## A NOTE ON THE ORIGINS OF THE GENERAL THEORY OF SECOND BEST: THE ACCOUNTS OF KELVIN JOHN LANCASTER, RICHARD GEORGE LIPSEY AND HARRY GORDON JOHNSON

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# A Note on the Origins of The General Theory of Second Best: The Accounts of Kelvin John Lancaster, Richard George Lipsey and Harry Gordon Johnson

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Abstract: In welfare economics, the theory of second best is inextricably linked to an article by Richard George Lipsey and Kelvin John Lancaster, published in 1956 in the *Review of Economic Studies*. The publication of this article was encouraged by Harry Gordon Johnson, who was a member of the journal's editorial board at the time. Over the years, these three economists have reflected on the origins of this article. While their accounts share common elements, they also diverge significantly, particularly regarding the allocation of scientific credit. This note seeks to compare their accounts, to provide context about the intellectual environment surrounding the article's conception and to highlight the relationships between these three economists.

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In welfare economics, the theory of second best addresses situations where the conditions required to achieve an optimum cannot all simultaneously be satisfied. In such cases, the best course of action is not necessarily to try satisfying the feasible conditions while disregarding those that are unattainable (Findlay 2018). Instead, the objective is to determine the best course of action when full optimality is unattainable, which is the aim of the theory of second best. For example, imagine preparing a dessert for friends who love your chocolate cake recipe. Achieving an optimum would require obtaining all the necessary ingredients, the right utensils, and a functioning oven. If, during preparation, you discover you forgot to buy chocolate, the best solution is not to proceed with the recipe despite the missing ingredient but rather to purchase a chocolate cake from a bakery or choose an alternative recipe. This example illustrates the intuitive principle underlying the theory, which has been applied across numerous areas of economic analysis since the early nineteenth century (Bohm 2018).

In "The General Theory of Second Best" (Lipsey and Lancaster 1956), Richard George Lipsey and Kelvin John Lancaster developed a general framework to analyze these varied applications. Published in the Review of Economic Studies during Harry Gordon Johnson's tenure as an influential editorial board member, the article acknowledged Johnson's help in its introduction. The article has had a profound impact, reshaping "the way economists have since thought about economic policy in every field" (Findlay 2018, p. 7561). It was even republished in a special issue of the Review of Economic Studies highlighting the journal's most influential articles. This article has several notable features. First, the authorship order is not alphabetical, with Lipsey listed before Lancaster—a practice that is more common today in economics (Wohlrabe and Bornmann 2022) but unusual at the time. Second, apart from their response to Maurice McManus's critique (McManus 1959; Lancaster and Lipsey 1959), this was the only co-authored article of Lancaster's career, despite his bibliography comprising around sixty works. Third, the original article contains numerous typographical errors and errors in the demonstrations, suggesting it was rushed to publication. Notably, when the article was later republished in collections of their works (Lancaster 1996; Lipsey 1997), the authors used the corrected 1973 version (Farrell 1973) rather than the 1956 publication. Fourth, the article is divided into ten sections, an unusual structure for a twenty-two-page article, with transitions between sections sometimes unclear. These features raise questions about the conditions under which the article was written.

During their careers, Lancaster, Lipsey, and Johnson proposed accounts of the article's origins. Lancaster reflected on it in a retrospective book chapter published two years before his death (Lancaster 1997b). Lipsey addressed the subject in multiple works (Lipsey 1997; 2007a; Corden et al. 2001). Johnson discussed the article's origins in his correspondence. While their accounts share common elements, they also reveal significant differences, particularly regarding the scientific credit each believed they deserved. This note compares these accounts, details the context in which the article was conceived and the relationships between these three economists. Additionally, this note examines the role of autobiographical accounts in the history of economic thought (e.g., Weintraub 2018), particularly as Lipsey expressed skepticism in his intellectual autobiography regarding the reliability of third-party historical reconstructions (Lipsey 1997, p. xxxv). The first section presents Lancaster's account of the article's origins.

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<sup>&</sup>lt;sup>1</sup> https://academic.oup.com/restud/pages/history-of-restud-vi

The second section details Lipsey's version. The third section explores Johnson's perspective. The fourth section concludes.

#### 1 The Account of Kelvin John Lancaster

Kelvin John Lancaster was born in 1924 in Australia. Initially studying geology with a minor in mathematics and English literature, he later shifted his focus to economics after World War II. Following a few years working for a consulting firm in Australia, Lancaster earned a degree in economics from the University of London, by passing exams without physically attending classes (Lancaster 1997b). His exceptional results earned him a scholarship to pursue a Ph.D. in economics at the London School of Economics (LSE) under the supervision of Andrew Ozga. Ozga notably wrote an article on tariffs (Ozga 1955) that was later cited by Lipsey and Lancaster (1956, p. 14) as an example of a second best scenario explained by their theory. In a retrospective book chapter published two years before his death, Lancaster (1997b) described himself as the most mathematically inclined member of LSE during the mid-1950s. Warner Max Corden, another LSE doctoral student during this period who later played a role in our story (see infra), also praised Lancaster's mathematical abilities, calling him more generally one of the brightest members of his generation at LSE (Coleman 2006, p. 385). It was at LSE that Lancaster met Richard George Lipsey, who was also pursuing his doctorate. They interacted frequently at Robbins' seminar and the LSE Staff Seminar on Methodology, Measurement, and Testing in Economics (M<sup>2</sup>T), established in 1957 (de Marchi 1988). Informally, they often discussed economics one-on-one or with colleagues, and their 1956 article arose from these discussions. In the same retrospective chapter, Lancaster reflected on the origins of the article, writing:

The story behind that paper is worth telling, both as an anecdote and as an illustration for the sociology of science. It started from one of the many informal discussions that took place between Lipsey and myself, with or without others. On this occasion, the discussion involved customs unions and indirect taxes, among other things, and was undoubtedly influenced by Meade's newly published *Trade and Welfare* (Meade 1955), in which Meade had used the term "second best". In the course of the discussion we both noted that the problem in these cases was that neither was truly optimal, but that there was nevertheless an optimal policy for each given that the real optimum policy (universal free trade, or lump sum taxes, respectively) was accepted as unattainable. We

simultaneously observed that there must exist a general principle of "second best" policy, of which the above and other cases (such as those Meade had considered) were special instances, in which the second best optimum would not be attained by piecemeal application of first best policy rules like marginal cost pricing or zero tariffs. Fired up by the idea, I sat down to work out an analysis which established the general theory, using a two stage neoclassical Lagrange multiplier technique in which the first stage relationships (first best) were specifically prevented from being attained in the second. I illustrated this with an economy of three sectors, one competitive, one monopolistic but unchangeable, the third a regulated monopoly, to show that the second best policy for the third sector was not generally to price at marginal cost, but above it. I wrote the paper quite rapidly (resulting in some sloppy mathematics which made it into print) and submitted it to the Review of Economic Studies. It turned out that Dick Lipsey, unbeknown to me, had been equally fired up and had spoken to Harry Johnson (then a guru to young economists and the editor of the Review) about writing a paper setting out the same principle, illustrated by a customs union example and with some reference to the existing literature, but without any general analytical proof. Harry suggested that, since our works were on the same topic and almost entirely complementary in content, we expand the introductory material, include more references to the literature (he supplied suggestions) and assemble them into a joint paper. This we did, putting the papers more or less end-to-end and writing a new lead-in and a new conclusion. The order of the names was the order of assembly: it had no significance in terms of contributory shares. Dick asked me to choose the name order. Since I was polite, I put his name first (Lancaster 1997b, p. 59).

This article represents an early-career work for Lancaster and Lipsey. In fact, it was published two years before Lancaster defended his dissertation in 1958. Notably, Lancaster admitted that by the time he began his dissertation, he had lost interest in the original topic, "Capital as a Factor of Production," but was unable to change the topic of his dissertation. As a result, he did not publish any work based on his dissertation and was minimally involved in its writing. Instead, his doctorate was awarded on the strength of his other works, including the article co-authored with Lipsey (*ibid.*, p. 60). Regarding the article's origins, Lancaster describes it as a case study in the sociology of science. He recounts that he and Lipsey "simultaneously" conceived the idea for a general theory of the second best during a discussion. They then independently worked on the subject, unaware of each other's efforts, until Harry

Gordon Johnson intervened, informing them of their overlapping work and suggesting a collaboration. Johnson also provided guidance that improved the article. However, Lancaster's account leaves the timeline unclear, particularly how long it took him to write and submit the article, though he noted that it was completed "quite rapidly." Additionally, while Lancaster initially suggests that Lipsey merely discussed the idea with Johnson, he later mentions that Lipsey had drafted his own work, which the two later merged during their collaboration.

It is curious that Lancaster and Lipsey, who interacted frequently at the LSE, were unaware of each other's progress. This proximity makes it difficult to reconcile Lancaster's account with the literature on "multiple simultaneous independent discoveries" (Merton 1979; Niehans 1995; Ullmer 2009). Yet, this is precisely what Lancaster's narrative suggests. His account is reminiscent of the story behind Kenneth Joseph Arrow and Gérard Debreu's 1954 article, in which they proved the existence of a competitive general equilibrium using a fixed-point theorem (1954). Till Düppe (2012) highlighted that Arrow and Debreu worked independently on the topic, which was a subject of discussions at the Cowles Commission for Research in Economics. Debreu informed Tjalling Koopmans during a phone call that he was working on this subject, and Koopmans, in turn, revealed that Arrow had completed a manuscript on the topic and sent it to Debreu. After Debreu shared his comments with Arrow, they decided to co-author an article, which became one of the most important works in the general equilibrium theory of the second half of the twentieth century. In Lancaster's story, Johnson played a role similar to Koopmans as the intermediary responsible for initiating his collaboration with Lipsey.

Lancaster's account clarifies some points mentioned in the introduction while leaving others ambiguous. On the order of authorship, Lancaster explains that it reflects the sequence in which their drafts were assembled and his own sense of politeness, as he decided to place Lipsey's name before his. While both explanations are consistent with Lipsey being the first author, they are based on very different rationales, making it surprising that both are mentioned. On co-authorship, Lancaster initially intended to write the article alone, as he did with all his other works, but Johnson's intervention led to the collaboration. Errors in the article, according to Lancaster, stemmed from his haste and enthusiasm for the subject. However, his rush to submit the article to the *Review of Economic Studies* without thorough review remains unexplained. The article's structure—ten sections with transitions between sections often unclear —becomes more understandable when considering it as a fusion of two drafts. Lancaster wrote the formal sections outlining the principles of the second best theory, while

Lipsey wrote the other sections. Furthermore, Lancaster highlights Johnson's central role in shaping the article, which went far beyond his editorial duties. Lancaster more generally regards Johnson as a "guru" for young LSE economists of that era. He also noted the role of James Edward Meade, who taught at the LSE from 1947 to 1957 and proposed the term "second best" in a 1955 book. Lipsey and Lancaster adopted this term to generalize it beyond Meade's initial applications.

Following their 1956 article, Lancaster and Lipsey responded to criticisms from Maurice McManus (McManus 1959; Lancaster and Lipsey 1959), this time arranging authorship alphabetically. This marked the end of their collaboration and, more broadly, Lancaster's co-authored work. Subsequently, Lancaster contributed little to the second best theory. He wrote a book chapter applying the theory to electricity pricing (Lancaster 1979), an encyclopedia entry (Lancaster 1994), and a chapter in a *festschrift* honoring Lipsey (Lancaster 1997a). He referenced the article sporadically in his other works (Lancaster 1964a; 1980; 1998) and republished it in a corrected 1973 version (Farrell 1973) within a collection of his writings (Lancaster 1996). Overall, Lancaster displayed limited and intermittent interest in the second best theory throughout his career.

#### 2 The Accounts of Lipsey

Richard George Lipsey, born in 1928 in Canada, discovered economics during his undergraduate studies. After graduation, he worked for a year at the Bureau of Economics and Statistics in the Department of Trade and Industry in British Columbia before pursuing an MA in Economics at the University of Toronto (Lipsey 1997, p. xiv). During his time there, he attended lectures by Johnson (Corden et al. 2001, p. 611). Lipsey then faced a choice between pursuing a PhD at the University of Chicago or the London School of Economics. He chose the LSE, enrolling in 1953 (*ibid.*). Lipsey's dissertation focused on the theory of customs unions under the supervision of Helen Makower, who had published an article on the topic the same year Lipsey enrolled at the LSE (Makower and Morton 1953). Makower was also an expert in linear programming. Lancaster would later write the entry on Makower for the *New Palgrave Dictionary of Economics* (Lancaster 2018), noting that her work influenced his own research on the characteristics approach (Lancaster 1966; 1971). Lipsey defended his dissertation in 1957, and it was subsequently published as a book in 1970 (Lipsey 1970). At the outset of his dissertation, Lipsey lacked the mathematical skills necessary for his research. He admitted that

he could not differentiate  $x^2$  and was skeptical of relying on numerical examples and diagrammatic models, which he felt had serious limitations (Lipsey 1997, p. xv). During his early years at the LSE, he trained himself in mathematical economics, although he still needed assistance with the proofs of his first articles. For example, George Morton helped him write the proof included in the article that was later combined with Lancaster's work (*ibid.*). Morton was acknowledged in the final version of the article (Lipsey and Lancaster 1956, p. 19). This contrasted sharply with Lancaster's situation, as he was renowned for his mathematical skills and frequently helped his LSE colleagues with proofs for their articles (e.g., Archibald 1961).

Lipsey revisited the origins of his article with Lancaster on several occasions (Lipsey 1997; 2007a; Corden et al. 2001). As Max Steuer observed, "Dick is an unusually self-aware scholar and has made his views on economics readily available on many occasions" (2019, p. 723). Drawing on excerpts from various works where Lipsey reflected on the article's development, we can compare and contrast his account with Lancaster's. In his intellectual autobiography introducing the first volume of his collected works, Lipsey offers the following reflection:

During my first year on the staff [at the LSE, in 1955], two sequences of events stand out. The first began one morning when I was in my room reading an article by Andrew Ozga on customs unions. Kelvin Lancaster came in for the usual morning gossip. I said to him in high excitement, "You know these guys are all discovering the same theorem in all sorts of different guises." Kelvin replied that ever since he had read Samuelson's *Foundations*, he had wondered why people put such stress on fulfilling selected optimum conditions when all of them could never be fulfilled. I went to the common room for coffee and, as luck would have it, I bumped into Harry Johnson and explained our great insight to him. "Publish immediately" was his advice. Kelvin worked out the general proof and I worked on my customs union example and the literature survey. Harry played an important part in arguing that if the article was to have the impact it deserved, we should do an exhaustive survey of the literature. He suggested several articles of which we were unaware and helped us write an article which had world-wide impact rather than going unnoticed as it might have done if less care had been spent on it (Lipsey 1997, p. xvii).

This account offers additional details compared to Lancaster's version. First, it was Lipsey's reading of Andrew Ozga's 1955 article, cited in their final article, that sparked the

initial discussion with Lancaster and led to their collaboration, Ozga being Lancaster's dissertation supervisor (see *supra*). Second, Lancaster referred to Paul Anthony Samuelson's *Foundations of Economic Analysis* (1947) to justify the need to study the second best, arguing that Samuelson had shown the futility of aiming for the first best. At the time, Samuelson's book was an important reference for many LSE scholars from Lipsey and Lancaster's generation (de Marchi 1988), and Lancaster regarded Samuelson as a significant influence on his own work (Lancaster 1997b, p. 58). Finally, Lipsey mentioned that he met Harry Gordon Johnson on the same day he discussed the topic with Lancaster. Johnson advised Lipsey to publish on the topic immediately, which helps explain the many errors in the article, attributed to the haste induced by this advice. Lipsey's account, however, does not address the question of authorship order.

On the 50th anniversary of the article's publication, Lipsey (2007a) provided further insights. He recounted that after his morning discussion with Lancaster, "Kelvin invented a proof of the main proposition that afternoon and submitted it to the *Review of Economic Studies*" (Lipsey 2007a, p. 351). In this compressed timeline, Lancaster drafted and submitted the article within a single day. Lancaster's claim that he wrote the article "quite rapidly" appears understated given these circumstances. However, questions remain about why Lancaster submitted the article directly to the journal rather than consulting with a member of its editorial board— one of whom, present at the LSE that day, was heavily involved in the journal's operations at the time (Lipsey 1997, p. 25)—or discussing it further with Lipsey, whose discussion with Lancaster had initiated the project. Lipsey also clarified that he was unaware of James Meade's work on the second best at the time, as he had not attended Meade's lectures on *Trade and Welfare* (*ibid.*). He found the first session unengaging, unlike Corden (Lipsey 2007a, p. 352) and Lancaster (Lancaster 1997a, p. 57). However, Lipsey did attend Meade's seminar on international trade. Lastly, Lipsey emphasized Johnson's critical role in the article's development.

Following his article with Lancaster, Lipsey referenced the second best in several works, most of which published after 2000 (e.g., Lipsey 2002; 2007b; 2017). The collaboration with Lancaster concluded after their joint response to Maurice McManus, as previously mentioned. Furthermore, neither Lipsey nor Lancaster acknowledged each other in their subsequent works, except for a mention in Lancaster's 1958 publication (Lancaster 1958). Nonetheless, Lipsey later showed considerable interest in Lancaster's work on the characteristics approach (Lancaster 1966; 1971) and cited these in several papers that mobilized the approach (Lipsey

and Rosenbluth 1971; Archibald, Eaton, and Lipsey 1986; Eaton and Lipsey 1989). Concerning his relationship with Johnson, Lipsey referred to him as a "mentor" (Corden et al. 2001, p. 611), despite a mere five-year age difference. Johnson played a significant role in Lipsey's early career. For instance, during his first years at the LSE, Lipsey drafted an early version of his article "The Theory of Customs Unions: Trade Diversion and Welfare" (1957b), which was cited in his article with Lancaster (Lipsey and Lancaster 1956, p. 14). Lipsey had the opportunity to discuss this article with Johnson during the 1954 Westminster Council, where they both represented Canada (Lipsey 1997, p. xv). Two years later, Johnson advised Lipsey to publish the article quickly, as Franz Gehrels had submitted a similar piece to the Review of Economic Studies (ibid.). Lipsey then submitted his article to Economica, the LSE journal. Gehrels' article was published in 1956 (Gehrels 1956), and Lipsey published a response in 1957, clarifying that "Mr. Gehrel's paper came into my hands only after my own note on the same subject had gone to print" (Lipsey 1957a, p. 211). Lipsey (1997, p. xviii) added that Johnson also played a decisive role in publishing his article "The Theory of Customs Unions: A General Survey" (Lipsey 1960), as Johnson arranged for Lipsey to be invited to a conference to discuss the topic. This caught the attention of a member of the Economic Journal editorial board, who then invited him to write an article on the subject (Corden et al. 2001, p. 612). Johnson also played a role in the publication of his article "Monetary and Value Theory: A Critique of Lange and Patinkin," co-authored with George Christopher Archibald (Archibald and Lipsey 1958), which faced multiple rejections before it was finally published in the Review of Economic Studies (ibid.). Archibald, also a doctoral student at the LSE at the time, later published an article highlighting several errors in Lipsey and Lancaster's article (Allingham and Archibald 1975). By the mid-1950s, Lipsey's ties with Johnson were much stronger than Lancaster's ties with Johnson. Lipsey remarked, "By then, I counted Harry as a friend as well as a mentor, and he played a key part in several of my early articles" (Corden et al. 2001, p. 612). After Johnson's death in 1977, Lipsey honored him with a laudatory article highlighting Johnson's contributions to international trade theory (Lipsey 1978).

#### 3 The Account of Johnson

Harry Gordon Johnson was born in 1923 in Canada. From 1939 to 1943, he studied political economy at the University of Toronto. He then joined the army, which took him to Europe, where he earned a Bachelor of Arts from the University of Cambridge in 1944 (Carey

2013, p. 289). Subsequently, he obtained two master's degrees, one from the University of Toronto in 1947 and another from Harvard University in 1948 (*ibid*.). Johnson then spent seven years at the University of Cambridge (Reuber and Scott 1977, p. 670), during which he maintained strong connections with the activities of the LSE, particularly through his participation in the "Oxford-Cambridge-London Joint Economics Seminar" (Lipsey 1978, p. 35). In 1956, he joined the University of Manchester. In 1957, James Meade left the LSE to join the University of Cambridge, enabling him to act as the external examiner for Lipsey's dissertation, which was defended that same year (Lipsey 1997, p. xix). Many anticipated that Johnson would succeed Meade at the LSE. However, despite support from younger faculty members like Lipsey, Johnson was not selected for the position. Lipsey speculated that Johnson's controversial review of Meade's The Balance of Payments (Meade 1951; Johnson 1951), which sparked debates at the LSE, may have influenced this decision (Lipsey 1978). In addition to critiquing Meade's work, Johnson expressed skepticism about the focus on comparative statics within qualitative economics, an approach favored by Lionel Robbins for addressing economic problems (Lipsey 2009). This critique would later be expanded by several LSE doctoral students who worked with Johnson, including Lancaster and Archibald, in the early 1960s (Lancaster 1962; 1964b; Archibald 1961; 1964). Johnson would eventually commend their "important work" on the subject (Johnson 1968). Johnson defended his dissertation at Harvard University in 1958, entitled "International Trade and Economic Growth" (AER Editorial Board 1958). This dissertation comprised a collection of his previously published articles (Moggridge 2008, p. 173). Therefore, Johnson, Lipsey, and Lancaster—a mentor and his two mentees—defended their dissertations within a span of two years. As Lipsey noted in his tribute to Johnson, despite their small age gap and the fact that Johnson had not yet completed his doctorate, he had already built a formidable reputation through extensive publications and editorial roles (Corden et al. 2001, p. 611). Notably, Johnson served on the editorial board of the Review of Economic Studies from 1949 to 1959 (Moggridge 2008, p. 104). After failing to secure Meade's position at the LSE, Johnson joined the University of Chicago in 1959. He later took on a dual role, accepting a chair at the LSE in 1966. By that time, however, Lancaster had already left the LSE for Johns Hopkins University in 1961, and Lipsey had moved to the University of Essex in 1964 (*ibid.*, p. 264), in line with the recommendations of the Robbins Report, which promoted the creation of new universities in the UK (Committee on Higher Education 1963).

Johnson's productivity as an economist was remarkable. Catherine Carey (2013, p. 289) noted that the bibliography of his works, compiled by the *Journal of Political Economy*, spans an astonishing 52 pages. Relevant to this discussion, Johnson published *Aspects of the Theory of Tariffs* in 1972, a collection of several of his works on international trade theory (Johnson 1972a). Warner Max Corden reviewed the book (Corden 1972), acknowledging Johnson's substantial work but suggesting that Johnson had underestimated the originality of his contributions. While generally positive, the review included some criticisms that Johnson struggled to accept. In a letter to Corden dated July 30, 1972, Johnson reflected on the origins of Lipsey and Lancaster's article.

#### Dear Max:

Thanks for sending me your review of my book on tariff theory. I have always known that you like me personally but disapprove of me professionally, and this comes clearly through in the review. I do in all probability overdo the no-originality, recognition of other people's work, but, it is likely that I learned it from Dennis Robertson. But new ideas are scarce in our business, whereas we are all trained how to give formal expression to one when we see it. And I would rather be known as someone who appreciated his colleagues' originality than as one who stole their ideas and made excessive claims for originality on his own behalf. I had a nasty experience (not my own) back in the fifties when I encouraged Lipsey to develop the theory of second best and he hold Lancaster and Lancaster tried to secure priority by sending a hasty draft article to the Review of Economic Studies. I made them write a joint article; but the idea was Lipsey's. (It was really mine, but I have enough ideas to keep my professional head above water, whereas Lipsey was in some doubt on that question.)

Anyway, thank you for reviewing the book. I don't usually get such thoughtful reviews. Yours sincerely,

Harry G. Johnson" (Duke Library, Rubenstein Library, W. M. (Warner Max) Corden papers/Box 2/Harry Johnson: 1964-1976).

In his letter to Corden, responding to the remark (which was not truly a criticism) that Johnson underestimated the originality of his work, Johnson explained that he preferred such a situation to taking credit for others' ideas—something he accused Lancaster of doing with Lipsey and, ultimately, with himself. Johnson claimed to have been the original creator of the general theory of the second best. This was a particularly harsh accusation against Lancaster, who was also well-known to Corden, as Corden had been a doctoral student at the LSE when

Lipsey and Lancaster published their article (Corden defended his dissertation in 1956.) While no evidence confirms this, it raises an intriguing question: did the order of authorship in the 1956 article reflect Johnson's assessment—made in his capacity as a member of the *Review of Economic Studies* editorial board—of Lipsey and Lancaster's respective contributions? Excerpts from Johnson's letter were cited by Donald Moggridge in his biography of Johnson. Moggridge also referenced a second letter, dated August 8, 1973, in which Johnson reiterated his claim to have originated the general theory of the second best (Moggridge 2008, p. 105). These letters offer a perspective that diverges significantly from those of Lancaster and Lipsey concerning the attribution of scientific credit. While Johnson's account may not necessarily be correct, it provides a complementary narrative to the intellectual autobiographies of Lancaster and Lipsey, in which they retrospectively reflect on the article's origins.

Johnson frequently referenced the second best in his later work (e.g., Johnson 1960; 1968; 1972b; 1977). In fact, he cited the concept far more often than Lipsey or Lancaster did throughout their careers. His relationship with Lipsey, particularly in the 1950s, was marked by significant intellectual closeness, as Johnson served as a "mentor" to Lipsey (see *supra*). Moreover, Johnson often cited Lipsey's work due to their overlapping research interests (e.g., Johnson 1963; 1965; 1974; 1975). He also reviewed Lipsey's dissertation, which had been defended in 1957 and published as a book in 1970 (Lipsey 1970; Johnson 1972c). In his review, Johnson began by reflecting on the mid-1950s as the golden age of the LSE, noting that Lipsey's book was a product of that period. He praised Lipsey for the intellectual achievement but highlighted several shortcomings in the work. Interestingly, Johnson attributed these flaws more to the senior members of the LSE than to Lipsey himself, suggesting that Lipsey had merely followed their guidance. Lipsey did not take this critique well, as evidenced by his later reflections in his intellectual autobiography, written 25 years after Johnson's review.

I have several times been the subject of historical reconstructions that were wide of reality—so much so as to make me mistrust all such historical accounts written by third persons. One obvious error was in Harry Johnson's review of my thesis [...]. According to Harry, I was a "soldier" trained for "active combat" and sent into battle "by the [LSE] high command". Anyone who knew the LSE at the time would know that my account of LSE's totally laissez-faire approach to supervision was the correct one rather than Harry's assumption that the LSE in the 1950s was like the Chicago he knew in the 1960s, in which PhD students were directed to particular subjects by their supervisors. Naturally I prefer Max Cordon's review of my dissertation (Lipsey 1997, p. xxxv).

Lipsey felt that Johnson's comments were so disconnected from reality that they made him skeptical of historical reconstructions of economists' work by third parties. This skepticism led Lipsey to place greater trust in intellectual autobiographies as a means of understanding an economist's contributions. Regarding Johnson's relationship with Lancaster, Johnson published an article expanding on Lancaster's critiques of John Richard Hicks's A Revision of Demand Theory (Hicks 1956; Lancaster 1957b; Johnson 1958). Lancaster acknowledged Johnson's response in his most famous article, "A New Approach to Consumer Theory" (Lancaster 1966), which was published in the Journal of Political Economy while Johnson served as its editor-inchief (JPE Editorial Board 1984). Lancaster also thanked Johnson for his feedback on an earlier draft of the article. Additionally, Johnson cited Lancaster's article, "Protection and Real Wages: A Restatement" (Lancaster 1957a; Johnson 1959), which seems to be Johnson's only other reference to Lancaster's work apart from the article on the theory of the second best. Later, Lancaster reviewed Johnson's book The Two-Sector Model of General Equilibrium (Johnson 1971). In his review, Lancaster described Johnson as "the last of the great geometers" (Lancaster 1972, p. 1432), drawing a parallel to James Meade, who had published A Geometry of International Trade (1952) shortly before Lancaster began his doctoral studies at the LSE. Even though they were few, these three economists still maintained connections after the singular experience of writing "The General Theory of Second Best."

### 4 Conclusion

This note revisited the origins of the article "The General Theory of Second Best" through the perspectives of its primary contributors. By comparing the accounts provided by Lancaster, Lipsey, and Johnson, it becomes clear that this article epitomizes the intellectual environment of the LSE in the mid-1950s. This is evident both in the references cited in the article (e.g., Ozga, Makower, Meade, Corden) and in the institutional affiliations of the key figures involved in its creation. In this sense, this note aligns with existing studies on the intellectual environment of the LSE during this period (de Marchi 1988; Gradoz 2024). Lipsey and Lancaster's article was conceived and published under considerable urgency, though the reasons for this vary depending on the account. These reasons include intense enthusiasm for the subject, editorial encouragement from Johnson, or the desire to secure priority in the discovery of the general theory of the second best. While these explanations are not mutually exclusive, they reflect distinct motivations behind the article's creation and highlight differing perspectives on the allocation of scientific credit. Notably, although Lipsey and Lancaster

acknowledged Johnson's role, Johnson claimed in his correspondence to have originated the idea, downplaying Lancaster's contributions. Without archival evidence, relying solely on the intellectual autobiographies of Lancaster and Lipsey might have led to the omission of this aspect. This note does not seek to determine whether Johnson was correct and Lancaster and Lipsey were mistaken. Instead, it aims to enrich their narratives by incorporating archival evidence, demonstrating the value of complementing intellectual autobiographies with documentary sources. Lipsey's skepticism toward third-party historical reconstructions—shaped by his negative experiences with Johnson—led him to favor intellectual autobiographies. However, this note suggests the complementarity of these approaches, aligning with recent historiographical studies devoted to this issue (e.g., Weintraub 2018). Finally, this note also examined the overlooked professional relationships between Johnson, Lipsey, and Lancaster, three economists who made substantial contributions to economic theory in the latter half of the twentieth century.

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