

Hans Singer's debts to Schumpeter and Keynes

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This essay discusses Hans Singer's intellectual formation and the influences on his early writings and on his post-1947 development economics. It asks what impact the unusual experience of studying with both Schumpeter and Keynes had upon his subsequent economic thinking and practice. It argues that the influence of both these mentors was surprisingly small, compared with that of Spiethoff and Clark. Singer repaid his debts to Schumpeter and Keynes, but by working in the new currency of development economics, some of which was his own coinage. His motivation for this vast effort was derived from the social egalitarianism of figures such as William Beveridge, Archbishop Temple and R. H. Tawney, rather than the liberalism of Schumpeter and Keynes.

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JEL classifications: B3, F1, O1

1. Introduction

'The most remarkable academic career in twentieth century England' is claimed to have been that of Joseph Needham (Cowling, 2001, p. 344). Maybe so, but Professor Sir Hans Singer had, if not the most remarkable, certainly a very impressive 60-year career as a development economist, both in England and elsewhere, during which he made seminal contributions to the analysis and policy of economic development. With his death in early 2006 at the age of 95, it is timely to re-evaluate the influences that shaped his work. This paper focuses on Singer's intellectual formation, while a companion piece looks in greater detail at his achievements in the arena of international development (Toye, 2006). Material for a reassessment of the youthful influences on Singer's thought is not scarce. As well as Singer's own writings (e.g., 1976, 1984, 1996, 1997), recent biographical accounts are valuable supplements (Shaw, 2002; Raffer, 2005). The UN Intellectual History Project recorded a lengthy Oral History Interview with Singer in 1995 which, despite some problems in interview technique and transcription, has proved an additional useful source.

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Singer's intellectual formation was highly unusual in that he studied with two of the greatest economists of the inter-war period, Joseph Schumpeter and John Maynard Keynes. Singer recalled his great expectations when these two 'wonderful minds' met in Cambridge in the summers of 1934 and 1935—and his despair when his expectations went unfulfilled. 'It was always extremely disappointing because they were two different people, they had very little to say to each other' (Singer, 1995, p. 24). This mutual lack of engagement pre-dated Schumpeter's highly critical review of Keynes's *General Theory* in 1936 (Backhouse, 1999, pp. 178–83). It is true that at the end of his life Schumpeter included Keynes in a book entitled *Ten Great Economists*, and that the tone of the memoir was generous about many of Keynes's personal characteristics and achievements. Yet its message was summed up with this famous back-handed compliment: 'it is possible to admire Keynes even though one may consider his social vision to be wrong and every one of his propositions to be misleading' (Schumpeter, 1952, p. 291).¹

In this paper, I shall pursue answers to the following questions. What did Hans Singer take from each of his two incompatible intellectual gods, and what intellectual debts did he incur when drawing on the legacies of Schumpeter and Keynes to make his own contributions to the economics of development? The answers cannot be found simply by looking at how Singer adjusted to his forced migration from the University of Bonn to the University of Cambridge in 1934. As a student in Germany, Singer was exposed to other influences besides Schumpeter, and once he came to Cambridge he felt other influences besides Keynes. Nevertheless, one can make a preliminary division between Schumpeter's influence during Singer's German period (Section 2) and Keynes's influence during and immediately after his Cambridge period (Section 3), and then one can try to see how themes from each period play into his post-war achievements in both economic theory and development practice, which are briefly summarised in Section 4. To anticipate, I shall argue in Section 5 that, despite Hans's repeated paeans of praise for both men (for example, in Singer, 1997), his intellectual debts to them were surprisingly small. Although their early support to him in his student years was rewarded by a great harvest of academic and official publications, there was a transfer problem, because Singer's work belonged to a different intellectual currency from either of theirs.

2. German Influences

Hans Singer was born on 29 November 1910 in Elberfeld, Germany, now absorbed into Wuppertal, a steel town on the river Wupper, which runs into the Rhine. His secular Jewish family was well assimilated to the local Protestant community and, at the Gymnasium where he studied classics, Hans had no strong sense of belonging to a minority. His father Heinrich—'a slightly remote figure'—was a medical doctor. During World War I, he served in the Medical Corps of the German Army, was awarded the Iron Cross, but returned home with his health ruined. Hans's mother, neé Antonia Spiers, 'a feminine figure in the old style', looked after the house and family, was without education or strong intellectual interests and adopted her husband's liberal political opinions. With Hans's next youngest brother (who later became an industrial chemist in Brazil), they formed a patriotic provincial German family of that era.

¹ Harcourt (2004, p. 129) calls the tone of Schumpeter's essay 'affectionate, appreciative, admiring'. True, but in this obituary Schumpeter deliberately side-stepped or soft-pedalled his issues of fundamental doctrinal disagreement with Keynes, observing the maxim *de mortuis nihil nisi bonum*.

Although Hans never claimed to have felt personally insecure, the times were not auspicious for patriotic Germans. Military defeat of Imperial Germany brought in its wake revolutionary conditions. During Hans's adolescence, the Weimar Republic struggled to establish itself in the face of internal and external enemies. In the spring of 1920, a rising of about 50,000 armed workers drove the German army out of the Ruhr, but was then crushed with considerable losses (Bullock, 1991, p. 71). In the first half of 1923, France invaded the Ruhr with an occupying force of 100,000 men, establishing a French zone that included Elberfeld (Fullbrook, 2004 [1991], p. 166). The Weimar government encouraged the Rhineland population to embark on a campaign of passive resistance to the French occupation that was then called off in September 1923.

The external value of the mark collapsed in the second half of 1923, and hyperinflation completely destroyed the internal value of the German currency. This episode was the origin of Hans Singer's interest in social and economic problems, as it was for Nicholas Kaldor (Thirlwall, 1987, p. 17). The young Singer was interested not just in the causes and potential remedies of hyperinflation, but also in its powerful social consequences—which included sudden and arbitrary redistributions of income and wealth and the rise of political 'saviours of the nation' such as Adolf Hitler (Haffner, 2002, pp. 50–4).

When in 1929 Hans was due to enter university in Bonn, he already knew that he would prefer to study economics rather than medicine as his father had wished. This choice was immediately confirmed once he had heard Joseph Schumpeter lecture. He found Schumpeter a brilliant and stimulating lecturer, as well as a fascinating personality with the adopted airs of an Austrian aristocrat. A lonely man after the early death of his second wife, he invited Hans to join his discussion group of high-flying students, which included August Lösch and Wolfgang Stolper—both committed Protestants and anti-Nazis. Singer completed his first degree in economics in 1932. During this time, Schumpeter forced him 'to learn a little bit of mathematics, econometrics and statistics'. Hans later praised him as 'a sort of an oasis in the desert of economics in Germany' (Singer, 1995, p. 16).

Hans started to work on a dissertation under Schumpeter's direction on the theory of economic development. According to Cairncross (1998, p. 12), the subject was the Kondratieff cycle—the sequence of long periods of price inflation and deflation and associated rapid and slow growth of output, caused by rising and falling waves of entrepreneurial innovation and investment. At this time, Schumpeter was refining his earlier view that the business cycle had a single, wave-like movement. Writing in March 1934, he declared:

I am convinced now that there are at least three such movements [sc. of differing periodicity], probably more, and that the most important problem that at present faces theorists of the cycle consists precisely in isolating them and in describing the phenomena incident to their interaction. (Schumpeter, 1936 [1934], p. ix)

Presumably, Hans's first research plan was to investigate this very problem.

Schumpeter, however, left Bonn to take up a chair at Harvard in 1932. Hans found a second supervisor in Arthur Spiethoff, who as Head of Department had brought Schumpeter to Bonn and who also researched on business cycles. Like Schumpeter, Spiethoff thought that the business cycle was integral to the development of capitalism itself, and their minor differences of opinion concerned the specific mechanism of the boom phase (Schumpeter, 1936 [1934], pp. 214–16). Spiethoff employed Hans as his

research assistant, investigating the cycle in house building and other construction. By the summer of 1933, Hans had already completed half of this new dissertation.

Hitler had now become Chancellor, and the Nazi threat was manifest, particularly to those of Jewish extraction. Spiethoff had stood firm against Nazi incursions onto the Bonn university campus, but it was not clear how long he could continue to do so. Singer left Germany for Zurich, then for Istanbul with the aim of getting a university job there. From Istanbul, he wrote to Schumpeter at Harvard, asking him for advice. After a few months, out of the blue, he received a letter from Richard Kahn, saying that Schumpeter had written to Keynes and had mentioned Singer's name as a candidate for a scholarship which King's College had established for refugee economists. Kahn wrote that he thought that, if Hans presented himself for interview in Cambridge, he would stand a very good chance of an award. And so it proved.

He had an urgent need to find a safe refuge, but refuge was not all that Kahn's letter signified to Hans. He already knew of Keynes as the English economist who, in *The Economic Consequences of the Peace* (1919) had claimed to demonstrate the economic impossibility of Germany's paying the war reparations stipulated in the Versailles Treaty. In *The Manchester Guardian Supplements* and *A Revision of the Treaty* (1923), Keynes had continued to make this case, as events in the Rhineland began to prove him right.¹ Since Keynes had the status of a near-saint in Germany in those days, it is not surprising that this had filtered through to the young Singer.

I got many of my economic ideas from the *Manchester Guardian Weekly* which was avidly read with a sort of self-taught English, and I had heard the name of Mr Keynes as a heroic figure who had criticised the reparations imposed by the Treaty of Versailles. (Singer, 1976, p. 1)

Later, this recognition of Keynes had been reinforced in another way by Schumpeter: 'Schumpeter, less in his lectures than in his informal evening seminars in his villa by the Rhine, had impressed on us the importance of Keynes's monetary writings' (Singer, 1996, p. 1).

It was probably not so clear to Hans that the publication of Keynes's *Treatise on Money* (1930) had persuaded Schumpeter to destroy and then re-start his own ultimately unfinished treatise *Geld und Wahrung* (*Money and Currency*) because he feared that Keynes had anticipated him (Swedberg, 1991, p. 21; Moggridge, 1992, p. 593).

3. From the Cambridge period to World War II

Having left Germany in the middle of 1933, Singer arrived in Cambridge around March 1934. During Singer's Cambridge period, Keynes was much more his academic patron than his teacher. It is not known whether he was indeed the mysterious donor who had funded the two refugee studentships at King's, but that was what was rumoured. Hans was invited to join Keynes's Political Economy Club, and went through the familiar ordeal

¹ Keynes's claim that payment of war reparations on the scale required in the Treaty of Versailles was economically impossible was later disputed by tienne Mantoux, who argued that the French invasion of the Ruhr was 'half-hearted' and would otherwise have been able to extract heavier reparations. Even Mantoux, however, did not deny that the actual reparations payments partly contributed to the German inflation, 'that the annihilation of the mark was undoubtedly a catastrophe; the German middle classes were beggared, and the resulting social instability had much to do with the success of National Socialism in later years' (Mantoux, 1946, pp. 141–4). For a view sympathetic to Mantoux's criticism of Keynes's claim, see Harcourt and Turnell (2005, pp. 4934–5).

by fire, having to introduce a discussion on an economic topic standing with his back to the blazing hearth. Nevertheless, Hans was not in the inner circle surrounding Keynes—comprising Richard Kahn, Piero Sraffa, Joan and Austin Robinson. They certainly did provide him with informal tuition and support, but Hans belonged, as far as Keynes was concerned, in an outer circle of younger people such as V. K. R. V. Rao, Alexander Cairncross, Brian Reddaway and David Bensusan Butt. It was they, along with Lorie Tarshis, Robert Bryce and Sid Butlin, who eagerly listened together as Keynes lectured in the Mill Lane lecture rooms from the drafts of *The General Theory*.

Keynes himself had long moved on from the German transfer problem to the theory of money and unemployment. He was little interested in the economic behaviour of particular sectors of the economy, such as housing and other construction, since the essence of his work was the articulation of a theory of the relations between national level aggregates. So Hans had to find another supervisor for his half-complete Spiethoff-inspired thesis. Schumpeter believed that the nearest counterpart to Spiethoff in Cambridge was Dennis Robertson. According to him, Spiethoff was more the statistician and Robertson more the theorist, but their work was complementary, and their general visions of the cyclical process and its causation were closely similar (Schumpeter, 1954, pp. 1127–8). That natural solution to Singer's problem of maintaining continuity of supervision was not available, however. King's College, not Trinity, was offering the studentships, and Keynes's advice was decisive.

So Hans went to see Colin Clark, who agreed to take him on. Clark was not a trained economist (he had studied chemistry), though he worked briefly for the Economic Advisory Council on statistics of trade and employment and had helped Richard Kahn with his work on the employment multiplier (Howson and Winch, 1977, p. 25, 36n, 72, 84–5; Moggridge, 1992, p. 535). Keynes brought him to Cambridge in 1931 as a lecturer in economic statistics. He had already agreed to supervise Rao and Cairncross in dissertations for the PhD degree—the first ever economics candidates in Cambridge (Clark, 1984, p. 62–3). Clark brought a robustly empirical approach to economics, which he presented as a methodology of falsification. 'The hard scientific discipline has yet to be learned, that all theories must be constantly tested and re-tested against observed facts, and those which prove wrong ruthlessly rejected' (Clark, 1940, p. viii). Clark showed little awareness of the epistemological subtleties of this manifesto, or even how it related to his own work. In the 1930s, Clark himself was not testing any theories, but was estimating the size of the national product, its components and its distribution—using the economic theory of Keynes's *Treatise* as his guide to what had to be estimated and what did not.

Singer completed his dissertation in 1936. It was never published in full, but some major results were set out in Singer (1941A). Two components also found their way into books by Clark. Estimates of pure urban rents (i.e., excluding all interest and maintenance expenditure on the capital value of buildings) in England and Wales from 1845 to 1931 were included in Clark's *Conditions of Economic Progress* (1940, p. 413). The statistical method used to make the estimates was described in Clark's *National Income and Outlay* (1965 [1937], pp. 98–9). The dissertation thus contributed to the long-run historical study of the British economy, and to the accumulating methodology for drawing up a set of national accounts.

The only article of Hans's that ever really interested Keynes was one written jointly with Abba Lerner on duopoly and spatial competition (Lerner and Singer, 1937). Inspired by the work of August Lösch, this substantial criticism of the work of Harold Hotelling

attracted complimentary remarks from Keynes. The article was, however, Hans's first and last excursion into deductive theory. He turned to applied work, always basing himself on observing a concrete situation before moving to an inductive analysis of it. This turn was consolidated by his participation in William Temple's unemployment inquiry. Hans later spoke of William Temple—then Archbishop of York, later of Canterbury—as a great man, who had deeply influenced him. Keynes, in his patron role, recommended Hans to the Pilgrim Trust when the Trust was putting together a team of researchers to carry out an inquiry for Temple into the conditions of the unemployed.

For Hans, this project was 'the best possible antidote to the abstractions and intellectual refinements of life and thought in Cambridge'. It was also 'the sharpest possible reminder that economics was a social science affecting the lives of people in a direct and profound way' (Singer, 1976, p. 12). The study was conducted by questionnaire survey applied to about a thousand unemployed families in six depressed urban areas in November 1936. The research team (David Owen, Walter Oakeshott and Singer) lived with the families of the unemployed. They thus combined the methods of participant observation with those of statistical enumeration. Ironically, this mix of methods is being laboriously re-invented by today's economists of poverty (Hulme and Toye, 2006).

Singer undertook the main burden of statistical analysis of the incidence of unemployment, using a punched card system. Austin Robinson, in his *Economic Journal* review of the final volume—*Men Without Work* (Pilgrim Trust, 1938)—criticised the sample as unrepresentative, but praised 'the most interesting results'—those relating to the psychological aspects of unemployment (Robinson, 1938, p. 311). In modern parlance, the study tried to find out whether unemployment caused psychic distress over and above the loss of income involved, or whether the unemployed became 'adjusted' psychologically to the deprivation of income and work. The former effect was predominant, in line with the findings of the contemporary economists of happiness (Frey and Stutzer, 2002, p. 428), but there was some evidence for the latter effect, which pre-figures the current concern with 'malleable utilities' (Sen, 1999, pp. 358, 362–3).

As far as Hans was concerned, *Men Without Work* provided him with a number of important opportunities. It allowed him to begin to draw on the humanitarian motivations that he had absorbed from observing his father's medical work among the poor. He was the author of the Trust's interim report on the links between unemployment and health. As he turned to applied economics, he learned to use economic and statistical tools in the broad context of social science enquiry, following in this respect the practice of the earlier poverty studies of Booth and Rowntree. Substantively, the study underlined that long-term unemployment was not just the outcome of deficient aggregate demand *à la* Keynes, but of many other factors—not least of which was labour-saving technical change in specific occupations, something that did not figure in Keynes's new system, and which was central to Schumpeter's critique of it.¹

After Singer took up his first academic appointment at Manchester University in 1938, he persevered with the study of unemployment, summarising his understanding in his first book, *Unemployment and the Unemployed* (1940). Here he surveyed the many different

¹ Schumpeter's central criticism was: 'reasoning on the assumption that variations in output are uniquely related to variations in employment imposes the further assumption that all production functions remain invariant. Now the outstanding feature of capitalism is that they do not, but that, on the contrary, they are constantly being revolutionised. The capitalist process is essentially a process of change of the type that is being assumed away in this book, and all its characteristic phenomena and problems arise from the fact that it is such a process' (Backhouse, 1999, p. 181).

sources or types of unemployment, and examined the forms of excess supply in the labour market that were preventing people from finding work—too many distant job seekers, too many unskilled, too many men, too many older people and too many with the wrong skills. He also wrote two useful articles that explored the dynamics of employment fluctuations (Singer, 1938, 1939). By the simple device of applying the standard stock-flow identities to the unemployment statistics, he pinpointed the ratios that would indicate the future trend of unemployment, and changes in its regional distribution. This method has been taken up again recently (Dixon and Mahmood, 2006).

Notwithstanding his very different perspective on unemployment, the events of World War II made Hans more deeply indebted to the patronage of Keynes. The first occasion was in April 1940, when Hans was interned by the British government as an enemy alien, along with several other refugee economists including Piero Sraffa, Paul Streeten and Erwin Rothbarth. (Since his name was also on the Nazis' list of those to be rounded up after the invasion of Britain, Singer was in the classic no-win situation.) Ilse Singer, his wife, wrote to Keynes to beg his intervention with the Home Office. Keynes, despite his preoccupation with war finance, took up the cudgels, and got him released after six weeks (Keynes 1971–89, XXII, p. 190). Singer then demonstrated his wartime utility by writing, at Keynes's request, a series of 12 articles in the *Economic Journal* on the German war economy.¹ The second occasion was when Hans applied for naturalisation as a British citizen, and Keynes acted as one of his character referees.² The third was when Keynes, recalling the subject of Hans's PhD dissertation, recommended him to the Ministry of Town and Country Planning to work on methods of compensation for land nationalisation in 1945–46. This was the assignment—bizarrely enough—that in 1947 became his passport to a career in international development.

4. The development economist

After the war, he wanted to resume his academic career in Britain, but in 1947 his new employer (Glasgow University) agreed to second him to the fledgling United Nations, despite his reluctance to go. When he arrived in New York, he knew only Michał Kalecki, Sidney Dell and David Owen (who had become the first head of the UN Department of Economic Affairs). In the end, however, he served the UN for 22 years with deep energy and commitment and a cornucopia of policy ideas.

Singer frequently stressed the accidental element in his becoming a development economist. He claimed that, when he arrived in New York, David Weintraub, the Deputy Director of the UN Department of Economic Affairs, selected him to work on developing countries because he misunderstood the British term 'country planning', thinking that it meant 'national planning', when it actually meant 'countryside planning'. His delight in relating this encounter indicates that Hans never took himself over-seriously, and was one of the most modest of men.

¹ In one of these articles, Hans drew attention to the German use of a 'points' system of rationing items of civilian consumption (Singer, 1941B, pp. 29–31). This was read by Richard Kahn (then at the Board of Trade) who used it, with the help of Brian Reddaway, Evan Durbin and Alfred Maizels, to design the British scheme of wartime clothes rationing (Marcuzzo, 1990).

² Hans later thought it had been counter-productive to flourish Keynes and Temple as referees, and that his naturalisation would have gone through faster if he had relied on plain Mr Smith and Mr Jones (Kunibert Raffer, personal communication, 21 April 2006).

He made his mark almost at once, with a study of the terms of trade of developing countries in 1948. Using British trade data, he pointed out that (contrary to the classical economists' view) the terms of trade for countries exporting primary commodities had been declining for a hundred years (UN, 1949). His study was passed to Raúl Prebisch, of the UN Economic Commission for Latin America, who used it to assert that the metropolitan countries were retaining all the benefits of global productivity increases. The UN thereby became associated with unorthodox economics. Singer's sole authorship of the secular decline doctrine—which had previously been known as the Prebisch–Singer thesis—is now beyond dispute (Toye and Toye, 2003). The doctrine drew swift attacks from North American economists, including Jacob Viner, Gottfried Haberler and Gerald Meier, but in the 1980s it held up well under a variety of heavy-duty statistical tests undertaken by Prabhajit Sarkar, John Spraos, David Sapsford, Tony Thirlwall and others. By the 1990s, it had become generally accepted that there is a long-term downward trend in primary commodity prices *vis à vis* the prices of manufactures (Ardeni and Wright, 1992). Even the IMF now advises the governments of developing countries to regard primary commodity price booms as temporary, and price collapses as permanent.

Simultaneously with the terms of trade study, Hans researched and wrote a study for Maurice Pate, Executive Director of UNICEF, which was changing from an emergency operation to one concerned with children's needs more generally. Hans was inspired by a lecture given by the nutritionist Nevin Scrimshaw of MIT, who showed that malnutrition of pregnant women had a permanent negative effect on the brain function of their children. Hans immediately saw the implication for investment in education—that it would be less productive if not linked to adequate measures for maternal health and welfare. This insight informed UNICEF's first publication on economic development, which Hans wrote (Singer, 1947; 1995, pp. 37–42; Shaw, 2002, pp. 144–5). When Singer visited Schumpeter at Harvard and reported on his initial UN work, Schumpeter understood the terms of trade study, but responded to news of the children study with the exclamation: 'that is very interesting, but you are an economist!' Hans himself reckoned that economists had no monopoly on the subject and that the analysis of development needed not just economists, but also sociologists, anthropologists, political scientists and natural scientists.

In the 1950s, together with his Cambridge fellow-student V. K. R. V. Rao, Singer campaigned for a soft loan facility to be established within the UN. This function was given in 1960 to the World Bank rather than the UN, despite his advocacy. For this advocacy he was abused by the right-wing US press, which used the fact that he had supported Beveridge's welfare state plans as a stick to beat him. For a time, he suffered from serious depression, and thought of quitting the UN (Toye and Toye, 2004, pp. 172–4). When Kennedy became President, however, he strongly supported the US initiative for a UN International Decade of Development.

While looking into sources of finance for a UN soft lending agency, Hans became interested in the possibilities inherent in US Public Law 480 for the design of a multilateral food aid programme. The era of decolonisation had altered the political balance of the UN, increasing demands from developing countries for UN assistance. He chaired the expert group that planned the launch of the World Food Program, and remained a lifelong advocate of giving aid in the form of food. This was linked to his concerns about malnutrition.

He was active in advocating and designing many new UN specialised agencies in the 1960s. He played a leading role in the establishment of the African Development Bank; of the UN Special Fund for technical assistance, which was then absorbed into the UNDP; of

the UN Industrial Development Organisation; and the UN Research Institute for Social Development. Throughout his UN phase, Singer had maintained a copious flow of professional publications on all aspects of development, including technical assistance, human capital and the welfare of children. He favoured a planning approach to development, but was not an uncritical advocate of overseas aid. Rather, he showed that, because of the fungibility of funds, uncoordinated project aid was likely to be an ineffective form of development assistance (Singer, 1965, pp. 539–45).

At a time of life when many would welcome retirement, Singer resumed his British academic career at the newly established Institute for Development Studies on the campus of Sussex University. In the 1970s, he led (jointly with Richard Jolly) the ILO Employment Mission to Kenya, which paved the way for further work on strategies of redistribution from growth. This idea was taken up by the World Bank, but abandoned in the 1980s when neoliberal policy rhetoric dominated the Bank's agenda. In fact, it foreshadowed today's renewed development policy concern with the promotion of 'pro-poor growth' or 'shared growth' (World Bank, 2005). The Kenya Mission was innovative in that it stressed the potential of the informal sector of the economy, previously regarded as stagnant, to create employment and reduce poverty.

Publication continued apace while he was at IDS, his personal bibliography well exceeding 400 items by 2002. Nevertheless, he always found time for the many students and overseas visitors who sought him out for discussion and guidance. His generosity in this respect was legendary, with the result that he was more widely renowned abroad than he was at home. Perhaps because of this, and because of his diffidence, honours were slow to come. He was eventually the recipient of five academic *festschriften*—and a sixth posthumous one is in preparation! Once he reached 80, he received honorary doctorates from the universities of Glasgow, Kent and Sussex in Britain, and from overseas universities in Argentina, Austria and Portugal. Cambridge, however, stood aloof, despite initiatives from below the level of the professoriate.¹ In 1994, he was knighted by the Queen 'for services to economic issues'.

5. The question of debts

Coming now to the questions with which we began, the question of Singer's drawings from his incompatible intellectual gods, it is instructive to start from the summary of Singer's publications, classified by topic (Table 1).

'Perspectives on development' may seem like a fruitful category in which to seek for Schumpeter's influence, but that is deceptive. Hans's perspectives were not those of Schumpeter. Schumpeter was wrestling in 1932 with fundamental questions, such as how to explain the arrival of a sudden, discontinuous innovation (e.g., the appearance of railways) as part of an *internal* evolution of the capitalist system (Schumpeter, 2005). He was doing so with rapid industrialisation in Europe as his mental context. Singer's mental context was slow industrialisation in Latin America, Asia and Africa, and his concern was the practical one of how to accelerate it.

The category 'Keynes and Schumpeter' also looks promising. However, most of these dozen items came from set piece occasions of recent years and are semi-autobiographical. At most, they point to general themes that Hans shared with his two great teachers. With

¹ However, it was another Cambridge initiative that led to Hans's receipt of the World Food Program's Food for Life Award in 2001 (John Cathie, personal communication, 6 March 2006).

Table 1. *Hans Singer's publications 1935–2001, classified by topic*

	Topic	Number	Percentage
1	Terms of trade and Investment	57	12.7
2	Food aid and Food security	34	7.6
3	The UN and Bretton Woods Institutions	34	7.6
4	Employment and unemployment	32	7.1
5	Aid issues	29	6.4
6	Science and technology	23	5.1
7	Industrialisation	18	4.0
8	North–South issues	18	4.0
9	Keynes and Schumpeter	12	2.7
10	Debt and debt servicing	11	2.4
11	Perspectives on development	89	19.8
12	Miscellaneous	93	20.6
Total		450	100.0

Source: Adapted from Shaw (2002, p. 268, Table 27.1).

Schumpeter, he shared an emphasis on the importance of technological innovation and the disruption of traditional circulation processes. With Keynes, he appreciated the utility of the macro-economic framework and the importance of well-designed international economic institutions. Some of these shared themes do surface in Hans's writings—for example, the Keynesian theme informs his criticisms of the Bretton Woods institutions. Yet even the most assiduous bean-counters would not find the influence of Schumpeter and Keynes in more than a small fraction of his whole oeuvre.

In any case, classifying publications by topic does not get one very far into the analytical style of the pieces. One has to read them, and then one finds that Singer took very little from the economics of either Schumpeter or Keynes. In the case of Schumpeter, Singer joined the general drift away from business cycle economics in the aftermath of *The General Theory*. Partly, this was a loss of interest in economic cycles as such. As guided by Colin Clark, he became focused on measuring the secular structural changes involved in a process of urbanisation and industrialisation, rather than the dynamics of the fluctuations around the trend. Partly, it was abandonment of the Schumpeterian *leitmotiv* that understanding the economic cycle was essential to understanding the capitalist process itself, and the nature of economic development.¹

The contrast between Singer and Prebisch in this respect is very striking. Both men offered explanations of the secular decline in the barter terms of trade of commodity producers. Singer offered a simple structural explanation, based on institutional differences in the labour markets of industrial and developing countries. Prebisch asserted that 'the cycle is the typical form of growth of the capitalist economy' and overlaid the basic structural difference highlighted by Singer with a mechanism of different business cycles at the centre and the periphery (Toye and Toye, 2004, pp. 115–16, 126–8). This was pure Schumpeter, but it was not coming from the man who had been Schumpeter's pupil! Hans later claimed that the Prebisch–Singer thesis was 'greatly influenced by Schumpeter'

¹ As Kalecki argued, 'the long run trend is but a slowly changing component of a chain of short-period situations: it has no independent entity' (Kalecki, 1968, p. 263). Hans Singer would not have disagreed with this, but was simply more interested in the comparison of starting and ending points than with the details of the transition between them.

(Raffer and Singer, 2001, p. 26). This was much truer of Prebisch's contribution than it was of his own. In UN (1949) and Singer (1950), technical innovation in the form of invention of synthetics is mentioned just once, in a paragraph in the latter noting 'other factors' influencing the terms of trade.

The explanation for Hans's freedom from Schumpeterian influences lies partly with Schumpeter himself. In his farewell speech, he had told his Bonn students: 'I have never tried to bring about a Schumpeter school. There is none and it ought not to exist. . . Economics is not a philosophy but a science.' Beneath the surface, he felt quite differently (Haberler, 1950, p. 372). Yet, despite his emotional conflict, Schumpeter's pedagogy lived up to his austere ideal. Paul Sweezy, who was his student and then his assistant at Harvard from 1933 to 1942, witnessed to the fact that Schumpeter never sought conformity to his own point of view.

I do not mean to suggest that he had no strong opinions of his own. He had plenty of them. . . [but] he never tried to impose them on others and—rarest of all qualities in a teacher—he never showed the slightest inclination to judge students or colleagues by the extent to which they agreed with him. . . Schumpeter's gift to all of us was not a 'system' or a set of doctrines—it was only an education, and intellectually the most stimulating years of our lives. (Schumpeter, 1951, pp. xxiii–xxiv)

This self-effacement extended to excluding his own research from his lecturing. Thus it is not convincing to argue that Hans was influenced by Schumpeter's sociology any more than he was by Schumpeter's economics. In sociology, Schumpeter was a modernisation theorist, believing that imperialism was a survival from earlier socio-economic structures that would gradually disappear in the face of psychological, cultural and political changes brought about by the evolution of capitalism (1951, pp. 83–130). Indian independence in 1947 seemed to validate this belief, but Hans speculated that de-colonisation was possible only because the working of capitalism would maintain the same unequal world division of labour as has previously been enforced by imperial might (Toye and Toye, 2004, p. 118). However, we must reject the idea that this was Hans's response to Schumpeter's *Zur Soziologie der Imperialismen*. Such was Schumpeter's reticence about his own work that 'by listening to Schumpeter's lectures and studying his reading assignments and suggestions, students could never have found out that he himself had ever written anything on these subjects' (Haberler, 1950, p. 359).

In terms of Singer's intellectual debt to Keynes, the tally is almost equally low. Singer added something to the new framework of national accounts that was being built around the Keynesian aggregate concepts. Later, after Colin Clark left for Australia in 1938, Keynes took up his work on the national income in the context of war finance, subjected it to some theoretical refinements and remitted it to James Meade and Richard Stone for incorporation into the 1941 White Paper on National Income and Expenditure. Singer's role in all of this was really quite minor. After World War II, national accounts were put to work as the formal apparatus of development planning, but, as I have argued elsewhere, the economics that animated this framework was not Keynesian. It was a re-worked version of Michał Kalecki's analysis of the British wartime economy, suitably adapted (Toye, 2005, pp. 126–7). Hans's use of the aggregate accounting framework as a development planning tool did not therefore imply any strong Keynesian theoretical commitments.

Despite Hans's later protestations, the Pilgrim Trust work on unemployment contained little of Keynes's thinking on this subject. Hans stated that *Men Without Work* had verified Keynes's claim that there was involuntary unemployment that was not the result of

inflexible labour markets (Singer, 1996, p. 2). The issue at stake, however, was whether involuntary unemployment represented a state of disequilibrium that would (eventually) be eliminated by microeconomic market forces, or whether it represented an equilibrium position in a different—Keynesian—economic system in which money was not treated as a neutral factor. This was not a question that could be settled merely by pointing to the factual existence of involuntary unemployment. Keynes made very clear his view that theory could be defeated only by theory, in the single paragraph Chapter 1 of *The General Theory*.

Hans's thesis on the secular decline in the barter terms of trade of primary commodity producers was certainly a heresy against the views of the young Keynes, and of many of the young Keynesians. I have shown elsewhere that it was not just the classical position that Singer rejected, it was the view of the terms of trade that lived on in Cambridge in the writings of Meade, Reddaway, Joan Robinson and Colin Clark (Toye, 2000, pp. 213–9). Singer found the secular decline in primary producers' terms of trade by inspecting international trade statistics—in the company of Folke Hilgerdt, who had compiled them, but not noticed this trend. He was not trying to test any hypothesis; rather, he was trying to explain facts as he found them. In doing so, however, he undermined a major implication of neoclassical trade theory (Raffer, 1994, p. 83).

6. Conclusion: a transfer problem

There are different kinds of debt that a young economist incurs in the course of his education and apprenticeship. Some are personal, accumulated through receiving mentoring, friendship and academic patronage, and some are intellectual, accumulated through inspiration, intellectual guidance and assimilation of the other's ideas. Clearly, Hans owed massive personal debts to both Schumpeter and Keynes, most importantly for collaborating—despite their professional rivalry and their shared casual anti-semitism—to rescue him and his academic career from Nazi persecution. Such an extraordinary personal debt was hardly repayable (though Hans did manage to repay Arthur Spiethoff, by vouching for him in the post-Nazi era). Hans's protestations of his discipleship of both Schumpeter and Keynes should be seen against this huge burden of non-repayable personal debt, and not be mistaken for an indication of the extent of his intellectual drawings from their thinking.

Intellectually, Hans went his own way. His theoretical background was Marshallian microeconomics and Keynesian macroeconomics. However, he learned his method from Spiethoff, who 'started, in the spirit of Juglar, from minute investigations of available statistics' (Schumpeter, 1954, pp. 1127–8), and Clark, who always had a 'hand poised to rattle out the next calculation on the machine' (Robinson, 1943, p. 239). Applying simple models, he invested much effort in constructing appropriate statistics and making detailed observations of concrete situations. His intellectual style closely resembled that of Austin Robinson, although it was less obviously that of a frustrated engineer (Harcourt, 1998, p. 369). His approach was also in several ways similar to that of Brian Reddaway who, although Keynes's star pupil, 'was less concerned with economic doctrine than with solving practical problems' and for whom 'quantification was essential to the examination of economic phenomena' (Singh, forthcoming).

For its substance, Hans's vast output of publications drew on a different animating spirit from that which inspired either Schumpeter or Keynes—the concern for equality and redistribution, the concern for social security and for a broad range of international

institutions in the social field to act as guarantors of peace. This was partly a response to his own experience of being a refugee from persecution, which taught him to view everything from the viewpoint of the under-dog, the victim and the recipient of aid (Singer, 1995, p. 33). It was also the spirit of his medical father Heinrich, of Archbishop Temple, of Tawney and Beveridge and of the Quaker Maurice Pate. By the end of his life, he had much intellectual wealth to offer in payment of what he had received from Schumpeter and Keynes, but it was not denominated in their intellectual currency. Both would have understood this particular transfer problem.

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