## HARSANYI BEFORE ECONOMICS: AN INTRODUCTION\*

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Upon learning that John C. Harsanyi (1920–2000) was awarded the Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel, in 1994, for his pioneering work in game theory, few economists probably questioned the appropriateness of that choice. The Budapest-born social scientist had already been recognized as a first-rank contributor to non-cooperative game theory for some time (see, e.g., Gul 1997). However, as many readers of this journal will be aware, Harsanyi first contributed to welfare economics, not game theory. More importantly, he was philosophically minded and accordingly has been "acknowledged as the most influential philosopher in economics" (Güth 1994: 252). This is of some significance since, before Harsanyi became acquainted with economics around 1950, his main interest was philosophy and, to a lesser extent, sociology and psychology. Rather than an economist with philosophical leanings, Harsanyi was actually a philosopher turned economist.

- \* This introductory article was begun as I was Ludwig Lachmann Research Fellow at the Philosophy Department at the London School of Economics. It would not have been written without the assistance of one of my students at the École normale supérieure. Sandor Szakacs-Vass translated Harsanyi's article of 1947 into French and provided valuable research assistance. Luc Bovens suggested that it be translated into English. I am grateful to him for his encouragement and comments. Roger Backhouse commented on a longer version. Finally, for their assistance and kindness, I thank Anne and Tom Harsanyi.
- <sup>1</sup> Güth (1994: 270–271) focuses on game theory and places Harsanyi's work on economic philosophy under "Other essential contributions", a short section before the two-paragraph "Final remarks". Arrow (2001: F751) provides a more balanced account, though he stresses the economic foundations of Harsanyi's philosophical work "the founding of ethics on utilitarian principles and the implications of the Bayesian approach for epistemology" more than the philosophical roots of his economic work.

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This biographical note introduces an English translation of "A filozófiai tévedések logikai alkata" – a condensation of Harsanyi's 50-page doctoral dissertation from the University of Budapest – published in *Athenaeum* in 1947.<sup>2</sup> I would like to take this occasion to point out that Harsanyi's inclination towards the axiomatic approach in economics after 1950 is more than simply an illustration of the emerging trend affecting economics after the axiomatization of bargaining by John Nash (1950) and of social choice by Kenneth Arrow (1963 [1951]). It also reflects his earlier pursuits as a student of philosophy.

Only a little information can be retrieved about his personal life before Harsanyi fled Budapest to Austria in April 1950. By that time, he had spent some 30 years in a country that had suffered several traumas, from revolution to territorial losses, occupation, and dictatorship. As with many other Hungarians of Jewish origin, Harsanyi's parents had converted to Christianity and, like most of their peers, they were anxious to give their son a good education, which would help his assimilation and possibly protect him from the vicissitudes of political life.

In September 1929, Harsanyi entered the now legendary "Fasori" Lutheran Gymnasium in Budapest, a high school that trained such distinguished scientists as John von Neumann and Eugene Wigner. There he stayed eight years, studying various subjects from Greek, Latin, biology and physics, to philosophy (in which he developed a strong and lasting interest) and mathematics. In his last year at the Gymnasium in 1937, Harsanyi won the first prize in mathematics in a nationwide competition. After high school, he attended mathematics classes given by Lipót Fejér, the famous University of Budapest professor, but, looking for applications, Harsanyi did not find his teacher's purist preoccupations to his taste and decided therefore to work at his father's pharmacy to get some experience. In the summer of 1939, while war clouds were gathering over Europe, Harsanyi was sent to Grenoble to learn some French with a view to studying leather chemistry. Before long, however, his parents called him home and after an uneasy journey through Italy and Yugoslavia, he was back in the Hungarian capital.

In Budapest, Harsanyi followed his parents' advice to study pharmacy, knowing it would help him get military deferment and a comfortable job were things to go wrong in Hungary. And so they did with the outbreak of war in September 1939 following Hitler's hostile attitude towards its

<sup>&</sup>lt;sup>2</sup> Athenaeum was the journal of the Hungarian Society of Philosophy. Ironically, Harsanyi published his article in the very last issue of the journal. I am grateful to Madarász Aladár for information on this. The biographical sketch below draws on the interviews conducted by Marion Ross (2000) and correspondence with John Harsanyi's widow and her son. In this note I do not explore the relations between Harsanyi's early work in philosophy and his later work in economics. Another paper (Fontaine 2007) touches upon that issue.

eastern neighbours. In that context, it is hardly surprising that, after becoming a fully qualified pharmacist in 1942, Harsanyi sought to prolong military deferment. Accordingly, he entered a doctoral program in one branch of pharmacy. Despite his interest in chemistry, he had to specialize in botany since the only professor willing to accept a doctoral student of Jewish origins was a specialist in that field.

By March 1944, following attempts by the Hungarian government to establish contact with the Western Allies, Berlin resolved to occupy Hungary. Very quickly, a new, pro-Nazi, government was set up and from the first days of the occupation, hundreds of Jews were arrested in Budapest and elsewhere in the country. At the end of March, it was decided that Jews would wear a yellow armband and a few days later the ghettoization and deportation process was launched. In May Harsanyi was drafted into forced labour in the vicinity of Budapest. At the time, the Jewish community in Budapest had been relatively spared from the abuses perpetrated against the Jews in the provinces. The removal of the puppet Nazi government in August and the subsequent attempts to end the war presaged further improvements, but, following the seizure of power by the Arrow-Cross Party of Ferenc Szálasi, in mid-October, the political situation again deteriorated. Deportations, in particular, were resumed. Harsanyi was among the potential deportees. Yet, by taking off his white armband, which identified him as a Christian Jew, he managed to escape from the railway station where a number of Jews had been gathered for deportation to Austria. Harsanyi knew he could take refuge in a monastery in the centre of the city. There, a friend of his, a Jesuit priest, hid him for two months. It was mid-November. The Soviet troops had already reached the outskirts of Budapest.

After the Red Army entered Pest in January 1945, Harsanyi left his refuge and joined his parents in the ghetto. From there, they moved back into their house. It was not long before his mother died and his father reopened the pharmacy. With normalization on its way in Budapest, Harsanyi decided to take up a doctorate in philosophy with minors in sociology and in psychology. In the fall of 1946, while attending classes in these subjects, he met his future wife, Anne Klauber, who was studying psychology in the same institute at the University of Budapest. Capitalizing on his studies in pharmacy, Harsanyi moved quickly through his doctorate and by 1947 he had completed his dissertation under the supervision of Gyula Kornis. In "The Logical Structure of Philosophical Errors", Harsanyi set out to "investigate the objective difficulties that stand in the way of an objective settlement of philosophical debates" (Harsanyi 2007 [1947]) and rejected the explanation of differences in philosophical viewpoints in terms of emotional preconceptions and ideological beliefs. In answering the question, "How could the greatest philosophers confuse their subjective "preferences" with logical evidence?", Harsanyi 346 PHILIPPE FONTAINE

dismissed errors in the form of reasoning and offered instead an "axiomatic explanation" centred on axiom-derived errors. He concluded that philosophical theories differ with regard to the scope of validity of their axioms. Deriving axioms from induction, Harsanyi correlated differences in philosophical systems with differences in the justness of their generalizations.

His dissertation completed, Harsanyi was appointed as university assistant at a Budapest university institute in sociology headed by Sándor Szalai, a sociologist and philosopher, who was on his dissertation committee. While teaching on various sociological subjects, Harsanyi made his anti-Marxist views known; gradually, he became something of an outcast at university. At some point, around May 1948, while Communists were putting increasing pressure on Social Democrats to force them to fuse into a single party, the "Workers' Party", Szalai, himself a Social Democrat, informed Harsanyi that things were getting too dangerous for him at university and that he would have to give up his teaching post. Once again, Harsanyi went back and worked with his father.<sup>3</sup>

With the ongoing Sovietization of academic life, recurrent anti-Semitism and the nationalization of many activities, Harsanyi faced an uncertain future. He had good reason to speculate about his chances of success in another society, which he did more formally in the following years as he investigated the "theory of choices involving risk" in the context of "value judgments concerning social welfare". After discussing their prospects in Communist Hungary, Anne and John concluded that they should emigrate. With the help of Anne's father, they found someone who could take them across the Austrian border. John Harsanyi, Anne Klauber and her parents left Budapest in the second half of April 1950. Three days later, they were in the Russian-occupied part of Austria, heading towards Vienna, where they soon found themselves in the American zone. There, they stayed for two months at the Rothschild hospital, which had been turned into a refugee centre. With the deterioration of the international situation in late June, however, the party decided to go to Salzburg – which was then in the American-occupied part of Austria - where they waited for an Australian landing permit for some five months. In Salzburg, Anne Klauber found a job at the International Refugee Organization, which had been created a few years earlier to deal with the displacement of people in postwar Europe, while John Harsanyi spent his days reading at a library maintained by the US Armed Forces. In this library, he perfected his English, reading numerous books and journal articles, among which were a few about economics. In this way, Harsanyi became acquainted with economics before leaving Austria, though his knowledge of the discipline was still fragmentary.

<sup>&</sup>lt;sup>3</sup> As it turns out, Szalai himself was arrested in 1950 and jailed until 1956.

In what follows, the readers of this journal should not expect to find an insight that will revolutionize their views of Harsanyi's work. Instead, readers may expect to discover a useful starting-point for reconsidering the simple story of a philosopher émigré inevitably seduced by a social science that found itself increasingly permeable to axiomatization. Harsanyi's interest in axioms developed long before he turned to welfare economics. He was not drawn into economics by a desire to axiomatize the field. His entry into the subject was accidental: upon arriving at the University of Sydney the only sociologist he could find was a specialist on the indigenous population. This was not the kind of sociology Harsanyi was used to reading while in Budapest or that he was willing to pursue now that he had landed in Australia. Even so, his M.A. thesis in economics, Inventions and Economic Growth (1953a), continued to reflect his interest in the dynamics of societies and, as such, revealed how embedded his economic thinking was in a sociological framework. Welfare economics came soon after, but here again Harsanyi's developments in interpersonal utility comparisons could easily be related to sociology, more specifically, Weberian themes such as empathetic understanding. The shift towards economics was therefore gradual and carried with it both the philosophical leanings and sociological dimensions of his early thinking. If there was a break in Harsanyi's theorizing, it probably occurred after the turn to game theory in the second half of the 1950s, but this is not to say that his work on cooperative and non-cooperative games completely erased the earlier interests.4

Our historical knowledge of Harsanyi is still fragmentary. His archives focus primarily on the period following his arrival at the University of California at Berkeley in the mid-1960s. Accordingly, it is helpful to glean pieces of information here and there to improve our deficient knowledge of Harsanyi's gradual endorsement of economics. Most readers of this journal will not be aware of his 1947 article. This note and the following translation are nothing more than a modest attempt to shed light on one of the most important figures of economics and philosophy in the twentieth century.

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<sup>&</sup>lt;sup>4</sup> An adaptation of Harsanyi's M.A. thesis was published under the title "The Research Policy of the Firm" in *Economic Record* in 1954. On welfare economics, see Harsanyi (1953b, 1953–54, 1955).

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