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Assimilation and Profession –

The ‘Jewish’ Mathematician C. G. J. Jacobi (1804–1851)

Biographical Introduction

Jacques Simon Jacobi, nowadays better known as Carl Gustav Jacob Jacobi, lived from 1804 to 1851. He attended the *Victoria-Gymnasium* in Potsdam, as did later Hermann von Helmholtz. He was an excellent pupil, especially in mathematics and ancient languages. In the report on his final examination, the director of his school certified that Jacobi had extraordinary mental abilities, and he dared to predict that “in any case, he will be a famous man some day.”¹

That was in April 1821, the same month Jacobi registered at the University of Berlin. He studied mathematics, but from the very beginning he was bored by the curriculum offered to him; so he also studied classics and philosophy. One of his teachers was the famous philologist August Böckh, who found only one fault with him: “that he comes from Potsdam, because a *famous* man has never ever come from there.”² Young Jacobi’s hero in philosophy was Hegel, who later was a member of his examining committee. Jacobi took the examination in 1824, and only one year later became a *Privatdozent*. After another year, at the age of 23, he was appointed assistant professor in Königsberg and then full professor at the age of 28.

Jacobi remained eighteen years at the *Albertina* in Königsberg, “where his tireless activity produced amazing results in both research and academic instruction.”³ His theory of elliptic functions – developed in competition with Niels Henrik Abel – was received by the mathematical community as a first-rate sensation. But Jacobi contributed substantially to all fields of mathematics: in particular, number theory, theory of ordinary and partial differential equations, geometry, analytical mechanics and history of mathematics.

1 Leo Koenigsberger, Carl Gustav Jacob Jacobi. Festschrift zur Feier der hundertsten Wiederkehr seines Geburtstages, Leipzig 1904, 5.

2 Ibid., 253.

3 Christoph J. Scriba, Jacobi, Carl Gustav Jacob, in: Charles Coulston Gillespie (ed.), Dictionary of Scientific Biography, vol. 7, New York 1973, 50–55, here 51.

As a teacher, Jacobi was equally successful: he presented substantial parts of his research to his students, thereby inaugurating a completely novel form of mathematical education at Prussian universities: 'research seminars' which attracted students from all over Germany and abroad, and some of Jacobi's colleagues from Königsberg as well. In co-operation with the physicist Franz Ernst Neumann, he founded the so-called 'Königsberg mathematical-physical seminar'. Jacobi, Neumann and the astronomer Bessel thus formed the nucleus of a school that was decisive for the advancement of mathematics and the mathematical sciences in Prussia.

Jacobi returned to Berlin in 1844. There he became a member of the Berlin Academy, and was entitled but not obliged to lecture at Berlin University. He continued his industrious research for the next four years. In 1848, however, he played an active role on the republican side in the 'March revolution', and his academic 'peace and quiet' came to an abrupt end: he came under mounting pressure from monarchists and republicans alike. Subsequent to a decision by the Prussian monarch, Jacobi, head of a large family, lost nearly all of his income. Though within the next year he had the offer of an attractive professorship in Vienna, he remained in Berlin. In 1851, he fell ill with smallpox and died unexpectedly. At the time, 47 years old, he was one of the most famous mathematicians in the world. The Berlin Academy announced the death of Germany's most important mathematician after Gauss, and this appreciation was shared by almost the entire mathematical community.⁴

Felix Klein described Jacobi in his very influential *Lectures on the Development of Mathematics in the 19th Century* as the "first Jewish mathematician to assume a leading position in Germany."⁵ Moreover, Klein postulates that Jacobi's splendid academic and university career was made possible by the 1812 *Emanzipationsedikt* which (at least formally) gave full civil rights to the Jewish people in Prussia. As the Berlin historian of mathematics Herbert Pieper has shown in some detail, Klein's thesis is historically untenable: it confuses formal laws and their application, i.e. the practice of appointments at German universities at the time in question, and it ignores the later revocation even of *formal* legal equality.⁶ In fact, the ex-

4 In 1904, exactly 100 years after Jacobi's birth, Leo Koenigsberger published his biography on Jacobi (see above), a study which is still authoritative today. It seems worth mentioning, however, that Jacobi's Jewish background was obviously *anathema* to Koenigsberger: it is nowhere mentioned directly in his extensive biography.

5 Felix Klein, *Vorlesungen über die Entwicklungen der Mathematik im 19. Jahrhundert*, 2 vols., Berlin 1926/27, vol. 1, 114.

6 Herbert Pieper, Carl Gustav Jacob Jacobi (1804–1851), in: *Jahrbuch der Albertus-Universität zu Königsberg* 29 (1994): Dietrich Rauschnig/Donata von Nerée (eds.), *Die Albertus-Universität zu Königsberg und ihre Professoren. Aus Anlaß der Gründung der Albertus-Universität vor 450 Jahren*, 473–488, here 478.

clusion from university careers was the most severe restriction for Jewish academics even after the *Emanzipationsedikt*, and it remained the most serious barrier for them throughout Jacobi's lifetime.⁷ It guaranteed equal civil rights to the Jews in Prussia, and explicitly included free access of Jews to academic teaching posts within universities and schools (though not to all official posts). This, however, was only the "paper world of equality of rights"; schools and universities remained effectively closed to Jews due to religious restrictions imposed by their standing rules and constitutions.

Jacobi was baptized a Protestant long before he was appointed professor in Königsberg, and most probably there would have been no 'Jacobian' academic career without him having taken this step. However, neither Jacobi's biography nor the fate of other Jewish mathematicians in 19th century Germany have been fully examined in regard to a salient dimension: the fact that their careers developed under pressure to assimilate. This can perhaps be partly explained on methodological grounds: one element of assimilation is to pay lip-service to the existing political and academic order, and even the opponents of Jews and converts often formulated their opposition *sub rosa* rather than openly, at least within academic discourse. Consequently, there is often a dearth of reliable sources, making it difficult for historians of science to properly examine the topic of 'assimilation and profession.'

This subject will be approached by a discussion of some turning points in Jacobi's biography in the specific light of his Jewish background, trying to integrate theses from the secondary literature about assimilation in the academic sphere which appear to be reasonable assumptions. These turning points are: (1) Jacobi's baptism, (2) his appointment at the *Albertina* in Königsberg, where he developed his understanding of mathematics and of the sciences in general, and (3) his political activity during the 'revolution of 1848' and certain reactions to it. The paper will end with some more general remarks on assimilation and career trajectory during the period in question.

Jacobi's Conversion to Protestantism

Jacques Simon Jacobi was raised in a prosperous and intellectually stimulating family. There seems to be only one passage in all of Jacobi's later papers and letters where his Jewish origin is mentioned, namely the *cur-*

⁷ Monika Richarz, *Der Eintritt der Juden in die akademischen Berufe. Jüdische Studenten und Akademiker in Deutschland 1678–1848*, Tübingen 1974, 206.

riculum vitae he had to write in 1825 in order to graduate at the University of Berlin: "I was born on December 10, 1804 in Potsdam of my parents S[imon] Jacobi, an exchange broker, and my mother, from the tribe of Abraham. My father strove to do everything possible to further my education."⁸ In the history of the Jewish community of Potsdam, Jacques' father Simon is described as a very cultured and religious man. He played an active role in the community and was held in high esteem by his fellow believers.

Jacobi was baptized during his first years at the University of Berlin, i.e. at the end of 1821 or (more probably) in 1822.⁹ The circumstances of this event are almost unknown; it is mentioned nowhere in Jacobi's private letters and manuscripts. It is worth noting, however, that there are two different interpretations which both can be traced back to members of the Potsdam Jacobi clan:¹⁰

The first interpretation was brought forward by Jacobi's younger cousin Adolf Philippi who was later baptized as well, and became a Protestant theologian. According to Philippi, Jacobi's intensive studies in ancient history, literature and philosophy brought him to the conviction that Judaism was out-dated and had been superseded by Christianity; the latter had proven itself to be a superior form of religion in the unfolding of history.

Wilhelm Ahrens, the historian of mathematics, later complemented this 'conviction thesis' by claiming that Jacobi, already at the age of 20, was well aware of his abilities and knew that he would succeed in an academic career whether baptized or not.¹¹ However, that perspective is a peculiar version of Whig history, i.e. a history of a scientific hero and his success, suggesting that his success depended solely on his scientific superiority and knowledge of this superiority, while totally ignoring the importance of academic professionalization at the time in question. Therefore, two counter-questions should be asked: How many mathematicians external to the academic world were accepted and influential during the 19th century in Germany? To my knowledge, none. And second, what does this negative answer mean, if the membership in a certain religion definitely made an academic career impossible? In short, Ahrens' attempt to integrate Jacobi's

8 Carl Gustav Jacob Jacobi, *Gesammelte Werke*, ed. by C. W. Borchhardt/K. Weierstrass/E. Lotter, 7 vols., 1 suppl. vol., Berlin 1881–1894, vol. 3, 43.

9 Herbert Pieper mentions that Jacobi was baptized during his very first term at the University of Berlin. See Herbert Pieper, *Jacobi in Berlin*, in: *Die Entwicklung Berlins zum Wissenschaftszentrum. Beiträge einer Kolloquienreihe*, Teil 4, Institut für Theorie, Geschichte und Organisation der Wissenschaft der AdW der DDR (1982), H. 30, 1–35, here 2. His later description – Herbert Pieper, *Carl Gustav Jacob Jacobi*, 475 – is less definitive in this respect.

10 *Ibid.*, 478.

11 Wilhelm Ahrens (ed.), *Briefwechsel zwischen Carl Gustav Jacob Jacobi und Moritz Hermann Jacobi*, Leipzig 1907, 82.

decision as an unimportant step in the young genius's success story seems by no means sufficient for an adequate historical assessment of this decision.

The second interpretation put forward by several members of the Jacobi family takes the social role of religion in 19th century science more seriously: according to it, Jacobi decided to be baptized in order to enter upon a university career. Interestingly enough, the Rabbi of the Potsdam Jewish Community, Robert Kaelter, defends this 'career thesis' in his *History of the Jewish Community at Potsdam*. According to Kaelter, Jacques Simon Jacobi was neither convinced by the Jewish religion nor any other. His motives were pragmatic, driven by his desire to become an academic and scientist at any price. As Kaelter put it, Jacobi betrayed the religion of his father:

"The heartfelt inner quality of the Jewish perception of God [...] was not grasped by this strong spirit with this weak character, and that is why to [...] change his religion, an ambitious step to eliminate all obstacles blocking his ladder to fame, came so easily for him".¹²

Above all, Kaelter blames the fact that Jacobi was able to analyse psalms in the Hebrew original without believing them, being captured by a merely scientific attitude towards their content, without any emotional participation. He was a kind of 'lost sheep' for the Jewish religion, caught up in the 'claws of science'.¹³

According to the first interpretation, Jacobi dissociated himself from his Jewish religion due to certain important philosophical reasons, propagating a 'Christian philosophy' or a 'philosophy of Christianity'; according to the second interpretation, he sacrificed his Jewish religion in order to make science, i.e. mathematics, into a primary source of truth and a kind of *surrogate* for religion (see below). Both versions must be taken seriously, though the second seems to be more relevant in Jacobi's case. In a time of secularization of religion in general, an independent mind like Jacobi's was able to think in terms of the one reason without discarding the other most welcome

12 Robert Kaelter, *Geschichte der jüdischen Gemeinde zu Potsdam*. Potsdam 1903, 81: "Die Innigkeit des jüdischen Gottesempfindens [...] war diesem starken Geist mit dem schwachen Charakter nicht aufgegangen, und darum kostete ihn der bald darauf erfolgende Glaubenswechsel, durch den sein Ehrgeiz alle Hindernisse von seiner Ruhmesleiter fortschaffen wollte, keine Überwindung."

13 Kaelter's explanation could be applied to a number of parallel cases: "Am stärksten lastete der Taufdruck auf Akademikern, die die Hochschullaufbahn einschlagen wollten. Der Zwang, die Habilitation mit der Taufe zu erkaufen, führte dazu, daß es in Preußen keine Universität ohne Proselyten als Lehrer gab." Richarz, *Der Eintritt der Juden in die akademischen Berufe*, 162. Cf. Ismar Schorsch, *The Religious Parameters of Wissenschaft. Jewish Academics at Prussian Universities*, in: *Leo Baeck Institute Year Book* 25 (1980), 3–19.

consequence, i.e. the opening of the path to a university career. It is well documented in the literature on Jewish intellectuals and academics in the early nineteenth century that many of them were no longer inclined to practice Jewish religion, and that even Judaism as a science along the lines of Gans and Zunz was not accepted as a bracket that could bind religious tradition and a growing inclination towards modern science and philosophy together.¹⁴ And this holds true for Jacobi as well.

However, the second interpretation is supported by several more general historical facts. One should recall that Jacobi was baptized around 1822: First, in 1822 King Friedrich Wilhelm III's personal decision not to appoint Eduard Gans professor of law gave rise to the so-called 'lex Gans', which even formally withdrew the possibility of academic appointments for Jews. This could have been a strong additional reason for Jacobi to be baptized (as Gans was some time later). In 1816, the *Habilitation* was introduced as a post-doctoral qualification for university teachers. Down to 1822, only three Jews in Prussia had completed their *Habilitation*,¹⁵ and none of them was granted a professorship as long as they were loyal to their religion.

Second, in 1822 the *Berliner Gesellschaft zur Beförderung des Christentums unter den Juden* (Berlin Society to Promote Christianity among the Jews) was founded. The society was supported financially by the King, and three university professors were named as its leading members. So if young Jacobi was planning his university career, the foundation of this *Gesellschaft* gave him a distinct hint how to act. Obviously the measures of the government for the assimilation of Jews, especially Jewish intellectuals, were, by their own standards, quite successful: in his book on Protestantism and the Jews, de le Roi notes that by mid-century, there were a total of 24 university teachers of Jewish origin at the University of Berlin who converted to Protestantism.¹⁶

It seems worth mentioning in this context that Jacques Simon Jacobi's elder brother also converted, though not to Protestantism. Moses Jacobi, nowadays known as Moritz Heinrich Jacobi, was the inventor of galvanoplastics, a milestone in the history of physics and technology. After his studies in Göttingen, Moses went on to Dorpat and then to St. Petersburg. He was also baptized, but became a member of the dominant Russian Orthodox Church. After converting, he got a chair at the University of St. Petersburg. He was also appointed a full member of the Academy of St. Petersburg, and he received Russian citizenship: parallel fates of two Jewish scientists in two different countries. The correspondence between Jacques

14 Richarz, *Der Eintritt der Juden in die akademischen Berufe*, 89.

15 *Ibid.*, 195.

16 Johann F. A. de le Roi, *Die evangelische Christenheit und die Juden*, vol. 2, Berlin 1891, 228.

Simon and Moses is one of the most important sources for research on the Jacobis. Yet in the extensive exchange of letters, neither Jacques' nor Moses' baptism is ever mentioned.

Jacobi's Appointment at the *Albertina* and his Inaugural Lecture

When Jacobi arrived at the *Albertina* in Königsberg in May 1826, he was obviously not very welcome. The famous Königsberg astronomer Bessel, who later befriended him, reported to Gauss that nearly all members of the faculty were Jacobi's enemies and that Jacobi himself left no stone unturned in seeking to offend them. And Bessel informed the *princeps mathematicorum* Carl Friedrich Gauss about this: "I don't know anything about his [personal] situation, except that his father was a Jew and exchange broker in Potsdam."¹⁷

Jacobi was sent to Königsberg as a *Privatdozent* by the minister in Berlin, granted a small salary, but the faculty of philosophy at the *Albertina* was obviously not prepared to accept him as a member. In the following year, Jacobi applied for full-time employment and a proper salary. The faculty, asked for its expert opinion by the minister in Berlin, confirmed Jacobi's scientific excellence and his merits as a university teacher, but once again rejected Jacobi as a potential colleague. Their statement makes it quite clear that they did not wish to have Jacobi as a colleague, because Jacobi "did not show enough respect to these members of staff in the past".¹⁸ Interestingly enough, it was the curator of the university, i.e. the head of the administration, who informed the minister that Jacobi was too excellent a mathematician not to appoint him: "As a professor extraordinarius, [he] will not join the faculty. Therefore I think that the faculty's concern is too rushed, and the faculty itself should not wish to expel such an excellent mathematician from our university."¹⁹ Fortunately, the minister followed the curator's assessment and not that of the faculty. Jacobi was granted an extra-ordinary professorship, i.e. associate professor, and an acceptable salary in December 1827. Two years later he was appointed full professor,²⁰ but for unknown (or at least undocumented) reasons he could not join the faculty until July 1832.

17 Koenigsberger, Carl Gustav Jacob Jacobi, 27.

18 Ibid., 56.

19 Ibid.: "Da derselbe als professor extraordinarius nicht in die Facultät tritt, so halte ich auch die Besorgniß derselben für voreilig, und sie dürfte es selbst nicht wünschen, einen so tüchtigen Mathematiker von der Universität zu weisen..."

20 Ibid., 88; this decision was obviously supported by the faculty.

Jacobi's appointment as a full professor and his later entry into the faculty can be interpreted as the last proof that he had made a wise decision to be baptized in order to open the pathway to a university career. Both events are 'ultimate marks' of Jacobi's academic recognition and of his full assimilation according to prevailing institutional standards.

Jacobi would definitely not have reached this goal without conversion. During his lifetime, no Jew was ever granted a full professorship in Königsberg, but at least seven converted Jews belonged to the professoriate.²¹ Moreover, Jacobi would definitely not have reached his aim without conversion specifically to the Protestant faith: The *Albertina* was founded, influenced by Luther and Melancthon, in order to secure Protestantism against the East. Even the new statutes of the university, issued in 1843, stated: "According to the foundational rules, the university at Königsberg only allows and appoints teachers who are of the Protestant faith."²² This restriction was eased a bit in 1867, but in principal remained valid until the 20th century.

This means that the religious-denominational character of the *Albertina* worked not only against Jews, but also against Catholics. Jacobi's disciple Friedrich Julius Richelot was one of the most active supporters of the idea to open the university for Jews and Catholics. But when he promoted the *Habilitation* of the Roman Catholic mathematician Karl Weierstrass in 1855, he was defeated by his faculty. The opposite kind of denominational discrimination was characteristic for many universities in southern Germany. This of course meant no equality (in the negative sense of 'equal discrimination') for the Jews, as they were *always* rejected. Even later in the century, when the denominational character of universities became less important, Catholic universities preferred to demonstrate their 'progressiveness' by appointing some Protestant professors and vice versa (Weierstrass, for example, went to the University of Berlin), but usually did not appoint Jews. Though the emancipation of science from religion was frequently demanded, the Prussian and other German universities remained basically bastions of *Christian* education.

Let us now return to Jacobi and Königsberg. When Jacobi joined the philosophical faculty of the *Albertina*, he was obliged to deliver an inaugural lecture. That text is most interesting with regard to his understanding of mathematics and of science in general. The lecture is neo-humanistic in

- 21 Richarz, *Der Eintritt der Juden in die akademischen Berufe*, 162. – "Dem Lehrkörper der Universität Königsberg gehörten bis 1848 mindestens 7 getaufte Juden an, und in Berlin lehrten 1856 sogar 24 Konvertiten."
- 22 Otto Volk, *Die Albertus-Universität in Königsberg und die exakten Naturwissenschaften im 18. und 19. Jahrhundert*, in: Franz Mayer (ed.), *Staat und Gesellschaft. Festgabe für Günther Küchenhoff*, Göttingen 1967, 281.

tone and stresses an ideal of *Bildung* (meaning both ‘education’ and ‘culture’) as an end in itself and ‘pure mathematics’ as the queen of science, being true without any reference to sense experience and expressing internal laws of the human mind. Autonomous, formal, abstract and purpose-free mathematics in Jacobi’s sense not only serves best as a means of training intellectual abilities and uncovering the laws of thought, but is also the key to our understanding of nature.²³ In his lecture Jacobi states:

“The same eternal laws are valid in our Intellect as in Nature; this is the prerequisite without which the world cannot be understood, without which no knowledge of the things of Nature would be possible. [...] If mathematics had not been created by our mind, the mathematical ideas implanted in Nature could not have been perceived.”²⁴

Jacobi’s mathematical Platonism, as his position might be characterised, is congruent with the dominant current of idealism in philosophy and the broad cultural movement of neo-humanism. The details of his attitude towards pure and applied mathematics are not of interest here, but it should be stressed that he regards mathematics as the sole source of truth, including truth about our knowledge of the external world. In other words: if we wish to arrive at truth, we have to study mathematics, and should not look to Divine revelation. This view becomes even clearer in a letter to his brother Moses. Jacobi was at the pinnacle of his career and, even more important, had fallen in love with his future wife. In this enthusiastic mood, he was unusually frank. He thanked God for sending him this companion, and he sent this piece of advice to his brother as a birthday present:

“The life of the gods is mathematics, as Novalis states correctly, because my life now is indeed the life of the gods. You, however, are what you are. But don’t remain what you now have become. See to it that you soon come to realize [...] that the absolute does not lie in the hereafter. [It] is my serious intention [...] to earn my happiness by my intellectual work, bravely storming the highest peaks of science, assiduously applying all the abilities I have been endowed with.”²⁵

23 Eberhard Knobloch/Herbert Pieper/Helmut Pulte, “... das Wesen der reinen Mathematik verherrlichen.” *Reine Mathematik und mathematische Naturphilosophie bei C. G. J. Jacobi*. Mit seiner Rede zum Eintritt in die philosophische Fakultät der Universität Königsberg, in: *Mathematische Semesterberichte* 42 (1995), 99–132, here 111–114. Here the lecture was published for the first time in German translation. The Latin manuscript seems to be lost. It was published by Walter von Dyck, *Eine in den hinterlassenen Papieren Franz Neumann’s vorgefundene Rede von C. G. J. Jacobi*, in: *Sitzungsberichte der Bayerischen Akademie der Wissenschaften, Mathematisch-physikalische Klasse* 31 (1902), 203–208.

24 Knobloch/Pieper/Pulte, “... das Wesen der reinen Mathematik verherrlichen”, 112f.

25 Ahrens (ed.), *Briefwechsel zwischen Carl Gustav Jacob Jacobi und Moritz Hermann Jacobi*, 8f. (letter from September 1831): “Das Leben der Götter ist Mathematik, sagt Novalis mit Recht, denn mein Leben jetzt ist das Leben der Götter. Du aber bist was Du bist, aber bleibe nicht was Du bleibst. Mache, dass Du bald erkennen mögest, dass das Absolute kein Jenseits

Jacques' message to Moses is quite clear: don't look for a 'transcendental absolute', but let your life and, above all, your scientific work be your absolute, as an absolute in *this world*. Monika Richarz, in her important book on Jews in academic professions,²⁶ states that proselytes working in the academic sphere often elevated their research subject or their science in general to the status of a certain 'holiness'. Jacobi can serve as a perfect example how science (in this case mathematics) fills up the vacuum left by lost religious convictions. This phenomenon, however, is certainly not restricted to converts during the 'age of science', as the 19th century is often called. But probably it is more relevant for their biographies.

However, Jacobi's scientific and secular 'absolute' does not imply a dogmatic and anti-religious scientism. This becomes quite clear in his later lecture *On Descartes' life and his method to govern our understanding properly and to seek truth in the sciences*.²⁷ The striving for truth in the new sciences, he says literally, "is not the wild and unconscious urge which opposes the state and religion, but it is the calm security of the self-conscious spirit that intends to resolve the task of mankind among people and with them."²⁸ The Berlin minister Eichhorn was very pleased to hear this, and he saw in Jacobi an ally in the fight against "theological zealots and politically muddle-headed persons."²⁹ Jacobi had adopted the typical attitudes of educated middle-class and upper-class intellectuals in mid-nineteenth century Prussia: enlightened, critical about religious orthodoxy and extreme political attitudes, somehow 'statesman-like' and diplomatic in their bearing.

Membership in the Berlin Academy and the Revolution of 1848/1849

Jacobi nevertheless remained an independent mind. After his return to Berlin, he joined the Prussian Academy, entitled though not obliged to teach at the University of Berlin. The character of the academy was quite different from the university. Its non-denominational tradition explains, for example,

ist. [...] es ist mein ernster Vorsatz, welcher erhört werden möge, dieses Glück durch Arbeit des Gedankens, muthiges Anstürmen zum Höchsten der Wissenschaft, unverdrossene Application aller mir gegebenen Kräfte einigermassen zu verdienen."

26 Richarz, *Der Eintritt der Juden in die akademischen Berufe*, 220–222.

27 Jacobi delivered this lecture at the *Singakademie* on January 3, 1846. See Jacobi, *Gesammelte Werke*, vol. 7, 309–327; excerpt in Koenigsberger, *Carl Gustav Jacob Jacobi*, 357f.

28 Koenigsberger, *Carl Gustav Jacob Jacobi*, 358: "Es ist nicht der wilde, unbewußte Drang, welcher sich dem Staate und der Religion gegenüberstellte, es ist die ruhige Sicherheit des sich selbst bewußten Geistes, welcher in ihnen und mit ihnen die Aufgabe der Menschheit lösen will."

29 *Ibid.*

why the Jewish physicist Peter Riess could become a member in 1842, more than a decade before a Jew got a chair at a Prussian university.³⁰ On the other hand, the academics were more dependent on the King and his cabinet than ordinary university professors. That is why Jacobi strove for a chair at the university, when first disturbances augured the looming political upheaval of 1848.³¹ But when the faculty of philosophy was asked by the minister to make a statement about Jacobi's request, he was already involved in the so-called 'March revolution' on the republican side. Once more, a faculty rejected Jacobi's request, i.e. the philosophical faculty of the University of Berlin declined to accept Germany's most ingenious and productive contemporary mathematician as its member. Only the three mathematicians on the faculty did not endorse this statement, obviously because they found the decision untenable from a scientific point of view. The decision was officially substantiated by Jacobi's unacceptable republican activities, and by the cryptic remark "that an impact on the special interests of the faculty by someone who stood outside it until now could not be expected."³²

Even more interesting are the reactions to Jacobi's political activities from the republican side. His involvement consisted mainly of some speeches in so-called constitutional clubs, where bourgeois and intellectuals discussed the idea of a German nation and democratization along the lines of the left wing of the Frankfurt National Assembly. From the reports of Jacobi's speeches we know that he argued above all for freedom of the press and of speech, for social progress and for equal opportunities of the individual.³³ Though not substantiated, it seems probable that Jacobi in this context also had equal rights for the Jews in mind as a goal.

Jacobi was no *homo politicus*, but rather felt obliged as a citizen to enter politics in order to come to the aid of his fatherland in a difficult situation. As he wrote to his brother: "Already in Cicero we can read that the fall of the Roman republic was due to the fact that the decent people retreated,

30 Richarz, *Der Eintritt der Juden in die akademischen Berufe*, 210; Adolf Harnack, *Geschichte der Königlich Preussischen Akademie der Wissenschaften zu Berlin*, Berlin 1900, 919; Schorsch, *The Religious Parameters of Wissenschaft*, 5.

31 Koenigsberger, *Carl Gustav Jacob Jacobi*, 447.

32 *Ibid.*, 454. In a letter to his brother Moritz Hermann (September 21, 1848) Jacobi described the hostile atmosphere at the academy: "Most of the academics do not behave very positively toward me. But the worst offender in this regard is R., who long since has ceased even to say hello to me. M. and P. act in a similarly foolish manner, but appear to be starting to accommodate. Yet that will probably entail certain difficulties." See *ibid.*, 469: "Die meisten Akademiker benehmen sich gegen mich nicht zum allerbesten; aber am elendsten R., so daß er mich schon lang nicht mehr grüßt; M. und P. bewiesen sich ähnlich albern, fangen aber an einzulenken, wie es scheint; doch dürfte dies seine Schwierigkeiten haben."

33 Ahrens (ed.), *Briefwechsel zwischen Carl Gustav Jacob Jacobi und Moritz Hermann Jacobi*, Anhang II, 241–246, here 246 (*Die Grenzboten*, 8. Jg., 1. Sem., vol. 2, no. 18 (1849), 176–181).

leaving the field to others.”³⁴ Though Jacobi’s aristocratic appearance was a bit alien to most republicans, he was obviously respected and appreciated as a sharp thinker and as a witty speaker. When, however, Jacobi thought about standing for the post of one of the representatives of the constitutional clubs, several of his fellow-republicans reacted very vehemently: according to the records of the club meetings, they repeatedly demanded that Jacobi should offer an explanation for his behaviour in the so-called “Raumer affair.”³⁵

This point can perhaps only be explained by taking into account Jacobi’s religious background: Friedrich von Raumer was the secretary of the Berlin Academy. During the celebration of the birthday of Friedrich II, in a lecture at the academy and in the presence of King Friedrich Wilhelm IV, Raumer praised Friedrich’s attitude towards religious freedom and equality as a model for a modern and progressive politics of religion. Indeed, Raumer urged the government to consider a continuation and extension of these policies as essential for the future of Prussia, and he explicitly called for more political influence of the Jews.³⁶ As Harnack has shown in his *History of the Prussian Academy*, Raumer’s lecture was directed against the strong position of conservative theologians and their influence on the government’s policy of religion.

The king was upset. He found Raumer’s lecture unacceptable and offensive, and he expected a formal excuse from the entire whole academy. Jacobi was among the academics who unanimously signed a letter of apology to the king. The character of this letter was very humble, if not submissive, and therefore caused severe displeasure among the republicans.

This so-called ‘affair’ took place at the beginning of 1847, and was ‘exhumed’ during the following year in order to undermine the sincerity and frankness of Jacobi’s political ambitions. Between the lines we find typical prejudices and stereotypes about the Jews, especially if they were converts: their political and moral opaqueness, their suspicious flexibility, their notorious unreliability, and so on. One newspaper article of the time sums up a long description of “Jacobi the politician” in these words: “No party trusts him, no party loves him.”³⁷ In the end, Jacobi came under fire both from the republican side and from the government. He had to withdraw from his republican candidature, and for a while he lost nearly all his privileges as a

34 Ahrens (ed.), Briefwechsel zwischen Carl Gustav Jacob Jacobi und Moritz Hermann Jacobi, 190.

35 Wilhelm Ahrens, C. G. J. Jacobi als Politiker. Ein Beitrag zu seiner Biographie, Leipzig 1907.

36 Harnack, Geschichte der Königlich Preussischen Akademie, 930.

37 Ahrens (ed.), Briefwechsel zwischen Carl Gustav Jacob Jacobi und Moritz Hermann Jacobi, Anhang II, 246 (Die Grenzboten, 8. Jg., I. Sem., vol. 2, no. 18 (1849), 176–181).

member of the academy. Jacobi fell between two chairs, or, as his brother Moses put it: "After freedom was invented, you have lost your freedom."³⁸

Concluding Remarks: Assimilation and Profession in Jacobi's Case

Jacobi's biography seems somewhat typical for an intellectual of Jewish background in the first half of the century in Germany. Under the pressure of discrimination, he strove for assimilation and, to a considerable degree, achieved that aim, at least according to formal and institutional standards. This dimension of his scientific career – and not the extremely interesting aspect of his social role within the scientific community – was stressed, because it seems evident that the overcoming of institutional barriers was most important for a rising young academic in his situation. For Jacobi, there would have been no proper profession without assimilation, and without profession there would have been no opportunity to express and cultivate what he regarded to be the reasonable and adequate form of human intellect, i.e. science and, above all, mathematics.

It is perhaps a bitter irony of history that neither Jacobi nor any of his Jewish disciples, such as Johann Georg Rosenhain or Ferdinand Joachims-thal, was able to achieve a university career without conversion. That accomplishment went first to a disciple of his rival Carl Friedrich Gauss, Moritz Abraham Stern, appointed the first Jewish professor at any German university, in Göttingen in 1859. This was eight years after Jacobi's death, though Stern was born only three years after Jacobi. Stern had to wait more than 20 years for his appointment, and most likely had the greater staying power of religion on his side to bolster him. Jacobi, however, is today far better known – not only as a mathematician, but also as an advocate of political liberalism and scientific freedom. First and foremost, he strove to enhance the power of science, which he understood as a feature of Enlightenment and a means to elevate humanity.