

Exemplary Goods: The Product as Economic Variable

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Abstract

This paper offers an alternative to essentialist theories that conceptualize goods as bundles of objective characteristics. Extending the idea that economic competition is a discovery process beyond the discovery of costs and prices to the discovery of qualities, we argue that relevant qualities of goods emerge along with costs and prices from the process of economic competition. Such a discovery process revolves around exemplary goods—a novel theoretical concept we develop. Exemplary goods, as we argue, have a coordinative role within markets that is complementary to the coordinative role of prices. We illustrate our theory with a reinterpretation of a case study on the entry of Starbucks and conclude by challenging some of the normative implications derived from theories of salience.

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Introduction

Although prices have long been accepted as the outcome of the subjective valuation of individuals, the way in which economists think of goods is still rooted in an older objective or essentialist view. Ever since Kelvin Lancaster conceptualized goods as combinations of objective characteristics, the economic theory of goods has not progressed much (Lancaster 1966 and 1971). Although many later contributions have focused on quality uncertainty (Chamberlin 1953; Akerlof 1970; Darby and Karni 1973; Stiglitz 1987), none have challenged the basic idea that goods are bundles of objective characteristics known

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to the producer, or at least to the economist. In a recent paper, Pedro Bordalo, Nicola Gennaioli and Andrei Shleifer (2016) argue that goods can be analyzed as consisting of a quality-independent component, and a quality-dependent component. The quality-independent component of the good, say, coffee, is what is essential to it being coffee. The quality-dependent component distinguishes it from other kinds of coffee. The basic idea is still that of Lancaster: quality is just one other characteristic in the bundle that makes up the good. This is also the basic idea underneath the calculation of shadow prices of individual characteristics of goods (Rosen 1974; Epple 1987; Pakes 2003).

One might think that this remnant of essentialism in economic theory is of little practical consequence. But product differentiation has expanded to virtually every market. Monopolistic competition and product differentiation, rather than perfect competition and product homogeneity, have over the past decades become the norm for consumer product markets. And a growing number of markets such as those for consulting services, movies, or dining experiences are characterized by what Richard Caves (2000) called an “infinite variety” of different goods.¹ In such markets, which often rely on fine-grained distinctions between genres, origins or types of service, classification can make a lot of difference. More importantly, disruptive innovative goods, services, and experiences have frequently upset traditional barriers between goods, and thus between traditional categorizations of markets. In the 1980s, who would have thought that technological developments would allow telephones to become a close substitute to newspapers?

The creation of markets which were long monopolized by the government—such as for energy supply—or which have only recently been recognized as economic goods—such as auctions for frequencies by the Federal Communications Commission or for pollution rights—or goods for which market mechanisms have only recently been adopted—such as for organs—rely on particular conceptualizations of the good. For these markets to function, it is of crucial importance to understand what is actually being traded (Becker and Eliás 2007; Kuchař 2016). A better conceptualization of goods and a better understanding of how market participants perceived goods as similar or different is thus of great importance.

In this paper, we criticize the recent work of Bordalo, Gennaioli and Shleifer (2013 and 2016, henceforth BGS) which builds on Lancaster’s theory of goods. BGS ask the right questions focusing on the importance of quality in markets and the way that consumers perceive quality differences. By analyzing how consumers perceive differences between goods, however, they implicitly assume that market participants know perfectly well what makes goods similar, or rather how can we isolate particular markets when we conduct our analysis.

¹ See also Karpik (2010).

As a consequence, their theory only illuminates half of the problem. We get a clear sense of how goods within a particular market are differentiated from one another, but not why these goods are considered to be part of the same (sub)-market in the first place. A more comprehensive theory of consumer choice should be equally attentive to those aspects of the competitive process that make products similar in the eyes of market participants. We do not wish to argue that the distinctions between goods are individually subjective. Instead, we contend that they are the outcome of a coordination process between producers and consumers, much like prices are the outcome of a coordination process between market participants.

Economists no longer believe that goods have some natural value or objective price. Rather, goods are thought to be priced in relation to other goods. And hence we only attach significance to relative prices. Yet for some reason, the majority of economic studies still presume that goods have objective characteristics independent of consumers' judgment. This paper offers a way of thinking about product innovation and quality adjustments through the novel theoretical concept of exemplary goods. Consumers and producers do compare relative prices, but they compare relative qualities as well. Exemplars set a new pattern of qualities which become recognized and imitated by other producers. We believe that thinking about certain existing goods as exemplars will shed light on the process of quality adjustment and, ultimately, on the emergent nature of classification schemes.² Exemplary goods, we will argue, have a coordinative role within markets which is complementary to the role of prices.

The first section will explain the current essentialist theory of goods as first developed by Lancaster and recently expanded by BGS (2016). Section two offers our alternative theory of exemplary goods. Section three presents a reinterpretation of the case study that examines the entry of Starbucks, as offered by BGS. Our reinterpretation demonstrates that Starbucks did not merely change the coffee market, but also upset the boundaries between categories of goods, and offered a product which soon came to be imitated by others. Section four generalizes our case-study to a theory of market competition, incorporating competition on quality and exemplary goods. There we show that qualities, just like prices, are discovered in the competitive market process.

1. The Essentialist Theory of Goods

The great step forward in Lancaster's theory of goods is to argue that goods are not single entities, but are instead bundles of more fundamental characteristics. Lancaster makes this point because he is aware that without such a theory,

² The exemplary theory of judgment relies on knowledge available in markets and is, therefore, a type of ecological rationality (Smith 2008; Gigerenzer 2008).

there is no way in which economists have something to say about the relationships between goods, i.e., whether they are substitutes or complements. He argues that without his theory, such an assessment would be nothing more than a set of common-sense judgments. Goods which overlap significantly in their fundamental characteristics will be substitutes:

“Any good possesses an enormous number of physical properties: size, shape, color, smell, chemical composition, ability to perform any one of a variety of functions, and so on. Because not all properties will be relevant to choice, we shall henceforth use the term *characteristics* for those objective properties of things that are relevant to choice by people” (Lancaster 1971, 6).

Lancaster’s fundamental insight that goods are bundles of characteristics is a step forward in consumer theory. It leads directly to the theory of bundling and unbundling which deals with the issue of why certain characteristics would typically be sold together, while others would be sold separately. It highlights that one part of the competitive process consists of figuring out the relevant bundle of characteristics.³ But Lancaster leaves us in the dark as to how we determine which characteristics are bundled in a particular good and how the association of characteristics occurs.⁴ Lancaster has merely moved the problem one level up. It is doubtful whether we should be any more satisfied with economists’ common-sense knowledge about the relations between goods than we should be about their judgments regarding the characteristics which are relevant to choice.

In a recent body of work, BGS (2013; 2016) focus on price and quality as two alternative ‘salient’ attributes which determine consumer choice. In their model, firms have to compete on quality when that variable is salient because consumers will overemphasize this attribute in their decision. During periods in which price is salient, price changes will be overemphasized by consumers, and hence price competition among firms will dominate (BGS 2016, 482). As a consequence markets can end up in inefficient equilibria, for example, a low-

³ In that sense there is a direct but little-acknowledged line between current discussions on bundling and unbundling and Lancaster’s theory (James and Yellen 1976).

⁴ Even at the time that Lancaster proposed his theory of goods, there were important criticisms available of an essentialist theory of goods. Edward Chamberlin (1953, 9) recognized clearly that the variety of goods and the circumstances in which they are sold are infinite, thus making a delineation of some partial market highly arbitrary. The idea that the objective characteristics of the product could be isolated from the related services, information, and circumstances in which the products were sold was further criticized in the industrial organization literature, which at time was concerned with the ‘value’ provided or ‘waste’ generated by advertising (Goldschmid, Mann, and Weston 1974, chapter 3). For these authors, it was clear that goods were not priced bundles of objective characteristics, but rather that entrepreneurs were engaged in a process of constant adjustment on multiple margins including price, quality, scope (bundling and unbundling of goods), advertising and whatever else might have been part of the product. The product, in this perspective, is itself an important economic variable (Chamberlin 1953; Kirzner 1973, 135–146).

price equilibrium in which improvements in quality are underemphasized by consumers.

The theory developed by BGS rightly emphasizes that all consumer choice happens within a particular choice context that does not remain constant when a new good is introduced: “A high-quality good draws attention not only to its own quality but also to the fact that the competitor product has lower quality”—BGS call this effect “attention externality” (2016, 482). But by assuming that the quality of the good is chosen by the producer and known (or at least stochastically known) by the consumer, BGS do not set themselves apart from Lancaster’s conceptualization of goods as combinations of objective characteristics. The entire argument of BGS—including the policy conclusions they draw from it—depends on the economist’s ability to identify the product characteristics relevant for consumer choice.

Considering quality as a known choice variable brings about a confusion between the idea of quality as an addition to a basic product and the idea of quality as a *distinctive attribute* or *characteristic*. If we see quality as a measurable standard, there are reasons to believe that a level of quality can and must be chosen by the producer and that this level of quality is correlated with costs of production. The BGS model and many similar models formalize this idea through making the costs of quality directly dependent on the costs of particular production technologies.⁵ The problem of quality vs. price competition thus becomes an exercise in constrained maximization because quality has been reduced to a cost. If quality is salient, the price range is given and producers compete on the cost margin, thereby adjusting the quality of the good. If prices are salient, costs of production (and thus quality) are given and producers focus on price competition. Remarkably, in both cases where either quality (as a measurable standard) or price ranges are given, the *qualities* (as distinctive attributes or characteristics) are always assumed to be fixed and objective. Quality competition is then a process of adding more quality to a fixed good (as in our case below in which the well-defined product is coffee).

In our view quality is not merely a cost-dependent measurable standard. Instead, qualities (in plural) are those properties in a good to which, besides prices, people pay attention. Most importantly for our purposes here, we consider qualities of goods to include rules of association and differentiation. Within mature markets there tend to be generally accepted notions of association and differentiation; in the process of quality competition we typically see minor variations around a particular good. As a consequence, when one breaks the rules of association too blatantly, a good becomes a different kind. When a

⁵ This line of reasoning merely falls back into an old fallacy, which in the 1970’s surrounded the failed attempts by critics of advertising to distinguish between production costs and selling costs. A distinction rightly criticized by Harold Demsetz (1964 and 1968), Yale Brozen (1974) and Israel Kirzner (1973, chap. 4).

good diverges sufficiently from existing goods, it becomes difficult to categorize it as a variation on an existing good (Earl and Potts 2013). While most of the time such variations will fall between the cracks, occasionally such new goods will become new focal points, around which other producers will group. These new goods will be understood as consisting of different qualities as compared with other established goods.

By fixing the characteristics—qualities—which make up a product, or at least those which are relevant to consumer choice, BGS assume the process of association and dissociation away and commit instead to an essentialist notion of goods. What we end up with is a natural map of markets: the market for fast food, the market for budget air travel, the market for financial services and the market for fashion (to name two which BGS associate with ‘price salience’ and two which they associate with ‘quality salience’). Not only do they neglect the way in which these markets became coherent in the first place, they also take for granted the product that is traded in these markets. Consequently, when BGS (2016) analyze the entrance of Starbucks into the coffee market, they have to interpret this as an instance of Starbucks competing in the coffee market with (cheap) brewed coffee, rather than as a quite fundamental change in the good, or as an introduction of a good which upsets current categorizations. We, on the other hand, contend that any convincing account of the introduction of Starbucks will have to take into account that the company contributed to a radical transformation of characteristics (qualities) that were relevant to consumer choice. In other words, the company managed to set in motion a process that altered the way in which the product was understood and categorized by consumers and other producers.

2. Exemplary Goods

To develop an alternative to the essentialist theory of goods, we propose a theory of exemplary goods. Hannah Arendt’s theory of exemplary validity greatly contributes to our understanding of what exemplars are and how they are used by individuals to make judgments. She developed her theory of exemplary reasoning as an explicit criticism of essentialist notions of categories. When considering a table, she argues, we could have in mind an essential list of characteristics to which every table must conform to qualify as such. If we then meet an object we can determine whether it fits the requirements. Does it have a flat top surface? Does it stand on legs? Does it have the correct height? Economists following Lancaster use this kind of laundry-list approach when they think of markets for goods as well-defined entities.

The exemplary mode of reasoning, on the other hand, “thinks of some table as the example of how tables actually should be: the exemplary table. This exemplar is and remains a particular that in its very particularity reveals the

generality that otherwise could not be defined” (Arendt 1982, 72). When we say, for example, that to be courageous is to be like Achilles, we use—in this exemplary sense—the particular to illustrate the general.

Arendt argues that thinking in terms of exemplars is “the faculty of thinking the particular” (*ibid.*, 76). Pure thinking for Arendt is thinking in the general, it is thinking in rules of association, laws, regularities, and categories.⁶ To judge, on the other hand, is to consider the particular in light of some category while keeping in mind the uniqueness of the particular. Occasionally we will find particular instances which we cannot yet relate to some existing category, and then we have to consider the particular in light of other particulars. When a new good is thus introduced to the market it is judged in relation to known exemplars, rather than fitted into a particular category.⁷

Theorists of exemplars emphasize the *gradedness* of categories (Mervis and Rosch 1981; Barsalou 1985).⁸ The idea is simple: not every member is an equally good example of a particular category. Robins, for example, are consistently considered to be exemplary birds, but penguins far less so (they seem to be closer to some exemplary fish). Such exemplars are learned faster by children and play a crucial role in category formation (Lynch, Coley, and Medin 2000). Exemplary goods are particulars that illustrate the general well.

One might think that exemplars represent a central tendency in the category: a bird has wings, feathers, and a beak, it is relatively small and it flies—features which the robin matches better than the penguin. But more recent studies have distinguished between a typical (central) instance and an exemplary instance. These sometimes overlap, but particularly when a notion of goodness is involved, as is the case for market goods, the exemplary tends to be close to some ideal, and thus far from the typical or central instance (Barsalou 1985; Lynch, Coley, and Medin 2000; Burnett et al. 2005). Exemplary goods tend to be close to some ideal as their qualities stand out.

Exemplary goods are goods (or services) that are successful and therefore are imitated by competitors.⁹ The iPhone has been an exemplary smartphone

⁶ See also Hayek (1978 [1969]) on the primacy of the abstract.

⁷ A good is not exemplary unless it manages to coordinate expectations about how one is supposed to act with regard to the good in question. This coordination of expectations takes place through contestation; exemplars emerge as solutions to social conflicts. In this sense, the meaning of exemplars is (at least potentially) always contested. Furthermore, exemplars can be seen as ontologically autonomous social media or focal public representations that *induce* certain beliefs and expectations; they are signs that induce dispositions to see the world and act on it in a particular way (cf. Aoki 2011; Herrmann-Pillath 2016).

⁸ Some of the early authors on exemplars noted the connection with family resemblances as described by Wittgenstein (Rosch and Mervis 1975).

⁹ An exemplar is, as an old definition has it: “a pattern; an example to be imitated” (Needham 1985).

for a considerable time, in the same way that Harvard and Cambridge are exemplary universities. These goods, or sometimes brands, teach us something about the characteristics and qualities of a category of goods, even when we cannot always fully describe or articulate what that quality consists of. Exemplary goods and practices contain tacit knowledge about the ‘dos’ and ‘don’ts’ that is often hard to codify (Polanyi 1958), exemplars are thus a tacit foundation for the rules of association. What a modern university is and whether it is different from a college, a think-tank or a 19th-century university has been discovered through the course of time. Moving too far from the exemplary pattern within one category, an organization or a product might be associated with a different exemplar in a different category. But neither the relevant characteristics, nor the way in which universities and think tanks are compared, nor the relationship of this particular category of goods to other categories has remained unchanged over time. Initial smartphones were closer to traditional mobile phones, but more recent versions have moved closer to tablets, computers and sometimes even TV sets.

It is important to differentiate our notion of exemplary goods from other types of goods used in economic analysis. Exemplary goods are not the highest quality good in a category — a good which manages to offer decent quality at a low price could equally be exemplary, and hence a pattern to be imitated. Exemplary goods are therefore also different from reference goods conceptualized as a good with average values of quality and price (BGS 2013, 820). The concept which comes closest in purpose is that of the ‘representative good’ as developed by Steven Payson (1995). But his conceptualization is disappointing in that it merely uses the median product in the market, rather than the exemplary good, which as we stressed before, is often close to some ideal rather than a central instance.

Exemplary goods are not typical or average, rather, they tend to be outliers within a category, to be particular and focal instances. Upon the introduction of a new good, we cannot say whether it will become exemplary, but we can observe it becoming exemplary when we see it is being imitated and used as a focal point by market participants (Dekker 2016). Through this process, new knowledge about rules of association emerges and begins to constrain and enable actions of other market participants. Such rules have been demonstrated to be important guides in consumer behavior (Janssen and Jager 2001). As such, the theory of exemplary goods fits within theories of ecological rationality, which study how knowledge is discovered, constructed, and utilized by market participants, rather than to assume that such knowledge is already available to one or more parties.

Just like prices and costs cannot be treated as fixed in the process of economic competition, so specific goods and markets cannot be treated as fixed for any more than short periods of time. As Chamberlin argues: “[p]roducts are not in fact ‘given,’ they are continuously changed — improved, deteriorated, or just

made different—as an essential part of the market process” (1953, 3). And since the offered product constantly shifts, the relationships between products, their cross-price elasticities, also change.¹⁰

A theory of exemplary goods allows us to leave behind essentialist notions of what a table, a coffee, or a university is, and to treat the relevant characteristics of these goods as qualities that are discovered in the process of competition (Hayek 1968). Exemplary goods make us recognize that categories are formed around particular, exemplary instances. This is the case, for example, for categories named after their exemplary instance: baby’s onesies, jeans, the jacuzzi, and the jeep. Secondly, exemplars emphasize that although some goods might be a perfect fit in a category, other goods are borderline cases, which do not fit current categories well (Zuckerman 1999; Kennedy, Lo, and Lounsbury 2010). Thirdly, exemplars are able to capture the market dynamic in which particular products are placed within a category, but are also represented as standing out from that category. This use of the exemplary is particularly visible in advertisements in which the uniqueness of the particular product is emphasized against the shared qualities of other products.

3. Starbucks and the Transformation of the Good

To illustrate their theory of salient characteristics, BGS (2016) use the case of Starbucks coffee. Starbucks, they argue, was successful in making quality (an addition to a basic product)—rather than price—salient, thus pushing the focus of the industry from cost-reductions to superior quality. The case-study is illustrative of the idea that there are distinct markets in the economy in which competition takes place.

In 1987 when Starbucks opened up its 11 café-style shops with 100 employees to sell high-quality espresso drinks to a mass market they quickly became successful; by 2000 Starbucks expanded to 3,500 stores, and to over 11,000 in 2010 (Schultz and Gordon 2012).¹¹ The authors argue that Starbucks was competing in the market for coffee, with home-brewed coffee and with other restaurants which offered coffee. Starbucks was supposed to find “a profitable way to sell espresso drinks for the mass market, by providing consistently high quality delivered by trained baristas” (BGS 2016, 500). It would be silly to deny that Starbucks provided a substitute for diner-style

¹⁰ One important consequence of the constant change in products is that “[t]he conception of the economic system as divisible into distinct markets for separate commodities is after all very largely the product of the imagination of the economist” (Hayek 1946, 98).

¹¹ For a timeline, see <https://www.starbucks.com/about-us/company-information/starbucks-company-timeline>.

brewed coffee, but by focusing on coffee alone we fail to understand what else Starbucks managed to achieve.

Starbucks did not just change the quality of the coffee. Instead, it changed the atmosphere in which coffee was consumed, providing Wi-Fi and comfortable chairs, using alternative marketing techniques, personalizing service and greatly expanding the range of drinks and snacks on offer, even for those who do not particularly like coffee and prefer tea or cake. In terms of exemplars, they managed to introduce a new good, one that can still be compared to (and hence compete with) brewed coffee, but which also now becomes related to pastries offered in bakeries, and to the social function of cafés, restaurants, and even libraries and working spaces.

BGS (2016, 501) speak of a “Starbucks effect” that they observe on the quality of coffee beans offered in the supermarket, but a similar effect (in different incarnations) might have taken place in bakeries, in cafés and restaurants, as well as in libraries and in the office world. For example, Starbucks seems to have initiated the trend to serve as an alternative office space for self-employed workers and writers (Woldoff et al. 2013). Bryant Simon also pointed out that many people “use the coffee shops as a second place—for business meetings and as an out-of-the-office office. Students use it as a library, study lounge, and clubhouse” (2009, 246). There are additional kinds of the “Starbucks effect” evidenced, for example, by Starbucks’ symbiosis with Barnes and Noble bookstores that “came to be known for their large stocks of books on an array of topics, easy chairs for reading and co-located Starbucks coffee bars” (Berry et al. 2006, 60).

When BGS claim that *the* Starbucks effect “results from Starbucks’ introduction of a different technology that allowed it to offer much higher and salient quality” (2016, 501), this grossly misrepresents what has happened in the market. What Starbucks did was not similar to a mere change in harvesting techniques which would lower the costs of high-quality beans. It was precisely the ‘what’—the product—that changed through their innovation. The product and the way it came to be understood by consumers, and hence how it was valued was the key aspect that changed. By doing so it upset relatively fixed boundaries between markets, together with the existing rules of association among goods. As a consequence, not just other sellers of coffee, but many other producers went on adapting to the introduction of this new good. BGS provide some evidence that the total quantity of coffee remains unchanged to make the argument that Starbucks managed to replace yesteryear’s low-quality coffee. But the constant quantity now bought at a much higher price is clear evidence that consumer valuation of the good in question changed. Even that, if our story is correct, would not be completely accurate, however. There is no market for coffee with fixed boundaries. Starbucks introduced a good that broke the existing rules of association, a good that would itself soon become exemplary, a

new focal point to which other producers soon gravitated altering the boundaries between markets. And hence we now see many small variations around the new good that Starbucks introduced.

BGS argue that the introduction of Starbucks was “causing a reduction in the price sensitivity of *all* consumers” (2016, 501) implying that consumers had been wrong because they had focused too much on price. In our alternative interpretation of exemplary goods, to the contrary, a new good is introduced which opens up new opportunities not just for producers, but also for consumers who adjust their behavior accordingly. That is, we do not have to posit a sudden shift in the price sensitivity of all coffee consumers. Instead, the theory of exemplary goods allows us to recognize that new goods and their relevant characteristics, or qualities, are discovered by people who take part in the competition process. The price-focused consumers in the pre-Starbucks world were only wrong if Starbucks were merely a new combination of existing characteristics. Then we can say that they were too focused on the salient characteristic price. But if we instead recognize that new relevant characteristics and new products are discovered in the competitive process, then consumers were, in fact, learning about new alternatives.¹² In such an open-ended world saying that price-focused coffee consumers were wrong before is like saying that people were too focused on the prices of hand-held calculators before the PC was introduced. The relevant research question then becomes how learning and adaptation takes place, rather than to explain why consumers make particular choices.

4. The Discovery of Focal Qualities Through Exemplary Goods

The competitive market process is widely believed to be a good way of finding the most efficient way of minimizing costs and of discovering the price which clears the market. But as we can see in the case of Starbucks, this is not the whole story. Competition is not just a price-quantity discovery procedure, it is also a process through which entrepreneurs discover relevant characteristics and rules of association that enable and constrain certain combinations of these. Our reinterpretation of the entry of Starbucks demonstrates that the relevant characteristics of the good did not remain fixed throughout the process of market competition, as they were discovered instead.

¹² It was not just consumers who were learning. While initially Starbucks only “sold bulk coffee,” it did not take long before “[a Starbucks] employee got the idea of putting a couch in the corner and people sat there—and the people in line liked the looks of things and the promise of comfort and community connections” (Simon 2009, 244–245). We can see that ex-ante a clear vision of what the good was going to be was not clear to Starbucks either.

Existing economic theories which rely on an essentialist notion of goods are unable to capture this product evolution (Payson 1995). They have to argue that all of these goods are part of some fixed product category. Our concept of exemplary goods, on the other hand, emphasizes that the relevant characteristics and, above all, the rules that make it possible to associate or distinguish these commodities from other artifacts are discovered in the competitive process. What occurs is a trial-and-error process of newly introduced goods that typically fail to catch on, only every now and then a new good succeeds in the market process. The good might then be interpreted and hence categorized and marketed as a slight variation of some existing (exemplary) good. Occasionally, however, firms introduce goods that challenge—or are perceived by consumers to challenge—the existing market categories or shared understandings of the good. The existing rules of association, which help us see some goods as different or similar, thus begin to fall apart.

These novel goods, when imitated, may become new exemplary goods altering the way that existing categories are graded, i.e., they will make characteristics which were previously thought to be of minor importance focal, and formerly focal characteristics will become less relevant. The new exemplar might also challenge the boundaries between existing market categories. Finally, the challenge of existing market categories might result in the emergence of new categories.¹³

Edward Chamberlin stressed the emergent product variation lamenting the deluded economist who has perhaps “been blinded” by “a system of thought which takes products as data and hence does not even raise the question of how they are determined” (1953, 23). The issue also repeatedly appears throughout the works of Friedrich Hayek, who points out that economic calculus —“the logic of choice”—takes the “apparatus of classification of possible human attitudes” for granted (1946, 93).¹⁴ Although both Chamberlin and Hayek recognized that the emergence of classifications is a central issue of economic competition, they are not very specific about how these rules of association are discovered. We contend that the notion of exemplary goods is a significant step forward in the study of the competition process, but to avoid confusion we

¹³ Within the marketing literature the dynamics of the introduction of (radically) new goods has been explored through case studies, but without systematic connection to economic theory (for some good examples, see Moreau et al. 2001; Rosa et al. 1999; Bessant et al. 2004; Bessant 2008). We do not further explore that connection in this paper.

¹⁴ Instead of assuming the existence of this network of focal exemplars and their mutual relationships, Hayek calls our attention to “the real problem” which seems to be “not whether we will get given commodities or services at given marginal costs but mainly by what commodities and services the needs of the people can be most cheaply satisfied” (1946, 100–101). We cannot proceed while assuming “a ‘given’ quantity of scarce goods,” the question of “*which things are goods* ... is precisely one of the conditions that competition should discover” (1968, italics ours).

further specify how exemplary goods fulfill their coordinative function. With this discussion, we conclude our argument.

If we do not take the apparatus of association and dissociation for granted, how can we go about analyzing it? In the Lancaster framework, which still dominates studies of quality in economics, producers choose the quality or the characteristics of goods. In other words, firms “‘frame’ competition by focusing consumers’ attention on their best attribute (quality or price)” (BGS 2016, 481). As a consequence, uncertainty about the goods is asymmetrical; the producer has knowledge the consumer does not, and potential for exploitation of this uncertainty exists (Lupton 2005).

There are at least two alternative ways in which new exemplary goods and their relevant characteristics may take shape. First, one might suggest a symmetrical variation of the standard model and argue that whether a new good—although introduced by producers in a trial-and-error process—will become exemplary is ultimately determined by consumers. After all, consumers pursue certain goals and will seek the goods which help them best fulfill these goals. This approach lies at the heart of the alternative approach to consumer theory developed by Robert Michael and Gary Becker (1973; see also Stigler and Becker 1977). In their approach, households seek to produce a fixed set of commodities for which consumer goods are inputs (food stocks, for example, are the input into the production of health). But while Lancaster fixes the essential characteristics of a good, this alternative Chicago approach has to fix the commodities which households produce, and thus remains equally essentialist.

The second alternative takes into account the role of an agency that regulates quality. These agencies—regulators—might take the process of quality determination into their own hands and, as Chamberlin points out, reduce the heterogeneity of qualitative characteristics by means of “standards and grades ... promulgated [for example] by the Federal government” (1953, 24). Alvin Roth (2015) has recently written about the case of the US market in wheat that used to be characterized by much uncertainty regarding the quality and provenance of the wheat. That is, until the Chicago Board of Trade implemented a uniform grading system in 1848. At that point the commodification of wheat, in the sense of the creation of a set of rules that made a product standardized, bolstered the market and cut down on a variety of transaction costs. It was this particular categorization of wheat that was necessary for the commodification of grain that allowed large-scale impersonal transfers of this good (*ibid.*, 16).¹⁵

This perspective implies that it is not just the firm that can choose and implement the (efficient) focal qualities of their goods around which categories and

¹⁵ In fact, Roth often quips that while God made wheat, it was the Chicago Board of Trade that made the No. 2 Hard Red Winter. It was the regulator who chose the rules of association that turned wheat into a more homogeneous commodity.

classification schemes are built. A regulator, such as a Board of Trade or the federal government, can choose and unilaterally implement these rules of association as well, and in practice we will often see a combination of both. Acknowledging that setting standards of quality might fall beyond the scope of firm decision-making is an improvement of the theory of consumer choice; it recognizes how third parties may help coordinate buyers and sellers. But Roth, focused on matching markets as he is, fails to consider why this grading system was accepted by buyers and sellers as legitimate in this particular instance, or indeed why in other instances we do not see more standardization, but instead more differentiation.

In other words, Roth fails to see the emergent nature of the process by which this non-price coordination comes about. Why are particular standards adopted? And why are particular differentiations successful? Although our theory of exemplary goods does not provide a way of identifying beforehand which goods will be exemplary, it does help us understand how particular goods may become linked together through association. Firms, consumers, and regulators all contribute to this association and dissociation of goods. Firms cannot offer random goods and enterprising regulators cannot make arbitrary distinctions stick because of existing exemplary goods which serve as guideposts. Exemplars are focal points and entrepreneurs must position and associate their goods in relation to an existing exemplary good.

Economists understand that prices emerge from an interplay of decisions whether to accept them or not. In this sense, the market price tends not to be “decided” by anyone in particular. Granted, producers might set prices, but if they set them too high, consumers will not buy from them. Similarly, consumers have only a limited power over prices, since other consumers might outbid them. Prices come about through a process of adjustment in which the actions of producers and consumers become mutually coordinated.

Qualities and categories are discovered in a process that is not unlike the one through which prices emerge—the take-it-or-leave-it process applies to qualities as well as to prices. When entrepreneurs associate their goods with exemplars they associate their work with categories that may serve as a certifier of quality. Kennedy et al. (2010) have appropriately called this “category currency.” In case a negative value becomes associated with a category of goods, producers will want to dissociate themselves from it. The judgment that an entrepreneur needs to make is whether she wants to abide by an existing set of rules and categorizations or whether she wants to break these and propose a new alignment of qualities. This is a process of non-price coordination, primarily with non-price signals. We have argued elsewhere that these non-price signals can be an important guide to entrepreneurial action. Just like prices, meanings and qualities are mutually coordinated (Bianchi 1998, Dekker and Kuchař 2017).

The market process is a discovery process, at least in the very real sense that knowledge of costs, prices, and focal qualities around which categories of goods emerge becomes available.¹⁶ The existing structure of categories often obscures the acts of entrepreneurship that have contributed to the fine-grained differentiation that modern markets rely on. These acts of entrepreneurship do not just introduce new products to us, but also the way in which we should understand them. We have developed the thesis that competition is above all a process of opinion formation (Hayek 1946).¹⁷ While we recognize that competition is a discovery procedure, it is not merely a discovery of costs and prices. This understanding is valuable but it takes an important part of the discovery procedure for granted. *Ex-ante*, the costs of doing things are not simply out there for the analyst—or an agent—to access and process. In the same way, the social categories that often seem solid, robust and objective are in fact not given either, as they have been created by market participants in the past and are likely to change in the future.

Conclusion

Competition is not just a price-quantity discovery procedure through which resources are allocated to their most efficient uses. It is a discovery process through which prices, costs *and* the relevant qualities of goods emerge. In this paper we have proposed a new concept of exemplary goods to demonstrate how particular goods function as focal points for quality coordination.

Our thesis offers an alternative to essentialist theories that assume goods belong to fixed product categories. The conceptual difference between essentialist and exemplary theories challenges the way in which economists generally distinguish between different goods and markets. Second, we challenge the way in which quality is usually considered in economic models where producers choose the level of quality (based on cost functions). Producers neither have the power nor the knowledge to do so. Rather, navigating through novel and uncertain situations and equipped with knowledge about existing exemplary goods, producers—like consumers—engage in discovering the relevant characteristics and qualities of the good. These qualities thus emerge from the competitive process.

¹⁶ Or as Richard Langlois and Metin Cosgel argue: “the economic problem of production becomes a coordination problem: discovering—or, rather, helping to create—an interpersonally shared structure of transaction” (1998, 112).

¹⁷ Cf. Israel Kirzner who praises Hayek’s “pathbreaking critique of the dominance of the perfectly competitive model (and hence also of the corollary doctrines of imperfect and monopolistic competition),” recognizing that the analysis of competition should “focus not on the state of affairs at the end of the market process, but upon the character of that process” (1997, 68).

Working with a salience model that operates with attention externalities (Bordalo, Gennaioli and Shleifer 2016), one needs to presume that all relevant characteristics are already known to both the consumer and the producer to conclude that consumers somehow make wrong decisions. If, on the other hand, we adopt the model of exemplary goods, with its associated ecological rationality, we can see that producers and consumers create and discover new relevant qualities and adjust their behavior accordingly.

We illustrated the process by which this happens with a case study showing that the relevant knowledge for improved decision-making by producers and consumers emerges in the competitive process. The new product offered by Starbucks had not existed beforehand, so to argue that producers were foolish not to offer this new product, or that consumers were misguided not having demanded it, is essentially blaming them for today's failure to possess tomorrow's knowledge (cf. Buchanan and Vanberg 1991). The problem is that tomorrow's knowledge is open-ended and it is only with the benefit of hindsight—that is with knowledge which will have been created in the competitive process—that we can see whether the decisions made were optimal or not.

We invite further research into the problem of non-price coordination. How do entrepreneurs who break focal expectations contribute to the formation and emergence of new exemplars and classification schemes? How does innovation upset existing classification schemes and traditional boundaries between market categories? We believe that the concept of exemplars will help us better understand how markets emerge by answering the question of what is actually being traded. What the good is should not be taken for granted by economists.

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