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KELVIN JOHN LANCASTER AND THE
DISTINCTION BETWEEN THE “GOODS
ARE GOODS” APPROACH AND
THE “CHARACTERISTICS” APPROACH
TO DEMAND THEORY

BY JULIEN GRADOZ

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Kelvin John Lancaster and the Distinction Between the “Goods are Goods” Approach and the “Characteristics” Approach to Demand Theory

Julien Gradoz, Center for the History of Political Economy, Duke University,
julien.gradoz@duke.edu

<https://orcid.org/0009-0005-1455-3073>

Abstract: In demand theory, the “characteristics approach” refers to situations where goods are described according to their characteristics. This approach is often contrasted with the “goods are goods” approach. We trace the origin of this expression back to a critique of demand theory formulated by Harry Johnson in 1958, which complete a critique proposed by Kelvin John Lancaster in 1957. We demonstrate that Johnson’s interpretation of this expression does not align with the interpretation that later became dominant in demand theory. We also highlight that these articles are connected with the development of the characteristics approach by Lancaster in the 1960s.

JEL codes: B21, D11

Keywords: Kelvin John Lancaster, characteristics, demand theory, Harry Gordon Johnson, John Richard Hicks.

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In demand theory, the “characteristics approach” describes goods as vectors of characteristics, such as weight, size, or color. It assumes that consumer preferences are

based on the characteristics of the goods. The development of this approach is generally associated with Kelvin John Lancaster (1966a; 1971). He presents this approach as a departure from “traditional” demand theory, the work of Gérard Debreu (1959) being exemplary of that tradition according to him (Lancaster 1971, 3). In “traditional” demand theory, it is assumed that Robinson and Friday trade apples and bananas. Their preferences are based on vectors containing different quantities of apples and bananas. In the “characteristics approach,” it is assumed that Robinson and Friday trade vitamins and calories. Their preferences are based on vectors containing different quantities of vitamins and calories. Apples and bananas are therefore considered as mere bundles of vitamins and calories.

If the term “characteristics approach” is used to describe the second situation, how can we refer to the first situation? Apart from the expression “traditional demand theory” used by Lancaster, this first situation is often referred to as the “goods are goods” approach (Lancaster 1971; Nerlove 1975; Eaton and Lipsey 1989; Milgate 2018; Archibald 2018). This expression has two interpretations. The most common interpretation suggests that traditional demand theory tells us nothing about the goods being exchanged. By merely assuming that Robinson and Friday trade different quantities of apples and bananas, we know nothing about the apples and bananas except that they are “goods.” The characteristics approach contrasts with this approach by describing the apples and bananas through the value of their characteristics. The other interpretation suggests that the concept of “good” has a positive connotation. It is a way to recall that “goods are desirable” in the sense that Robinson and Friday prefer having more apples to fewer apples (and the same applies to bananas).

These two interpretations are not mutually exclusive, but they do not mean the same thing. In this article, we trace the origin of the expression “goods are goods” back to a 1958 article by Harry Gordon Johnson published in *Economica*. This article is a response to a 1957 article by Kelvin John Lancaster in which he is highly critical of John Richard Hicks’s book *A Revision of Demand Theory* (1956). Lancaster argues more generally that demand theory boils down to a single theorem, the *substitution theorem*, which can be derived from a single axiom, the *consistency axiom*. This theory is therefore almost empty according to Lancaster, and Hicks’s book does not contribute to enriching

this theory. This radical critique of demand theory helps to better understand why Lancaster worked on the characteristics approach in the late 1960s and presented this approach as a departure from traditional demand theory. In his article, Johnson argues that the substitution theorem can be derived even more simply from the axiom that goods are desirable, an idea summarized with the expression “goods are goods.” The interpretation proposed by Johnson is therefore different from the one that became prevalent in demand theory.

By revisiting this episode, this article makes two contributions. On the one hand, it provides a better understanding of the context in which the expression “goods are goods” emerged, showing that the interpretation of this expression has evolved, that it originally carried a critical dimension, and that its existence predates the expression “characteristics approach” as defined by Lancaster. On the other hand, it sheds light on the origins of Lancaster’s work on the characteristics approach, which follows from his radical critique of demand theory. Although Lancaster is considered an economist who had a significant influence on economic theory in the second half of the 20th century (e.g., Krugman 1999; Findlay 2018), and his article “A New Approach to Consumer Theory” is the eighth most cited article in the *Journal of Political Economy* (Amiguet et al. 2017), few studies have focused on his career. This article therefore offers an opportunity to learn more about this economist and the origins of his work on the characteristics approach.

The first section explains the origin of the expression “goods are goods” by presenting the content of Lancaster and Johnson’s articles. The second section connects these articles with Lancaster’s later work on the characteristics approach. The third section discusses three mobilizations of the expression “goods are goods” in demand theory in light of the analyses presented in the previous sections.

1 The Origin of the Expression « Goods are Goods »

In 1957, Kelvin John Lancaster published a six-page article titled “Revising Demand Theory” in *Economica*. This article is a harsh critique of John Richard Hicks’s book *A Revision of Demand Theory* (1956). This is not a book review, as book reviews were a separate section in *Economica* at the time. Lancaster begins by noting that the verb “to

revise” seems to have lost its meaning, which originally implied condensing and simplifying a topic. This remark is a way of criticizing the choice of the title of Hicks’s book, which is about two hundred pages long, whereas the treatment of demand theory in *Value and Capital* (1939) was about sixty pages, without, according to Lancaster, any substantial enrichment of demand theory in the meantime. He further observes that economists increasingly use tools that allow for the condensation of results’ presentation. Therefore, with constant content, fewer pages are needed to present the results of demand theory in the 1950s compared to the 1930s. Lancaster is not explicit about the nature of these tools. However, he mentions that Hicks uses them in the first chapters of his book (the best chapters according to him). In these chapters, Hicks (1956, 4) explains that he tries to stay as close as possible to the tools used by Paul Anthony Samuelson in *Foundations of Economic Analysis* (1947). We can therefore mention algebra and difference equations.¹ Lancaster’s comment can be situated within the debates of that period regarding the mathematization of economics, defined as an increased use of these tools (Beed and Kane 1991, 581), which were primarily taking place in the United States.² A notable example is the 1954 special issue of the *Review of Economics and Statistics* dedicated to this topic, in which Samuelson published his famous three-page article “The Pure Theory of Public Expenditure” (1954b). Samuelson explained that the brief length of his article was intended, among other things, to demonstrate that specific mathematical tools allowed for a concise presentation of economic results (1954a, 380). Even if Lancaster was not an active promoter of the mathematization of economics, he did have a strong inclination for the use of mathematics in economics. On the one hand, he was trained in geology with mathematics as his principal minor before becoming an economist, describing himself in the 1950s as “the most mathematical of my generation of economists at the LSE” (1997, 58). His first article, titled “A Refutation of Mr Bernardelli,” consists in using his

¹ “As the author of *Foundations of Economic Analysis*, published in 1947, Samuelson may be seen as one of the most ardent defenders of a type of mathematics, made of matrices and difference equations, which questioned the usefulness of the kind of diagrammatic analysis that was so central in the practice of economists less than ten years before, and this is one of the reasons which could explain why he has been pointed out as the founder of ‘modern economic theory’” (Giraud 2010, 177).

² Many years later, he recalled this period of the 1950s where he was at the London School of Economics and observed “an explosion in mathematical economics that was taking place in the United States, but had not yet really arrived in Britain” (1997, 57).

mathematical skills to dismantle the arguments presented by Harro Bernardelli (1952) in an article which “baffles the unsophisticated reader with specious and misleading mathematics” (1953, 259). His second article follows the same logic (Lancaster 1955). On the other hand, Lancaster’s work is characterized by an extensive use of mathematics, sometimes mathematics that was not widely understood by his colleagues, particularly in his work on qualitative economics, which heavily relies on matrix theory (1962; 1964; 1965). Finally, he authored a textbook titled *Mathematical Economics*, where he mentions Samuelson’s argument concerning the condensation of economic results (1968, v). Lancaster’s comment on Hicks’s book should therefore be understood in the context of the debates of the 1950s concerning the mathematization of economics.

If demand theory has not been expanded since 1939, according to Lancaster, and if Hicks uses tools that allow for a more concise presentation of his results compared to his previous book, how can we justify that his 1956 book is much longer than the treatment of demand theory in his 1939 book? According to Lancaster, if we exclude the first chapters, which account for sixty pages, and the concluding chapter, the remaining 120 pages do not say anything interesting (1957a, 354). Therefore, a large portion of the book is superfluous according to him. To be more precise, he argues that this portion is:

largely occupied in heroic attempts to extract more out of demand theory than is contained in it. In spite of this heroism, and in spite of the variety of subtle analytical ingenuities presented, the results are a mixed bag of valid conclusions from highly particular assumptions (surely a consumer whose expansion paths for all commodities are straight lines is not a common animal) plus dubiously, or only approximately, valid conclusions that seem to have little application. One cannot criticise Hicks for entertaining himself by playing analytical games, but one can criticise him for putting those games in a book of this kind and providing no signposts to assist the reader in sorting out the important from the trivial (1957a, 358).

Following this harsh judgment of Hicks’s book, Lancaster argues more broadly that demand theory contains very few valid propositions that can be derived from universally acceptable assumptions on the behavior of economic agents (1957a, 354). He goes further by suggesting that the only proposition in demand theory that can be derived in

the absence of empirical knowledge about the consumer behavior is the *substitution theorem*, which states that: « (i) at least one commodity shows a change in quantity of opposite sign to its change in price (unless there is no change at all in any of the quantities), and (ii) the numerical value of the sum-products for commodities in which price and quantity move in opposite directions exceeds the numerical value of the sum-products for commodities in which price and quantity move in the same direction (“substitution is dominant for the system as a whole”) » (1957a, 356). “Empirical knowledge” refers for instance to the assertion that: « the substitution effect is larger than the income effect » (*ibid.*, 357). He then demonstrates that the substitution theorem can be derived by simply using the *consistency axiom*, which he attributes to Paul Anthony Samuelson (1953). This axiom states that:

If any collection (A) fails to be chosen by a consumer, but collection (B) is chosen, in any situation in which both (A) and (B) are available, then collection (A) will fail to be chosen in *all* situations in which both collections are available (1957a, 355).

This axiom is a specific formulation of the weak axiom of revealed preference, also identified by Samuelson (1938). For an analysis of the links between revealed preference theory and the concept of “choice consistency,” see D. Wade Hands (2014). We use the notations from the textbook *Microeconomic Theory* by Andreu Mas-Colell, Michael Whinston, and Jerry Richard Green (1995, 17–36) to present Lancaster’s demonstration, which are clearer than those used by Lancaster (which is ironic, considering that Lancaster criticizes Hicks’s notations for their lack of clarity). The Marshallian demand $x(p, w)$ maps any income w and price vector p to the bundle of goods chosen by the consumer at market equilibrium. Considering two situations (p, w) and (p', w') , the budget constraints associated are $p \cdot x(p, w) \leq w$ and $p' \cdot x(p', w') \leq w'$. Lancaster assumes that $p' \cdot x(p, w) = w'$, implying that the bundle chosen in situation (p, w) exhausts the consumer’s income in situation (p', w') . Substituting this equality into the budget constraint, we obtain $p' \cdot x(p', w') \leq p' \cdot x(p, w)$, or equivalently $0 \leq p'(x(p, w) - x(p', w'))$. Due to the consistency axiom, $x(p', w')$ should not be accessible in the situation (p, w) , as otherwise the consumer would not have chosen $x(p, w)$. We have therefore $w \leq p \cdot x(p', w')$. Combining this inequality with the budget constraint, we

obtain $p \cdot x(p, w) \leq p \cdot x(p', w')$, or equivalently $0 \leq p(x(p', w') - x(p, w))$. If we add the two previous inequalities, we have:

$$0 \leq (p - p')(x(p', w') - x(p, w))$$

This inequality corresponds to the substitution theorem according to Lancaster, derived solely by using the consistency axiom. This inequality is equivalent to the *generalized compensated law of demand* (Mas-Colell, Whinston, and Green 1995, 39). The usual proof of this law relies on slightly different assumptions than those used by Lancaster, so it is worthwhile to briefly present this demonstration to highlight some implicit aspects and differences in Lancaster's demonstration. Three assumptions are made:

1. $x(p, w)$ is homogeneous of degree 0. For any p, w and scalar $\alpha > 0$, $x(\alpha p, \alpha w) = x(p, w)$. Therefore, if prices and income increase proportionally, the chosen bundle of goods remains unchanged.
2. $x(p, w)$ satisfies Walras' law. For any $p \gg 0$ and $w > 0$, $p \cdot x(p, w) = w$. The consumer spends his entire income. This is an assumption not made by Lancaster.
3. $x(p, w)$ has a unique value for every p and w . This assumption allows disregarding multivalued functions.

This demonstration also employs the usual formulation of the weak axiom of revealed preference. Consider two situations (p, w) and (p', w') . Each one is associated with a chosen bundle at equilibrium. This axiom states that if $p \cdot x(p', w') \leq w$ and $x(p', w') \neq x(p, w)$, then $p' \cdot x(p, w) > w'$. The first condition means that $x(p', w')$ is accessible in the situation (p, w) . This bundle does not exhaust the consumer's income. However, in this situation, the consumer chooses $x(p, w)$. This choice "reveals" his preference for $x(p, w)$ over $x(p', w')$. The second condition indicates that the bundles are different. Therefore, the weak axiom of revealed preference means that $x(p, w)$ should not be accessible in the situation (p', w') since the consumer chooses $x(p', w')$. This is why we have $p' \cdot x(p, w) > w'$. If this were not the case, the consumer would have revealed a preference for $x(p', w')$ over $x(p, w)$, contradicting his initial "revelation." The

weak axiom of revealed preference and the consistency axiom are two different formulations of the same idea.

Consider the transition from p to p' . Additionally, suppose that the consumer's income is "compensated" so that the bundle $x(p, w)$ is exactly accessible in this new situation. This means $w' = p' \cdot x(p, w)$. This is the scenario studied by Lancaster, although he does not explicitly mention compensation. If the Marshallian demand is associated with the three assumptions previously mentioned and the weak axiom of revealed preference is adopted, then for any compensated price change characterized by the transition from (p, w) to $(p', p' \cdot x(p, w))$, we have:

$$(p' - p) \cdot [x(p', w') - x(p, w)] < 0$$

The left part can be rewritten:

$$p'[x(p', w') - x(p, w)] - p[x(p', w') - x(p, w)]$$

According to Walras's law, $p \cdot x(p, w) = w$ and $p' \cdot x(p', w') = w'$. Through the compensated price change, $w' = p' \cdot x(p, w)$. Given the weak axiom of revealed preference, $x(p', w')$ should not be accessible in the initial situation, which means $p \cdot x(p', w') > w$. If we combine these four elements, we have $p'[x(p', w') - x(p, w)] = 0$ and $p[x(p', w') - x(p, w)] > 0$ and we derive the inequality. The generalized compensated law of demand is therefore equivalent to the substitution theorem as defined by Lancaster, although it relies on different assumptions. Making a connection between the substitution theorem and the generalized compensated law of demand highlights that Lancaster's article pertains to fundamental aspects of demand theory.

The following year, Harry Gordon Johnson published a one-page article in *Economica* titled "Demand Theory Further Revised or Goods are Goods" (1958). The expression "goods are goods" appears in the title of the article. The aim of this article is to demonstrate that the substitution theorem can be derived even more simply by merely assuming that "goods are goods," in the sense that goods are desirable. Johnson thanks Lancaster for comments on an earlier version of his article. He begins with a definition of the concept of "good," from which he derives a result about consumer behavior.

Define a good as an object or service of which the consumer would choose to have more. Then the collection of goods he chooses when he has more money to spend (prices being constant) must represent more goods than that he chooses when he has less money to spend (since he could have had more of each separate good) (1958, 149).

This definition reflects the idea that “goods are goods,” in the sense that a consumer prefers to have more units of a good rather than fewer units. Johnson then derives the fact that if prices are constant and income increases, the chosen bundle of goods will contain “more goods.” However, as H. A. John Green points out in a one-page article titled “When are Goods More Goods?” published the same year in *Economica*, the notion of “more goods” used by Johnson is confusing. Green distinguishes between a “vector” interpretation and a “choice-based” interpretation of the expression “more goods.” The vector interpretation asserts that bundle B contains more goods than bundle A only if it has an equal or greater quantity of each good. For instance, compared to bundle $A = (2 \text{ apples}, 2 \text{ bananas})$, bundle $B = (2 \text{ apples}, 3 \text{ bananas})$ contains more goods, whereas bundle $C = (1 \text{ apple}, 18 \text{ bananas})$ does not. The “choice-based” interpretation states that both bundles B and C contain more goods than bundle A . Green shows that the choice-based interpretation is a disguised reformulation of the consistency axiom. Therefore, it is not a simpler way to derive the substitution theorem compared to Lancaster’s approach. On the other hand, the vector interpretation has very limited scope unless inferior goods—those whose consumption decreases when income rises but are still desirable—are excluded by assumption. This is what Johnson does, as he writes in the first step of his demonstration: “(i) If [consumer] income rises, he buys more goods; this implies a presumption that normally the income-effect is positive” (1958, 149). However, this is an empirical assumption about consumer behavior, which Lancaster was precisely trying to avoid, and it is also highly debatable. Therefore, Johnson is mistaken in claiming that the substitution theorem can be derived even more simply from the idea that “goods are goods” compared to Lancaster’s approach. Johnson appears to have recognized this issue, as Green thanks Johnson for his comments on the earlier version of his article.

In summary, Lancaster believes that demand theory boils down to a single theorem, the substitution theorem, which can be derived from a single axiom, the consistency axiom. In Lancaster's view, demand theory is nearly empty, and this radical critique has connections with his reformulation of demand theory in the 1960s. In particular, he notes that "Hicks's book contains all the parts, beautifully polished and laid out, for a 'Do It Yourself Demand Theory Kit', but somehow the examples he gives of the uses of the parts are not always happy" (Lancaster 1957a, 357), a remark that foreshadows his work on the characteristics approach. On the other hand, Johnson argues that the substitution theorem can be derived even more simply by merely assuming that goods are desirable, which he summarizes with the expression "goods are goods." However, we have shown that Johnson was mistaken in asserting this. This will not prevent the expression "goods are goods" from having a significant legacy in demand theory.

2 Lancaster's Characteristics Approach

In 1957, when his critique of demand theory was published, Kelvin John Lancaster was a PhD student at the London School of Economics (he defended his thesis in 1958). By that time, he had already published several articles in *Economica* (1953; 1957b), the journal of the London School of Economics, as well as in *The Review of Economic Studies* (1955; 1956). We can notably mention his article on the Second Best, co-authored with Richard George Lipsey and published in 1956. In an autobiographical note, he mentions an anecdote about this article which should be told according to him "as an illustration for the sociology of science" (Lancaster 1997, 58). The anecdote is that, although he and Richard George Lipsey met regularly at the London School of Economics (where Lipsey was pursuing his PhD under the supervision of James Edward Meade), they worked independently on articles addressing the issue of the Second Best. It was the editor of *The Review of Economic Studies* who suggested that they combine their articles, leading to the 1956 publication. At that time, the editor of *The Review of Economic Studies* was Harry Gordon Johnson, whom Lancaster regarded as a "guru to young economists"

(*ibid.*).³ Therefore, Lancaster and Johnson were acquainted prior to their articles in *Economica*.

In this autobiographical note, Lancaster also mentions the “ferocious” seminars organized by Lionel Charles Robbins at the London School of Economics, which he attended as a PhD student. He notes that “the first year I attended the seminar, there was emphasis on consumer choice and welfare economics in the choice of topics, and on methodological fundamentals in the style of discussion. Both aspects undoubtedly influenced the direction of my own development as an economist” (*ibid.*, 57). Attending Robbins’s seminar therefore contributed to Lancaster’s deep understanding of demand theory, which enabled him to critique such a prominent figure as Hicks at a time when he was still a doctoral student. It also explains why his critique targets the methodological fundamentals of demand theory. As he argues, these two aspects, evident in his 1957 article, played a crucial role in shaping the direction of his future work, particularly his research on the characteristics approach.

In 1966, he published his most famous article, “A New Approach to Consumer Theory,” in the *Journal of Political Economy*. This article had a significant influence on demand theory and is the eighth most cited article in the *Journal of Political Economy* (Amiguet et al. 2017). Many works trace the origins of the “characteristics approach” back to this article, although earlier works had already proposed this approach (e.g., Hotelling 1929). In the preamble, Lancaster thanks Johnson for his comments on an earlier version of the article, highlighting the continuity of their exchanges over the past decade. The article begins with a presentation of what Lancaster calls the “current status of consumer theory.” He argues that consumer theory, since the 19th century, notably through the contributions of Slutsky, Hicks, and Allen, as well as through various works published over the preceding twenty-five years (which are not explicitly cited), “has been shorn of all irrelevant postulates so that it now stands as an example of how to extract the minimum of results from the minimum of assumptions” (1966a, 132). According to Lancaster, this long process culminated in the formulation of consumer theory as

³ This story is reminiscent of the role played by Tjalling Charles Koopmans in connecting Joseph Kenneth Arrow and Gérard Debreu, which led to their joint article on the existence of a competitive general equilibrium (Arrow and Debreu 1954; Dütte 2012).

presented by Gérard Debreu (1959; 1983 [1959]) and Hirofumi Uzawa (1989 [1959]), describing it as “a thing of great aesthetic beauty, a jewel set in a glass case” (*ibid.*). Several remarks can be made regarding this description offered by Lancaster.

On the one hand, Hicks is one of the only three names cited by Lancaster to illustrate the long process of clarifying and simplifying consumer theory. Given Lancaster’s harsh critique of Hicks’s 1956 book, particularly the accusation that Hicks did not contribute to “revising” demand theory, one might be surprised to see Hicks cited here. However, by associating Hicks with Roy George Douglas Allen, it becomes clear that Lancaster is referring to their article “A Reconsideration of the Theory of Value” published in *Economica* (Hicks and Allen 1934). This is further supported by Lancaster’s subsequent mention of a twenty-five-year period, which does not align with the publication of Hicks’s 1956 book. Lancaster also included Hicks and Allen’s article in his anthology on consumer theory (Lancaster 1998). As a consequence, the critique of Hicks’s 1956 book should not be seen as a critique of Hicks’s entire career, but rather as a reflection of Lancaster’s disappointment with a book by an economist whose work he otherwise appreciated. The only mention of Hicks’s book in *Consumer Demand: A New Approach* (Lancaster 1971), where Lancaster develops the ideas from his 1966 article, is to note that Hicks considered the possibility of a characteristics approach but abandoned it due to technical difficulties. Once again, the mention of Hicks’s book is framed negatively. However, by acknowledging that Hicks considered the possibility of a characteristics approach, we are able to envision the influence of Hicks’s book on Lancaster’s later work on the characteristics approach. There are therefore strong connections between the 1957 article and the 1966 article. On the other hand, Lancaster refers to “consumer theory” rather than “demand theory” without explicitly distinguishing between the two. The title of his book *Consumer Demand: A New Approach* maintains some ambiguity concerning the differences between these two theories. Throughout his career, Lancaster most often referred to consumer theory rather than demand theory (e.g., Lancaster 1991; 1998). Finally, while Lancaster is not explicit about the works from the past twenty-five years that helped clarify and simplify consumer theory, it can be assumed that he had his own work in mind. This likely includes his contributions to qualitative economics (Lancaster 1962; 1964; 1965), as qualitative

economics focuses on testable results that can be derived with minimal assumptions about the functions used in models—namely, results that can be formulated without explicit functional forms or empirical assumptions about the behavior of economic agents (Lloyd 1969). Another pertinent work is his article “Welfare Propositions in Terms of Consistency and Expanded Choice,” published in the *Economic Journal* (Lancaster 1958), in which he extends his critique of positive demand theory to the issue of consumer welfare. More specifically, he demonstrates that there is no need to employ concepts of utility and indifference to derive the main conclusions about consumer welfare, which is an extension of his 1957 critique of demand theory. He mentions his 1957 article, which he views as an application of Occam’s razor to consumer theory. He then refers to Johnson’s article in these terms:

[My article] brought forth a reply by Johnson (1958) which suggested, somewhat tongue-in-cheek, that the determinateness of the sign of the substitution effect (the only substantive result of the theory of consumer behavior) could be derived from the proposition that goods are goods. Johnson’s comment, on reflection, would seem to be almost the best summary that can be given of the current state of the theory of consumer behavior. All *intrinsic* properties of particular goods, those properties that make a diamond quite obviously something different from a loaf of bread, have been omitted from the theory [...]. Thus, the only property which the theory can build on is the property shared by all goods, which is simply that they are goods. Indeed, we can continue the argument further, since goods are simply what consumers would like more of; and we must be neutral with respect to differences in consumer tastes (some consumers might like more of something that other consumers do not want), that the ultimate proposition is that *goods are what are thought of as goods* (Lancaster 1966a, 132).

On the one hand, Lancaster suggests the ironic aspect of Johnson’s expression. While this irony is not evident in Johnson’s article, we can imagine that Lancaster, due to his close relationship with Johnson, knows the intentions behind the use of this expression. On the other hand, Lancaster reappropriates Johnson’s expression and gives it a different interpretation from the one Johnson originally intended. Lancaster uses “goods are goods” to indicate that “traditional” consumer theory (1966a, 133) neglects

the characteristics of goods, implying that we know nothing more about the goods than the fact that they are goods. The “goods are goods” approach is therefore contrasted with his “new approach to consumer theory.” He then combines this interpretation with Johnson’s original interpretation by reminding us that the term “good” has a positive connotation, and so the only thing known about the goods is that they are desirable to consumers. This combination of the two interpretations is significant because it implies that the “goods are goods” approach opposes Lancaster’s characteristics approach. However, if we restrict ourselves to Johnson’s original interpretation, the expression “goods are goods” is actually compatible with the basic version of Lancaster’s new consumer theory. In this basic version, Lancaster focuses on characteristics that are desirable to consumers, so goods, which are assumed to contain positive quantities of these characteristics (Lancaster 1971, 18), are desirable to consumers. As a consequence, Lancaster’s characteristics approach aligns with Johnson’s interpretation of “goods are goods.” Lancaster offers a reinterpretation of this expression, which now refers to situations where goods are not described by the value of their characteristics. This is the interpretation that would later become predominant in demand theory.

In summary, we have demonstrated that the discussions surrounding Hicks’s 1956 book influenced Lancaster’s work on the characteristics approach. On one hand, Lancaster mentions that Hicks considered the possibility of a characteristics approach in his 1956 book, though he did not fully develop it. This suggests that reading Hicks’s book might have inspired Lancaster with the idea of the characteristics approach. On the other hand, Lancaster’s harsh critique of demand theory in 1957 likely made him aware of the need to develop alternative approaches, leading to his new approach to consumer theory. Finally, Lancaster reappropriated Johnson’s expression “goods are goods” to describe situations where goods are not described by the value of their characteristics.

3 Some Remarks on the Uses of the Expression “Goods Are Goods” in Demand Theory

Since the late 1960s, the expression “goods are goods” has been regularly used in demand theory. In this section, we focus on three instances where this expression has

been employed by prominent economists (Nerlove 1975; Polo 1986; Milgate 2018), which we will discuss in light of the reflections presented in the previous sections. These three instances were chosen as they exemplify the journey of this expression since the publication of the articles by Johnson and Lancaster. First, in 1975, in a joint review of the books *Consumer Demand: A New Approach* (Lancaster 1971) and *New Commodities and Consumer Behaviour* (Ironmonger 1972),⁴ Marc Nerlove writes:

As Johnson (1958) pointed out, with acerbic wit, the sign of the substitution effect is really the only substantive result of this highly refined theory of consumer behavior, and this “theorem” simply follows from the proposition that goods are goods (Nerlove 1975, 1085).

Nerlove echoes ideas and expressions from Lancaster when commenting on Johnson, which is consistent with the fact that he is reviewing Lancaster’s book. He particularly suggests the ironic dimension of Johnson’s expression and uses the terms “substantive result” and “substitution effect,” which Lancaster employs but are not present in Johnson’s article. However, Nerlove is mistaken in writing that Johnson claimed the substitution theorem is the only substantive result of demand theory. In fact, it was Lancaster who made this assertion, not Johnson. Johnson merely stated that the positive connotation of the word “good” could replace the consistency axiom to derive the substitution theorem, but he did not claim that the substitution theorem is the only substantive result of demand theory. If we consider the passage from Lancaster’s 1966 article where he comments on Johnson’s article (see the end of the second section), we can see where Nerlove’s error comes from. Lancaster adds his own comments in parentheses while presenting Johnson’s arguments, making it appear as if these were Johnson’s arguments. Nerlove is not the only one to make this mistake (e.g., Wilson and Sporleder 1971). Moreover, Nerlove states that Johnson showed the substitution theorem can be derived from the assertion that “goods are good,” but we have demonstrated that caution is necessary. One must either consider “goods are goods” as a reformulation of the consistency axiom or exclude inferior goods. To put it differently,

⁴ For an analysis of the connections between these two books, see Earl and coauthors (2022).

one cannot derive the consistency axiom solely from the statement that “goods are goods.” This is also a common error in the literature (e.g., Pickering et al. 1973).

In the entry “Goods and Commodities” in *The New Palgrave Dictionary of Economics*, Murray Milgate describes Johnson’s “goods are goods” as an “amusing aphorism” (2018, 5372) that suggests “that the definition of goods carried with it the whole of the theory of demand, that the explanation of the determination of the exchangeable value of ‘things’ was intimately bound up with the definition of the ‘things’ themselves” (*ibid.*). On the one hand, given that Johnson’s statement is incorrect, it is difficult to consider the expression “goods are goods” as an aphorism. On the other hand, even if we could consider this expression an aphorism, Johnson’s aphorism does not affirm what Milgate claims. As previously, Milgate attributes to Johnson a statement that actually belongs to Lancaster. Furthermore, neither Johnson nor Lancaster made statements related to exchangeable value. Finally, the connection that Milgate suggests between Johnson’s article and Lancaster’s work on the characteristics approach is rather doubtful:

Eight years [after the publication of Johnson’s article] in the *American Economic Review* Lancaster advanced the so-called characteristics theory of demand. The argument was a simple corollary of the Johnson theorem: if it is the aim of the theory of demand to determine the prices of goods, then one ought to specify as clearly as possible the goods which are being demanded (*ibid.*).

If Milgate mentions the *American Economic Review*, it is because Lancaster also published an article in 1966 in which he presented his theory of consumer production technology (Lancaster 1966b), which complements his article published in the *Journal of Political Economy*. It is unclear how Lancaster’s characteristics approach would be considered a corollary of Johnson’s theorem. Indeed, what is the connection between the substitution theorem, the fact that the word “good” has a positive connotation, and describing goods through the value of their characteristics? While there is indeed a link between Johnson’s article and Lancaster’s work, as we have shown in the previous sections, it cannot be claimed that Lancaster’s work logically follows from Johnson’s article. Finally, Johnson never states that the purpose of demand theory is to determine the price of goods.

Later in his entry, Milgate accurately points out “that nothing of substance had been altered in the definition of the word [‘goods’] even after it had been co-opted into the formal terminology of economic theory” (*ibid.*, 5373). As a consequence, the expression “goods are goods” can be understood as stating that goods (in the economic sense) are goods (in the common language sense). Johnson uses this expression in this way, as the positive connotation of the word “good” in the common language translates into economic terms as the idea that “goods” are desirable to consumers. Therefore, contrary to Michele Polo (1986, 174), one cannot claim that the expression “goods are goods” as used by Johnson is a “tautology.” In fact, the subject and the predicate are not identical. With Lancaster, the situation is more complex. On the one hand, he uses this expression critically to emphasize that the only thing known about goods is that they are goods, thereby invoking a principle of identity, which is indeed a tautology, to highlight the absurdity of traditional demand theory. On the other hand, since he combines this interpretation with Johnson’s interpretation by acknowledging that goods are desirable, one might question whether the expression “goods are goods,” as used by Lancaster, is truly a tautology.

4 Conclusion

In their synthesis of product differentiation theory, Curtis Eaton and Richard George Lipsey (who co-authored the article on the Second Best with Lancaster) explain that they choose to use the expression “goods are goods” to refer to situations where goods are not described according to the value of their characteristics “for obvious reasons” (1989, 728). In this article, we have shown that this interpretation is not at all obvious. The expression was originally proposed by Harry Gordon Johnson in 1958 to emphasize that goods are desirable. His aim was to demonstrate that by simply assuming that goods are desirable, one could derive the substitution theorem. This idea followed an article published the previous year by Kelvin John Lancaster, who argued that the substitution theorem was the only theorem in demand theory and that this theorem could be derived from the consistency axiom. This fundamental critique of demand theory influenced Lancaster’s later work on the characteristics approach, and Lancaster reappropriated Johnson’s expression to describe situations where goods are not

described through the value of their characteristics. While Lancaster's characteristics approach has had a significant impact on demand theory, we have also shown that his interpretation of the expression "goods are goods" has similarly been influential.

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