Yet marketing, the discipline that studies these phenomena, has so far taken little notice of attempts to develop theories of domains of common-sense reality by investigating its own ontology. Received marketing theory holds that “only philosophers can afford to define products in ontological terms, and that is only because for them it makes no operational difference what the definition is” (Levitt 1969: 11). This view betrays some basic misunderstandings.

If ontological analysis has been applied to geographical space, linguistic categories, real estate, visual perception, intellectual property rights, ‘naïve physics’, cyberspace, ethical values, technical artifacts, social relations, and economic objects, something as central in our lives as the domain of commercial products should certainly afford an equal degree of analytical scrutiny (see, e.g., Smith 1995; 1998, 1999; Smith/Casati 1994; Simons/Dement 1996; Smith/Varzi 1999a; Smith/Mark 1999).

The ontology of the commercial world is of great complexity. This has been recognized in the few attempts to reconstruct or model the categorial framework in which we consider market relations. Economic theory is based on primitive concepts such as: economic good, commodity, money, value, price, and exchange. But it permits only few implications for purposes of marketing, which studies objects not only under the aspect of their specific utility for consumers but, going beyond the domain of economics, also in regard to the opportunities, strategies and techniques of *influencing* utility and exchange relations. One single project to develop an ontology of business enterprises within an artificial intelligence framework has thus far been undertaken, using the notion of brand as one of its primitives (Uschold/King/Moralee/Zorgios 1998).

One of the problems every ontological investigation encounters resides in the fact that we can, at one and the same time, classify a region of common-sense reality as comprising (physical or immaterial) objects, economic goods, products, and brands. The subject areas of chemistry, physics, cognitive psychology, economics and marketing overlap, and ontological clarification is needed to identify why and how we deal with the same object differently in marketing than, say, in microeconomic price theory.

Over the past two decades, much of marketing theory has focussed on explaining *brand equity*. It has been recognized that brands are often the most valuable corporate assets, exceeding less dominant products both in terms of consumer awareness and of financial valuation. The question remains, however, what exactly constitutes brand equity. What causes products such as Coca-Cola, the Hershey chocolate bar or Campbell's soup to be 'deep' brands and to profit from a price premium while other colas, candies or soups do not? More precisely, the challenge is to find "a way of bridging the gap between the intangible perceptions of a brand and the revenues realized from it" (Dyson/Farr/Hollis 1996: 10). Only this will adequately explain why companies founded on strong brands are often acquired for up to ten times their book value.

There are theories that see brand equity as being anchored in consumer awareness, as intangible assets of companies, or as a theoretical construct which is functionally dependent on brand management (Aaker 1996; Keller 1993, 1998). Consumers perceive brand equity as the value added to a product by associating it with a brand name and other distinctive characteristics. Customer-based brand equity, then, depends on the degree to which consumers are familiar with products and "hold some favorable, strong, and unique brand associations in memory" (Keller 1993: 2). Considering the matter from a financial perspective, companies view brand equity as the net present value of the future profit stream that can be attributed to the price premium of the brand. This conception has gained importance in several countries by the admission of brand equity as a depreciable asset on balance sheets. In a managerial perspective, the equity of a brand is determined by an ontologically peculiar set of properties - including brand awareness, brand loyalty, perceived quality, and brand associations - attached to the outward presentation of a brand by means of a name, symbol, design, packaging, or delivery.

Most approaches see the nature of brand equity as revolving around the relationship between brands and other products in the same competitive set (Kapferer 1992: ch. 7). What need to be explained, therefore, are the conditions that demarcate brands from other members of their respective product class.

Two conceptions of this relationship will be compared and it will be shown that there are good reasons to accept the ontological reality of brands as special kinds of products (Section 2). This is followed by an exposition of the sense in which brands are to be regarded as real (Section 3). The rudiments of an ontology of economic goods, products and brands will be presented (Section 4), followed by a sketch of an ecology of brands (Section 5). In the concluding part, the

relevance of this model for business, particularly for understanding brand equity and for strategic brand management will be discussed (Section 6). Further work will be needed in order to define the precise ontological structure of brands in formal fashion, to derive from this the set of necessary and sufficient conditions for successful branding, and to test the results against empirical data about brand choice, consumer behavior and the balance sheet asset value of successful brands (Section 7).

2. BRANDS: IDEALISM VERSUS REALISM

2.1. Products and Brands

The relationship between products and brands is a moot area of marketing science. Most textbooks understand brands to be members of a subset of products of a particular category such as automobiles or sodas. Brands are products that are distinguished from others of the same category by *accidental* features such as brand names or design and by the higher awareness and knowledge that consumers have of them. In this view, brand names stand for a product category much in the same way that Kleenex, Xerox, Caterpillar or Rollerblades have come to stand for the product categories of paper tissues, photocopiers, earth-moving machines or inline skates.¹ The necessary and sufficient condition for the existence of brands is held to be the higher awareness that consumers have of certain products independently of their being able to explain from which any real differences such as higher brand awareness arises. According to this view, brands are, in consequence, reducible to brand names, terms, signs, symbols or designs (Kotler 1997: 443). This implies that brands are not products of a particular nature but “essentially a seller’s promise to deliver a specific set of features, benefits, and services to the buyers” (*ibid*). This same account would, however, apply also to generic products such as the unbranded rice we buy in a supermarket, which are likely to have a package specifying only the contents, the net weight and the producer.

Marketing scholars often use the brand concept ambiguously, for example when they refer to “a Mercedes” (and not to the term ‘Mercedes’) as a “deep brand” while at the same time reducing a brand to a set of attributes and calling a brand a “complex symbol” (Kotler 1997: 443). Obviously an automobile should not be reduced to a symbol, though certain symbols may of course

help us to distinguish automobiles within their competitive set.² In this respect it is important to notice that type-token confusions abound in the literature on brands.³ Similarly, some authors refer to brands themselves as “assets” (Dru 1996: 73) while others see brand name awareness, brand loyalty, perceived quality, and brand associations as the “set of assets” (Aaker 1996: 80) that constitute brand equity. Other authors uphold a dichotomy or, more often, a continuum between products *simpliciter* and branded products while at the same time identifying the *differentia specifica* of the former as lying in subjective evaluation, in consumer attitudes such as brand loyalty, or in the existence of a brand mark. In so doing they underplay the fact that marketing practice talks of brands as branded products, i.e. as items within the same category as non-branded products. But they also disregard the difference that market research draws between brand-level and product-level investigations, which implies that indeed there are real differences to be studied.

2.2. Brand Idealism

All views that regard brands as rooted in the perception of consumers may be collectively classified as *idealist* conceptions of branding. They repudiate any definition of products “in ontological terms” (Levitt 1969: 11), i.e. by reference to properties of products, since “the features that distinguish [brands] from those of competitors, are invariably held to be external to the generic products” (*ibid.*). Instead of looking for defining characteristics within product space, idealists propose operational definitions so as to arrive at an “actionable” (*ibid.*) theory of brands - a theory with practical consequences for the marketing strategist. According to a popular version, brands are created by applying marketing tools, particularly advertising, in such a way as to influence consumer perception. The underlying assumption is that consumer wants are generally not for the benefits of core products (such as transport in the case of automobiles) but for the additional benefits of augmented products (such as style, image or social recognition). It follows from this view that any product can potentially be branded or, in an operationalist formulation, that the conditions for a product to become a brand reside not in product space but depend only on marketing management. To be a brand, then, ultimately means to be perceived or known to be a brand or to have been forged into a brand. Such idealist conceptions still employ the tacit assumption of a *substratum* that has been transformed into something-

plus. But they typically assume that “the brand is not a mere indicator of origin, it is the actual origin of the products to come” (Kapferer 1992: 107).

Brand idealists share their belief in the mental origin of branded products with Searle’s view that ‘counting as’ is the essence of all social reality. For Searle, rules of the form ‘*X* counts as *Y* in context *C*’ constitute the social rather in the way that the rules of chess define what it means to play chess (Searle 1995: 28). The fact that a product *X* counts as a brand *Y* within a market *C* would then be all that is needed for branding.

Brand idealism is confronted with serious problems however. First, the language of marketing treats ‘brand’ and ‘product’ as intersubstitutable in many contexts and hence treats brands and products themselves as belonging to the same level of concreteness. The science of marketing studies brand choice behavior and assumes, for example, that products are subject to particular life cycles while brands are (at least potentially) not. This indicates that, as a matter of fact, brands are treated as a special class of products, precisely as *branded* products.

Second, in the case of a commodity purchase such as bread or milk, there is typically little brand preference even where the products purchased are in fact branded, as in the case of the well-known Italian dairy producer Parmalat or its French competitor Danone.⁴ Nor, as is shown by the case of Chiquita bananas or Perrier water, need brand strength be correlated with greater competitive advantage. High consumer awareness may coincide with a much weaker role of this awareness in determining purchase decisions, which calls into question the overriding role of awareness in determining the success of branding or in constituting brands in the first place.

Third, idealism cannot easily accommodate ‘natural’ (or ‘category’) brands such as champagne, cognac, Parma ham or Emmental cheese. In these cases, brand names did not arise through either individual branding or umbrella branding (i.e. by being placed under a corporate or a ‘blanket’ family name). Moreover, packaging or design is here not consistent and therefore not constitutive of the brand. In the case of champagne, brand idealism would imply that the right marketing mix could persuade consumers to accept wines as champagnes that, as a matter of fact, do not come under the umbrella of this ‘natural’ brand. Rather, their belonging to a particular species of wines, a particular production process (*‘méthode champenoise’*) and their origin in a particular viticultural region characterize certain wines sufficiently to make them champagnes, regardless of the degree of awareness consumers may have of them and irrespective of any corporate brand name (Thode/Maskulka 1998).

Fourth, products often retain a higher value even if they have become ‘debranded’. This explains the value of Lacoste shirts without the Lacoste label, or of Rolex watches stripped of the Rolex name: “They are worth more than counterfeit imitations, because the brand is present even when it cannot be seen. In contrast, though the brand may appear on an imitation, it is actually missing” (Kapferer 1992: 10f.). This phenomenon can only be explained by assuming that even the former presence of a brand somehow transforms a product. But this precludes brands from being reduced to a simple external sign such as a name or label.⁵

Fifth, it is a fact that in a number of cases a brand can be founded on the design of products alone. Thus the Swatch[®] brand uses design to demarcate a range of highly branded watches under a family umbrella name. Design is, in this case, a necessary condition for being a Swatch[®], the sufficient condition being added by the registered trademark. But it is neither the trademark nor any consumer perception that creates or constitutes the brand. Similar cases are found among automobiles, technical appliances and other products with a high degree of product differentiation.

Sixth, brand idealism ultimately leads to the assumption that product differentiation is induced or created by the marketing mix and particularly by advertising. If it were only accidental features that differentiate brands from other products in the same category, then brands should be able to be created *ad libitum*. But research demonstrates that not just any product can, even by applying efficient tools of the marketing mix, be converted into a brand.⁶ The number of branding flops is legion and advertising is not the universally powerful panacea its critics accuse it of being.⁷ Successful branding must therefore depend on conditions that are rooted in structures of reality. The existence of “immutable laws of branding” (Ries/Ries 1998) has been postulated, some of which are rooted in the psychology of perception and cognition while others may depend on strategic product management. In the literature on consumer behavior and on cognitive psychology, the following regularities have, for example, been shown to hold for the relationship between brands and product categories:

1. The strength or salience of brands within a product category is not reducible to any single measure of brand performance that can be influenced by marketing management (Aaker 1996: 356f.; Ehrenberg/Barnard/Scriven 1997). It is not simply about how strongly users feel about a brand, whether they value one brand a certain number of

times more than another brand, or whether they have stronger associations with a particular brand.

2. The *strength* of brands, as measured by the price differential consumers are willing to accept over other products of the same category, bears no direct relation to the *size* of brands as measured by sales volume or market share (Farr/Hollis 1997; Chong/Ho/Tang 1998). Market niches can be small but profitable, and the size of dominant brands does not have to reach a particular share of category sales.⁸ Since marketing management can typically influence size, this would imply that, while advertising has a formidable potential of transforming products into brands, branding must also depend on other than purely operational conditions (Aaker 1996: 319ff.).
3. Brands can be founded on properties that appear to create a meaningful product difference but in reality turn out to be irrelevant to creating that benefit.⁹ A meaningless differentiation can be valued positively by consumers and can therefore produce a meaningfully differentiated brand, which indicates that the status of brands is independent of any meaning they may have for consumers: “Its distinctiveness suggests its relevance, prompting positive associations, even causal inferences about its impact on product performance” (Carpenter/Glazer/Nakamoto 1994: 349).
4. Category-brand relations are not symmetrical, i.e. a strong brand-to-category association (e.g., the Ferrari brand with the category of sports cars) does not imply a strong category-to-brand association (e.g., the sports car category does not necessarily activate ‘Ferrari’ but may also activate ‘Porsche’ or ‘BMW Z’) (Tversky/Gati 1978; Farquhar/Herr/Fazio 1990; Farquhar/Herr 1993; Boush 1993, 1997). Thus, a brand with a strong association toward the product category is likely to be preferred if no other brand owns the association from the category. This is the case, for example, for Kleenex but not for Ferrari.
5. Not all instances of natural kind categories such as ‘fruit’ or ‘bird’ are regarded as equal. Consumers regard apples and peaches, for example, as more typical exemplars of the category of fruits than pumpkins and olives (Smith 1989; Estes 1994: 33ff.). If branding relies on typicality within a category of natural kinds, this category has a structure and does not permit selection of arbitrary products to be established as successful brands in just any way.

6. Natural products, including artifacts, represent a more comprehensive classification of objects than natural kinds, and by including the latter as a subset many of the characteristics of natural kinds extend to categories like furniture, clothing or automobiles. In particular, natural products are perceived to have a graded structure, i.e. to include more or less typical exemplars or prototypes (Rosch/Mervis 1975; Boush 1993). Consumers have a rather clear concept of what chairs, automobiles or fruits are like. Products belonging to natural product categories with features too dissimilar from those of the prototypes would no longer be regarded as belonging to the same category. Consequently, consumers use the salience, relevance and typicality of product attributes to judge brands more favorably.
7. Brand names representative of product attributes are recalled more often than family brand names and novel names when all are illustrated with visual cues consistent with the attributes (McCracken/Macklin 1998). Consumers do not accept attempts to assign arbitrary names or symbols to products for which they see a clearly demarcated 'slot' in reality. They require a proper 'fit' of concepts though the exact domain to which the concept applies may not always be definable by necessary and sufficient conditions (Keller 1998: 135-46). Even if the referential extension of the concept 'chair' may be fuzzy in the sense of being extended to bar stools or to single-pedestal arm chairs, the branding of chairs requires identity or at least close similarity with the prototypical categorization of what a chair is (Boush 1997). Congruity of brand names therefore also affects evaluation of brand name extension to other categories (Herr/Farquhar/Fazio 1996).
8. The core associations connected with a brand have boundaries, which explains why a brand cannot arbitrarily be extended within (and even less so across) product categories (Farquhar/Han/Herr/Ijiri 1992; Farquhar/Herr 1993). Consumers know what Coca-Cola is and cannot be tricked into accepting anything else for the 'real thing'. The perceptual fit of potential brand extensions to new categories depends on the degree of category dominance in the original category and on the boundaries that protect the brand. Since consumers' cognitive representations impose limits on the possibility of stretching brands it is generally easier to extend brands to closely related categories than to distantly related categories (Farquhar/Han/Herr/Ijiri 1992; Farquhar/Herr 1993; Batra/Lehmann/Singh 1993; Nakamoto/MacInnis/Jung 1993; Herr/Farquhar/Fazio 1996;

Leong/Ang/Liau 1997; Ries/Ries 1998: 78ff.; Keller 1998: ch. 12). It is also easier to extend brands to categories which themselves have a prototypical brand (Han 1998). But the decisive criterion is the nature of the boundaries.¹⁰ The stronger a brand - the more it is a 'master brand' - the smaller tends to be its extendibility (Farquhar/Han/Herr/Ijiri 1992). The difference in plasticity of brands, however, cannot be due only to the application of a particular set of marketing tools but must also be explained by structures of the underlying reality of product space that permit extension in some but not in other cases.

9. Brand names alone affect the demand for a product, and by implication brand equity, less than is often assumed. Twin automobiles usually made in the same plant which are physically essentially identical but carry different brand names have been shown to differ in sales price (Sullivan 1998). But the degree of difference - with an average relative retail price ratio for the domestic twin pair sample of 0.993 - is close to unity, and moreover corresponds to the degree of difference between the average prices of automobile brands of the same category. This suggests that car buyers use information about parent brand quality to infer the quality of models under the parent brand. This conclusion would impose limits on the degree to which individual brands can be leveraged by the application of names or symbols independently of the leverage derived from a parent master brand.

2.3. Brand Realism

These results of empirical research suffice to show that both product space and perceptual space are governed by certain regularities, principles or laws that permit some products of a category to become brands but not others. There are non-arbitrary, constraining conditions for successful branding. By consequence, brands cannot simply be reduced to their external characteristics such as brand names, symbols, trademarks or designs, since marketing management tools can only be applied successfully if these other conditions are fulfilled.¹¹ Brands, then, are emergent products that are not reducible to any simple combination of product properties.

Emergent properties have been defined as such that "belong to a complex as a whole and not to its parts" (Broad 1925: 23). Brands are not properties of a mysterious entelechy of products, i.e.

of an immanent capacity of some products to become brands. What constitute brands are properties of products themselves.¹² Brands are determined by and are dependent upon properties of product space, without being reducible to these.

We may express the same idea by saying that brands *supervene* on products, much as the mental has been claimed to supervene on the physical or beauty to supervene on non-aesthetic properties. Supervenience has been defined as a relationship between sets of properties where one set is only present in virtue of the presence of the other set (Kim 1993). Similarly, an object can only have the properties of a supervening brand if it also has those of an underlying product, without however being reducible to the latter. If products permit differentiation in terms of properties such as shape, color, taste, solubility, divisibility or packaging, this defines the possibilities of branding these products. In the language of Gestalt theory, brands are *founded* on products and require special intellectual acts in order to be grasped by consciousness. They have, in Christian von Ehrenfels' sense, a higher degree of 'organic unity'. Brands, then, might be viewed as Gestalten that exist in reality.¹³ Brands have a value greater than the sum of their tangible assets, which explains the phenomenon of brand equity (Murphy 1990: 45; Zaichkowsky 1995: 74ff.). It is the 'closure' of brand elements, their degree of unity and integration, which facilitates brand awareness, since each piece of information can act as a retrieval cue for the other. This makes us understand the extraordinary persistence of 'deep' brands (or 'strong' Gestalten, i.e. wholes made up of parts other than natural parts). They are more integrated wholes than weaker brands. Procter & Gamble, for example, has managed to keep its Tide brand as the leader in the laundry detergent category for more than 50 years.¹⁴

Any such explanation is clearly incompatible with an idealist view. *Brand realism* challenges brand idealism on the basis of what may be called ecological constraints on branding. It imputes to brands an ontological reality by treating them as a particular class of products. A weak form of brand realism is expressed in the definition: "*A brand is a product, then, but one that adds other dimensions to differentiate it in some way from other products designed to satisfy the same need*" (Keller 1998: 4). Here the term 'brand' has to be understood in the comprehensive sense that includes services, stores (Bloomingdale's, Harrod's, the Waldorf Astoria), persons (Elvis Presley, Michael Jordan), and places (Burgundy, Nappa Valley).

The ontological position of brand realism may be exemplified by a case from business history. Since 1901, Gillette has been in the market of grooming products, producing numerous genera-

tions of ever-better razors and pioneering product innovations. Nonetheless its market leadership was challenged in 1962, when Wilkinson Sword introduced the first razor with a coated, stainless steel blade. Gillette lost 30 per cent of its wet shaving business over the next three years until it regained its competitive edge, which was always founded on product innovation. The market accepted the new Wilkinson brand, from a company that had hitherto not even been in the shaving business, because it filled an unoccupied niche, a particular location in product space which corresponded with - as of yet unfulfilled - consumer demand for products with a particular combination of properties. On account of different properties, the category could accommodate at least two brands, which were, in spite of a degree of overlap, yet still sufficiently differentiated.

According to brand realism, parts of object space have an intrinsic potential for accommodating brands. Only products that find themselves in such 'slots' or 'niches' can become brands. Necessary features that permit branding thus characterize product space, and brands are *one-sidedly dependent* on products in the sense of formal ontology (Smith 1982; Johansson 1989: 131). This tenet is not exposed to what has been described as the "product-attribute fixation trap" (Aaker 1996: 72), since it does not reduce brands to product attributes. Realism about brands does not require product fixation. In particular, it does not imply the assumption of metaphysical essentialism, which in the present context would amount to the claim that there are necessary and sufficient conditions for a brand to be dominant within a category. Brands are conceived to be products that are salient within their category by being demarcated from other less-branded ones by defensible boundaries. A defensible position is one which remains viable even after subsequent competitive entry. Defensibility can be a function of unique properties of products, control over distribution channels, advertising expenditure or, in the strongest case, a function of licenses, patents, trademarks or recognized designations of origin.¹⁵

For the realist, consequently, brand equity is a function of the degree to which brands succeed in occupying *niches* within product categories. A niche is that into which a brand fits, much like a species occupies an ecological niche. The specific nature of such niches is defined by a combination of properties of products and factors pertaining to the way these are perceived and evaluated by consumers. The latter, subjective factors such as brand image, do play an important role, but they do not constitute brands since they themselves are founded on them: "A true brand is one whose image is embodied in the product characteristics" (Kapferer 1992: 139).

Realism about brands does not imply a causal dependence. The fact that there would be no branded products if features of these products had not been set into relief or if marketing tools had not been applied does not entail the causal dependence of brands on acts of the mind or on marketing management. Manipulability is sufficient but not necessary for existence. It is the entry into causal interactions that has been well established for brands, independently of and differently from generic products, that justifies ontological commitment to such 'higher-level' entities.

Brand realism is compatible with the idealist claims that it is the augmented product, through the application of names, symbols, and advertising, that turns unbranded products into brands, and that products are of interest for marketing only to the extent of being actionable. Realism need only assume a one-sided dependence of brands on products, which implies that marketing tools can, sometimes unawares, at least partially de-brand a product again.¹⁶ But they cannot change features of the underlying product that would afford re-branding. Brands are, in this sense, *grounded* in products.¹⁷ Thus the Hallmark brand is grounded in three different classes of characteristics of the underlying product: essential characteristics (gift-associated, high quality), contributing (but non-essential) characteristics (combination of pictures and words), and accidental characteristics (made of paper). The Hallmark brand supervenes on several different product types (greeting cards, gift-wrapping, posters, plaques, party accessories, Christmas ornaments), with greeting cards clearly being the brand prototype (Boush 1993).

Branded products represent exemplars within their categories: "In certain markets, a brand personifies the product category. It is its prototype" (Kapferer 1992: 139). For a long time, the IBM Personal Computer and the Apple Macintosh have been the relevant prototypes among computers. They defined 'platforms' or standards for a range of hardware and software products. Empirical research shows that typicality of category members always depends on feature salience (Boush 1993: 306). The easiest brand for consumers to accept is one in which typicality is based on a few related salient features. This is the case not only for Hallmark, Levis and Coca-Cola but also for Sony, originally a family umbrella name and now a corporate name that sets the standard in categories such as that of multi-band short-wave radios or CD players. Walkman[®], as a registered trademark of Sony, has established itself as a master brand and has come to be used as a category designation. Identification with a prototype within a category thus enhances the potential for branding. But in the case of Sony products, too, the brand is

founded on a few common properties such as hi-tech (and often ‘futuristic’) design, miniaturization, dedication to quality, and technological lead.

Brand realists will also concede to idealists that, everything else being equal, consumers will choose the brand of which they are most aware or towards which they possess the most favorable attitude. But they doubt that the *ceteris paribus* condition typically holds in cases of product differentiation, since the conditions for alternative products to occupy a certain niche depend on the structure of reality, both on features of products and on the functioning of our cognitive processes. Furthermore, brand realism can make many assumptions about constructs such as brand identity, brand personality, brand organization, brand value and brand symbols redundant by raising the issue of ontological dependence. If a product category is structured in such a way that it admits of one brand with defensible boundaries, whether these derive from the type of product or from a copyright or trademark, other operational methods of leveraging the brand may be unnecessary. If, on the other hand, a product category admits of several overlapping niches, marketing management will generally contribute towards a stronger differentiation and thus a higher leverage for the competing brands. In both cases brands are more than products (Aaker 1996: 72): they are dominant members of a product class characterized by emerging properties. Similarly, a melody as a Gestalt supervenes on a sequence of notes but both in traditional harmony and in dodecaphonic music only a combination of certain notes has the potential of becoming a melody. This is well corroborated by Arnold Schönberg’s theory of musical coherence and categorization as well as by recent work on the cognitive structure of musical perception (Narmour 1990; Kendall/Carterette 1996).

It follows from this account that ‘brand’ is not a theoretical construct belonging to the metalanguage of marketing. Much like membrane bounds, tectonic plates, quasars, phonemes or melodies, brands are postulated as existing in the object domain rather than solely in conceptual space.

An advertising practitioner has, without metaphysical sophistication, best described the brand concept: “A brand is more than a product; it’s both a physical and perceptual entity [...] The physical aspect of a brand (its product and packaging) can be found sitting on the supermarket shelf (or wherever). It is mostly static and finite. However, the perceptual aspect of a brand exists in psychological space - in the consumer’s mind. It is dynamic and malleable” (Randazzo 1995: 6).¹⁸ Brands, then, can depend “both on perception of differences in the product itself and

on any claims made on behalf of the product as to function and performance” (Alderson 1957: 270). But the latter are in turn dependent on the former since there must be structures of product space for anything to be perceived or set into relief at all.

The realist view of branding may be illustrated by a famous marketing mistake. When in 1985 Coca-Cola decided to change its formula and developed ‘New Coke’ with a sweeter and smoother taste, consumers worldwide overwhelmingly rejected it. By changing the taste of the beverage the company tried to relocate the niche within the category of colas that Coca-Cola has traditionally enjoyed. However, consumers were not willing to accept the new product as a Coca-Cola, a brand that took up a well-defined position in their minds, i.e. with which they associated a set of well-defined properties. Many believed that the distance to the niche occupied by Pepsi, a brand which is often considered to be sweeter, had been reduced and that an overlap of the two niches had been brought about where consumers wanted these niches to be discrete. The sugar content in the chemical composition of colas may vary, and there may be a continuous gradation of other objective features. But consumer expectations, however these may have been formed, permit the category of colas to contain two niches, depending on a combination of features such as sweetness, color, and content of carbon dioxide.¹⁹ In addition, the classic shape of the hourglass bottle, to which the company has increasingly returned, strengthens the identity of the brand. Advertising that, in the case of Coke, emphasizes the ‘real thing’ while Pepsi tries to appeal to a younger audience and stresses excitement may, of course, enhance the specific position of Coca-Cola and Pepsi in consumers’ minds. But the brand image created by advertising is founded on - or grounded in - the causal relation between features of products and how these are perceived. Here, again, we see the relation of the one-sided dependence of brands on products. If the niches of Coca-Cola and Pepsi overlap beyond an acceptable threshold, dilution of the brands occurs, and this is what has happened in 1985. Today ‘Coke Classic’, the legitimate successor to the original brand, captures 20.6 per cent of the U.S. soft drink market (on a brand basis), outselling Pepsi-Cola by 6.1 per cent, while ‘Coke II’, which evolved out of the ‘New Coke’, held a miniscule 0.1 per cent and was withdrawn from the market. Private labels reach a cumulative share of 2.7 per cent of the relevant market, with a drop in sales volume from 1996 to 1997 by 13.6 per cent.²⁰

3. THE REALITY OF BRANDS

3.1. Affordances of Brands

If brands have an ontological reality, the exact nature of this reality remains yet to be clarified. The realist account does not imply a purely physicalist demarcation of brands from other products nor does it imply the view that products become branded at the behest of processes of perception or cognition. Such a view would presuppose a Cartesian dualism between *res cogitans* and *res extensa* which has long ago become obsolete in cognitive science. Much along the lines of Gibson's ecological model of perception, brand realism treats the structures of our cognitive apparatus as part of the same reality to which products belong (Gibson 1982). The salient question, then, is what kinds of products can be branded at all, given the characteristics of our cognitive system.

The conditions for branding need not even reside in presently perceived or existing properties of products: "every product has more attributes than meet the eye" (MacMillan/McGrath 1996: 58). Branding strategies cannot be based only on the particular taste, shape, consistency or perceived quality of a product but they must relate also to real (or *de re*) possibilities - to the dispositional properties - of products to enable certain uses or to permit certain transformations that have not yet been undertaken. Gibson referred to such possibilities as 'affordances', in the sense that a chair affords sitting, fire affords warmth or products of the same category afford the same use while one product may afford multiple usage. The *affordance* of an object is a certain invariant of the environment. It is independent of any of the needs and dispositions of an observer and can therefore not be influenced. Affordances do not cause behavior but rather constrain or control it. They are not the outcomes of perceptual processes, as 'meanings' are often held to be (Gibson 1982: 411). Affordances, sets of potentials or capacities of products, exist objectively, as part of product space, though they may not yet have been realized or acted upon. In the context of marketing, they define the necessary but not yet sufficient conditions for successful branding.²¹

Because of the relational character of affordances, we need to tie them to the action repertoire of agents. A television set no more affords viewing (but only listening) to a blind person than a hammer affords hitting to a creature without manipulators. Moreover, the affordances of an object are context-dependent. A television set does not afford viewing when enclosed in a box;

a hammer does not afford hitting in a room without agents that might use it (Kirsh 1995). Affordances are therefore context-sensitive, which is of little problem for the realist.

Product engineering has long used affordances to describe the potential of products to assume certain functions. Physical properties of objects are designed to constrain certain actions - car boot lids and engine bonnets are obvious examples - or to suggest a range of possible actions (Norman 1988). A button with a concave surface invites pressing, while a cylindrical knob suggests grasping and rotation. Flashing hold buttons on telephones afford attention. Well-designed products contain visible cues for use.²² In this sense, information is in the world, to be picked up by users, in the sense in which Gibson understood the process of perception (Smith 1999a). In branding we utilize the affordances of objects to provide signals about special functions, higher quality, uniqueness, or value.

Generic products (private labels, store brands), too, are defined by characteristics of their product categories. But here it is not affordances rooted in products themselves but rather functional aspects that drive category share. Low variability in quality, easy production from commodity ingredients, large product category sales, low national advertising expenditures and intensive distribution networks are some of the conditions under which private labels will prosper (Quelch/Harding 1996; Hoch/Lodish 1998). These characteristics are rather associated with cost structures (e.g., production technology, particularly economies of scale), with conditions of product and factor markets, and with marketing management, than with properties of products themselves.

3.2. Essentialism vs. Naturalism

This conception of brands does not imply metaphysical essentialism. Aristotle showed that the possibility of using the same thing for different purposes does not impute to it different essences (*Met.* 1030^a5ff.). One and the same stuffed piece of cloth can be a pin pad, a paperweight or, if branded and trademarked, a Beanie Baby[®]. In order to turn a stuffed piece of cloth into a Beanie Baby[®], however, certain objective criteria must be fulfilled. In addition to these necessary conditions on product space, successful branding will depend on the application of marketing tools such as brand name, design, trademark, packaging, and advertising. But the fact that brands are set into relief in virtue of structures of the perceptual system does not make

them *dependent for their existence* upon human perceivers or the application of any methods of marketing: “We discover which aspects of what we perceive have to be assigned to the sensory system only by identifying in the object the intrinsic features to which the senses are responding. Thus at every stage of the investigation, knowledge of how the senses function presupposes knowledge about the objects they respond to” (Kelley 1986: 43).

The problem then boils down to that of giving a *naturalistic*, or an *ecological*, account of branding rather than to the distinction between ‘subjective’ and ‘objective’ aspects of this process.²³ Not just any product can, by virtue of the creation of an external brand identity via appropriate use of the marketing mix, attain such a high awareness in the consideration set of consumers that it may be classified as a brand. Thus it may well be possible to brand even sand (Hill/McGrath/Dayal 1998). However, since sand is a commodity that permits little product differentiation, even the application of quality control, packaging and customization is unlikely to afford the establishment of a master brand. Any brand identity that can be achieved, in such a case, will be a function not only of product features such as granularity or the content of microorganisms but will also be a function of the marketing mix (e.g. of a combination of packaging, price, name etc.).²⁴ On the other hand, Evian is such a powerful brand that it sells for a 20 per cent higher price than Budweiser and for 80 per cent more than Coca-Cola (Ries/Ries 1998: 6f.). As table water, it has few salient product features apart from chemical and microbiological purity on which to found a brand. But consumer perception has permitted a combination of physical and intellectual features (including the images of France and of the Alps) to occupy a niche in its category that is remarkably defensible. Moreover, on many markets Evian has succeeded to establish itself as a product prototype and has become the leading table water.

It follows from this conception that constructs such as brand identity, brand personality or brand meaning cannot be constitutive of brands. It may well be that “a brand gives products their meaning and direction” (Kapferer 1992: 13). But it can do so only within the limits defined by the affordances of products: “In categorization terms, a brand (or any other cue) has meaning (validity) when it is relatively consistent within category members and distinctive from members of other categories” (Boush 1993: 307). The meaning of a brand is then a function of its typicality and of the degree to which it occupies a discrete niche. This definition may therefore well be seen as lying within the ambit of brand realism: “Though we can accept that the brand starts with a product, it is not the product: the brand is the sense, the meaning of the

product” (Kapferer 1992: 117f.). In other words, the brand supervenes on the product, or is founded on it.

3.3. Function and Existence

In a broader perspective, the realist must reject all claims that perceiving or interpreting products in a particular way, or assigning special functions to them, constitutes the ontological reality of markets. Such a view would follow from Searle’s belief that the function of an object is not intrinsic to its materiality but is assigned by someone. The brand realist has no problem admitting that someone assigns the function of a product in the sense of determining its concrete use. But he will insist that its material nature affords a certain range of possible functions and not another. It is, therefore, not the principle ‘*X counts as Y in context C*’ that defines - let alone creates - social objects. This would imply that the collective acceptance of just any product as a brand would make it a brand and that brands are but observer relative objects (Searle 1995: 12). But the realist can subscribe to what has been referred to as Searle’s ‘principle of constitution’: ‘*X constitutes Y in context C*’ (Meijer 1998). This principle explains how higher-order properties emerge and how they can be real while at the same time being irreducible. But it expresses nothing more than the realist claim that in certain contexts brands supervene on underlying products. It does not yet permit to define the topology or the ecology of product space.

Searle defines his social ontology by way of the following propositions (Searle 1995: 10):

- “1. The sheer existence of the physical object in front of me does not depend on any attitudes we may take toward it.
2. It has many features that are intrinsic in the sense that they do not depend on any attitudes of observers or users. For example, it has a certain mass and a certain chemical composition.
3. It has other features that exist only relative to the intentionality of agents. For example, it is a screwdriver. [...] Observer-relative features are ontologically subjective.
4. Some of these ontologically subjective features are epistemically objective.
5. For example, it isn’t just my opinion or evaluation that it is a screwdriver. It is a matter of objectively ascertainable fact that it is a screwdriver.
6. Although the feature of being a screwdriver is observer relative, the feature of thinking that something is a screwdriver (treating it as a screwdriver, using it as a screwdriver, etc.) is intrinsic to the thinkers (treaters, users, etc.). Being a screwdriver is observer relative, but the features of the observers that enable

them to create such observer-relative features of the world are intrinsic features of the observers [...]”

Applied to consumer behavior and to the domain of brands, the realist accepts propositions 1. and 2. Product properties do not depend on consumer wants or attitudes since these wants manifest themselves only “*after* production decisions have placed opportunities before consumers” (Kirzner 1973: 176). But the realist must repudiate the ontological subjectivity of brands and can accept 3. only on the understanding that intentional states of observers with regard to objects do not arise *ex nihilo*, or at the behest of observers, but are afforded, warranted or made possible by features of product space. Rather than preexisting in a vacuum, “consumer wants are modified by the very process of production supposedly designed to cater to them” (*ibid.*). The realist agrees with 4. and can accept proposition 5. if the features of observers that permit branding are conceived in a naturalistic way, i.e. as part of the same reality to which products and brands belong (Núñez 1995).²⁵ For the realist, the ontological emergence of brands finds its counterpart in the epistemological domain: our knowledge of brands is more comprehensive than our knowledge of products of the same category.

4. TOWARD A CATEGORIAL ONTOLOGY

4.1. Levels of Competition

Marketing regards objects under the aspect of their utility for consumers. Primary commodities, produced goods and services, including those goods and services that are factors of production, are, by virtue of the relative scarcity of their supply, economic goods which are traded on markets. Marketing as a discipline investigates, and marketing management seeks to influence, the processes by which these goods become *products*. They do this by assuming a specific utility for consumers. Products, then, are economic goods that have the capacity to produce the satisfaction of a want or a need (Kotler 1995: 430).

Products fall into product categories by virtue of the functional utility they have for consumers, i.e. whether consumers use them for food, transport, entertainment, information etc. There are automobiles, wines and candy, and within these categories one may distinguish subcategories

such as sports cars, sparkling wines and chocolate bars. In many cases, products are complementary bundles of goods and services, such as meals in restaurants, air transport, or the auditing of financial statements.

Many products in these categories are *brands* such as Ferrari, champagne, Colgate and Hershey. All brands are therefore products but not all products are branded. There are product categories, particularly those of natural kinds such as rice, potatoes or lettuce, where generic products predominate, though there is also ‘Uncle Ben’s’ rice and there are Idaho potatoes.²⁶ In other product categories, such as those of automobiles, technical appliances or mineral water, all products may at the same time be brands. The less differentiated a product can be - or, in ontological terms: the fewer constituent moments can be identified in the corresponding whole - the less it affords branding (Smith 1982).

Some brands are ‘natural’ (or category) brands with a geographical or historical identity, e.g. champagne, cognac, Parma ham, Louis XVI furniture, or Georgian architecture. Others are corporate brands such as Ferrari, Chippendale furniture or Hershey’s chocolate bars. With category brands, the adjective-noun composite as in ‘Venetian glass’ does not consist of two independent concepts of which one modifies the other. This is the case in the composite ‘red apple’, where ‘red’ is the modifier and ‘apple’ is the header (Murphy 1988). Venetian glass is one type of glass distinguished by color and form, similar rather to Granny Smith or Mackintosh apples than to red apples.

In markets characterized by product differentiation competition can occur on several levels, where at least those of products, brands, and product forms must be distinguished. The relevant market is usually defined by the substitutability of competing elements in the consideration set of consumers. Products may then be said to compete at various levels depending on consumer purpose (Guillinan 1993; Sudharshan 1995: ch. 4). For example, a particular brand of toothpaste (say, Crest) may compete with another brand (say, Colgate) at the lowest-but-one level, since subbrands of these brands (e.g., spearmint-flavored variants) may compete at the level of product forms (or of branded variants). At a higher level, that of product categories, toothpaste may compete with other dental hygiene products such as tooth powders or, at a yet higher level, with ‘mouth fresheners’ (e.g., breath mints). Similarly a coffee brand may come in caffeinated and decaffeinated variants. This competition, which is driven by consumer needs for products fulfilling a similar purpose, has been termed ‘generic competition’ (Kotler 1995: 230).

These are the levels of competition that are of relevance specifically for marketing. In an even wider sense, of course, all economic goods compete for the budget of consumers. In the case of product forms, the competitive set of, for example, Diet Cola, comprises Diet Pepsi and other reduced calorie colas, while as a product the ‘deep’ brand Coca Cola competes with other colas, whether they are more branded or less. On yet broader levels, colas compete with other sodas, with soft drinks, and lastly with beverages.

4.2. Substances and Accidents

Within the framework of a broadly Aristotelian ontology (Smith 1997; Smith 1999b), products such as apples, chairs or CD players would be substances while services such as financial auditing, the mixing of drinks, lecturing, or haircuts, are accidents - in this case processes which unfold in time.²⁷ It is events and processes, not substances or ‘things’, which have temporal parts. Together with qualities, processes are accidents that are one-sidedly dependent upon substances (*Met.* 1040^b5-16, 1041^b28-31, 1052^a22ff., 1070^b36-1071^a4; *Cat.* 1^b5).

Prima facie it might seem that the only attributes or benefits on which - at least personal or ‘embodied’ - services can be differentiated are speed, reliability and efficiency of delivery. Service marketing has gone much beyond that and recognizes that one point of differentiation lies in the integration of substances in the process of service delivery. One of the most successful strategies of marketing personal services is to increase the physical evidence, or to provide tangible cues to consumers, whether in the form of facility layout or of corporate design (Zeithaml/Bitner 1996: ch. 18). Just like brands are founded on products, all services are lastly founded on substances. Substances *individuate* the accidents which inhere in them, to make them the entities they are (*Cat.* 2^b1ff.). This explains why (personal) services are non-homogeneous. Services are individuated *a priori*, which raises particular challenges for the establishment of service brands (Keller 1998: 612ff.).

Substances are, in virtue of their causal powers, grouped together into natural kinds or species. Product categories such as coffee - but not products or brands such as Jamaica Blue Mountain Coffee - would correspond to such species. In each such category, it is possible to distinguish typical or standard instances, together with a penumbra of non-typical instances. Non-branded generic products are roughly what Aristotle regarded as non-typical instances while brands are

classes of typical instances of the product category to which they belong. They are characterized by their *Prägnanz* - or, for want of a better translation, their salience - within a category. Gestalt psychologists have stressed that *Prägnanz* is in fact ambiguous as between, on the one hand, a tendency to regularity or lawfulness in our perception and, on the other hand, a feature or features of the objects themselves that would afford such perception (Kanizsa/Luccio 1986; Smith 1988: 61ff.). A product which enjoys this property is 'marked' and is a 'good example of its type', but it is also 'full', 'well-rounded' and 'integral' in the sense of being a more 'organic' whole.²⁸ To a large extent, Kellogg's corn flakes, on account of their nutritional value, crispness and taste, have become the standard of corn flakes. They possess a higher degree of 'organic unity', and the brand name Kellogg's "stands as guarantor of their quality and taste" (Kapferer 1992: 164). *Prägnanz* is a matter of degrees, which corresponds to the existence of more or less branded products, or of stronger and weaker brands. Store brands (or private labels) have properties that are less salient for consumers. It may be conjectured that what has been described as the 'identity' or the 'values' of brands is largely their *Prägnanz*, their degree of 'closure' and integration (Kapferer 1992: 31ff., 74; Dru 1996: 115; Aaker 1996: 68ff., 201ff.). It permits a cognitive processing of brands on which brand equity is founded.

4.3. Parts and Wholes

Differentiation of levels of competition has sometimes led to the assumption that products are composed of 'atoms' or 'elements' in the sense of set theory. Some composite products are indeed such that they consist of proper parts (or substances), such as an automobile and its tires.²⁹ However, consumer demand is for the automobile as a functional unit, which it would not be without tires. Even composite products cannot be conceived of as a nesting of proper parts in the sense of independent elements constituting a whole.

It has been suggested that consumer demand is actually not directed at products as such but rather at their characteristics (or properties) such as size, color, shape, texture, or flavor. Consumer theory has thus been reconstructed in terms of property space rather than product space (Lancaster 1971). In an extension of Lancaster's model, hedonic price analysis uses multiple regression methods to determine functional relationships between market prices and properties of rival products. This model underlies the various models of functional (or benefit) segmentation and of positioning. Decomposition of products into attributes as their elements constitutes

the basis for perceptual maps and attribute-based multivariate methods in market research, such as those used in factor analysis, cluster analysis and conjoint analysis.³⁰

The properties of products can potentially be identified and measured independently of the purchase decision. Distances between attributes in product space may also explain why a red car and a blue car are close substitutes while a red car and a red apple are not. But this is so not just because the cars share many attributes, but rather because certain attributes are the important ones for most people who desire cars. If this were not so, a bicycle with a wheel missing would be a moderately close substitute for one without. In the absence of a functional assumption, there is danger that a product will simply reduce to its attributes, which would then be treated as its component parts.³¹ On this ontological issue realists must therefore part company with Lancaster's model, since they cannot accept any such reducibility.

Not only are consumers unlikely to have similar marginal rates of substitution between properties, i.e. they do not value properties alike, but products are also not reducible to a simple set of properties which are independent of each other. If this were possible it would indeed be difficult to distinguish between products which are highly branded and such which are not. In Lancaster's model, higher consumer valuation of particular properties can only be expressed as a higher willingness to pay. But in complex products with a number of relevant properties the willingness to pay for one property also depends on the number and the monetary valuation of other properties. Some properties may be such, as in the case of shoes without soles or computers without processors, that our willingness to pay for any other of their properties is reduced to zero if one property is missing or found deficient. Brand equity resides in the very fact that properties of particular products are not only salient for consumers - an assumption that may still be accommodated in Lancaster's model - but that they are highly integrated and represent prototypes of their respective products. 'New Coke' was not rejected because of its perceived sweetness but because the brand as a whole, its Gestalt, had changed. Brands, by contrast to products, are 'moored' in niches and resist change.

If brands are wholes, their properties are accidents - rather than parts - in the Aristotelian sense. They inhere in the whole and cannot be separated from it, whereas the parts of a substance are themselves substances (*Met.* 1028^b9-120). Coca-Cola, for instance, is not a product that just happens to be a brown beverage. Its color is, in this case, even a necessary property of the

product, as the failed attempt to produce a colorless cola ('Crystal Pepsi') has well documented. Properties intrinsic to the product (e.g. solubility, acidity, texture or color) but also brand names, logos, design, or packaging enter into a complex whole the identity of which can no longer be dissociated into individual elements (Kapferer 1992: 5). In the naturalistic view held by brand realism no difference is made between 'internal' or 'external' properties: "some attributes are intrinsic to the physical product itself, whereas others are defined by the way a segment of customers uses the product" (MacMillan/McGrath 1996: 62).

Instead of belonging to atomistically structured domains, then, brands belong to a mereological world of part-whole relations, connections and boundaries (Smith 1995; Smith/Varzi 1999a). This is the world described in Gibson's ecological psychology, particularly in his theory of surface layout (Smith 1999a). The properties of brands stand in relations of dependence on other properties, and a change of some properties may constitute a new product while a change of others may not. Product forms or subbrands must therefore not be assumed to be a 'lower' level of competition since competition between, say, spearmint-flavored and peppermint-flavored chewing gums is a competition between instances of a brand such as Wrigley and not between spearmint and peppermint. Products, and *a fortiori* brands, are wholes which are neither ontologically nor economically reducible.

4.4. Boundaries

Products, as substances that take up space and endure through time, exist within certain boundaries. Products are typically scattered or separated in product space, i.e. there are different well-demarcated products belonging to a category. The outer boundary of a particular kind of sausage, whether branded or not, is within the boundary of the product category of sausages, which in turn is within that of meat products. Boundaries between products exist in a real and physical sense - products can be sliced, transported and packaged. Those products which are embodied services - such as haircuts, surgery or financial auditing - have their boundary defined by the agent, who can interrupt delivery of a service, move the location of delivery etc.

Boundaries can generally be of either of two types: *bona fide* boundaries are those that correspond to genuine (spatio-temporal) discontinuities in the world while *fiat* boundaries are projected into the world wholly or partly independently of such discontinuities. Bona fide bounda-

ries obtain in the things themselves; they comprise cases of qualitative heterogeneity (of fabric, texture, electrical charge etc.) among the parts of a whole (Smith 1995; Smith/Varzi 1999a). Whether commodities, artifacts or services - all products are such that their outer boundaries are surfaces.³²

Boundaries between products within a category, too, can be of a bona fide or a fiat nature. A distinguishing feature of bona fide boundaries is that they are necessarily part of the entities they bound (Smith/Varzi 1999a). The package of a product is thus an integral part of the (augmented) product. This implies that brands, as differentiated products, equally have bona fide boundaries and are therefore bona fide objects.

Branding products involves a change of boundaries. Product differentiation can consist in breaking a product down into smaller (physical) units, combining these with another product, redesigning a product, packaging a composite product and making it available to consumers at new locations. Altering the quality or composition of a product, by changing its color, granularity, fabric or smell also imposes bona fide boundaries of an internal nature. Adding hazelnuts to a milk chocolate changes the internal composition of a chocolate bar, though size and package may remain unaltered. It thus affords the establishment of a new brand or subbrand. Marketing management utilizes the affordance of a product to be divided, recombined and qualitatively altered and imposes external or internal boundaries (including, for example, new distribution channels for consumers).

The difference between branded and non-branded products is, then, often of a bona fide nature. In a physical sense, Classic Coke and a private label cola are two substances divided by bona fide internal and external boundaries - they are not only qualitatively heterogeneous but are contained by different packages and therefore occupy different spatio-temporal locations.

But branding may also be founded on the imposition of fiat boundaries, e.g. in cases where proper parts are delineated within the interior of larger wholes. Gestalt theory would predict that the strength of the whole is inversely related to the 'naturalness' of its parts, since a 'weak' Gestalt is defined as consisting of proper parts (Smith 1988). Wholes characterized by less unity and *Prägnanz* will then rather have fiat than bona fide boundaries.

The use of trademarks or copyrights to protect brands is such an instrument for carving out fiat wholes.³³ But the reliance on fiat measures of product policy always presupposes the existence

of bona fide brands in the first place, since intellectual property rights can only be established where real discontinuities and distinctions exist: “Worthy of protection is the uniqueness or singularity of coined marks, not value acquired merely through advertising” (Martino 1996: 26). The drawing of fiat boundaries therefore only has a supplementary or derivative function. It increases the defensibility of a niche but does not define its width or depth.

Fiat objects are also not any less ‘real’ than bona fide objects. They are different only *qua* being entities delineated by decisions. The decision to draw a boundary where it is drawn is due to associated real properties of the relevant factual material which, in the sense of Gibson, afford the drawing of such boundaries. As demarcated in ‘mesoscopic’ (or table-top) reality, fiat products are in every case linked to bona fide objects of comparable scale on which they supervene. In the world of mesoscopic scale to which products belong it is the interiors of a thing which are salient for purposes of categorization and of branding, and internal boundaries are often of a fiat nature.

In the case of services, again, the nature of boundaries becomes more complex. A holiday in a Club Méditerranée is a complex whole which, as a service package chosen from a tour operator’s catalogue, is composed of a definite number of material and immaterial parts. However, independently of the specific combination selected by consumers, what is included in a holiday package depends on the drawing of fiat boundaries. The complex whole that is a holiday in a Club Méditerranée is itself created by the conjoining of multiple parts and may include bona fide objects within it. But as such its boundaries are of a fiat nature without thereby imperiling its potential to become a brand. The whole package that is sold as one branded product supervenes on its components (e.g., hotel accommodation, air transport, meals, etc.) in the sense that the fixation of relevant properties at the lower level of individual components (e.g., the category of hotel or quality of transportation) suffices to fix the values of properties at the higher level of the composite product. Similarly, the consumer want is for surgery, as a complex bundle of services, not for surgeons, lancets, operating theaters, nurses, or anaesthesia. All of these elements enter into a whole the external boundaries of which are of a fiat nature.³⁴

Between product categories fiat boundaries obtain, since the question of what the domain of sausages encompasses cannot, as essentialists would have it, be answered by reference to physical discontinuities alone. But fiat boundaries do not imply arbitrary delineations of object space. Exemplars or prototypes, in Aristotle’s sense of typical instances, define the extension,

or possible circumference, of a product category, albeit without precision. The boundaries of categories are not imposed by the human mind, they derive from our structures of categorization, particularly our perception of typicality and similarity (Smith, E.E. 1989; Estes 1994). Marketing strategy can only leverage brand equity by setting the boundaries of brands into relief (Farquhar/Han/Herr/Ijiri 1992).

Product markets, i.e. the sets of products that serve a certain need of a certain market segment, always depend upon delineation, i.e. they have fiat boundaries.³⁵ Analysts impose segments, and the ‘goodness of fit’ of these segments largely depends on the method chosen (Wedel/Kamakura 1997). Boundaries are largely of a functional nature: “The concept of product-market boundaries is, therefore, strongly interrelated to the notion of the types and forms of effective competition” (Sudharshan 1995: 104).³⁶

5. TOWARD AN ECOLOGY OF BRANDS

Brands are part of an ecology of products in which products become branded and de-branded, product and brand extension occurs, products and brands disappear from the market, new products enter, and brands ‘cannibalize’ one another. A number of central concepts of population ecology - species, niche, ecosystem, competition etc. - can be fruitfully applied in marketing theory for making sense of these phenomena.

The concept of an ecological niche has repeatedly been applied to marketing (Milne 1990; Milne/Mason 1989, 1994). In the “ecology of products”, as opposed to that of natural species, products “do not survive by laws of natural selection, but are selected for survival because they find a place in human minds and living patterns” (Alderson 1957: 270). By analogy with the survival of firms in competition, products can establish themselves in niches if they fulfil three such principles: 1. the niches they occupy endure because they are *prolific*; 2. they have a (stable) *core* and a *fringe*; 3. they are *plastic* in the sense of being able to assume new functions through image transfer and brand extension (Alderson 1957: 55ff.). Whether a niche is prolific depends, first and foremost, on total demand for the product category, i.e. on achievable profit per unit. However, the more prolific a niche is, the more the brand that occupies it is likely to become subject to attacks by competitors. The core of every niche determines the competitive advantage of the brand and, by extension, the degree to which its boundaries are defensible.

The relationship between the core and the fringe (i.e. niche width) imposes, depending on the relative elasticity of the niche, limits on the extendability of brands.

In population ecology, a niche is understood as an n -dimensional hypervolume of ecological space, i.e. as a set of points along n axes that represent the conditions under which a species can survive (Hutchinson 1978: 158). It is a functional attribute of a species and not a spatial unit. Hence niche, which defines the role of a species in a community, is different from habitat, which simply refers to its location in a community.

For purposes of marketing, a niche would then be an n -dimensional hypervolume in product category space, where n designates the number of properties used in the consumer evaluation of products. By analogy with the species concept, which corresponds to product categories rather than products, a niche defines the conditions for brands to establish themselves dependent on the match between consumer preferences and properties of products.³⁷ A niche embraces not only products in the sense of substances, but also shapes, colors, textures, tendencies and boundaries, all of which afford consumers sufficient benefits to sustain a brand. It must be noted that formally a niche is not simply a (convex or non-convex) combination of product properties such that the hypervolume would be a matrix of n vectors describing properties - an assumption underlying the characteristics approach in consumer theory (Lancaster 1971).

This understanding of the term 'niche' is restricted to the supply side and is narrower than the term 'market niche' as currently used in marketing theory. Without loss of any assumption on which brand realism is founded, the concept can be extended to the demand side. A brand's niche is then determined by relevant customer characteristics such as demographics, psychographics, usage patterns and benefits sought, and for every brand core and fringe customers can be distinguished (Milne 1990; Milne/ Mason 1989; Milne/Mason 1994). To compete, then, brands must target similar customers to a significant degree. The boundaries of the niche (e.g. their plasticity) and of the product category will either favor generalist or specialist strategies (Sudharshan 1995: 34ff.). Competitive advantage, in the realist view, requires that a brand affords "the best fit between a product's bundle of attributes and their customers' needs" (MacMillan/McGrath 1996: 58). This match is understood in a naturalistic rather than a dualistic way, i.e. by assuming a mutual fittingness of successful branded products and consumer cognition.³⁸ Intensity of competition is then not only "determined by the extent to which two brands compete for the same customer resources" (Milne 1990: 9) but also by supply-side phenomena

such as the number, width, elasticity, overlap and relative proximity of niches in product space. And competitive success depends on a particular *tuning* between products and consumers.

One of the fundamental assumptions about ecological niches has become known as Gause's competitive exclusion principle, according to which no two species can coexist permanently in any one niche. It would seem that this does not fully apply to marketing. In contrast to niches in biological ecosystems, the niches occupied by competing brands can experience significant overlap over sustained periods of time, as in the case of Classic Coke and Pepsi-Cola or that of different brands of compact cars. But overlap can only cover the fringe of niches while for their core Gause's principle still holds. Attacks at the core therefore have an all-or-nothing character - as in the fight between Microsoft and Netscape over the Internet browser market. But rather than simply resulting from the whims of consumers, who are mistakenly assumed to be nearly infinitely malleable by advertising, inter-brand competition is a function of product structure, particularly of the degrees of similarity among products and the salience of product features (Ehrenberg/Barnard/Scriven 1997; Chong/Ho/Tang 1998).

6. IMPLICATIONS

The version of product policy and the understanding of branding defended here are fully compatible with a subjectivist view of consumer choice. Subjectivist economics deals, in a formal sense, with how consumers value products, not with the factors - affordances of products or not - that permit or elicit such valuation. In a world of complexity, change and uncertainty, consumers necessarily have imperfect information about the properties and promises of the multitudes of products. Austrian economics, as the most consistent school of subjectivist value theory, holds that products are naturally differentiated. Against Chamberlin's theory of monopolistic competition it is argued that product differentiation is "a natural aspect of competitive activity" (Kirzner 1973: 116.). The role which brands play on the market, like that of commercial goodwill in general, "does not impair or restrict competition" (Mises 1963: 380). A product, for Austrian economics, is a variable rather than a datum, its quality and quantity change as a result of entrepreneurial action. This view may accommodate the fact that which marketing decisions will turn out to be successful depends on what is afforded by the nature of the product.

A realist conception of brands does not underrate the role of strategic management in establishing the success of brands. This role will differ depending on whether it concerns individual brands or (family or corporate) umbrella brands, and depending on the degree to which these brands are defensible. In this conception, marketing theory explains market behavior in terms of heterogeneity and differentiation rather than similarity and equilibrium: “Competition is the search for meaningful differential advantage on the part of both buyers and sellers” (Savitt 1986: 248). Entrepreneurs do not seek homogeneous market segments but thrive on the opportunities provided by the heterogeneity of both product space and consumer wants: “They are trying to develop products that constitute a rupture with what the competition has to offer” (Dru 1996: 38). Marketing management, as an entrepreneurial function, aids in the *disruption* of the market process. And increasingly this is again founded on features of brands.

Brand realism has equally significant implications for policy issues. The new understanding permits not only a rethinking of product management but also a new conception of trademarks and copyrights, of new product introduction, of the limits of advertising, of price determination, of the role of brands in accounting, and of marketing strategy in general. For competition policy it would suggest a new method of determining product market boundaries and relevant markets, and of measuring product differentiation and industry concentration in antitrust cases (Milne 1992). Rather than simply estimating cross-elasticity from panel data, the actual ‘mooring’ of brands and their defensibility would be measured, which substitutes a more realistic and more dynamic approach for one largely based on historical data about consumer behavior. And brand dilution as understood in the Federal Trademark Dilution Act of 1995 can be made more precise by investigating when a “famous mark” enjoys a “distinctive quality”, when conditions such as the “blurring”, “tarnishment” or “disparagement” apply and what their actual impact may be.³⁹

Brand realism proposes an explanation of brand equity that does not rely on attitudinal assumptions such as brand loyalty. Brand equity is understood as a real phenomenon to be further explored in an ecological theory of branding that does not rely on a Cartesian dualism between products and perceiving minds or between ‘products in themselves’ and ‘products as objects of marketing management’. Brand equity is a function of the ‘closure’ of brand elements as ‘organic’ wholes, of the nature of niches brands occupy, and of their defensibility. Branding strategies in vertical and horizontal directions - from sub-branding to brand bridging - can then

be reconstructed in view of the new understanding of products and brands (Farquhar/ Han/ Herr/Ijiri 1992).

Realism about brands eschews the proliferation of supposedly explanatory constructs - from brand personality and brand character to brand culture - that have been introduced in order to explain branding as a consumer-based phenomenon. If it is a viable project, most of these constructs may fall under Occam's razor.

Three fields of application may suffice to illustrate the implications and the relevance of the new conception of brands.

6.1. Niche Marketing

Niche marketing has come to be understood as the concentration on particular consumer segments of a small dimension. It has been recommended as a strategy for small companies, based on the expectation that smaller market share combined with a lower price elasticity of demand may still afford more specialized sellers a competitive advantage (Kotler 1997: 251, 395ff.). The term 'niche marketing' has proliferated, and a veritable myth about the advantage of small over large market shares and segments has evolved - culminating in metaphors as those of 'guerrillas' successfully competing against 'gorillas' (Dalgic 1998).

In the light of a realist conception, the issue is not that of the size of a target segment, which is usually only measured statically, but that of the boundaries of the targeted niche. It has been observed that all product market boundaries are arbitrary - or fiat boundaries - though they directly affect competitive position measures (Gullinian 1993; Milne/Mason 1994). Market share is a meaningless number unless a company defines the market in terms of the boundaries separating it from its rivals. These boundaries are the points of parity at which two brands are equivalent in a potential customer's judgment, where these points in turn depend on similarity measures among brands.

A realist view of marketing affords a better understanding of what it means to 'carve out' a market niche for a brand - a strategy which requires for its success not only that there is an adequate volume of market demand but that a niche in product space aligns with it (Milne 1990; Milne/Mason 1989, 1994). And by showing that niches are, depending on whether they host

generalist or specialist brands, independent of market size, it lets some popular conceptions of niche marketing and micromarketing collapse. This promises a new understanding of niche marketing and, *a fortiori*, of marketing strategy in general.

6.2. Advertising

In developing his theory of monopolistic competition, Chamberlin argued that brand names are harmful for economic efficiency, since they rely on a higher willingness to pay that is exclusively owed to advertising. Other economists have pointed out that brand names provide consumers valuable information by signaling cues about quality when product properties cannot easily be judged in advance of purchase (Erdem/Swait 1998). If brands indeed are ontologically real, as has been argued, much of this discussion can be shown to be futile.

The new understanding of brands permits to conceptualize a new role of market communication, particularly of advertising. The traditional view, developed in industrial economics, of the relation between advertising and market power, as expressed by market share, was as follows: advertising leads to economies of scale (i.e. increasing returns to advertising), which entail higher concentration ratios, and consequently a higher market power. A product *A* was therefore held to be more advertisable than a product *B* if *A*'s advertising response function is more elastic than *B*'s (Kaldor 1950). If, however, products have a different degree of 'advertisability' independently of the demand side, as brand realism assumes, and if heavier advertising produces higher profits even if increased concentration is not a causal intermediate between advertising and market power, the logic of this causal chain breaks down. Different degrees of 'advertisability' may of course simply be reduced to product differentiation (Comanor/Wilson 1967). But numerous studies have invalidated the assumption of increasing returns to advertising which underlies the 'classical' view of industrial economics (Simon 1970: ch. 1). Moreover, product differentiation would appear to be nothing but a 'surface' term for the degree to which products can occupy niches. 'Advertisability' is then a function of properties of niches such as niche width and depth, and relates to the defensibility of brands.

'Classical' industrial economics relies on the assumption that advertising provides a service different from the product that is being advertised. It assumes that there are products - whether conceived of as substances or as bundles of attributes - which, in a separate process, are being

brought to the attention of consumers. As a consequence, Chamberlin assumed a categorical distinction between production costs and selling costs. But if ‘objective’ and ‘subjective’ product features actually coincide, as brand realism argues, such a dualism makes no sense: “It is [...] clearly improper to treat the product itself and the advertised ‘information’ as two complementary ingredients that might in principle be purchased separately” (Kirzner 1973: 158). If information about a product is “inseparable from the product itself” (Kirzner 1973: 162), if it is founded on the product, expectations about the power of advertising will clearly be more modest than was envisaged by mainstream industrial economics and marketing theory.

The realist model would lend credence to the view that advertising is a ‘weak’ and longer-term force nudging consumers to purchase one brand or another, rather than to the competing and received view that advertising has a strong and more immediate effect on sales (Uncles/ Ehrenberg/Hammond 1995; Dyson/Farr/Hollis 1996; Farr/Hollis 1997; Ehrenberg/Barnard/ Scriven 1997).⁴⁰ Its primary function is to alert consumers to available opportunities afforded by brands. Advertising tells consumers what exactly it is that they do not know about brands, and this function of eliciting alertness characterizes the entrepreneur (Kirzner 1973: 155ff.). For a product is only “adequately identified” for a consumer (i.e., the optimal information is provided) if, in his ignorance, “the supplier has guessed right” (Alderson 1965: 61) - and this cannot be done by computing marginal rates of substitution but by exercising entrepreneurship and engaging in exchange. In this sense a new understanding of brands may shed new light on the opportunities and limits of market communication.⁴¹

6.3. Brand Valuation Measurement

The treatment of intangibles, and particularly of brands, belongs to the undecided questions of accounting. In accordance with the UK Statement of Accounting Practice (SSAP 23), Grand Metropolitan Plc, for instance, has capitalized some of its brands such as Smirnoff, Pillsbury, Green Giant, and Burger King. Brand value, or brand equity, keeps building up and become an indispensable factor in the valuation of the firm on a going concern basis. UK law, as that of most EU countries, permits amortization.

Other countries abide by accounting standards that even require the amortization of brand values.⁴² This may be quite an inappropriate policy, since the longevity of brands can be remark-

able and often exceeds even amortization over 50 years. On the other hand, U.S. accounting standards for intangibles greatly limit what may be capitalized as a trademark or brand, permitting only purchased trademarks and successful legal defense to be amortized over five to forty years (Accounting Principles Board 1970). But it is highly questionable whether only purchased brands should be placed on balance sheets while omitting internally developed brands that are blessed with longevity and that continue to be extended to new product categories. Moreover, the new IRC Sect. 197 postulates a statutory recovery period for intangible assets of 15 years but does not cover self-created intangibles such as brands (Young 1994). In the light of a realist understanding of commercial products the inclusion of customer-based and supplier-based intangibles and of ‘identity rights’ (franchise, trademark, trade name) among amortizable assets and the exclusion of brands, software or sports franchises from this group must be called in doubt.

Where the accountancy profession or tax law recognize trademarks as assets while being ambivalent about brands, they are mistaken as to logical priority. The brand itself is the asset while the trademark provides only security, or defines an outward boundary of the brand. By taking objective criteria for the strength of brands as a basis of valuation, brand realism is apt to provide grounds for a more realistic policy on ‘intangibles’ than those currently applied in many countries. By treating brands as a particular class of tangible products (including ‘disembodied’ services), accounting practice no longer has to treat brand equity and goodwill as basically the same phenomenon but can again conceive of commercial goodwill as deriving from the totality of firm-specific knowledge about production, organization and marketing (Tollington 1998).

7. EXTENSIONS

This paper has made a case for the ontological reality of brands, as opposed to various forms of brand idealism. The exposition has largely remained within the realm of material ontology. The formal ontology of commercial products, like that of marketing and of economics in general, still needs to be explored. This endeavor will include an analysis of *mereological* (i.e. part-whole) and of *topological* properties of products, brands, and product categories. It will be presented in an axiomatic form using the resource of a language such as first-order predicate logic.

This will ensure translatability into the languages (such as Ontolingua) underlying the various attempts to construct enterprise ontologies within artificial intelligence frameworks (Guarino 1998; Uschold/King/Moralee/Zorgios 1998).

Mereotopology, however, can only define the architecture of product space. Investigation of branding as a process, of various branding strategies, and ultimately of the conditions for influencing brand equity, requires a second extension and an in-depth study of the ecology of brands. This will comprise an investigation of at least the following issues: (1) competition between brands as competition over niche (instead of market) share; (2) conditions on niche overlap; (3) niche depth and width; (4) maximum and optimum number of brands in a product category (i.e. carrying capacity of categories); (5) elasticity of niches with regard to product line and brand extension; (6) branding strategies such as umbrella branding, sub-branding etc. Investigation of these issues will have to use tools of mathematical analysis.

The realist view of brands makes empirical claims about consumer behavior. In order to establish its validity, testable hypotheses will have to be developed and confronted with primary and secondary data about brand awareness and brand choice.

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1. Brands that so dominate a particular product category that they 'own' that category in the consumer's mind have been called 'master brands' (Farquhar/Han/Herr/Ijiri 1992).
 2. It is interesting that the Enterprise Ontology, an artificial intelligence project within the Ontolingua framework, is based on a somewhat confused idealist view of brands. In its marketing section, which is very rudimentary and consists of 22 primitive terms with 'sale' as the central concept, the relation 'brand-of' is defined as "a Relationship between a Vendor and a Name (i.e., a text string) whereby the Name is identifiable by Customers", as "A Name identifiable by Customers associated with one or more Products of a Vendor", and as "the Name (...) associated with one or more Products of the Vendor". On the other hand, an 'image' is "a set of properties that a Customer believes to be true of a Brand, Product or Vendor", implying that products and brands are at the same level (<http://www.aiai.ed.ac.uk/~enterprise/enterprise/ontology-code/enterprise-v.1.0/Brand-Of.html>; Uschold/King/ Moralee/Zorgios 1998).
 3. Examples of an ontological equivocation are sometimes found in the same publication, e.g. between "brands in a product class" (Aaker 1996: 11) and "the failure to distinguish between a product and a brand" (Aaker 1996: 72).
 4. Generics (private-label products or store brands) claim about 14 per cent of supermarket spending in the United States, with a tendency towards a larger share (Quelch/Harding 1996; AC Nielsen 1998: 23ff.). But they are highly concentrated in categories such as sugar, milk, sour cream, eggs, wrapping materials, bags, vitamins and ice that are of the nature of commodities and afford little product differentiation.

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5. Consumers still ranked General Electric second in the food-blender category 20 years after it had stopped producing them.
 6. There are producers of cigar bands and cigar box labels catering to producers of private-label cigars. However, the significantly lower price these cigars achieve on the market indicates that a label alone does not constitute a brand.
 7. "It is a widespread fallacy that skillful advertising can talk the consumers into buying everything that the advertiser wants them to buy" (Mises 1963: 321).
 8. This issue is subject of a recent debate in which two positions confront each other: 1. that brand strength is basically a function of market penetration, which questions the validity of constructs such as brand equity (Uncles/Ehrenberg/Hammond 1995; Ehrenberg/Barnard/Scriven 1997); 2. that attitudes toward a brand and particularly brand loyalty determine success, which makes market share appear less important (Farr/Hollis 1997).
 9. An example for meaningless differentiation is a firm's decision to add silk to shampoo and advertising it with the slogan 'we put silk in a bottle' where silk clearly is irrelevant for hair (Carpenter/Glazer/Nakamoto 1994).
 10. Thus Calvin Klein could successfully extend its product line from clothing to perfume and underwear while Levi's, an equally dominant brand, was unable to extend even from jeans to dress suits. Johnson & Johnson, deeply positioned as producers of baby oil and of other toiletries had no success in launching a perfume, Pierre Cardin's foray into dishware proved to be a failure, and Bic's venture into pantyhose and perfumes was also not accepted by consumers. On the other hand, Jell-O successfully extended itself from the dry mix box into ready-to-eat dessert, yogurt, and ice pops. And the Virgin name could be extended from a record label to a retail chain of cultural products, electronics equipment, an airline, a tour operator, a multimedia production company, and even to condoms. But the Virgin Cola brand is currently less successful in the U.S. soft drinks market.
 11. In *Federal Trade Commission v. Borden Co.* (1966) the U.S. Supreme Court upheld the FTC's view "that labels do not differentiate products for the purpose of determining grade or quality". Not consumer preferences or brand acceptability determine the grade of evaporated milk but rather "characteristics of the product itself" (383 U.S. 637, 86 S.Ct. 1092, 16 L. Ed. 2d 153).
 12. "The emergent theory asserts that there are certain wholes, composed (say) of constituents A, B, and C in a relation R to each other; that all wholes composed of constituents of the same kind as A, B, and C in relations of the same kind as R have certain characteristic properties; that A, B, and C are capable of occurring in other kinds of complex where the relation is not of the same kind as R; and that the characteristic properties of the whole R (A, B, C) cannot, even in theory, be deduced from the most complete knowledge of the properties of A, B, and C in isolation or in other wholes which are not of the form R (A, B, C)" (Broad 1925: 61).
 13. This implies that brands are to be understood rather in the sense of the Berlin than in that of the Graz or Vienna schools of Gestalt theory (see Smith 1988).
 14. Most brand leaders of 70 years ago - including Kodak, Wrigley, Coca Cola, Morton and Campbell - are still brand leaders today (Kotler 1997: 445).
 15. The European Union, for example, has already recognized more than 400 Protected Designations of Origin (PDO) and Protected Geographical Designations (PGD) under regulations EEC 2081/92 and 2082/92, mostly for agro-food products including cheeses, wines, oils and fresh meats. The GATT Uruguay Round documents include an Agreement on Rules of Origin which also affords protection for products claiming the status of country-of-origin brands.
 16. This was the case when, on April 2, 1993, the price of Marlboro cigarettes was lowered by 40 cents a pack, thus changing in consumers' minds the clear position of one of the strongest brands. As a result of 'Marlboro Friday', the stock of Philip Morris, Inc. dropped \$14.75 per share, or 23 per cent of its value, wiping out \$13 billion in market value. In the next few months, 25 of the top brand marketers in the United States including Sara Lee, Procter & Gamble, Heinz and Gillette saw their market value plunge by a combined \$45 billion (Keller 1998: 61f.).
 17. " Rxy is a grounded relation if and only if it is logically impossible for there to exist a z and a w with exactly the same qualities as x and y , respectively, but between which the relation R does not hold" (Johansson 1989: 120).
 18. Crest has certain features that other brands of toothpaste do not have, be these features red stripes, a particular taste, a greater viscosity, or a more appealing packaging. These afford the construction of a brand identity, which since 1958 has been encapsulated in variants of the tagline 'no cavities'. This identity has emerged from product space, has been reinforced through advertising, and has thus become an integral (and maybe constitutive) property of the brand.
 19. This is witnessed by the difficulties Virgin Cola currently has in the United States in establishing a share of even less than one per cent of the soft drinks market, in spite of an expected image spillover of the Virgin name and sizeable marketing expenditure. The price premium of the 'national' brands Coca-Cola and Pepsi-Cola averages about 40 per cent.
 20. Source: *Beverage Digest* 2/12/1998. The average price premium of Classic Coke over Pepsi-Cola, however, amounted only to \$ 0.04. Figures for 1997.
 21. An exception would be products that, because of their production in a particular region, fulfill both necessary and sufficient conditions for being branded. Thus an objective feature differentiates Roquefort cheese, Bordeaux wine, or (Kentucky) bourbon from which differences in taste, aroma, appearance etc. derive. According to the

French system of ‘*appellations*’, or registered and protected growing areas, soil (‘*terroir*’) suffices as a measure of the relative quality of wine (Thode/Maskulka 1998).

22. Similarly, physical space affords multiple use, and particular arrangements of furniture and appliances in kitchens, offices, or at supermarket checkout counters can facilitate or impede efficient workflow and affect possible psychological states of occupants (Kirsh 1995).

23. Ecological naturalism emphasizes the non-separation between the mind and the medium in which it evolves, their biological co-determination, and the supra-individual nature of the biology of mental phenomena. By implication, it is non-Cartesian and does not treat the domains of physical and mental phenomena differently. Ecological naturalism does not entail objectivism or essentialism if these are understood to be the views that reality has all its properties independently of any perceptual or cognitive interaction with it, and that all reality is characterized by essential properties (Núñez 1995).

24. Salt also is a commodity that seems to permit little product differentiation. Nonetheless Morton’s salt is estimated to have a share of about 50 per cent of the American market. This has been achieved by introducing a higher degree of product differentiation, e.g., by creating the Morton Lite Salt[®], Morton[®] Kosher Salt, Morton[®] Salt Substitute, Morton[®] Popcorn Salt, and Morton[®] Canning and Pickling Salt brands and by accepting a low price difference in comparison with private label salt. The success of Morton’s salt thus seems to corroborate a realist view of brands.

25. Franz Brentano demarcated mental from physical entities by reference to two criteria: the directedness of mental acts towards their objects and the intentional inexistence of objects in mental acts (Grassl 1982). His claim is that mental phenomena are distinguished by having content that is intrinsic to their identity. It seems that Searle tries to separate these two criteria again by embracing directedness but not intentional inexistence.

26. The Nunes Company, Inc., has successfully branded a range of agricultural commodities such as lettuce, celery and broccoli under the trademark Foxy[®], the Jamaican company Jamaica Broilers Group Ltd. has established a poultry brand under the name Best Dressed Chicken[®].

27. In contradistinction to the received conception as ‘immaterial goods’, services have been defined as “deeds, processes, and performances” (Zeihaml/Bitner 1996: 5). Services, in fact, fall into two groups - embodied and disembodied (or splintered) services - depending on whether they require a physical carrier medium or not (Bhagwati 1984). Some services such as haircuts or dental surgery can only be personally delivered and require the spatial and temporal presence of both producer and consumer. Other services, such as a painting, the performance of a symphony, or photography consist of the unique creative act and require a physical carrier medium such as canvas, a CD or film to be preserved. If services are relations in the Aristotelian sense, they must rather be regarded as relational accidents that have temporal parts (Smith 1997, 1999).

28. European marketing scholars seem to place more emphasis on the ‘wholeness’ or ‘integrity’ of successful brands than Anglo-American scholars do (e.g., Becker 1993: 173f.).

29. This includes the case of aggregates of commodities. Hicks argued out that if a group of prices move in parallel, then the corresponding commodities may be treated as a single good.

30. Geometric representation of competitive patterns between brands, for example through perceptual mapping, project brands as points in a low-dimensional coordinate space so that the degree of observed competitiveness between properties is represented by Euclidean distance measures. Compositional approaches typically reduce multi-dimensional brand characteristics as perceived by consumers into lower-dimensional spaces and employ data reduction methods such as discriminant analysis. Decompositional approaches are usually based on multidimensional scaling techniques and require proximity or dominance data as observed by respondents’ similarity or preference statements concerning competing brands (Wedel/Kamamura 1997).

31. Moreover, it has been observed in the economic literature that any attempt at constructing an exclusively demand-based consumer theory is flawed. The demand for attributes in various combinations is determined by consumer preferences, but the supply of these attributes depends on the costs of producing them and on producers’ access to product markets. A large coefficient for a particular attribute in a hedonic price function may therefore reflect not only consumer evaluations of that attribute but also the difficulty of producing this attribute given scarce input factors (Rosen 1974).

32. The boundaries of services merit further differentiation. Disembodied (or ‘splintered’) services such as symphonies on a CD may be said to be bounded by the surfaces of the carrier medium while embodied (or personal) services such as haircuts are bounded in space by their hosts (i.e. the persons, animals, objects etc. receiving these services) and by time.

33. Courts have repeatedly applied Gestalt principles in matters of trademark protection, copyright and advertising, particularly in deciding on the respective claims of competing brands (Zaichkowsky 1995: 74ff.).

34. Such wholes, which embrace within themselves objects from distinct ontological categories, describe the nature of many services such as education or operas. They have been referred to as ‘transcategorical wholes’ (Smith 1999b).

35. There have been a few attempts to construct a theory of marketing on the basis of a time-space framework. Rather than consumers and firms simply being represented by utility or cost functions, they take up unique spatio-

temporal regions and act within both perceived (i.e. fiat) and real (i.e. bona fide) boundaries (Savitt 1986). This realist approach certainly deserves to be developed further.

36. In *Brown Shoe Co. v. United States* (1962) the U.S. Supreme Court held that “the outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it”. The boundaries of submarkets, however, “may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product’s peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors” (370 U.S. 294, 82 S.Ct. 1502, 8 L. Ed. 2d 510). In addition to market characteristics, product properties, too, were recognized as constituting fiat boundaries, the term ‘submarket’ coinciding with what has here been called ‘product category’. In *United Brands Company and United Brands Continentaal B.V. v. Commission of the European Communities*, the Court of Justice of the European Communities decided that bananas constitute a market which is independent of the fresh fruit market on account of the special physical, functional and economic characteristics of bananas. The Court refers to properties such as taste, softness, hygienic handling, seedlessness and nutritional value, which reduce the interchangeability of bananas with other fruit and afford consumption by “all consumers and especially certain categories of consumers” (No. 27/76, February 14, 1978).

37. The literature that applies the niche concept to various marketing issues (Milne/Mason 1989; Milne/Mason 1994) has overlooked that brands do not resemble species as currently understood in the philosophy of biology. For example, degree of morphological difference is assumed not to be a sufficient criterion for a species. Moreover, the term ‘species’ is used both in a typological sense (i.e. as belonging to the metalanguage of biology) and as referring to actual taxa whereas brands, in a realist view, are only the latter, i.e. instance of the object domain (Mayr 1996).

38. A further development of brand realism may draw upon insights gained by Roger Barker’s theory of physical-behavioral units and environmental settings (Smith 1999b).

39. Section 43(c)(15 USC § 1125 c).

40. This does not necessarily imply concurrence with the view that the behavior of consumers toward brands is sufficiently well described by a stochastic model of the Dirichlet type that makes the extra conceptual baggage associated with brand equity redundant (Uncles/Ehrenberg/Hammond 1995; Ehrenberg/Barnard/Scriven 1997).

41. Since niches cannot be created *ad libitum*, talk about consumers being misled as to their ‘true’ needs by the ‘commodity fetishism’ inherent in marketing would appear to be idle rhetoric.

42. In this context it is regrettable that in October 1998 the International Accounting Standards Committee (IASC) issued IAS 38, which specifically prohibits the recognition as assets of internally generated goodwill, brands, mastheads, publishing titles, customer lists and items similar in substance. This is a retrograde step by comparison with those countries which already permit capitalization of brand value as assets on balance sheets.