

JEWISH SOCIAL SCIENCE AND THE ANALYSIS OF JEWISH STATISTICS IN THE EARLY TWENTIETH CENTURY

BY
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The late nineteenth century saw the multiplication of statistical studies on Jewish populations. This literature is now known as “Jewish Statistics” or “Jewish Social Science” (JSS). This article focuses on the articles published in Zeitschrift für Demographie und Statistik der Juden (Journal for Demography and Statistics of the Jews, ZDSJ). The ZDSJ was the main journal in JSS and appeared from 1905 until 1931.

Existing scholarship on JSS has either focused on the influence of Zionism (Hart 2000) or eugenics and race theory (Efron 1994). This article proposes to relate JSS to the history of economics and statistics. As is suggested by the intellectual profile of the main contributors to the ZDSJ, we argue that JSS was a by-product of the German historical school in economics. Though JSS was intended for a mostly Jewish audience, its organization and methods were clearly inspired by those of German economists.

I. INTRODUCTION

The late nineteenth century saw an impressive multiplication of statistical publications about the Jewish population. This statistical literature is now known as “Jewish Social Science” or “Jewish Statistics” (hereafter JSS; see Efron 1994; Hart 2000; Penslar 2001).¹ If JSS had some antecedents in the nineteenth century, its most important developments were clearly located in early twentieth-century Germany.² In 1903,

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¹ In this article, we use the expressions “Jewish Social Science” and “Jewish Statistics” as synonyms. The same remark applies to “Jewish statistician” and “Jewish social scientist.”

² Notably, Leopold Zunz advocated the application of quantitative methods to the study of the Jewish population in his 1823 article entitled “Prolegomenon to a Future Statistic of the Jews” (Zunz 1823). Such

German-Jewish intellectual leaders and communal institutions created in Berlin an organization meant as a gathering place for JSS: the Committee for the Establishment of a Bureau for Jewish Statistics, subsequently called “Association for Jewish Statistics” (*Verein für jüdische Statistik*, hereafter the Verein). In 1904, the Verein created a Bureau for Jewish Statistics (*Büro für Jüdische Statistik*, hereafter the Büro), which had affiliated branches all over Europe.³ The Büro was in charge of the publication of the *Journal for Demography and Statistics of the Jews* (*Zeitschrift für Demographie und Statistik der Juden*; hereafter *ZDSJ*).

This article focuses on the 435 articles that were published in the *ZDSJ* between 1905 and 1931, which we consider as a representative sample of the JSS literature of the early twentieth century. JSS has received little attention in Jewish history (Hart 2000, p. 4). Existing scholarship on Jewish statistics has either focused on the influence of Zionism (Hart 2000) or eugenics and race theory (Efron 1994). An important concern for JSS was indeed the demographic decline of the Jewish population in Germany, and more generally in western Europe. This concern was framed as a “problem” from the perspectives of both Zionism and race theory. Many Jewish statisticians were deeply committed Zionists and considered the strong decrease of the Jewish population in western Europe as showing the limits of assimilation policies, and hence as an argument in favor of a large emigration to Palestine. The demographic decline was also seen as a threat to the conservation of the “Jewish race.” Jewish social scientists largely accepted race theory, eventually turning negative race-based stereotypes about Jews into positive ones (Efron 1994; Vallois forthcoming).

Rather than see the writings in the *ZDSJ* as a collection of anthropological fantasies in early Zionism, this article proposes to relate JSS to the history of statistical and economic thought. Our general claim is that JSS was meant as an academic analog of the German historical school in economics. This is paradoxical, because most of Jewish social scientists were excluded from the German academia, and were interested in the specific economic and social issues of Jewish populations. Though JSS was intended for a mostly Jewish audience and worked in many ways as a quasi-autonomous Jewish academia, its organization and methods were clearly inspired by those of German economists. From the perspective of economic and statistical thought, this particular body of statistical knowledge can therefore be regarded as a sub-genre of late nineteenth-century German economics.

Studying JSS from the perspective of economics has two important methodological consequences. First, we focus mainly on the articles published in the *ZDSJ* that were about “economic issues” in Jewish statistics. We excluded most of the purely anthropological articles that dealt only with the question of the purity of the Jewish race. We will not ignore the fact that economic reflections in JSS were largely informed by race theory and physical anthropology. Yet we will not analyze in depth the epistemological status of race theory in JSS, or offer a comparison with other economists of the same period.

calls did not remain purely programmatic in the nineteenth century. One out of many examples: in 1871, the Israelite Synod of Augsburg conducted an important statistical study of the Jewish population in Germany, Austria-Hungary, and Switzerland (Nossig 1903, pp. 12–13).

³ On the institutionalization of the Verein and the Büro, see the first chapter in Hart (2000).

This article is also intended as a prosopography, i.e., a collective biography of the contributors to the *ZDSJ*.⁴ Some of these authors were strong personalities. Arthur Ruppin and Felix Theilhaber in particular were widely known in the Jewish intellectual community for their personal and controversial opinions that they expressed in various outlets outside of the *ZDSJ*. It is our assumption that the *ZDSJ* can nonetheless be treated as a coherent object for the historian. Individual differences between authors will not be ignored in this article, but we will focus on the way the *ZDSJ* and the Büro built a general method for JSS, elaborated both by and for a community of scholars.

The article is structured as follows. [Section II](#) argues that JSS can be seen as a by-product of the German historical school in economics, as suggested by both the intellectual profile of the main contributors to the *ZDSJ* and the academic ambition of the journal. The next two sections discuss methodological aspects. [Section III](#) addresses the question of scientific objectivity in JSS, in the context of strong political tensions in its Jewish audience. [Section IV](#) focuses on statistical methods. As a systematic effort of compilation and documentation, the *ZDSJ* provided subsequent scholars with a vast amount of “good quality” economic data on the Jews and, even more importantly, the practical and qualitative knowledge necessary to read, use, and interpret these data.

II. JSS AS A BY-PRODUCT OF THE GERMAN HISTORICAL SCHOOL

Intellectual and Sociological Profile of the Main Contributors to the ZDSJ

Jewish social scientists came from different countries, had different political views, and occupied different professions. Yet it is possible to identify some more homogenous subcategories within this population. For each subcategory, it will be shown that German economics of the period had a major influence in the intellectual background of these authors.

To further analyze the social and intellectual profile of these authors, we classified each of the 123 contributors to the *ZDSJ* according to the number of published articles and published pages in the journal. Our sample includes all issues for the entire history of the journal. The *ZDSJ* relied on a large number of mostly male contributors, but some of them were significantly more prolific than others and the authorship was actually quite concentrated.⁵ Out of these 123 contributors, the thirty-one who wrote more than three articles accounted for about 70% of the total numbers of papers published in the *ZDSJ*, and two-thirds of the total numbers of published pages. We chose to focus on these thirty-one authors, who are listed below in [Table 1](#).

We then retrieved biographical information for each of these authors from the main encyclopedias and biographical lexicons (Wininger 1925; Herlitz and Kirschner 1930; Hundert 2008; Skolnik and Berenbaum 2007) and additional sources from the secondary literature. We did not find any information for six of these thirty-one authors and ended up with a sample of twenty-five authors, of which only one was female (Sara Rabinowitsch). These twenty-five authors were classified into the categories listed in [Table 2](#).

⁴ For an application of prosopography to the history of economics, see, for instance, Svorenčík (2018).

⁵ Out of the 123 contributors, only six (4.9%) were female.

TABLE 1. LIST OF THE THIRTY-ONE MOST IMPORTANT CONTRIBUTORS TO THE *ZDSJ* (NUMBER OF PUBLISHED PAPERS >3)

Author	Number of articles	Number of pages	% articles	% pages
Segall, J.	56	456	12.9	17.1
Ruppin, A.	35	144	8.0	5.4
Weissenberg, S.	25	109	5.7	4.1
Blau, B.	20	74	4.6	2.8
Thon, J.	15	77	3.4	2.9
Koralnik, I.	12	99	2.8	3.7
Wassermann, R.	12	41	2.8	1.5
Goldberg, B.	9	37	2.1	1.4
Goldstein, N. W.	8	46	1.8	1.7
Rosenfeld, M.	8	49	1.8	1.8
Fishberg, M.	7	50	1.6	1.9
Kaplun-Kogan, W.W.	7	58	1.6	2.2
Knöpfel, L.	7	54	1.6	2.0
Hoppe, H.	6	26	1.4	1.0
Rabinowitsch, S.	6	48	1.4	1.8
Theilhaber, F.	6	29	1.4	1.1
Hanauer, W.	5	38	1.1	1.4
Leshchinsky, Y.	5	31	1.1	1.2
Margolin, S.	5	29	1.1	1.1
Weldler, N.	5	25	1.1	0.9
Auerbach, E.	4	27	0.9	1.0
Becker, R.	4	14	0.9	0.5
Brutzkus, B.	4	27	0.9	1.0
Cohen, A.	4	24	0.9	0.9
Elkind, A.D.	4	22	0.9	0.8
Haas, T.	4	33	0.9	1.2
Philippsthal, H.	4	25	0.9	0.9
Paul-Schiff, M.	4	14	0.9	0.5
Sanders, J.	4	11	0.9	0.4
Sofer, L.	4	22	0.9	0.8
Trap, C.	4	29	0.9	1.1
Total	303	1768	69.7	66.3
Total for the whole <i>Zeitschrift</i>	435	2666	100	100

TABLE 2. SOCIAL-PROFESSIONAL PROFILES OF THE MAIN CONTRIBUTORS TO THE *ZDSJ*.

	Physicians/doctors	Economists/statisticians		Lawyers	Total
		Non-academic	Academic		
Number	12	9	2	3	26
Percentage	48	36	8	12	104

It should be noted that each author could belong to several of these categories: an author could be both a physician/doctor and an economist/statistician.⁶ The two main professions in our classification are physicians/doctors and economists/statisticians, which provided about one-half (48%) of the total number of authors.

The group of doctors includes authors who were usually described in their biographical entries as being both “physician and physical anthropologists” (e.g., Maurice Fishberg, in Skolnik and Berenbaum 2007, vol. 7, p. 60). These authors had medical responsibilities as doctors and therapists but were also interested in anthropology. They played an important role in the collection of statistical material about Jewish populations all over the world. Authors such as Samuel Weissenberg traveled extensively and amassed data for anthropological studies of the Jews throughout the world (Skolnik and Berenbaum 2007, vol. 20, p. 738). The statistical studies were frequently commissioned by official authorities: for instance, Fishberg worked as an anthropological consultant for the US Bureau of Immigration (Skolnik and Berenbaum 2007, vol. 7, p. 60).⁷

The second most important occupation among these authors was economist/statistician. Only two of these economists/statisticians (Arthur Cohen and Boris Brutzkus) had academic careers. The vast majority of them had non-academic positions either in public administration or in Jewish communal and social-welfare institutions.⁸ Though they were recognized as economists and statisticians by the German administration and occasionally employed as such, most of these authors did not enjoy academic recognition. Jacob Segall, who was the editor of the *ZDSJ* between 1923 and 1931 and the most important contributor to the journal, worked, for instance, as a doctor (and belonged thus to both categories of “doctor” and “economist/statistician”). During and after WW I, he directed the German Office for War Statistics, then participated in the 1920s in the foundation of the leading social-welfare institution for German Jews (Herlitz and Kirschner 1930, vol. 5, p. 340).

Three contributors also worked as lawyers or practiced law (Bruno Blau, Jacob Thon, Arthur Ruppin), a seemingly less important profession among Jewish statisticians. Yet, it should be noted that the distinction between each professional category in our classification is not clear-cut. Segall was known as a statistician, economist, and

⁶ This is the reason why the sums of previous columns in total column are greater than twenty-five and 100%.

⁷ Other example: Arkadius Elkind worked for an Imperial German scientific society and collected anthropological material in Poland (Wininger 1925, vol. 2, p. 163).

⁸ In particular, the Jewish organizations meant to implement “economic reforms” of the Jewish population, such as the Jewish Colonization Association or the ORT (Society for Handicraft and Agricultural Work among the Jews of Russia), in which some of these authors could be employed as economic experts (e.g., Brutzkus).

demographer but worked as a doctor; conversely, Ruppin practiced law before becoming director of the Büro and editor of the *ZDSJ*. What matters to us here is the intellectual profile of these authors rather than exact proportions of their socio-professional status.

Our argument is that each of these three professional categories included authors whose intellectual background was largely influenced by the economics and statistics of the German tradition, known as the “German Historical School” (hereafter GHS).⁹ The vast majority of economists and lawyers had followed curriculum in German universities. Due to the interdisciplinary nature of the German social sciences in the late nineteenth century, it can be reasonably hypothesized that most of these authors had at least some courses in political economy, under the various labels in which the discipline was taught (*Nationalökonomie*, *Volkswissenschaft*). Statistical courses were also increasingly important in university curriculum at the end of the nineteenth century (Grimmer-Solem 2003, p. 49). The case of Ruppin illustrates this close relationship among economics, statistics, law, political science, and other disciplines belonging to what was sometimes referred to as “sciences of the state” (*Staatwissenschaften*): Ruppin first obtained a law degree, but then continued to pursue a doctorate in *Nationalökonomie* at the University of Halle; the subject of his dissertation was pure economic theory (Thünen’s theory of value and its relationship to the Theory of Marginal Utility), under the supervision of Johannes Conrad, editor of the influential *Jahrbücher für Nationalökonomie und Statistik (JNS)*.

Jacob Segall also wrote a doctoral dissertation in political economy under the supervision of Georg von Mayr, another prestigious economist and statistician (Segall 1908). The fact that both Segall and Ruppin had doctorates in political economy is worth noting, because they were key actors in the Büro: they edited more than half (53%) and themselves wrote about 20% of the total number of articles published in the *ZDSJ*. The *ZDSJ* also published doctoral dissertations in political economy on topics pertaining to JSS.¹⁰ Even non-German Jewish social scientists had usually studied in Germany, due to the severe restrictions toward the admission of Jewish students in tsarist Russia.¹¹

Physicians and physical anthropologists were probably less familiar with the economics of the GHS, but had indirect exposure to it through the new interdisciplinary paradigm of racial hygiene or eugenics, mostly taught and diffused in German universities as “Social Hygiene” (*Sozialhygiene*) or “Social Medicine” (*Sozialmedizin*). Basically, the methods of *Sozialmedizin* consisted in approaching medical diseases as consequences of social and environmental causes, and thus relied heavily on statistics and field surveys. Felix Theilhaber’s dissertation on the incidence of cancer of the uterus among Jews, Protestants, and Catholics combined medicine and confessional

⁹ We will not discuss here the issue of whether the GHS was really a “school of thought” in the history of economics. For a reference on this debate, see Pearson (1999, 2001); Caldwell (2001); Grimmer-Solem (2003, pp. 19–34); Hagemann (2015).

¹⁰ This was possible because doctoral dissertations were shorter than today’s standards, and could sometimes be only thirty pages long (Grimmer-Solem 2003, pp. 47–48). Examples of dissertations: Josef Unna’s, from the University of Frankfurt, in two parts (Unna 1925, 1926); Erwin Baron’s, from the University of Rostock (Baron 1927); Segall’s dissertation was also published by the Büro as a special issue (Segall 1908).

¹¹ A few examples: Sara Rabinowitsch was born in Berezin (now Bielorussia, formerly in the Russian Empire) but graduated in Germany in 1902 as a doctor of social sciences (Skolnik 2007, vol. 17, p. 39); Boris Goldberg was from Lithuania and studied in Hanover; Wladimir Kaplun-Kogan was born in Yalta and studied also in Russia; Yakov Leshchinsky was born in Ukraine and attended universities in Bern and Zürich.

statistics (Efron 1994, p. 143). Interdisciplinarity and the rise of statistics in German universities thus explains individual trajectories such as Segall's, who was trained and worked as a doctor but was also a recognized specialist of demography and statistics, which were important branches of German political economy.

Yet, very few Jewish social scientists became academic economists in a German university. An obvious explanation for this fact was discrimination against the Jews, and antisemitism, which was widely current in the German academic community of the early twentieth century (Lindenfeld 2008, pp. 283–284; Ringer 1990, pp. 135–136). Conditions became increasingly adverse for Jews in German academia before and during our period of interest (early twentieth century). Fritz Ringer's sociography of German academics between 1863 and 1938 indicates that the German universities were relatively open to both admission of Jewish students and recruitment of Jewish professors in the decade from 1870 to 1880, but Jews were progressively evicted in the late nineteenth century. In 1909–10, Jewish professors were overrepresented as “instructors” (*Privatdozent*), i.e., the lowest grade of professorship in the German academic system (Ringer 1992).¹² Jewish instructors had to be recommended by (usually non-Jewish) full professors for advancement. Discrimination against recruitment of Jewish professors was therefore not the result of explicit policies but relied mostly on the personal biases of the German academics.

An important exception to this discriminatory pattern was Arthur Cohen.¹³ Cohen had a very classical trajectory in the German academic community: he obtained a doctorate in political economy under the supervision of Lujo Brentano in München, started to work as a *Privatdozent* in 1906 in the Technological University of München, and became extraordinary professor six years later (Wininger 1925, p. 561). The case of Cohen suggests that recruitment as academic economists or social scientists was not impossible for Jewish social scientists, despite the strong anti-Jewish discrimination. It can reasonably be argued that Ruppin, for instance, could have had an academic career, since he seemed to have strong support from his influential supervisor, Conrad.¹⁴

Yet, pursuing an academic career in Germany was probably not conceivable for the vast majority of Jewish social scientists. They had one foot outside German academia and one foot inside, because of their academic training. But what matters to our argument is that German “mandarins”—i.e., the prestigious professors who owed their status to educational qualifications (Ringer 1990, pp. 5–6)—were taken as models for Jewish statisticians. Particularly influential for the contributors to the *ZDSJ* was Georg von Mayr, an economics professor in München, known as a specialist of population statistics. As already mentioned, Mayr supervised Segall's thesis. He was also regularly cited as an inspirational source by Jewish statisticians.¹⁵

¹² *Privatdozent* were usually not paid by their university but remunerated only through the private fees students had to pay to attend the lectures.

¹³ The other academic economist/statistician in our sample is Brutzkus. He occupied a less prestigious position than Cohen, mostly outside Germany. He started as a lecturer in Russia, then worked in the Russian Scientific Institute in Berlin, and ended up as a professor in Israel.

¹⁴ Conrad pushed Ruppin to apply for the Krupp prize, an academic competition on social Darwinism; Ruppin entered the competition and took the second prize (Bloom 2007a, p. 335). Ruppin also wrote several articles in Conrad's *JNS* in 1902.

¹⁵ See for instance the foreword in Theilhaber's *Der Untergang der deutschen Juden* (Theilhaber 1911a); Cohen wrote a special article in the *ZDSJ* for Mayr's seventieth birthday on his statistical legacy (Cohen 1911).

There were more than a few occasional references and acknowledgments. Jewish social scientists obviously tried to work and organize themselves as German academic economists. The institutional organization of the Verein, with the Büro in Berlin in charge of the publication of the *ZDSJ*, and affiliated offices throughout Europe, corresponded to the basic organizational model of political economy in the GHS. Statistical bureaus were indeed “key non-university research institutions of relevance to the mode of production of historical economics”; their connections by a network of numerous links allowed the dissemination of their methods (Grimmer-Solem 2003, pp. 62–67). Like the Büro in JSS, the important task of these statistical offices was to edit and publish affiliated journals. The typical career path for a German economist was to combine academic teaching and the practices of official statistics (Tooze 2001, p. 50): in addition to his academic positions, Mayr also directed the Statistical Office of the Bavarian State and funded its affiliated review.¹⁶ When Segall, former student of Mayr, was editing the *ZDSJ*, he was therefore occupying a very similar position to his mentor, though it was transposed into the Jewish intellectual field. Even if Jewish statisticians were mostly excluded from German academia, there was undoubtedly academic and scientific ambition in the *ZDSJ*.

A Scientific Ambition: The ZDSJ as a Statistical Platform

In his 1903 foreword to the first publication of the Verein, Alfred Nossig explained the purpose and objective of the association. According to Nossig, the main task of the Büro and its affiliated branches was the “processing and editing” (*verarbeitung*) of statistical sources. Such sources could be found either in “raw material” (typically, official results from public censuses) or from secondary sources, i.e., statistical data that had already been edited and published in other outlets (e.g., academic reviews, private research from communal institutions, publication of various scientific institutes) (Nossig 1903, p. 16). The term *verarbeitung* has to be understood as “preparatory work”: the Büro was meant to provide clean statistical data on the various Jewish populations, which could then be “worked out” for future research. After three years of editorship, Ruppin also claimed that the main objective of the *ZDSJ* had been to provide to the specialists the reliable yet hard-to-find statistical data, so that Jewish statistics would not be any more a “secret science” (*Geheimwissenschaft*; Ruppin 1907, p. 177).

To fulfill this objective, the Verein published in 1903 a systematic “Jewish statistical bibliography,” which listed the existing statistical sources on Jewish populations (Nossig 1903). This bibliographic work was continued in the subsequent publications of the *ZDSJ*. The journal was indeed organized in two parts: beside “articles” per se (*Abhandlungen*), the “statistical archives” (*Statistisches Archiv*) were short notices that indicated to the reader the recent publication of new statistical sources (e.g., outcome of a recent census), occasionally with one or a few statistical tables.

The task of *verarbeitung* was necessary because of the huge growth in the number of statistical sources in the years preceding the creation of the journal. This was due to the introduction and improvement of the modern periodic census in most European countries and America in the second half of the nineteenth century (Porter 1986, p. 17). In Germany notably, after the unification of the German States into a single nation-state in

¹⁶ The *Zeitschrift des Königlich Bayerischen Statistischen Bureau*.

1871, general censuses took place in four- and then five-year intervals (Michel 1985; Gehrman 2009). Another important “raw” statistical source for JSS was the 1897 Russian census, which was the first general census in the Russian Empire (Cadiot 2005). It played a decisive role in the development of JSS, because the majority of Jews lived in Russia and Eastern Europe at the time, and it therefore permitted a significant improvement in the reliability and accuracy in the estimation of the total Jewish population (Ruppin 1911, pp. 35–36).¹⁷

Yet, JSS needed statistical data not only on the general populations of these countries but specifically on the Jewish minorities. In other words, it needed confessional statistics; i.e., statistical variables had to be sorted out according to the different religious faiths. It required that the question about individual confessions had been asked in the census (and their answers recorded). This was the case in most German censuses. No other country in the world provided so much statistical information on religious confessions, and Jewish statisticians considered Germany as the place where confessional statistics were the richest and of the best quality (Segall 1912a; Simon 1930). An important source for confessional statistics about the Jews were also the Polish censuses of 1921 and 1931.¹⁸

Even when confessional statistics were available, the task of *verarbeitung* was still needed. As Segall pointed out, State confessional statistics usually lacked continuity: for instance, data about different localities, or between different variables, or between different time lapses, were published in separate volumes or issues. The first purpose of the articles published in the *ZDSJ* was to bring together these scattered pieces of information (Segall 1910; Nossig 1903). Another problem was that confessional statistics were not detailed enough, and more information could be needed. For instance, in a 1931 article, Yakov Leshchinsky regretted that the Polish census of 1921 did not separate data for each big Polish city; thanks to his relationship with the director of the Lodz statistical institute, Leshchinsky was able to provide the missing information (Leshchinsky 1931).

This kind of “insider information” was frequently provided in the *ZDSJ*. The *verarbeitung* of Jewish statistics therefore involved personal knowledge and familiarity with State officials in charge of statistics and censuses in the various countries. Establishing such connections with administrations was an important purpose of the Büro. Directors and members of State statistical offices were invited to and regularly did contribute to the *ZDSJ*.¹⁹ Cohen, in a 1914 programmatic article, wrote that the journal was meant to bring together the “producers” of statistics (states, empires, communal institutions) and “consumers” (scholars, reformers, politicians). These two communities should not be separated, because the “production” might not correspond to the “demand,” and statistics should be produced for their future users (Cohen 1914).

¹⁷ About Russia, the Jewish Colonization Association (JCA) also instituted in 1897 a large-scale study about the economic states of Jews. The results were published in 1904 (JCA 1904).

¹⁸ The State of Poland was instituted after World War I by the Treaty of Versailles as a “polyethnic state,” in which the political rights of the ethnic minorities were supposed to be guaranteed by the Minorities Protection Treaty of 1919 (Simoncini 1994; Rothschild 1981). Polish statistics were thus tabulated according to ethnicity and nationality. The Jews could be identified in the census of 1921 according to both criteria of nationality and religion, and to the criterion of mother tongue (Hebrew or Yiddish) in the census of 1931.

¹⁹ Ludwig Knöpfel, director of the Central Statistical Office of the State of Hesse; Cordt Trap, director of the Statistical Office in Copenhagen; Erich Simon from the Prussian Statistical institute.

In most countries, there were, however, no confessional statistics (notably in the US, in France, England, Belgium), and this was regarded as one of the most important problems faced by JSS (Nossig 1903, p. 17). We will see in section IV how the contributors to the *ZDSJ* were nonetheless able to at least partially overcome this difficulty for non-confessional statistical censuses. Beside public censuses, confessional statistics could also be provided by private statistical inquiries, which were historically the earliest manifestations of JSS (Penslar 2001, p. 217). Hence, an essential task of the Büro was to stimulate the production of these alternative statistical sources, which could be elaborated either from large-scale communal institutions privately funded (e.g., the JCA study mentioned above) or small-scale investigations (e.g., anthropological studies from doctors). Apart from the articles dedicated to the *verarbeitung* of existing “raw” statistical materials, the *ZDSJ* also contained more programmatic and methodological papers that encouraged their readers to edit their own statistics (Dreyfuss 1906). A repeated claim was also that Jewish communal institutions should be more oriented toward the production of reliable statistical data about their members and their organizations (Segall 1910). Last but not least, the Verein occasionally asked public administrations to run special field surveys.²⁰

The *ZDSJ* operated therefore as a “statistic platform”: it called for the production of more statistical inputs, processed and edited the various existing inputs, and provided “cleaned” data for future research. As such, the *ZDSJ* was clearly conceived so as to look similar to the major German economic reviews of the GHS: the *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich*, known as “Schmoller’s *Jahrbuch*”; the *Jarbücher für Nationalökonomie und Statistik (JNS)*; and the *Zeitschrift für die gesamte Staatswissenschaft* (Grimmer-Solem 2003, pp. 75–86). Both the *ZDSJ* and these German academic journals were involved in the same type of *verarbeitung* process on similar sources. For instance, the 1895 German occupational census had been the object of articles in the *JNS* (Scheel 1898), in Schmoller’s *Jahrbuch* (Kollmann 1899a, 1899b, 1900a, 1900b, 1900c) and in the *ZSDJ* (Segall 1911a, 1911b, 1911c, 1911d). In the same spirit of bringing together the producers and consumers of statistical knowledge, these articles contained long and careful descriptions of the census procedures and its mode of administration. The *ZDSJ* was therefore conceived as an analog of the German academic literature, though most of its contributors were excluded from the German academy.

III. THE POLITICS OF STATISTICAL OBJECTIVITY

Apologetics and Political Commitments: The Value-Laden Content of Jewish Statistics

Contributors to the *ZDSJ* shared with their German academic counterparts a strong commitment both to reforms and social improvement of the Jewish and German populations. This political role was explicitly assumed by Jewish social scientists

²⁰ The Büro asked, for instance, the Prussian Ministry of Education in 1904 to run a survey about the relative educational performance of Jewish and Christian pupils. The demand was refused and the study was run subsequently by the Büro itself, on a much smaller scale than the initially proposed project (Ruppin 1906b).

(Nossig 1903; Segall 1910). There was also a close connection between the *ZDSJ* and other German-Jewish journals oriented toward social welfare and reform, such as the *Jüdische Wohlfahrtspflege und Sozialpolitik*.²¹ Lack of commitment toward social reform was precisely an argument against the “Science of Judaism” (*Wissenschaft des Judentums*; Cohen 1914), the prior generation of scholars who had initiated the scientific and historical study of the Jews and Judaism in the early nineteenth century (Dinur 2007).²²

This political commitment involved notably a strong engagement against antisemitism. Providing statistical data about Jewish populations was meant to refute economic prejudice. According to Alfred Nossig, first director of the Verein, an important mission of Jewish statistics was to disprove that Jews were “a greedy and avaricious Nation” (Nossig 1903, p. 8). Some articles published in the *ZDSJ* were indeed motivated by apologetic purposes. For instance, in his 1908 article “The Poverty among Jews in New York,” Fishberg criticized the antisemitic claim that Jews were “economic parasites.” Statistics from the US Immigration Office showed that Jewish migrants—mostly from Russia—were significantly poorer than other migrants to America, while statistics provided by Jewish charities proved that, relatively, they less often asked for assistance and adapted quickly to their new economic situation (Fishberg 1908).

In a similar apologetic tone, some other articles in the *ZDSJ* documented the various economic discriminations that *Ostjuden* were suffering from in Russia. In a 1908 article, Boris Brutzkus showed that restrictive measures within the Pale of Settlement had significant effect on Jewish occupational structure and explained why most Jews were occupied in these regions in overcrowded sectors (Brutzkus 1908; see also Amin 1911).²³ Jewish social scientists later on also documented the economic degradation of Russian Jewry after the Revolution (Brutzkus 1924a, 1924b, 1924c; Koralnik 1925, 1927), and provided statistics about the economic effects of pogroms on Jewish properties and migrations (Koralnik 1923, 1927).

When defending the economic or “racial” worth of the Jews, Jewish social scientists found themselves in the position of taking up a value-laden task. For instance, Segall argued that the respective rise and decline of Jewish participation in industry and commerce in Prussia was “a clear contradiction to the antisemitic ... claim that the Jews are a haggling Nation [*Schachervolk*] and possess a distinct commercial spirit [*Handelgeist*]”; it rather indicated “phenomenal intellectuality [*Geistigkeit*], purposefulness, determination, flexibility and adaptability” (Segall 1912b, pp. 41–42).

Here Segall was clearly turning a negative stereotype about Jewish economic behavior into a positive one (Jewish intellectuality): pointing out Jewish *Geistigkeit* instead of calling them a *Schachervolk* allowed Segall to refute the usual antisemitic

²¹ For instance, Israel Koralnik, the last co-editor of the *ZDSJ*, was a regular contributor to both journals.

²² The *Wissenschaft des Judentums* was also commonly criticized as “cultural Judaism” (*Kulturjudentum*), i.e., for its excessive focus on the religious, cultural, and ideological dimensions of Jewish history. On the contrary, JSS was meant to study the concrete and material aspects that were much more relevant for social reform (Cohen 1914).

²³ In Tsarist Russia, the enforcement of the Pale of Settlement prohibited most Jews from residing outside of a limited territory (the Pale of Settlement) on the western fringe of the empire, with a few very limited exceptions for some merchants, soldiers, and craftsmen. It was a significant limitation of mobility for Russian Jews (Kahan 1986, p. 35).

claim while presenting Jewish occupational structure in a favorable light.²⁴ This was quite typical of JSS: as John Efron argues, many Jewish social scientists and anthropologists accepted antisemitic considerations of the Jews, while eventually trying to transform these considerations as positive assessments, to prove the anthropological worth of the Jewish race (Efron 1994; Morris-Reich 2010).²⁵

Struggling for Objectivity: Political Tensions in JSS

Such value-laden statements, and more generally political commitments, were of course problematic for the academic ambitions of the *ZDSJ*. German economists, and more generally statisticians, faced a similar problem at the time. The bureaus of official statistics created in the nineteenth century were indeed characterized by a tension between “objective” and “prescriptive” points of view, i.e., the conflicting demands of the scientific world and those of the modern state (Desrosières 2002, p. 8).

The issue of scientific objectivity was common to both German economists and Jewish social scientists, but was addressed differently by each of them, because they were engaging with different audiences. Though Jewish statisticians took German academia as a model, Jewish statistics were intended for a (mainly) Jewish audience of social-welfare and communal organizations (Hart 2000). Both the *ZDSJ* and the Büro were largely dependent upon the contributions from these Jewish institutions (Bloom 2011, p. 74; Hart 2000). As we shall see later, in the 1920s and 1930s, the journal influenced statistical periodicals in Yiddish, thereby confirming that Jewish social science was mainly intended for a Jewish—at least Yiddish-speaking—readership.

In this particular German-Jewish context, scientific objectivity was mostly understood as political neutrality, and raised the specific issue of non-partisanship toward Zionism. As mentioned earlier, Zionists had a large influence in the creation of the Verein. Out of the twenty-five most important contributors to the *ZDSJ*, almost half of them (twelve) were committed Zionists. This could raise important political tensions, because all the major central European organizations and communal representative bodies that actively funded the Verein expressed an open hostility to Zionism (Hart 2000, p. 46).

The perceived “objectivity” of Jewish social science thus largely depended on its ability to transcend the party politics of its Jewish audience, hence the numerous assessments in the *ZDSJ* of its on-partisanship. For instance, in a 1914 article, Cohen criticized the metaphor of statistics as a “young girl” to whom everyone was speaking according to their own interests in order to seduce her. Cohen preferred the image of statistics as a “lady” who invites everyone to her table, on the condition that nobody asks for his “favorite dish”; one could therefore approach statistical knowledge with a “pure heart” (Cohen 1914, p. 151; for a similar argument, see Cohen 1905).

Such images were part of what Mitchell Hart calls the politics and “rhetoric of objectivity and universality” in JSS (Hart 2000, pp. 53–55). The essential part of this rhetoric was the idea that JSS was in the service of all Jewry, and not merely a fraction. In

²⁴ The German word *Schacher* was a negative term used in the nineteenth century to refer to “a specific Jewish type of commerce, with the pejorative sense of haggling, huckstering.” *Schacher* was also claimed to come from Hebrew “*miskhar*,” which means “traffic,” “commerce” (Penslar 2001, pp. 45–46).

²⁵ More generally, on the influence of economic stereotypes in Jewish statistics, see Vallois (forthcoming).

his 1903 introductory article, Nossig acknowledged the role of Zionism and renewal of the “Jewish national conscience” in the development of JSS, but also stressed that JSS had to serve the whole Jewish community, including the vast majority of non-Zionist Jews, and even humanity and science in general (Nossig 1903; Verband 1907). An associated argument was that JSS as an objective scientific endeavor could be worthy of interest for non-Jewish populations having similar socio-economic structures (Simon 1930).

Such ideas were, of course, at least partially rhetorical. They were part of a Zionist strategy to prove that Zionism alone could represent the real interests of *all of Jewry* (Hart 2000, p. 54). Yet, it was true that the users of JSS were not exclusively Zionists; non-Zionist philanthropic organizations displayed in particular a great interest in the economic components of JSS (Penslar 2001, p. 217). Inclusion of non-Zionists in the audience was also paralleled within the Verein. Its administrative personnel was almost exclusively composed of Zionists in its early years, but non-Zionists assumed key positions later on (Hart 2000, p. 45). The editorship of the *ZDSJ* was probably chosen so as to maintain this political balance between Zionists and non-Zionists. Ruppin, the first editor of the journal, was a deeply committed Zionist; yet Segall, the last and longest-serving editor of the *ZDSJ*, was a leading figure of the main liberal Jewish organization in Germany, known for its counter-Zionist position (Herlitz and Kirschner 1930, p. 340).

In the end, like most German economists of the period, Jewish social scientists saw no contradiction between scientific objectivity, on the one hand, and commitment toward social reform, on the other. This consensus on scientific objectivity was enhanced by a widely shared faith in the objectivity of numbers. Statistics by its very quantitative nature was seen as an objective science. As Cohen argued, politics had to be based on a reliable and objective method, and this method was precisely statistics, the science of the modern state (Cohen 1911). This faith in numbers was “the *leitmotiv* of nineteenth century statistical thinking” (Porter 1986, p. 6). The enthusiasm for the power numbers was perhaps even more important for Zionists, who were looking for different ways to promote Jewish national consciousness. Collecting statistical data about Jewish populations was a particularly useful source for this nationalist endeavor (Hart 2000, p. 17).

Editing and publishing numbers were thus seen as a valuable task in itself. This is clearly reflected in the form of the *ZDSJ*. As said earlier, the journal was very similar to the main German economic reviews of the period. Yet, an important difference between the *ZDSJ* and the two other reviews was that its articles were significantly shorter. The *JNS* article was seventeen pages long; the paper in Schmoller’s *Jahrbuch* was published in five different parts, for a total number of 371 pages! This was a regular feature of these academic journals, which published very long articles (more than 100 pages was no exception) and tended to grow in terms of volume throughout the years (Grimmer-Solem 2003, pp. 75–86). Table 3 gives more information about the average size of the papers published in the *ZDSJ*.

As this table shows, the vast majority (about 90%) of articles in the *ZDSJ* were less than ten pages long. This is associated with a more restrictive ambition. The main objective of the *ZDSJ* was to edit and publish statistical tables, with some explanations on how to “use” these data. Of course, these explanations were not free of value judgments (cf. supra), but the various contributors strove not to express directly their opinions about the observed trends. In contrast, in an article published in Schmoller’s

TABLE 3. LENGTH OF ARTICLES PUBLISHED IN THE *ZDSJ*

Number of pages per article	1-3	4-10	11 and more	Total
Articles	90	301	44	435
Percentage	20.7	69.2	10.1	100

Jahrbuch, after observing, for instance, that the industry now occupied the largest part of the German population, Paul Kollmann could then spend two pages answering the question of whether this evolution was desirable for German society (Kollmann 1899a).

Short articles entailed prioritizing publication of statistical tables over interpretation and speculation. There were a few exceptions, and the *ZDSJ* also occasionally published some more morally engaged articles; but the journal remained committed to its editorial task of *verarbeitung* and effectively operated so as to smooth out the personal interests and convictions of its contributors about the present and future of world Jewry.²⁶ This can be clearly instantiated through the individual cases of Ruppin and Theilhaber. Both authors were known as influential representatives of the so-called literature of dissolution and disintegration (*Auflösungsliteratur*) in German-Jewish society of the early nineteenth century (Hart 2000, p. 144). In 1904, Ruppin published *Die Juden der Gegenwart*, in which he argued that the Jewish population suffered from a severe demographic decline.²⁷ Theilhaber made a similar case in his 1911 book entitled *Der Untergang der Deutschen Juden*.²⁸

Both books were highly controversial and generated passionate debates. Ruppin's, for instance, was harshly reviewed in the German-Jewish liberal press, while being favorably received among Zionists (though he was not yet a Zionist at the time; see Efron 1994, p. 168). Though based on statistical data, Ruppin's and Theilhaber's arguments were rooted in Romanticist and Völkisch images. Concentration in large cities was associated in particular with demographic decline and degeneration, i.e., with modern, capitalist economic life, while rural agricultural occupations were idealized (Hart 2000, pp. 84–87; Efron 1994, p. 148).²⁹ Yet, when one reads Ruppin's and Theilhaber's articles in the *ZDSJ*, one is struck by their dispassionate and almost neutral tones, compared with the tones of their respective books. Interestingly, in the first years of the Verein, Ruppin himself criticized Nossig, then director of the association, for his “propagandist approach” and his use of JSS as an “apologetic and defensive weapon in the struggle against antisemitism” (Bloom 2007b, p. 188; see also Bloom 2011). Ruppin was yearning instead for knowledge and expert research; it seems that the issue of the dispute was favorable to Ruppin, since he left his imprint on the *ZDSJ* during its three-year editorship, while Nossig left the Verein a few years later and never published an article thereafter.

This editorial policy in favor of *verarbeitung* explains the very few references to other (non-Jewish) German economists writing on Jewish economic history. Of particular

²⁶ See in particular Heinrich Silbergleit's 1927 article on the Jewish population in Berlin (Silbergleit 1927).

²⁷ Translated in English into “The Jews in the Modern World.”

²⁸ *The Demise of German Jews*.

²⁹ Ruppin was advocating for a return of the Jewish economic system to agriculture, a classical idea in early Zionism (Ruppin 1911, pp. 242–260).

interest in this period were the contributions of Wilhelm Roscher (Roscher 1875), and especially Werner Sombart's influential book *The Jews and Modern Capitalism* ([1911] 1962), which raised an important polemic within the German Jewish community.³⁰ Like Roscher and Sombart, Jewish statisticians were interested in the question of Jewish contribution to commerce, but their method was different. Sombart's and Roscher's vision of Jewish economic history was based on far-reaching generalizations about Jewish medieval history, while Jewish social scientists were mostly working on present-day statistics. Sombart was actually quite reluctant about statistical methods.³¹ In addition to a few side comments about Sombart, the contributors of the *ZDSJ* therefore did not engage in a detailed discussion of Roscher's and Sombart's works on the Jews.³²

We found also no references in the *ZDSJ* to the *Berliner Antisemitismusstreit*. This dispute was initiated by the famous historian Heinrich von Treitschke, who argued in several articles published in 1879 that Germany was threatened by massive Jewish immigration from the East. Treitschke started an intense polemic, involving notably the economist Adolph Wagner and the historians Theodor Mommsen and Moritz Lazarus. In 1880, Salomon Neumann, a Jewish doctor and statistician, published *Die Fabel von der jüdischen Masseneinwanderung. Ein Kapitel aus der preußischen Statistik*, a statistical pamphlet that was meant to disprove Treitschke's claims on the basis of demographic data.³³ Like Neumann, Jewish social scientists claimed that statistics might be used to refute antisemitic attacks on Jewish immigrants (e.g., Segall 1910, pp. 83–84). Yet, they did not refer to Neumann's previous demographic studies. This probably reflects a conscious attempt by the editors of the *ZDSJ* to stay away from polemics, and, more importantly, a fundamental difference in the conception of Jewish statistics. While Neumann was opposed to the introduction of categories such as "Jewish nation" or "Jewish race" in the field of statistics, Jewish social scientists considered the production of specific statistics about the Jews as the best political answer to antisemitism.³⁴

JSS grew out of the impulse to collect as much data as possible about the Jews, and out of the sense that this task might transcend political cleavages within Jewish communities. It is in this sense that the *ZDSJ* is representative of Jewish statistics in general. Located in Berlin, the *ZDSJ* influenced later writings in Jewish statistics, after its postwar decline. The Büro was indeed mostly active in its first years, notably under the editorship of Ruppin (1904 to 1907). The war caused important difficulties, with the interruption of most public censuses and the modification of national borders, as Bruno Blau, successor of Ruppin as editor of the *ZDSJ*, complained in a 1919 article entitled "The Future of

³⁰ On the Jewish reception of Sombart's book, see Penslar (2001, pp. 163–173).

³¹ In the first pages of *The Jews and Modern Capitalism*, Sombart argued that beyond the problem of data availability, statistical methods were excessively focused on large groups and thus unable to grasp the role played by "exceptional individuals." His "genetic method" allowed one to move beyond these limits of statistics and to analyze the Jewish "spirit" (Sombart [1911] 1962, pp. 7–8). On Sombart's aversion to statistics and quantification, see also Sombart (1930), and its interpretation in Ringer (1990, p. 224).

³² Jewish social scientists usually considered that Sombart was overstating his arguments (particularly because of his reluctance toward statistical methods), but his general thesis was regarded as "convincing" (e.g., Segall 1912b, p. 52).

³³ About the *Berliner Antisemitismusstreit*, see Hacking (1990, pp. 189–199); Regneri (1998); Labbé (2015, pp. 147–164).

³⁴ This is the reason why Neumann stayed away from the Verein when it was created in 1903 (Regneri 1998, p. 153).

Jewish Statistics” (Blau 1919). Later on, the problem was aggravated by the budgetary restrictions in most German statistical institutions that introduced important delays in statistical publications. The problem was acknowledged by Segall (1930a), who regretted that lack of financial resources could not allow the Büro to continue its pre-war activity, as reflected by the slowdown in the publication frequency of the journal.³⁵

In the 1920s, Berlin became briefly an important center of Hebrew and Yiddish publishing (Kuznitz 2014, p. 35). Several important monographs in Jewish statistics published in Yiddish came out in Berlin in the period.³⁶ From 1923 to 1925, the *Bleter far yiddisher demografie, statistik, un ekonomik* (Pages for Jewish demography, statistics, and economics) was also published in Berlin. Similar both in form and content to the *ZDSJ*, the *Bleter* was a Yiddish statistical periodical that came out in five successive issues. The Economic-Statistical Section at the Yiddish Scientific Institute (YIVO), founded in 1925, then published the *Ekonomishe Shriftn* (Economic writings) under Leshchinsky’s editorship. It was meant as the successor of the *Bleter* and appeared in two volumes in 1928 and 1932. The section also published *Di yiddishe ekonomik* (Jewish economics), another periodical published from 1937 to 1939.³⁷

These periodicals were written in Yiddish, thereby reaching different audiences from those of the *ZDSJ*. Yet, all these statistical journals had a similar agenda: collecting data in the service of the Jewish community at large. The YIVO was funded precisely to organize this project of collection and recording “from the folk” and “for the folk” (see Kuznitz 2014, pp. 71–111).³⁸ In this regard, the *ZDSJ* and later Yiddish periodicals faced the same problem of political neutrality: their editors and many of their contributors were known for their political engagement and/or held strong political convictions, which were potentially problematic for their statistical research. If Ruppin was a controversial figure, Leshchinsky, head of the Economic-Statistical Section at YIVO, was known as a political activist and was among the founders of the Zionist-Socialist Workers Party.³⁹ As Cecile Esther Kuznitz points out, political tension “was at the very center of the Economic-Statistical Section’s mandate”—and more generally of JSS (Kuznitz 2014, p. 91).

The legacy of the *ZDSJ* was transmitted to subsequent Yiddish periodicals through a close network of authors. The *Bleter* was edited in Berlin by Segal, Israel Koralnik, and Leshchinsky. Segal and Koralnik were the two last co-editors of the *ZDSJ*, and Leshchinsky, who was Koralnik’s brother-in-law, one of its important contributors. Out of the thirty-five contributors to the *Bleter*, almost half of them (sixteen) had previously written at least one article in the *ZDSJ*. The *Bleter* thus functioned as a link between Yiddish-language and German scholarship in Berlin. Leshchinsky played an important role in this regard. He collaborated closely with Koralnik during and after his editorship of the *Bleter* (Manor 1961, p. 48), and was one of the rare Yiddish-speaking authors with extensive contacts in the German Jewish community, a resource that would

³⁵ Started as a monthly review, the *ZDSJ* was published every two months after the war, then every three months (Segall 1930).

³⁶ Notably Yakov Leshchinsky, *Dos yidishe folk in tsifern* (Berlin: Klal-farlag, 1922); Mark Wischnitzer, *Yidishe bal-melukhe-tsekh in poyln un in lite* (Klal-farlag: Berlin, 1922); Ber Borochof, *Di yidishe arbeter-bavegung in tsifern* (Berlin: Fareynigtn borokhov-komitet, 1923).

³⁷ YIVO is the Yiddish acronym for *Yidisher visnshaftlekher institut*.

³⁸ Though it had an Economic-Statistical Section, the YIVO was not meant only to publish economic and social statistics but more generally to collect and record cultural productions of Eastern European Jewry.

³⁹ For details on Leshchinsky’s political engagements, see Manor (1961); Estraiikh (2007); Alroey (2006).

later be useful in his editorship of the subsequent YIVO-related periodicals (Kuznitz 2014, p. 37). Beyond personal networks, the *ZDSJ* also established common statistical methods for Jewish statistics.

IV. THE STATISTICAL METHODS OF JSS

A Descriptive Approach to Occupational Statistics

Economic questions in the *ZDSJ* were mostly treated through the perspective of “occupational” or employment statistics (*Berufsstatistik*).⁴⁰ A reason for this is that Jewish social scientists did not have many other economic statistics. Occasionally, they could figure out the state of wealth and poverty among Jews through statistics provided by Jewish communal institutions—for instance, on individual contributions to the community (e.g., Thon 1907a) or about people in need of charity assistance (e.g., Fishberg 1908), yet these data were restricted to particular regions or cities. In the *ZSDJ*, articles on the employment structure (*Berufsgliederung*) of the Jews usually started with the type of table in Figure 1:

Occupation	Christian	Jews	Out of 1000 individuals in this occupation are		O. o. 1000 Christians	O. o. 1000 Jews
			Christ.	Jews		
Agriculture and Forestry	13 568 793	139 810	990	10	544	114
Industry	6 649 714	351 212	950	50	268	287
Commerce and Transport	2 067 762	535 247	794	205	83	437
Civ. Service and Lib. Prof.	2 630	198 442	929	70	105	162
Total	24 917 153	1 224 711			1 000	1 000

FIGURE 1. Jewish Employment Structure in Austria according to the 1900 Occupational Census (Source: Ruppin 1905e, p. 2)

Most employment censuses (*Berufszählung*) were based on a similar classification of economic activities among agriculture, industry, commerce and transport, civil service, and liberal professions. Eventually, subsequent tables could detail the subcategories for each sector. The basic method consisted in comparing the Jewish and non-Jewish occupational structures. Almost invariably, such tables showed that Jews were largely overrepresented in the commercial sector (in Austria, 43.7% compared with only 8.3% for Christians) or in specific semi-industrial branches, typically the garment industry in Russia (Koralnik 1925), while being underrepresented in the agricultural.⁴¹

⁴⁰ Both expressions will be used here as synonyms.

⁴¹ The statistic for Jewish participation to agriculture is here relatively high (11.4%) compared with other countries at the same period, where the same statistics was rarely above 2% to 3%. The relative importance of Jewish agriculture in Austria was mostly concentrated in Galicia, though most Jews employed in Galician

On the basis of such statistics, Jewish social scientists regularly agreed on the “abnormal state” of Jewish employment structure (see, for instance, Ruppin 1906a), frequently perceived as a sign of economic degeneration. As is well known, the theme of economic degeneration and return to agriculture played an important part in early Zionism (Hart 2000). In the *ZDSJ*, several articles echoed this interest in productivization policies among Zionist goals (Preuss 1927; Menes 1931). As noted earlier, Jewish social scientists also used (occupational) statistics to disprove antisemitic claims.

Such comments were certainly value-laden but not necessarily representative of the methods of JSS. The observation that most Jews were occupied in commerce was usually not conceived as an “essential” and durable feature of the Jewish population but rather a part of a general socio-economic structure. The basic methodological principle of most articles on economic questions was therefore to consider the structure (*Zusammensetzung*)—i.e., the interdependence between employment structure and other variables (social structure, women’s employment, urban concentration, demographic variables)—rather than solely focus on each dimension separately.

This approach in terms of statistical interdependency appeared in the journal through the frequent use of contingency tables, which articulated two statistical dimensions, typically employment structure and social structure (e.g., Segall 1911d, p. 98). Such tables could thus provide an explanation of Jewish participation in a certain sector on the basis of their social composition. For instance, Koralnik observed that Jews in Prussia were heavily concentrated in the garment industry. While arguing in an apologetic tone that this does not result from a specific Jewish inclination toward this profession, Koralnik suggested an alternative explanation on the basis of a similar contingency table: the garment industry was relatively less concentrated (both in size and in geographical terms), thus requiring a large number of independent workers and business owners, who were overrepresented in the Jewish population (Koralnik 1931).

Yet, this approach in terms of structure and interdependence remained descriptive in the sense that it did not entail a theory or a conception of statistical “causality.” Jewish social scientists very rarely used the word “cause” in their articles. For instance, Koralnik did not say that the participation of Jews in the garment industry was “caused” by their social structure; rather, both dimensions (occupational and social structure) were said to be corresponding, while not necessarily specifying any particular sense of causality (Koralnik 1930). We spoke until now of “interpretations” and “explanations,” but in most articles on Jewish occupational structure, contributors to the *ZDSJ* considered their contingency tables as part of the work of *verarbeitung*, i.e., as the “correct manner” to describe the data, not as a personal hypothesis on observed tendencies.

Of course, *verarbeitung* was not entirely neutral. Some particular ways to “edit” and describe statistical tables were used to argue in favor of a specific political agenda for social reform. For instance, a recurrent theme was the association of Jewish poverty in eastern Europe to both overcrowding in some economic sectors and small-scale businesses, thereby arguing for a “proletarianization” of Jewish workers, eventually through emigration (e.g., Margolin 1910; Leshchinsky 1913; Koralnik 1925).⁴² Yet, at the

agriculture were not actually peasants but occupied specific positions in the neighboring branches of commerce, such as the grain trade, for instance (Thon 1907b).

⁴² On the problem of Jewish proletarianization and un-proletarianization, see Gutwein (1990, 1994); Frankel (1984).

methodological level, such arguments were not grounded in complex models or speculative theories but on what seemed a mere accumulation of data.

The Qualitative Knowledge of JSS: Mathematical Sophistication versus Statistical Rigor

In the early twentieth century, techniques of statistical sampling based on error theory in mathematics were being developed in the works of Sir Francis Galton, among others (Porter 1986). Though they were familiar with eugenics (and thus with Galton's works) and race theory, Jewish social scientists largely ignored these techniques and did not use them in the articles of the *ZDSJ*. This preference for descriptive methods can be related to the well-known strong empirical and qualitative focus in the German statistical tradition. The notion of statistics as a technique of estimating probabilities remained largely alien to German economists and statisticians (Lindenfeld 2008, pp. 131–132). In the second part of the nineteenth century, apart from a few exceptions (Wilhelm Lexis), most German statisticians ignored the technique of sampling.

The mentors of Jewish social scientists were themselves known for their preference for empirical analysis over mathematical sophistication. Conrad, Ruppin's supervisor, provided detailed quantitative investigations of local conditions, and thus "continued the idiographic strand of German statistics," rather than the mathematical treatment advocated by Lexis (Lindenfeld 2008, pp. 239–243). Such authors are usually considered as having an almost excessive empirical focus. According to Erik Grimmer-Solem, Mayr, Segall's supervisor, embodied the type of statistical analysis "giving way to the narrow accumulation of data" (Grimmer-Solem 2003, p. 276).

It would be wrong, however, to consider JSS as being mathematically "unsophisticated." It should be noted first that inductive statistics based on probability theory were not really influential in economics until the 1970s (Biddle 2017). More importantly, the idea of mathematical unsophistication does not reflect adequately the statistical methods of the GHS. German statisticians of the late nineteenth century were interested in what Theodore Porter calls "systematic covariation": the "proper statistical procedure" was "to fracture the population into tiny pieces, and then regroup these in various ways" (Porter 1986, p. 184). These "tiny pieces" had to be chosen as the specific subgroups that were homogenous and coherent according to the main variable of interest, thus illustrating the main differences in the general population. "Systematic covariation" meant, basically, paying attention to the details and statistical rigor. Statistical ability largely consisted in the deep empirical knowledge that was necessary to identify coherent subgroups: for instance, a statistician working on the occupational structure in Austria had to know how this structure varied and should be then "fractured" among geographic (cities versus countryside, or specific regions such as Galicia), demographic (e.g., gender, age), or temporal (e.g., specific periods) lines.

An important corollary of "systematic covariation" was a general skepticism and suspicion toward statistical aggregates and averages. Such a skepticism played an essential part in Segall's harsh critique of Theilhaber's book on German Jewish demographic decline (Theilhaber 1911a). The *ZDSJ* published a short version of

Segall's review (Segall 1911e).⁴³ Segall did not and could not reasonably disagree with Theilhaber's general claim that German Jews were demographically declining; the bulk of the controversy was about statistical rigor.⁴⁴ A repeated claim in Segall's review was indeed that Theilhaber paid insufficient attention to the details of the data. For instance, Theilhaber compared the statistics on birth between 1871 and 1905 to substantiate his thesis that the German Jewish population was declining, but did not look at what happened between these two dates—i.e., the statistics on birth in the 1880s and 1890s—which were strongly affected by emigration and immigration. In doing so, Theilhaber could not understand properly the relationship between migration and demographics (Segall 1911f, pp. 491–494). Through his meticulous review, Segall also uncovered that Theilhaber wrongly reported census statistics (Segall 1911f, p. 496), and even invented numbers in a subsequent article (Segall 1911f, p. 494).

The kind of statistical rigor and thoroughness displayed by Segall was one of the important strengths of both the German tradition in statistics and JSS. For economists of the GHS and Jewish statisticians, such knowledge resulted from the production of monographs. Writing about specific areas and specific periods allowed statisticians to develop their sensitivity toward internal differences within statistical aggregates. As said earlier, Segall's dissertation was on the demographics of the Jewish community in München, and was published as a separate booklet by the Verein (Segall 1908). The *ZDSJ* occasionally published monographs on Jewish populations in particular cities (e.g., Weiner-Odenheimer 1915, 1916; Unna 1925).

Another important critique in Segall's review was that Theilhaber lacked the qualitative knowledge about the production of statistics: "Theilhaber sees only numbers, not the way they came to existence" (Segall 1911f, p. 487). In other words, Theilhaber did not know how censuses were conducted and what were their shortcomings, and therefore probably could not fully understand and properly interpret the resulting statistics. Gross misunderstandings of data occurred when, for instance, Theilhaber compared the population in Prussia over the periods 1866 to 1871 and 1871 to 1876 without taking into account that the Prussian borders had moved in 1871, therefore invalidating the meaning of his comparison (Segall 1911f, p. 493).

As seen in section II, a significant part of the articles published in the *JNS* or in Schmoller's *Jarhbuch* were dedicated to the presentation of censuses and to the description of the various procedures for data collection. This surrounding qualitative knowledge about quantitative knowledge can be regarded as the second important strength of the German statistical tradition and JSS.

As far as JSS is concerned, this qualitative knowledge consisted, first, in knowing the shortcomings of public censuses or field studies. One of the important purposes of *verarbeitung* was precisely to indicate to the reader and/or future user of statistics such shortcomings. These could relate first to missing data. For instance, Korálnik mentioned

⁴³ Our analysis is based here on the longer version of Segall's review, and Theilhaber's subsequent response, that were published in *Im deutschen Reich*, a journal of the German Jewish liberal press (Segall 1911f, 1911g; Theilhaber 1911b).

⁴⁴ The problem was a general concern for the vast majority of Jewish statisticians (Hart 2000). In his response to Segall, Theilhaber reports that Mayr admitted his thesis of a demographic decline of German Jews (Theilhaber 1911b, p. 668). It should also be noted that Segall became less critical of Theilhaber later on (Segall 1930, p.2).

that in the 1920 Soviet Russian census, several regions were not included because of war (Koralnik 1927). More frequently, contributors to the *ZDSJ* indicated to their readers the several biases that might have occurred during the collection of data, notably an occupational distortion known as “Columbus tailors” (Lederhendler 2009, p. 18): according to Leshchinsky, when questioned about their professions by US immigration officials, Jewish migrants were inclined not to answer “commerce” but rather any craft, because of its better reputation, hence the overrepresentation of tailors among Jewish migrants (Leshchinsky 1910; for another example about liberal professions in Germany, see Koralnik 1930). Jewish statisticians also pointed out that some specific part of the employment and social structure was not adequately reflected in a census—e.g., the distinction between employees and workers in commerce (Ruppín 1905b) or in the industry (Segall 1912b).

Beyond signaling lacunae, authors of the *ZDSJ* proposed ways to amend the existing statistics in order to get the adequate information, notably methods to identify Jews in public censuses. When data about confessions were not directly available, Jewish social scientists developed alternative empirical techniques to trace indirectly the Jewish subgroups in the general population. For instance, in US immigration statistics, Jews could be identified on the basis of mother tongue (i.e., Yiddish; Ruppín 1906c). In other countries such as Rumania where Jews were not citizens, they could be indirectly identified as foreigners without citizenship in a foreign state (Ruppín 1905d).

Jewish social scientists did not only know the techniques; they were also aware of their relative advantages and shortcomings, and discussed these. For instance, Harry Lindfield, director of the statistical department of the American Jewish Committee, published an article in the *ZDSJ* in which he criticized (with regard to the US) the identification method based on mother tongue, and proposed to estimate the number of Jewish children on the basis of the number of pupils who were not present at school on the day of Yom Kippur (Lindfield 1930). Similarly, Ruppín engaged in a discussion in the *ZDSJ* with Philip Cowen, an official at the US Bureau of Immigration, on the proper method to identify Jewish migrants (Ruppín 1908). Once again, strong qualitative knowledge of the data was needed to properly use these techniques. As the *ZDSJ* also published articles on, for instance, the literacy of Russian Jews in Yiddish, Hebrew, and Russian (Rabinowitsch 1913), other contributors to the *ZDSJ* knew quite accurately the proportion of Yiddish speakers among Russian Jews, and thus the accuracy of the “mother tongue” technique.

In the end, it could be argued that it was not despite of but precisely because of their empirical rigor and their qualitative knowledge of statistics that Jewish social scientists, just like German economists of the same period (Grimmer-Solem 2003, pp. 276–277), used descriptive methods that could not lead to far-reaching theories. This interpretation corroborates both our hypotheses that JSS was intellectuality grounded in the GHS and that the *ZDSJ* operated as a “statistic platform” whose main purpose consisted in the *verarbeitung* of statistical data.

The large amount of economic data produced by the *ZDSJ* can be regarded as its “statistical legacy.” This legacy is visible through the multiple use and reuse of the data, which were edited. When it comes to Jewish economic history of the nineteenth century, most economists and historians relied on sources that were compiled in the *ZDSJ*. It was indeed difficult to edit its own data, for the various reasons that were previously explored (original sources are hard to read, scattered across different volumes, or without direct

identification of the Jewish population). We shall briefly mention here two revealing examples. Interestingly, Werner Sombart himself heavily quoted articles from the *ZDSJ* in *The Jews and Modern Capitalism*.⁴⁵ In his subsequent 1912 book entitled *Die Zukunft der Juden*, Sombart relied almost exclusively on the “reliable compilations” provided by Ruppin (Sombart 1912, p. 10). Later on, when Simon Kuznets wrote several essays on Jewish economic history, he borrowed statistics from the *ZDSJ* and acknowledged his intellectual and empirical debt to Leshchinsky and Ruppin.⁴⁶

V. CONCLUSION

JSS was a very specific body of statistical knowledge. Jewish statisticians were interested in the specific socio-economic issues of the Jewish populations. They addressed the specific demands of Jewish social welfare organizations. Most of them were excluded from academic positions, and their discussions took place entirely outside of German academic fields. Yet, this Jewish economic-statistical academia was clearly a theoretical by-product of the German Historical School in economics. Trained as typical nineteenth-century German economists, Jewish social scientists organized the Verein as an analogue of German statistical offices, and borrowed their methods. The *ZDSJ* operated as a statistical platform, mainly dedicated to the *verarbeitung* of statistical data, whose legacy was transmitted to subsequent Yiddish developments of JSS. The journal and more generally JSS as a whole provided a vast amount of “cleaned” economic data that could and has been used in subsequent research and, even more importantly, also provided the practical and qualitative knowledge necessary to read, use, and interpret these data.

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⁴⁵ Though Sombart made numerous references to articles of the journal (e.g., [1911] 1962, p. 10, pp. 164–165, p. 196, p. 282), especially in the last part of the book, which includes mostly considerations about race.

⁴⁶ Kuznets’s essays on Jewish economic history have been recently edited by Glen Weyl and Stephanie Lo (Kuznets 2017a and 2017b).

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