

# The Diagnostic Eye – On the History of Genetic and Racial Assessment in Pre-1938 Austria

**Maria Teschler-Nicola**

Department of Anthropology, Natural History Museum, Vienna, Austria

## ABSTRACT

*The present contribution examines the history of the genetic biology experts reports in Austria up until 1938. This field of activity effected the research topics and –methods at the Viennese Institute for Anthropology considerably and caused an increase of application in practice. The motives of the scientists, the coalition of interests as well as the orientation towards the content of the discipline before 1938 – which created the prerequisites for the racial experts reports of the NS time – will be discussed.*

**Key words:** *history of anthropology, genetic and racial assessment, pre-1938 Austria*

---

## Prologue

In the early eighties of the 20<sup>th</sup> century, Seidler und Rett<sup>1</sup> were first to shed light on the advisory opinions rendered by Austrian anthropologists and medical doctors consulted during the Nazi era on genetic and racial questions. More recent studies discuss other specific aspects of the subject, focusing more distinctively

on the role and ideological motivation of these experts; and investigating the tasks, organisation and complex structure of public authorities in the National Socialist state and the Reichssippenamt (Reich Geneological Office) in particular, as well as their internal dynamics.<sup>2</sup>

---

<sup>1</sup> Horst Seidler/Andreas Rett, Das Reichssippenamt entscheidet. Rassenbiologie im Nationalsozialismus, Vienna 1982.

<sup>2</sup> Katja Geisenhainer, Otto Reches Verhältnis zur sogenannten Rassenhygiene, in: *Anthropos* 91 (1996), 495–512; Hans-Peter Kröner, Von der Vaterschaftsbestimmung zum Rassegutachten. Der erbbiologische Ähnlichkeitsvergleich als »österreichisch-deutsches Projekt« 1926–1945, in: *Berichte zur Wissenschaftsgeschichte* 22 (1999), 257–264; Georg Lilienthal, Arier oder Jude? Die Geschichte des erb- und rassenkundlichen Abstammungsgutachtens, in: Peter Propping/Heinz Schott (eds.), *Wissenschaft auf Irrwegen. Biologismus –*

Initially employed exclusively to shed light on disputed paternity, the focus was on a so-called »comparison of polysymptomatic similarities« in morphological traits, which was required for proof of Aryan ancestry (»Ariernachweis«) following the Nazis' rise to power and entry into force of the »Law for the Restoration of Professional Civil Service« (»Gesetz zur Wiederherstellung des Berufsbeamtentums«) of April 7, 1933, and the Reich Citizenship Act (»Reichsbürgergesetz«) of September 14, 1935. The medical examinations were to be performed by anthropological institutes upon the request of the »Expert on Racial Research.«<sup>3</sup> The fact that the new regulations enabled the legislator to define the procedure, hence the »type of examination«<sup>4</sup>, not only illustrates »how National Socialism used anthropological knowledge for its own purposes«<sup>5</sup>; it also involved intensive preliminary work by and the collaboration of »experienced experts«.

This paper illustrates the history of comparative genetic analysis of similarities as practiced in Austria until 1938

and highlights scientific approaches and methods, as well as content, substance and lines of tradition followed by the Vienna Institute of Anthropology that were to establish the framework for the expert opinions furnished by Austrian anthropologists on issues of race.

### **Evolution of the First Anthropological Genetic Paternity Assessment in Austria and Its Underlying Motivation: Otto Reche and »Circumstantial Evidence«**

*»The judge must therefore request a certain method...«<sup>6</sup>*

Otto Reche<sup>7</sup> is considered as having pioneered the presentation of anthropological evidence in paternity court proceedings in the German-speaking world. In 1924, he succeeded Rudolf Pöch to the Vienna Chair of Anthropology and Ethnography, which had been vacant since 1921.<sup>8</sup> He advocated a racial anthropology based on human genetics<sup>9</sup>, took a prominent role in shaping Nazi racialist ideology<sup>10</sup> and in spite of his term of ba-

Rassenhygiene – Eugenik, Bonn 1992, 66–84; id., Anthropologie und Nationalsozialismus: Das erb- und rassenkundliche Abstammungsgutachten, in: Jahrbuch des Instituts für Geschichte der Medizin der Robert Bosch Stiftung 6 (1998), 71–91; id., Zum Anteil der Anthropologie an der NS-Rassenpolitik. Kritischer Essay, in: Medizinhistorisches Journal 19 (1984), 148–160; Diana Schulle, Das Reichssippenamt. Eine Institution nationalsozialistischer Rassenpolitik, Berlin 2001.

<sup>3</sup> H. Seidler/A. Rett (see footnote 1), 161.

<sup>4</sup> Comparative analysis included 120–130 physical traits: interpapillary lines of fingertips, palms, ear shape, nose, lips and oral fissure, scalp hair etc. See H. Seidler/A. Rett (see footnote 1), 163–167.

<sup>5</sup> H. Seidler/A. Rett (see footnote 1), 155.

<sup>6</sup> Otto Reche/Anton Rolleder, Zur Entstehungsgeschichte der ersten exakt wissenschaftlichen erbbiologisch-anthropologischen Abstammungsgutachten, in: *Z. Morph. Anthropol.* 55 (1964), 283–293, 283.

<sup>7</sup> See summarised table in the Annex. See also Josef Wastl, Otto Reche † 1879–1966, in: *Mitt. Anthropol. Ges. Wien* 96/97 (1967), 5–9; Michael Hesch, Otto Reche zum 80. Geburtstag, in: *Anthropol. Anz.* 23 (1959), 91–93; Curriculum vitae Otto Reche, undated, BA Koblenz R73/13816.

<sup>8</sup> His appointment was supported by the German-nationalistic members of the Vienna Anthropological Society, see Brigitte Fuchs, Frauen und »Rassenkunde«. Ein Beitrag zur Geschichte der anthropologischen Disziplinen an der Universität Wien (1870–1945), Vienna 1996, 1–236, 105.

<sup>9</sup> Michael Hesch, Otto Reche als Rassenforscher, in: Michael Hesch/Günther Spannaus (eds.), Kultur und Rasse, Munich/Berlin 1939, 9–16; Otto Reche, Verbreitung der Menschenrassen, Leipzig 1938, 6; id., Die Anthropologie als biologische Wissenschaft, in: *Der Biologe* 8 (1939), 317–323, 322 and 323.

<sup>10</sup> Reche was a member of numerous National-Socialist associations, see v. Hoff's application to the Reichsforschungsrat (Reich research council) 13/2/1943. BA Koblenz R 73/13816.

rely three years, launched three projects of »sustained effect«: Reche was not only co-founder of the *Vienna Society of Racial Hygiene*<sup>11</sup> but also co-founder and first chairman of the *German Society for Blood Group Research (Deutsche Gesellschaft für Blutgruppenforschung)*. Established in 1927, the Society had aimed to survey blood groups and other »racial traits« throughout Europe, covering hundreds of thousands of people. The *Zeitschrift für Rassenphysiologie* acted as official organ of the Society.<sup>12</sup> Reche himself, a »scientist who was political in the best meaning of the word«<sup>13</sup>, presented himself as a compliant follower of the Nazi regime: In a grant application to the DFG (German Research Foundation) for publishing the paper, he added that he had founded the magazine, among other reasons, because of the »possibility of gradually bringing blood group research, to date (mid-20ies, author's note) almost exclusively performed by Jews, under Aryan control«<sup>14</sup>, in the expectation that

*»daß dieser Zweig der Rassenforschung nicht nur für Zwecke der Rechtswahrung – hauptsächlich in Vaterschaftsprozessen – eine immer wichtiger*

*werdende Rolle spielen würde, sondern ganz besonders auch in rassenpolitischer Hinsicht, da gerade rassenphysiologische Erkenntnisse und Untersuchungsmethoden für die Reinhaltung von Familie und Volk von rassenhygienisch und rassisch bedenklichem Erbgut unentbehrlich sind.«<sup>15</sup>*

*»this branch of racial research would not only become increasingly important to the preservation of justice – mainly in paternity proceedings – but especially for racial policy, given that the physiological findings and methods of racial examination are indispensable for keeping the family and the people pure from genetic material that is questionable from the point of view of racial hygiene«.*

Reche's third project, his »invention« of the anthropological paternity assessment, which was about to embark on a dubious career in the name of politics, became a key factor in the subsequent orientation of anthropology in Vienna: Reche, who had supported and disseminated the Nazi »racial policy« for decades, believed that science was obliged to »be at the service of man«<sup>16</sup>; therefore he was

<sup>11</sup> The Wiener Gesellschaft für Rassenpflege (Rassenhygiene) was established in November 1924 upon the suggestion of Willibald Neubacher, a veterinarian; Otto Reche was made first chairman, Heinrich Reichel, a social hygienist, became second chairman and Michael Hesch, Assistant at the Institute of Anthropology and Ethnography, was named clerk of the Society. Another co-founder of the Society was Gustav Kraitschek, whose aim was to disseminate ideas on racial hygiene with a »scientific« basis (»scientific racial hygiene«). Before, the »Graz Gesellschaft für Rassenhygiene« had been founded by dermatologist Rudolf Polland, who later became expert on genetic biology. See Monika Löscher, Zur Rezeption eugenischen/rassenhygienischen Gedankengutes in Österreich bis 1934 unter besonderer Berücksichtigung Wiens, Master's thesis Vienna 1999.

<sup>12</sup> Also founded and published in 1927 by Reche. See application for »Rasse, Monatsschrift für den Nordischen Gedanken«, R. v. Hoff to Dr. Mentzel, 13/2/1943. BA Koblenz R73/13816.

<sup>13</sup> Werner Kulz, Die politisch-weltanschauliche Bedeutung der Arbeiten Otto Reches, in: M. Hesch/G. Spannaus (see footnote 9), 17–22.

<sup>14</sup> Grant application for *Zeitschrift für Rassenphysiologie*, Otto Reche to the DFG, 19/11/1938, BA Koblenz R73/15980. In support of his application he mentions, i.a., the paper's contribution to »elimination of the majority of the Jewry from this field of research«.

<sup>15</sup> Grant request, Otto Reche to DFG, 19. 11. 1938, BA Koblenz R73/15980.

<sup>16</sup> Otto Reche, Die ersten anthropologisch-erbbiologischen Abstammungsgutachten, undated typescript, pp. 1–9, in: Otto Reche und Anton Rolleder, Die Einführung des anthropologisch-erbbiologischen Gutachtens in Österreich (Historische Unterlagen), NHM/AA, Somatology Collection 2682.

highly supportive of Vienna district judge Anton Rolleder's<sup>17</sup> suggestion to furnish anthropological genetic opinions in contentious paternity cases.<sup>18</sup> Reche was to call him »father of paternity assessments« later.<sup>19</sup> Reche, the »genealogist with a biological bias«<sup>20</sup> with 25 years of practical experience»<sup>21</sup> in comparative similarity analyses which he had acquired within his own family and with the Criminal Records department of the Vienna police, welcomed the Viennese judge's suggestions<sup>22</sup> and developed his »exact scientific method«<sup>23</sup> of genetic paternity assessment at the Vienna Institute in 1925/1926: so-called »circumstantial evidence« based on the assumption that many indications pointing in the same direction mutually endorse and thereby reinforce each other. As a matter of fact, this claim of exact scientific reasoning

was effectively neither supported by »circumstantial evidence« nor by the assessments subsequently expanded to include numerous characteristics and made more »objective« by using mathematical calculations. But many judges nevertheless accepted the genetic procedure as proof of evidence, for the following reasons: Prior to the application of genetic and of serological procedures (roughly established at the same time), Austria considered as procreator of a child the man who, according to § 163 ABGB (Civil Code, contestation of extra-marital paternity), had had sexual relations with the child's mother within the period of conception as specified by the law (180 to a maximum of 300 days prior to the child's birth),<sup>24</sup> and jurisdiction up to that date had in most cases been based on the credibility of the defendants' state-

<sup>17</sup> Anton Rolleder (1881–1972): regional court counsel; his activities included decisions on paternity suits; from 1938 assessor to the Party court; from January 1940 one of the chairmen of the Vienna Erbgesundheitsgericht (genetic health court) which he was later in charge of; party member since 1931; since 1938 member of the NS-Rechtswahrerbund (Nazi federation of preservers of law). See Claudia Spring, Verdrängte Überlebende. NS-Zwangssterilisationen und die legitistische, medizinische und gesellschaftliche Ausgrenzung von zwangssterilisierten Menschen in der Zweiten Republik, Master's thesis Vienna 1999, 297 and 298; Johann Jungwirth, Landesgerichtsrat Anton Rolleder †, in: *Mitt. Anthropol. Ges. Wien* 102 (1973), 1–2; Anton Rolleder, Meine Handakten über meine Erfahrungen und Erlebnisse bei Einführung und Verwendung anthropologisch-erbblologischer Sachverständigengutachten u. Ähnl. zwecks Erledigung von Vaterschaftsprozessen in Österreich, submitted in March 1961, typescripts and correspondence in: Otto Reche und Anton Rolleder, Die Einführung (see footnote 16). NHM/AA, Somatology Collection 2682.

<sup>18</sup> It seems that already in 1921, a paternity suit was decided on an anthropological and genetic pathological opinion in Norway. See Hans Grebe, Über erbpathologische Befunde bei Vaterschaftsbegutachtungen, in: *Der Erbarzt* 12 (1944), 17–22.

<sup>19</sup> O. Reche, typescript. NHM/AA, Somatology Collection 2682, 3; roughly around the same time, a similar method was also established in Russia. See Albert Harrasser, Ergebnisse der anthropologisch-erbblologischen Vaterschaftsprüfung in der österreichischen Justiz, in: *Mitt. Anthropol. Ges. Wien* 65 (1935), 204–232, 205.

<sup>20</sup> O. Reche, typescript. NHM/AA, Somatology Collection 2682, 2.

<sup>21</sup> *Ibid.*

<sup>22</sup> Rolleder had previously also approached Hella Pösch, who had been a free-lance associate at the Institute of Anthropology and Ethnography in Vienna until 1925, to prepare anthropological opinions for him. See the chronological list in Rolleder's »Handakten« (personal files) concerning the appointment of Dr. Hella Pösch as expert in paternity suit Z./F. (GZ CV 350/24); according to a handwritten annotation by Rolleder dated January 1961 this appointment did not occur. NHM/AA Somatology Collection 2682.

<sup>23</sup> O. Reche, typescript, NHM/AA, Somatology Collection 2682, 2.

<sup>24</sup> § 163 ABGB constitutes an assumption. Up to then, this assumption could be refuted only by providing evidence as to the incapacity to procreate of the person alleged to be the child's father, by an impeccable alibi or contradiction between the gestation period and the child's maturity. See details in A. Harrasser (see footnote 19) and Ludwig Kornel, Die Blutuntersuchung im Vaterschaftsprozesse, in: *Österr. Richterzeitung* 19 (1926), 159–160.

ments<sup>25</sup>. The »blood group opinion« (serological proof), which in 1926 had also been delivered for the first time in Austria in a paternity suit, was also accepted as proof of evidence. And although it most probably met the requirements for adoption in ambiguous paternity matters – its heredity pattern was known, which obviously did not apply to visible morphological features – its application was limited: Its purpose only was to prove the exclusion of a certain father, without positively identifying a specific father. Reche considered this an »unpleasant procedural defect«<sup>26</sup> and never tired of praising the methodological advances in anthropology, which were able to »prove paternity with all certainty in a large majority of cases«: He had probably also become aware of the economic potential of the new method of »applied anthropology«. From 1926, Austrian administration of justice eventually admitted supplementary genetic paternity opinions: Comments on §§ 158 and 163 ABGB mentioned as proof both »blood properties«, as well as »facts of an anthropological nature«, i.e. »certain physical traits which make a child's descent from the one man more likely than from the other«.<sup>27</sup> This context is the first to mention the criterion of »racial trait« as

one possible piece of evidence in paternity proceedings.<sup>28</sup>

After Reche had sworn his oath as official expert appointed to the courts in February 1925 in the district court (BG) of Meidling, Vienna,<sup>29</sup> the first examination was to take place on July 9, 1926.<sup>30</sup> His methodology becomes obvious from three well-preserved opinions which Reche delivered upon Rolleder's request between January and June 1927.<sup>31</sup> Reche's comparative analysis started out by including »19 essential aspects« (features): Apparently benefiting from the experience he had gathered as lecturer of the Institute of Criminal Investigation at Vienna's Police Headquarters, he emphasised form and number of papillar lines of the fingertips, apart from the blood group characteristics. He also assessed the colouring (hair and eye colour) and the characteristic form of the head, face, eyes, ears and nose. As opposed to much more extensive genetic analyses conducted later, e.g. by Josef Wastl at the Natural History Museum, Reche took a predominantly »morphognostic« approach, with metric »classification« of the head and face only. We cannot establish in all certainty to which degree his methodology followed along

<sup>25</sup> Rolleder also seems to have mentioned to Reche that »in no other field of jurisdiction do we encounter so many lies and so much perjury as in paternity suits«. A. Rolleder, typescript. NHM/AA, Somatology Collection 2682, 3.

<sup>26</sup> Otto Reche, Anthropologische Beweisführung in Vaterschaftsprozessen, in: *Österr. Richterzeitung* 19 (1926), 157–159, 158.

<sup>27</sup> A. Harrasser (see footnote 19), 206.

<sup>28</sup> This comment dates back to R. Bartsch, quoting Albert Harrasser, Vaterschaftsbeweis I. Zur prozessualen Bedeutung des naturwissenschaftlichen Vaterschaftsbeweises, in: *Österr. Richterzeitung* 25 (1932), 125–126, 126.

<sup>29</sup> See the chronological description in A. Rolleder, Handakten. NHM/AA, Somatology Collection 2682.

<sup>30</sup> It is reported that Otto Frhr. v. Verschuer of the Kaiser-Wilhelm Institut für Anthropologie, menschliche Erblehre und Eugenik in Berlin developed a similar procedure and had made 6 anthropological/genetic paternity assessments by 1928 – apparently unaware of the developments in Vienna. See Otto Frhr. v. Verschuer, Vaterschaftsbestimmung, in: *Der Erbarzt* 12 (1944), 6–17. Independently, a thorough method had also been developed in Russia, see A. Harrasser, Ergebnisse (see footnote 19), 205 and Albert Harrasser, Zur prozessualen Bedeutung (see footnote 28), 126.

<sup>31</sup> Three genetic opinions delivered by Reche (typescript carbon copies). NHM/AA, Somatology Collection 2682.

the lines of his long-trained Viennese colleagues who had a »biological« bias, or whether he was familiar with the schemes developed by Pöch<sup>32</sup> and Weninger for WW I prisoners, or Weninger's further »attempts at classification«, which had already been available in print since 1924.<sup>33</sup> This seems rather likely though, given that Reche modified his selection of traits within the few months which we are able to review from available analyses, and subsequently performed a clearly more nuanced morphognostic assessment and description of physical traits along the lines of the »Vienna School« protagonists.<sup>34</sup> Although he brought to the attention of the Austrian Courts a succinct description of his method<sup>35</sup> in 1926, it was not published in scientific literature. Reche, one of the anthropological

pioneers of Nazi racialist ideology, member of the Alldeutsche Verband (All-German Association) since 1913, associate of the Deutschvölkische Schutz- und Trutzbund<sup>36</sup> and after taking the Chair in Vienna in 1925 also an active member of the »Deutsche Klub«<sup>37</sup>, found in Anton Rolleder,<sup>38</sup> who was close to him ideologically, a convinced proponent and supporter of these »methods of examination which are ground-breaking in Austria«<sup>39</sup>. Reche was highly persuasive in marketing them through the media and personal contacts, and disseminating them quickly – in spite of the methodological shortcomings which he himself was well aware of: age and sex variability, doubtful qualitative standard of the traits, and lack of knowledge on heredity. Nevertheless, not all judges<sup>40</sup> – and not all biologists<sup>41</sup> –

<sup>32</sup> Rudolf Pöch (1870–1921), First Chair of Anthropology and Ethnography in Vienna, is considered the founder of the so-called »Vienna School«; see e.g. Eugen Oberhammer, Rudolf Pöch (gestorben am 4. März 1921). Nachruf, in: *Mitt. Anthropol. Ges. Wien* 51 (1921), 95–104 and Johann Szilvássy/Paul Spindler/Herbert Kritscher, RUDOLF PÖCH – Arzt, Anthropologe und Ethnograph, in: *Ann. Naturhist. Mus. Wien* 83 (1980), 743–762. For reports on the studies commissioned by the Vienna Anthropological Society on the Royal and Imperial P.O.W. camps see Margit Berner in this volume as well as B. Fuchs (see footnote 8), 86–99.

<sup>33</sup> Josef Weninger and Hella Pöch, Leitlinien zur Beobachtung der somatischen Merkmale des Kopfes und Gesichtes am Menschen, in: *Mitt. Anthropol. Ges. Wien* 54 (1924), 232–270.

<sup>34</sup> A letter written by Rolleder to lawyer Ludwig Bernhart of Leoben on January 2, 1928, refers to four paternity assessments made by Reche: »S...Č each subsequent one more beautiful and detailed than the former, the last one comprising 32! pages with superb photographs...«. NHM/AA, Somatology Collection 2682.

<sup>35</sup> Otto Reche, Anthropologische Beweisführung (see footnote 26).

<sup>36</sup> Curriculum vitae Otto Reche, v. Hoff to Reichsforschungsrat, 13/2/1943. BA Koblenz R 73/13816.

<sup>37</sup> In attempting to advance the date of Reche's NSDAP membership, Justizrat v. Zezschwitz of Munich apologises for the »trivial name« of the association as »concealment still essential at that time in Vienna«, where National Socialism, at the time of Reche taking the Chair, »had been under rather weak, often unclear leadership«; a »well-functioning, solid block« had only been formed among the student body of the Vienna University, Justizrat v. Zezschwitz to NSDAP, 19/9/1940. BA Berlin PK Reche Otto, 11673.

<sup>38</sup> Rolleder i.a. laments that an indicted Arab had »eloped« him and that he was sorry having missed such »exemplary case« (probably a genetic opinion including »racial features«, author's note), »unless the alleged Arab were perhaps a member of the same race as the child's mother (Jewess)«. Rolleder to Reche, 4/10/1927. NHM/AA, Somatology Collection 2682. See also the racialist statements in Reche's response, where he reacts to Rolleder's »very witty« comments as follows: »I suppose you are right in assuming a racial companion of the mother; he probably dreads being ritually slaughtered«, Reche to Rolleder, 15/10/1928. NHM/AA, Somatology Collection 2682.

<sup>39</sup> Rolleder's fees invoice, 5/5/1927. NHM/AA, Somatology Collection 2682.

<sup>40</sup> Rolleder i.a. complains about non-compliance with a request made in a lawsuit conducted by a »local judge who resents the anthropological method«. Rolleder to Reche, 10/7/1927. NHM/AA, Somatology Collection 2682. He also laments that his fellow judges at the Meidling court were »outright enemies of all issues of heredity and descent« and had therefore made disparaging remarks about his work, mainly behind his back,

were convinced of the new approach, while the press remained critical.<sup>42</sup>

### *The transition phase*

Probably with good reason from his own subjective point of view, Rolleder was disappointed at Reche's leaving Vienna in the fall of 1927 to become Full Professor at Leipzig's Ethnological-Anthropological Institute and director of the museum. However, probably upon Rolleder's intervention, he continued his appointment as expert to the Austrian courts for lack of consultants with »genetic training« to replace him;<sup>43</sup> his activities were very likely financially attractive, as the expert fees ranging from 700.– to 1,000.– Austrian schillings seemed »rather high« even to some judges.<sup>44</sup> With the initial cooperation of his assistant Michael Hesch<sup>45</sup>, who

he would occasionally dispatch to Vienna, Reche continued to issue a number of opinions. After all, in the meantime even the Supreme Court had admitted »anthropological examination« as proof of paternity, stating explicitly that refusal to comply with the request for anthropological examination was paramount to procedural defect<sup>46</sup>. But coordination proved difficult from Leipzig. Reche lacked the relevant premises<sup>47</sup> and his payment advances could not always be secured, so that Rolleder would soon deplore the »slow-down« in his cases.<sup>48</sup> From mid-1928 approximately, Reche contracted hygienist Rudolf Polland<sup>49</sup> from Graz with the inventorying of traits, »naturally intending to procure some extra income to the brave fighter«.<sup>50</sup> Reche was soon to be gradually faced with other, in his opinion unpleasant developments, including a

---

and had »likewise influenced the officials in his office«, Rolleder to Reche, 10/4/1928. NHM/AA, Somatology Collection 2682. See also O. Reche/A. Rolleder, *Zur Entstehungsgeschichte* (see footnote 6), 283 und 284.

<sup>41</sup> Prior to calling on Reche, Rolleder had also approached Rudolf Martin from Munich for the delivery of genetic opinions, which he declined.

<sup>42</sup> See *Wien Sonntag*, 4/12/1927.

<sup>43</sup> Rolleder to Ministry of Education, 28. 8. 1927. NHM/AA, Somatology Collection 2682. See also O. Reche/A. Rolleder (see footnote 6) 285.

<sup>44</sup> Emil Blank, *Pater semper incertus?*, in: *Österr. Richterzeitung* 20 (1927), 136–138, 137; see also Reche's letter to Rolleder, 2/11/1927. NHM/AA, Somatology Collection 2682. By way of comparison, alimony payments were established at 20.– to 40.– schillings, see e.g. Rolleder's decision in case M. E. vs. A. B., CV 1122/26/27, 19/9/1927. NHM/AA, Somatology Collection 2682.

<sup>45</sup> Michael Hesch, student of Rudolf Pösch, from 1921 Assistant lecturer at the Institute of Anthropology and Ethnography in Vienna, from 1927 Reche's assistant in Leipzig, later in charge of the anthropological collection of the Museum of Zoology and Ethnology in Dresden. ÖSTA, AVA, Unterrichtsfasz. 653 (Wissenschaftliche Hilfskräfte), Zl. 12192–1921; see also *Wiener Neueste Nachrichten*, 12/2/1928.

<sup>46</sup> A paternity suit dealt with at the district court of Leopoldstadt in Vienna: As the case was dismissed because of a non-conclusive blood group comparison, the plaintiff appealed to a higher court requesting proof by anthropological examination and dactyloscopy. Delayed filing of the request resulted in a review by the Supreme Court, which stated procedural defect. Press note (undated). NHM/AA, Somatology Collection 2682.

<sup>47</sup> Reche had requested permission from his successor Josef Weninger to use the premises of the Vienna Anthropological Institute, which he denied. Reche to Rolleder, 30/12/1927. NHM/AA, Somatology Collection 2682. The examinations were then conducted by Reche's assistant Hesch in the photographic studio »Apollo« at Landstraßer Hauptstraße 26. Lawyer Dr. B. Jaitner to district court of Meidling, 30/1/1928. NHM/AA, Somatology Collection 2682.

<sup>48</sup> Rolleder to lawyer L. Bernhart, 2/1/1928. NHM/AA, Somatology Collection 2682.

<sup>49</sup> Polland to Rolleder, 14/9/1928 and Reche to Rolleder, 30/6/1928. NHM/AA, Somatology Collection 2682; see also Polland to LGR Murmayr, civil district court in Graz, 1928 (without exact date). UW/Ifa, Ordner Korrespondenz. I am indebted to Univ. Prof. Dr. H. Seidler and Univ. Prof. Dr. H. Wilfing who provided access to the files.

<sup>50</sup> Reche to Rolleder, 2/4/1928. NHM/AA, Somatology Collection 2682.

Supreme Court ruling questioning the conclusiveness of one of his genetic opinions.<sup>51</sup> Reche's justification is symptomatic, indirectly revealing the weaknesses of the genetic approach: A child's descent from a given man would necessarily have to »be expressed somehow – at least not insignificantly – in the phenotype as well«. <sup>52</sup> A precursor of efforts towards making genetic descent »mathematically more objective« as subsequently aimed at by Viennese anthropologists, Reche deplored the fact that the Supreme Court failed to comprehend that in the complete absence of »improbabilities« an accumulation of »probabilities« and »major probabilities« was tantamount to »evidence« and that inversely, an accumulation of »improbabilities« amounted to »counter-evidence«. <sup>53</sup> Reche, the »pioneer«, felt misunderstood. <sup>54</sup> To prevent further official misunderstanding, Reche re-worded his opinions, drafting them »in clearer terms«, with increasingly »more authoritative findings«. <sup>55</sup> Reche's responsiveness to external demands, while simultaneously in ignorance of methodological inadequacies and theoretical deficiencies, may well be considered an expression of a sci-

ence, or of its profit- and career-oriented actors, that had meanwhile become increasingly application-oriented. Nevertheless, and in spite of Rolleder's massive propaganda, the Austrian courts' demand for Reche's opinions decreased significantly towards the end of the 1920s – due to negative decisions adopted by the Supreme Court, public criticism, <sup>56</sup> complicated procedural logistics, and probably also due to outrageous fees. <sup>57</sup>

Given that Josef Weninger, Reche's successor to the Vienna Chair, initially raised scepticism over genetic assessment in general, claiming to be »unfamiliar with this method«, <sup>58</sup> other medical experts were consulted for their expertise; these included Anton Werkgartner<sup>59</sup>, the forensic expert and pathologist specialising in blood tests and dactyloscopy, Burghard Breitner<sup>60</sup>, head of the 1<sup>st</sup> Surgical Department of the Rudolfstiftung hospital, and particularly hygienist Heinrich Reichel.<sup>61</sup>

Yet despite these developments, genetic advisory activity was eventually to become instrumental in determining the »boom« of the Vienna Institute in the 1930s.

<sup>51</sup> The Supreme Court questioned an anthropological opinion which had concluded »absence of paternity« by commenting: While »similarity« may indicate descent, does dissimilarity prove the contrary?« Reche to Rolleder, 19/4/1928. NHM/AA, Somatology Collection 2682.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

<sup>54</sup> Reche to Rolleder, 21/12/1928. NHM/AA, Somatology Collection 2682.

<sup>55</sup> Reche to Rolleder, 30/6/1928. NHM/AA, Somatology Collection 2682.

<sup>56</sup> Reche's anthropological method to determine paternity was also the subject of a variety show in Leipzig. Reche to Rolleder, 21/12/1928. NHM/AA, Somatology Collection 2682.

<sup>57</sup> Ibid.

<sup>58</sup> O. Reche/A. Rolleder (see footnote 6) 291.

<sup>59</sup> Rolleder's decision in case 5 C 1785/27, 24/9/1928. NHM/AA, Somatology Collection 2682.

<sup>60</sup> Lawyer Marcell Sokal to Rolleder, 6/1/1928. NHM/AA, Somatology Collection 2682. According to the press Breitner (initially? author's note) did not feel eligible to deliver such opinion. *Neue Freie Presse*, 12. 2. 1928.

<sup>61</sup> *Wiener Neueste Nachrichten*, 7/11/1928, 8; see also decision of the district court of Meidling, 27/3/1930 and judgment of district court of Meidling in 4 C 259/30, 20/10/1930. NHM/AA, Somatology Collection 2682; see Reche to Rolleder, 17/9/1938. NHM/AA, Somatology Collection 2682, where Reche mentions that »Prof. Reichel – himself not an anthropologist – has prepared many assessments, which he has obviously learnt to do quite well«. There had been one opinion though, of 1927, which »in all confidentiality – quite obviously lacked the necessary anthropological expertise«.

**»Hands-on« Approach of a Discipline: Official Expert Josef Weninger and Fundamental Genetic Research Activities of the »Vienna School«**

*Scepticism and disassociation*

In 1927, Josef Weninger<sup>62</sup> was appointed Professor of Anthropology, succeeding Otto Reche to the Vienna Chair of Anthropology. He initially refused to meet the Austrian courts' requests for genetic opinions on the grounds that paternity assessments according to Reche could not be performed<sup>63</sup> for lack of reliable data and »deficiencies in scientific foundations«. <sup>64</sup> His critical approach led to, i.a., modifications of an initial judgement<sup>65</sup> based on one of Reche's opinions, and was referred to in a basic decree issued by the president of the higher provincial court.<sup>66</sup> In other words, by alleging methodological shortcomings, Weninger initially succeeded in refusing to take on assignments.

His objections seem to be reasonably founded, and there is no doubt that Weninger's scientific pretensions were honourable. What comes as a surprise, though, is his »change of attitude« only slightly later, which raises the question about the personal relationship between Reche and Weninger (their political stance was different) or about academic competition. Indeed, while Reche produced expert opinions with love of morphological detail – in fact resembling the Viennese researchers' scientific approach, without ever specifying so in writing – Weninger ignored Reche's »achievements« – even though their reasoning did not differ substantially.

Probably upon Rolleder's suggestion<sup>67</sup>, Hella Pöch, Rudolf Pöch's widow and voluntary associate at the Institute, submitted a »draft report on the establishment of an institute for paternity research« early in 1929.<sup>68</sup> It summarises the Insti-

<sup>62</sup> Josef Weninger (1886–1959), studied at the Technical University and the University of Vienna from 1904 (prehistoric studies, folklore studies and ethnology, ethnography and physical anthropology and geography); he was a student of Hoernes, Haberlandt, Much, Oberhammer and Pöch, among others; initially worked as scientific support staff and assistant with Hoernes and Pöch, later for Pöch only; together with Pöch studied the P.O.W. of WW I, developed a somato-morphological method; 1918–1927 scientific officer at the State Administration of Monuments (Staatsdenkmalamt); further cooperation with Pöch as voluntary Assistant; 1926 postdoctoral thesis (»Habilitation«); 1927 was appointed Extraordinary Professor of Physical Anthropology; in charge of the Institute (succeeding Otto Reche); 1934 appointed Full Professor; end of August 1938 was forced to retire by virtue of § 3 art. 1 of the regulation governing the reorganisation of the Austrian professional civil service because of his wife's being a Jewess; 1940–1945 associate of the NÖ Landesmuseum (Lower Austrian Provincial Museum); in 1945 re-established as Full Professor and Head of the Anthropological Institute; in 1945 real member of the Austrian Academy of Sciences; retirement in 1957. UW/IfA, Ordner Josef Weninger; see also Wilhelm Ehgartner, Josef Weninger †, in: *Mitt. Anthropol. Ges. Wien* 88/98 (1959), 1–7.

<sup>63</sup> Weninger to district court of Fünfhaus, 7/11/1927. UW/IfA, Ordner Forensische Korrespondenz.

<sup>64</sup> Weninger to civil provincial court of Graz, 10/5/1928. UW/IfA, Ordner Forensische Korrespondenz.

<sup>65</sup> Typescript, extract of the appellate judgment on case 5 C 1785/27=43 R 1235/28, 11/2/1929. NHM/AA, Somatology Collection 2682.

<sup>66</sup> Basic decree 80/28 of the President of the Higher Provincial Court dated 23. 10. 1928, Jv 14407/28; many judges were alienated by the reference to critical statements made by a prominent anthropologist in a basic decree; Rolleder subsequently attempted to deny Weninger's competence in »fields of genetic science applied to paternity assessment which are not necessarily related to anthropology«. Decision by district court of Meidling on case 4 C 259/30, 20/10/1930, 8–9. NHM/AA, Somatology Collection 2682.

<sup>67</sup> A. Rolleder, typescript. NHM/AA, Somatology Collection 2682, 4.

<sup>68</sup> Entwurf Hella Pöchs zur Schaffung eines Institutes für Paternitätsforschung, early 1929, typescript, carbon copy, 2 pages. NHM/AA, Somatology Collection 2682.

tute's forthcoming research programme, which was to address »preliminary issues« involved in preparing genetic analyses, including age variability and quality of observed traits.<sup>69</sup> Hella Pösch and probably other members of the Institute were likely to be well aware of the profitability of such exercise, which would »definitely come to bear over time« due to the »prospect« of the programme being used »in return for monetary compensation, even from abroad.«<sup>70</sup>

In the early 1930s Rolleder, apparently slightly alienated by Weninger's refusals, perhaps even by some Supreme Court rulings, endeavoured to establish a platform of discussion including the experts known to him or recommended by Reche (Polland, Breitner, Reichel, v. Weyringer and others). Convinced of the need for an institute of human genetics based on his practical judicial experience and internal knowledge, Rolleder now took an interest in developing further strategies for the implementation of such institute; in particular, he sought to initiate a discourse on the resources »science can provide for reliable determination of the male co-progenitor of a human being«<sup>71</sup>. His efforts raised a relatively modest echo: Hardly any of the recipients responded to the issues raised by him in detail, except for Reche, who answered the question, for example, of the »simplest case« of anthropological features by referring i.a. to the »cross-breeding of extremely different races«:

*»Erstkreuzung zwischen Mitteleuropäer und Neger z. B. muß stets schon beim kleinen Kinde zu erkennen sein; wenn derartige negerische Merkmale bei einem Kind vorhanden sind, muß also von einer Elternseite Negerblut gekommen sein; sind keine negerischen Merkmale da, so kann kein Negerblut vorliegen --- Und bei sorgfältiger Untersuchung werden sich auch andere Rassenmischungen nachweisen lassen, wird man auch bei anderen Rassenmischungen auf Vaterschaft oder Nichtvaterschaft schließen können.«<sup>72</sup>*

*»A first crossing between Central European and Negro, for example, must be recognisable already in the small child; if a child has such Negro features, one parent must obviously be of Negro blood; in the absence of Negro features, there can be no Negro blood --- Careful examination will also bring other racial mixtures to light, and it will also be possible to prove paternity or absence of paternity for other racial mixtures.«*

In conclusion, these examinations had a very narrow basis – still so in 1931, when the Supreme Court ruled in appellate proceedings that lack of biological examination in a paternity case constituted procedural deficiency.<sup>73</sup>

*The »Erbbiologische Arbeitsgemeinschaft«*

Weninger subsequently changed his attitude and signalled willingness of the

<sup>69</sup> Ibid., 1.

<sup>70</sup> Ibid., 2.

<sup>71</sup> Rolleder to Reche, 20/10/1930. NHM/AA, Somatology Collection 2682.

<sup>72</sup> Reche to Rolleder, 20/3/1930. NHM/AA, Somatology Collection 2682.

<sup>73</sup> Albert Harrasser mentions 24/4/1931 as the day of the Court ruling, see A. Harrasser, Zur prozessualen Bedeutung (see footnote 30) 126, while Josef Weninger mentions 23/4/1931, see Josef Weninger, Über anthropologisch-erbbiologische Vaterschaftsgutachten, in: *Österr. Richterzeitg.* 25 (1932), 126–127, 127; see also Eberhard Geyer, Die Beweiskraft der Ähnlichkeit im Vaterschaftsnachweis. Praktische Anwendung, in: *Mitt. Anthropol. Ges. Wien* 68 (1938), 54–87, 55.

University Institute to furnish opinions on genetic biology under his leadership.<sup>74</sup> At the same time he criticised the interests of previous anthropologists (also of his Institute) who had focused on the description of human races while »showing lack of attention for biology«<sup>75</sup>. He founded the »Erbbiologische Arbeitsgemeinschaft«<sup>76</sup> (Working Group on Genetic Biology) for the purpose of establishing the mean frequency distribution and inheritance of morphological traits based on examinations of twins and anthropological surveys of families, in order to establish the basis for expert opinions and to participate in their preparation. Apart from Josef Weninger, this working group included his wife Margarete, Eberhard Geyer, Dora Maria Koerner, Robert Routil and Albert Harrasser, each of whom were responsible for one specific group of features.

The method used was »metric measurement« and graphic or photographic documentation (»classification«) of the morphological features of the head, face and body<sup>77</sup>, which Weninger liked to refer

to as the »Vienna School« of anthropology.<sup>78</sup>

Soon after the working group was established Albert Harrasser, Weninger's assistant until the end of 1934<sup>79</sup>, observed an increase in forensic work and research activities at the Vienna Institute which »would be totally unthinkable without the constant work for the courts and the resulting income«.<sup>80</sup> All this was due to a general practical interest in these issues and the fact that the discipline could now serve the interests of society at large.<sup>81</sup>

It is thus not surprising that already in the winter term of 1931, due to increased participation from the Reich, student numbers rose significantly.<sup>82</sup> Weninger attributed that rise to the start of lectures on racial knowledge and genetic biology.

Towards the end of 1932, Josef Weninger and Heinrich Reichel eventually had their names registered on the roster of judicial experts on »human genetics«.<sup>83</sup> By 1934, Weninger and his assistants were to render 200 opinions<sup>84</sup>, identifying by

<sup>74</sup> See J. Weninger, *Vaterschaftsgutachten* (see footnote 73), 127. Otto Frhr. v. Verschuer maintained that it was Weninger's visit at the Institute in Berlin which made him decide to prepare genetic opinions, see O. Frh. v. Verschuer, *Vaterschaftsbestimmung* (see footnote 30), 7.

<sup>75</sup> J. Weninger, *Vaterschaftsgutachten* (see footnote 73), 127.

<sup>76</sup> See A. Harrasser, *Ergebnisse* (see footnote 19), 207 and 208; Eberhard Geyer, *Probleme der Familienanthropologie*, in: *Mitt. Anthropol. Ges. Wien* 64 (1934), 295–326, 325 and 326; O. Reche/A. Rolleder, *Zur Entstehungsgeschichte* (see footnote 6), 286.

<sup>77</sup> Josef Weninger, *Der naturwissenschaftliche Vaterschaftsbeweis*, in: *W. klin. Wochenschr.* 1 (1935), 1–11.

<sup>78</sup> Typescript, 3 pages. UW/IfA, Ordner Allgemeine Korrespondenz 1938. See also Josef Weninger, *25 Jahre Anthropologisches Institut an der Universität in Wien*, in: *Mitt. Anthropol. Ges. Wien* 68 (1938), 191–205, 202; id., *Menschliche Erblehre und Anthropologie (Zur Methode der Erbforschung)*, in: *W. klin. Wochenschr.* 26 (1936), 1–17, 12.

<sup>79</sup> Harrasser worked at the Kaiser-Wilhelm-Institut für Genealogie und Demographie of the Deutsche Forschungsanstalt für Psychiatrie in Munich from 1/12/1934.

<sup>80</sup> Harrasser to lawyer Dr. Franz Müller, 11/3/1934. UW/IfA, Ordner Forensische Korrespondenz.

<sup>81</sup> Eickstedt e.g. considered anthropological paternity assessments »a typical case of successful application of initially purely cognitive results for practical purposes«, see Egon v. Eickstedt, *Rassenkunde und Rassen-geschichte der Menschheit*, Stuttgart 1940, vol. 1, 594.

<sup>82</sup> J. Weninger, *25 Jahre* (see footnote 78), 200.

<sup>83</sup> O. Reche/A. Rolleder, *Zur Entstehungsgeschichte* (see footnote 6), 286.

<sup>84</sup> A. Harrasser, *Ergebnisse* (see footnote 19), 208.

that time 13 groups of traits with 160 details.<sup>85</sup>

Weninger was highly successful in popularising and marketing the results obtained at the Vienna Institute through the media<sup>86</sup>. By disseminating the potential of genetic biology, he ended up with a high volume of assignments (and performed up to 6 examinations a week<sup>87</sup>), in spite of the high cost involved in these examinations. Like Reche in Leipzig, he used the income for teaching activities and technical equipment purchases, expanding the photographic technical gear in particular<sup>88</sup>; and above all, he used it for basic research and studies on the biology of growth.

It was not least due to its expertise and work done for the courts, originally refused by Weninger, that the Vienna Institute of Anthropology became the »second largest [institute] of all German uni-

versities«<sup>89</sup>; furthermore, the new tasks significantly influenced the type and number of scientific projects and publications.

In more general terms, anthropology underwent a change of paradigm: »Modern biology« focused increasingly on the theory of heredity<sup>90</sup>, while anthropology emphasised »research of cause« rather than »research of facts«.<sup>91</sup> Leading theoreticians of the discipline, including Erwin Baur<sup>92</sup> or Eugen Fischer<sup>93</sup>, came to define anthropology as the science of genetic differences in man; the race concept became inheritance-oriented; it was assumed that »physical and psychological racial traits« were due to genetic factors<sup>94</sup>; while »racial formation«, »racial reshaping« issues, »bastardisation«<sup>95</sup> and extraction of the different components making up the mix of »hypothetically pure races« became a major research topic.<sup>96</sup> At the time, statistical analyses of

<sup>85</sup> J. Weninger, Vaterschaftsbeweis (see footnote 77), 4.

<sup>86</sup> Through a large number of press reports, some drafted by himself, and public lectures, see *Neue Freie Presse*, 19/7/1932, 9; *Neue Freie Presse*, 24/11/1933; *Wiener Neueste Nachrichten*, 9/7/1933, 11; *Der Wiener Tag*, 30/1/1935; *Reichspost* 337, 6/12/1936, 17; *Neues Wiener Journal*, 25/10/1936. UW/IFA, Ordner Zeitungsauschnitte.

<sup>87</sup> Harrasser to lawyer Dr. Franz Müller, 11/3/1934. UW/IFA, Ordner Forensische Korrespondenz.

<sup>88</sup> Harrasser tried to address age variability, one of the inherent problems of genetic comparison, by consulting amateur photographs (e.g. photos of the parents in their childhood), see Albert Harrasser, Die Laienphotographie als Hilfsmittel für erbbiologische Beobachtungen, in: *Mitt. Anthropol. Ges. Wien* 62 (1932), 338–342.

<sup>89</sup> Harrasser to Müller, 11/3/1934. UW/IFA, Ordner Forensische Korrespondenz.

<sup>90</sup> In Vienna, the biological approach was already followed by Rudolf Pöch, who emphasised the importance of experimental genetic studies to shed light on the »concept of race«, see Rudolf Pöch, Neue anthropologische Fragestellungen, in: *Mitt. Geograph. Ges. Wien* 62 (1919), 193–210; Margarete Weninger, Rudolf Pöch zum 40. Jahrestag seines Todes (1870–1921), in: *Mitt. Anthropol. Ges. Wien* 91 (1961), 142–143; he conducted his first practical work on the subject in the form of family surveys, e.g. in 1917 in a Wolhynian refugee camp, see J. Weninger, 25 Jahre (see footnote 78), 197 and Hella Pöch, Beiträge zur Anthropologie der ukrainischen Wolhynier, in: *Mitt. Anthropol. Ges. Wien* 55 (1925), 289–333; id., Beiträge zur Anthropologie der ukrainischen Wolhynier, in: *Mitt. Anthropol. Ges. Wien* 56 (1926), 16–52.

<sup>91</sup> Otto Reche, Die Anthropologie als biologische Wissenschaft, in: *Der Biologe* 8 (1939), 317–323, 318.

<sup>92</sup> Erwin Baur/Eugen Fischer/Fritz Lenz, *Menschliche Erblchkeitslehre und Rassenhygiene*, 3<sup>rd</sup> ed., Munich 1927.

<sup>93</sup> Eugen Fischer, *Die Rehobother Bastards und das Bastardierungsproblem beim Menschen*, Jena 1913.

<sup>94</sup> Fritz Lenz, Die Erblchkeit der geistigen Begabung, in: E. Baur/E. Fischer/F. Lenz (eds.), *Erblchkeitslehre* (see footnote 92); Reche shared the view that the »human races« differ not only physically but also in their »mental and psychological characteristics«, see O. Reche, *Anthropologie* (see footnote 91), 318.

<sup>95</sup> E. Fischer, *Rehobother* (see footnote 93).

<sup>96</sup> E.g. anthropologist Viktor Lebzelter of the Vienna Natural History Museum postulated a *forma typica* as a basal variant of man, which he later attempted to differentiate into »local racial types« by using a morpholog-

populations and typological comparisons were conducted on a massive scale, families were surveyed and twins examined to determine the hereditary patterns of different groups of features. While the twin method<sup>97</sup> mainly addressed general issues related to heredity, it was by adding the biological dimension that family research, for a long time equivalent to »genealogy« and as such representing but a narrow branch of pragmatic historical research, became a »science of immediate importance for life« which, according to v. Eckstedt, »could also be subjected to the goals of racial hygiene«. <sup>98</sup>

*Large-scale scientific project:*  
»Marienfeld«

Like others, the Vienna Institute and its projects followed the mainstream of ongoing research in the field<sup>99</sup>. While »an-

thropology used to over-emphasise the description of human races«, <sup>100</sup> the »bells of the time rang loudly, ushering in the knowledge of heredity, now leading anthropology into a biological direction [...]«. <sup>101</sup> Weninger never ceased to stress the novel approach of his morphological method: a formal analysis of subtle peculiar characteristics, blown up to innovation, which provided the »basic instrument of anthropological research« in Austria for many years<sup>102</sup>; it was relevant both for questions relating to the »origin and differentiation of human races«<sup>103</sup> as well as for genetic surveys of families and their resulting paternity assessments. <sup>104</sup>

The Institute's most significant project was a genetic survey conducted in the winter of 1933/1934 of the population of the German village of Marienfeld in Ro-

---

ical approach. He was one of the few who challenged the static concept of race underlying the Nazi party's dogma on anthropology; see B. Fuchs, Frauen (see footnote 8), 139; regarding the »static« and the »dynamic concept of race«, see also Karl Saller, Die Rassenlehre des Nationalsozialismus in Wissenschaft und Propaganda, Darmstadt 1961.

<sup>97</sup> Otto Frhr. v. Verschuer was the most renowned researcher on twins of the time, though Viennese anthropologists also submitted several papers on the subject. See Otto Frhr. v. Verschuer, Die Ähnlichkeitsdiagnose der Eineiigkeit von Zwillingen, in: *Anthrop. Anz.* 5 (1928), 244–248; Erbbiologische Arbeitsgemeinschaft am Wiener Anthropologischen Institut, Metrische und morphognostische Beobachtungen. Die anthropologische Diagnose der Zwillinge H., in: *Zeitschrift f. d. ges. Neurologie und Psychiatrie* 148 (1933), 683–690; Robert Routil, Anthropologisch-erbologische Familienforschung als Grundlage der rassenkundlichen Analyse, in: *Mitt. Anthropol. Ges. Wien* 67 (1937), 31–52.

<sup>98</sup> E. Frhr. v. Eickstedt, Rassenkunde (see footnote 81) 584.

<sup>99</sup> The tradition of family surveys had actually been launched by Rudolf Pöch (see footnote 90); see Eberhard Geyer, Vererbung der bandförmigen Helix, in: *Mitt. Anthropol. Ges. Wien* 58 (1928), 17–20; id., Vererbungsstudien am menschlichen Ohr, in: *Mitt. Anthropol. Ges. Wien* 62 (1932), 280–285; id., Studien am menschlichen Ohr, in: *Anthrop. Anz.* 13 (1936), 101–111; id., Probleme der Familienanthropologie, in: *Mitt. Anthropol. Ges. Wien* 64 (1934), 295–326; Robert Routil, Ein Beitrag zum Erbstudium des menschlichen Haarkleides, in: *Zeitschr. f. Rassenkunde* 9 (1939), 48–57.

<sup>100</sup> J. Weninger, Vaterschaftsgutachten (see footnote 73), 126–127.

<sup>101</sup> J. Weninger, 25 Jahre (see footnote 78), 199.

<sup>102</sup> Emil Breitinger, In memoriam. Josef Weninger, 1886–1959, in: *Anthrop. Anz.* 23 (1959), 236–238, 237; see also Heinrich Hayek, Josef Weninger. Nachruf, in: *Almanach d. Österr. Akad. d. Wiss.* 109 (1959), 427–436.

<sup>103</sup> Josef Weninger, Menschliche Erblehre und Anthropologie (Zur Methode der Erbforschung), in: *Wr. klin. Wochenschr.* 26 (1936), 1–17, 17; Robert Routil, Familienforschung (see footnote 97).

<sup>104</sup> Typescript »Die Wiener Schule«, 3 pages, probably 1938. UW/IfA, Ordner Korrespondenz. Weninger kept referring to »morphology« as being better suited than classical »metrics«; however, as the polemic discussion between him and Viktor Lebzelter demonstrates, this view was not generally shared, see Viktor Lebzelter, Wozu und zu welchem Ende messen wir noch?, in: *Anthrop. Anz.* 11 (1934), 1–2.

mania.<sup>105</sup> The study consisted in an anthropological examination of 1081 members of 251 families. The findings were obtained in eight »work stations« with different tasks. Geyer mentions an average »daily output« of 40 persons or 280–300 photographic and an approximately equal number of schematic views.<sup>106</sup> The tradition followed by such apparently »highly effective« examination, which ensured fast recovery of data, dates back to the examinations of WW I prisoners<sup>107</sup> and was similarly applied during anthropological examinations in P.O.W. camps of WW II.<sup>108</sup> However, the family surveys were based on voluntary participation and researchers refrained from conducting embarrassing full-body examinations:

*»Körperuntersuchungen nach so einem erweiterten Programm könnte man wohl nur bei unbekleidet lebenden Primitiven, hiezulande nur bei Sportlern oder bei klinischen Erhebungen (Konstitutionsforschungen) in größerer Menge anstellen. Die Beobachtungen am Kopf und Gesicht sind zwar mühevoll,*

*aber sie begegnen im allgemeinen viel geringeren Schwierigkeiten.«*<sup>109</sup>

*»Bodily examinations under such extended programme could probably only be conducted of primitives living without clothes – in this country, on a large scale, only of athletes or in the course of clinical (constitution) studies. Observing the head and face is arduous, but generally meets with much less resistance«.*

With the Banat study, under collaboration of all associates of the Erbbiologische Arbeitsgemeinschaft, Weninger not only focused on the question of inheritance of metric and morphological traits, but especially on age modification and sex difference of these traits; furthermore, he was interested in developing computational methods to »adjust the absolute figures«<sup>110</sup>. Indeed, while he chose to view his family research project from the scientific point of view, primarily serving the provision of anthropological and genetic evidence, hence serving administration of justice<sup>111</sup>, Eberhard Geyer considered the Marienfeld measure a »mat-

<sup>105</sup> J. Weninger, 25 Jahre (see footnote 87), 200; Eberhard Geyer, Vorläufiger Bericht über die familienanthropologische Untersuchung des ostschwäbischen Dorfes Marienfeld im rumänischen Banat, in: *Verhandlungen der Ges. f. Phys. Anthrop.* (1935), 5–11; id., Studien am menschlichen Ohr (see footnote 99); Margarete Weninger, Zur Vererbung der Wirbelmuster an den Fingerbeeren, in: *Mitt. Anthropol. Ges. Wien* (1938), 220–245; Robert Routil, Familienanthropologische Untersuchungen in dem ostschwäbischen Dorfe Marienfeld im rumänischen Banat. I. Biometrische Studien, in: Akademie d. Wiss. Vienna (ed.), *Untersuchungen zur Rassenkunde und menschlichen Erblehre* 1 (1942), 1–82.

<sup>106</sup> Eberhard Geyer, Vorläufiger Bericht (see footnote 105), 10.

<sup>107</sup> J. Weninger (see footnote 78), 193–196.

<sup>108</sup> Josef Wastl, Anthropologische Untersuchungen an belgischen und französischen Kriegsgefangenen, in: *Akad. Anz.* 13 (1941), 1–4; id., Korsen (Eine somatometrische und somatoskopische Untersuchung), in: *Mitt. Anthropol. Ges. Wien* 96/97 (1967), 89–108; id., Das physische Erscheinungsbild der Vietnamesen, in: *Mitt. Anthropol. Ges. Wien* 95 (1965), 168–179. The author does not disclose the origin of material used for the two latter studies.

<sup>109</sup> J. Weninger, typescript (see footnote 104), 3.

<sup>110</sup> J. Weninger, *Menschliche Erblehre* (see footnote 78), 5; a »coefficient of adjustment« was necessary for genetic paternity assessments to compare persons of different age.

<sup>111</sup> Although Weninger also saw a potential for »racial studies under a new perspective« in family research, see Josef Weninger, *Rassenkunde und Familienforschung*, in: *Nachrichten der Wr. Ges. f. Rassenpflege (Rassenhygiene)*, 1 (1938), 1–4, 3.

ter of the heart<sup>112</sup> as well as a contribution to the study of nationalities and the minority problem.<sup>113</sup> Geyer rejected a research approach primarily aiming at »empirical assessment and theoretical treatment« without any »goals of immediate application«;<sup>114</sup> his objective, visibly more strongly influenced by Nazi ideology, was to identify the »racial differences between »Gast- und Wirtsvolk« (host and guest peoples) and, in the project under discussion, the framework of evolution and preservation of a German minority in southeastern Europe.<sup>115</sup>

The fact remains that both anthropologists – though under different angles – had a massive interest in analysing a pure and isolated German population group; the breeding ground had thus been prepared for subsequent conflicts over land tenure and scientific evaluation of the undertaking subsumed under the concept of »Deutschtum« or Germanness research.<sup>116</sup>

Eugen Fischer, who had given his expert opinion on an application introduced by Weninger regarding Marienfeld to the German Research Foundation in 1936, pointed out yet another aspect: Though criticising some points of the »indeed

somewhat broad« morphological survey, he held that the results not only served as a basis for decisions on civil alimony cases, but for decisions of the Sippenamt concerning the Aryan or non-Aryan descent of illegitimate children, children of adultery, »foundlings« etc. as well.<sup>117</sup>

In short, at a time when Vienna was still attempting to make the Marienfeld results available to the courts in support of scientific proof of paternity, Germany, following the Nazis' rise to power, had already established the legal basis of a totally different »career« for these genetic assessments, which Vienna's anthropologists were to follow only a few years later.

#### *Attempts at objectification up to 1938*

In the 1930s, responding to some critical comments by some members of Vienna's legal profession<sup>118</sup>, efforts were made to widen the scientific basis of these genetic assessments. By applying a so-called quantitative criterion, i.e. methodologically covering as many traits as possible<sup>119</sup>, attempts were made to minimise the problems inevitably – in spite of all anthropological efforts involving the whole family<sup>120</sup> – arising from ignorance

<sup>112</sup> Eberhard Geyer, Deutsche Vorposten in Rumänien, in: »*Zeitgeschichte*« *Österreichische Monatsblätter für deutsche Erneuerung* 6 (1934), 161–168, 168.

<sup>113</sup> Eberhard Geyer, Anthropologie und Nationalitätenforschung, in: *Nation und Staat* 7 (1934), 323–327, 323.

<sup>114</sup> *Ibid.*, 325.

<sup>115</sup> *Ibid.*, 327; see also E. Geyer, Probleme (see footnote 76), 319 and 321; id., Wozu treiben wir Familienanthropologie?, in: *Vorträge des Vereins zur Verbreitung naturwiss. Kenntnisse in Wien* 73 (1933), 59–65.

<sup>116</sup> Although Weninger's application to the DFG in 1936 received a positive response from two experts, i.e. Eugen Fischer und Karl Thums, the DFG refrained from taking a decision. The reason was another (political) statement, made by Amon: He maintained that Weninger relied on »collaborators with a non-political attitude«; should the DFG prefer to support reliable people, this were »feasible only Š...Č by way of independent applications«, concluding that in any event the Marienfeld data belonged to the DFG. BA Koblenz R 73/15621. Geyer and Koerner subsequently filed their own applications for evaluation of the Marienfeld data.

<sup>117</sup> Statement made by Eugen Fischer upon Josef Weninger's application to the DFG, 28/3/1936. Bundesarchiv Koblenz R 73/15621.

<sup>118</sup> Letter of complaint from Josef Weninger to the Provincial Government of Lower Austria (undated). UW/IfA, Ordner Korrespondenz.

<sup>119</sup> A. Harrasser, Ergebnisse (see footnote 19), 222 und 223.

<sup>120</sup> Margarete Weninger, Zur Anwendung der Erbformeln der quantitativen Werte der Fingerbeeren im naturwissenschaftlichen Vaterschaftsnachweis, in: *Zeitschr. f. menschliche Vererbungs- und Konstitutionslehre* 21 (1937), 206–219.

of the hereditary patterns followed by polygenic morphological traits. It was believed to thereby effectively address the errors involved in single genes. Eberhard Geyer, Weninger's assistant, eventually established »theoretical guidelines« for genetic assessments<sup>121</sup>, defining the critical parameters of »quality and quantity of traits«. However, due to the fact that the family surveys did not produce reliable hereditary patterns as expected, genetic experts hastened to accept<sup>122</sup> similarity-based statistical procedures in certifying paternity.<sup>123</sup> It is important to note that such calculation included the frequency of traits occurring in the population, allowing expression of the percentage probability of paternity. The purpose was to bridge the problematic »computa-

tional gap« by »converting form into figures«. This procedure responded to the judges' preference of an exact numerical concept over ambiguous wording as well.<sup>124</sup> Even though a few prominent members of the community rejected this approach as being questionable<sup>125</sup>, it continued to support decisions in the formulation of anthropological-genetic opinions up to the recent past.<sup>126</sup>

### **Certificates of Descent or »Racial Certification«: The Protagonists in Universities and Museums**

While Vienna indeed continued its attempts at improving methodology, the German Reich, with the Nazis' rise to power, had already taken a different

<sup>121</sup> E. Geyer, Probleme (see footnote 76), 295; id., Die Beweiskraft (see footnote 73).

<sup>122</sup> Besides Eberhard Geyer, the procedure was also used by Karl Tuppa and Dora-Maria Kahlich-Koenner to support decision-making in anthropological proof of paternity. See Eberhard Geyer, Die praktische Anwendung der ESSEN-MÖLLER'schen Formel im Vaterschaftsnachweis, in: *Verhandl. d. Deutschen Ges. f. Rassenforschung* 9 (1938), 79–84, 79; Eberhard Geyer/Karl Tuppa, Vom Wert der Merkmale im anthropologischen Vaterschaftsbeweis, in: *Anthrop. Anz.* 17 (1940/1941), 273–285.

<sup>123</sup> Erik Essen-Möller, Die Beweiskraft der Ähnlichkeit im Vaterschaftsnachweis. Theoretische Grundlagen, in: *Mitt. Anthrop. Ges. Wien* 68 (1938), 9–53; id., Wie kann die Beweiskraft der Ähnlichkeit im Vaterschaftsnachweis in Zahlen gefasst werden?, in: *Verhandl. d. Deutschen Ges. f. Rassenforschung* 9 (1938), 76–78; according to Routil, Essen-Möller had only modified the method developed by P. Stocks for twin research, see Robert Routil, Der erbbiometrische Abstammungsnachweis, unpublished proof (1943), 1–34. NHM/AA Fachbibliothek.

<sup>124</sup> Thereby the anthropologists also believed to provide a »positive proof of paternity«; by integrating predominantly »normal human traits of mean frequency« they also established a clear-cut dissociation from other disciplines, such as medicine. See E. Geyer/K. Tuppa, Wert der Merkmale (see footnote 123), 285.

<sup>125</sup> During discussions of the paper presented by Geyer at the 9<sup>th</sup> Meeting of Deutsche Gesellschaft für Rassenforschung (1937) Eugen Fischer described this formula as being dangerous for various reasons, issuing an explicit warning to this effect; even Reche did »not feel at all at ease« about it, see E. Geyer, Die praktische Anwendung (see footnote 123), 84; Essen-Möller's probability calculation met with massive criticism also of Kramp, see Peter Kramp, Bemerkungen zur Arbeit von E. Geyer und K. Tuppa: »Vom Wert der Merkmale im anthropologischen Vaterschaftsbeweis«, in: *Anthrop. Anz.* 17 (1940/41), 286–291, 291 and of Routil, see R. Routil, Der erbbiometrische Abstammungsnachweis (see footnote 122), 30–34; this mathematical construct was also rejected by Margarete Weninger, see Margarete Weninger, Zur zahlenmäßigen Erfassung der Ähnlichkeit im naturwissenschaftlichen Vaterschaftsnachweis. Eine kritische Auseinandersetzung mit der Formel von E. Essen-Möller und ihre praktische Anwendung, in: *Mitt. Anthrop. Ges. Wien* 77–78 (1949), 33–58.

<sup>126</sup> Dora-Maria Kahlich-Koenner, Praktische Erfahrungen bei der Anwendung der Essen-Möller'schen Formel in Wiener Vaterschaftsuntersuchungen, in: *Homo* 2 (1951), 58–61; Karl Tuppa, Über die Bedeutung der relativen Häufigkeit wahrer Väter für die Essen-Möller'sche Formel, in: *Homo* 2 (1951), 114–117; Dietrich Wichmann, Erfahrungen mit der Essen-Möller'schen Methode, in: *Homo* 2 (1951), 61–64; Leopold Breitenecker/Johann Szilvássy, Über eine Vaterschaftswahrscheinlichkeitsberechnung nach Blutmerkmalen und morphologischen Merkmalen, in: *Mitt. Anthrop. Ges. Wien* 107 (1977), 284–287, 285; Johann Szilvássy/Josef Herbich, Empirische Untersuchungen zur Vaterschaftswahrscheinlichkeitsberechnung nach den Blutsystemen, in: *Mitt. Anthrop. Ges. Wien* 107 (1977), 222–232.

course: Legislation on racist policy and racial hygiene, especially the law on the »reestablishment of professional civil service«, which for the first time included the Aryan regulation, marked a complete change of approach to the issuance of professional certification of genetic descent; as of then, certificates of paternity were not only required in paternity suits. By decree issued by the Reich's Interior Ministry on April 24, 1934, authorities were officially empowered to request a »genetic and racial certificate of descent« (»erb- und rassenkundliche Abstammungsnachweis«) to clarify cases of incongruence between statutory descent and biological descent or such cases where documents or other evidence were insufficient to support a decision – particularly when illegitimate children or foundlings were involved.<sup>127</sup> It particularly applied to the cases of »suspected Jewish« descent.<sup>128</sup> Those descending from three Jewish grandparents were considered »full Jews«. The descent of a person became vitally important by the time the Nuremberg Laws were adopted. It was also in this context, i.e. when the »erb- und rassenkundlicher Abstammungsnachweis« was »established«, that Otto Reche, the »inventor« of genetic expert assessment, assumed a central role: Soon after the decree was issued, he suggested to the »Official Expert in Racial Issues« (»Sachverständige für Rassefragen«) to use professional genetic/racial opinions (»erbbiologisch-rassenkundliche Gutachten«) to obviate the potential danger of »Jewish blood infiltrating the German people«.<sup>129</sup> As also stressed by Kröner<sup>130</sup>, the actually »racial« part of the opinion was irrel-

evant for the question of »racial descent« given that even to a diagnostically trained eye no »racially specific anthropological« traits had to be objectified for the prevailing issues concerning Jewish descent.

This was further complicated by the fact that the defendants were often presented in amateur photographs, which means that the experts had a personal scope for their »diagnoses«, including the option to refuse an opinion – after all, there was no procedural consensus even among the anthropological community. By way of example, Josef Weninger refused a request in 1937 to issue »such a document«.<sup>131</sup> But especially Weninger, who never failed to advocate scientific criteria, must probably have recognised by then – at the very latest – that the fateful chain of events had already been triggered in the anthropological community of the 1930s – triggered by the »practical urge for application« which after all he himself, among others, had promoted. In a final analysis, he eventually fell prey to his own ideological view.

Weninger's stance was ambivalent: He tolerated propagandistic lectures and events organised by the *Rassenhygienische Gesellschaft* at the Vienna Institute, the creation of a »Familienkundliche Erhebungsstelle« (Family Survey Unit), NSDAP membership of most of the Institute's associates at the time the party was prohibited, as well as party training activities. It is obvious then that the National Socialist ideology and its racist objectives of racial hygiene had by then gained a full grasp on the Austrian an-

<sup>127</sup> Christian-Ulrich von Ulmenstein, *Der Abstammungsnachweis*, Berlin 1936, 69.

<sup>128</sup> H.-P. Kröner (see footnote 2).

<sup>129</sup> Reche to the »Expert on Racial Research«, 23/2/1935. BA Koblenz R22/486.

<sup>130</sup> H.-P. Kröner (see footnote 2).

<sup>131</sup> Josef Weninger to N.N., 8/5/1937, UW/IfA, Ordner Allgemeine Korrespondenz.

thropological community, even years before the Anschluss. It thus comes as no surprise that Eberhard Geyer was already mentioned among the »experts on genetics and racialism« in the 1938 pamphlet of the Reichsstelle für Sippenforschung (Reich Kinship Research Unit) describing the (unpublished) procedural guidelines of the Reich Interior Ministry's regulation on »certification of genetic and racial descent« (»erb- und rassenkundliche Abstammungsnachweis«).<sup>132</sup>

Eberhard Geyer had worked for the Institute of Anthropology since 1925 and headed the Institute from 1938. After the Nazis took power in Austria in late August 1938, he took over from Josef Weninger, who had to retire (under § 3 art. 1 of the regulation to the reorganisation of the Austrian professional civil service<sup>133</sup>) since he was married to a Jewess. Geyer »considered his scientific work not as running in parallel to his life but knew how to integrate it into the framework of his political convictions«.<sup>134</sup> Eberhard Geyer was a member of the NSDAP from 1933, in charge of the Institute's party cell during the prohibition and of the main unit of the Rassenpolitisches Amt of the Lower Danube district, and subsequently figured as »relentless« advisor.<sup>135</sup> As early

as June 8, 1938, Geyer was sworn as permanent expert to the parish of the civil provincial court of Vienna (section B/1–16 »Human genetic biology«) under Zl Jv 1295-5d/38.<sup>136</sup> On the same day, Weninger informed the court of Vienna's Leopoldstadt district that he could not continue his advisory activities »for some time due to a change in work schedule«.<sup>137</sup> From 1933, Geyer had considered racial studies a core concern of anthropology, not only to address practical issues like »race and settlement« or »race and the people«, but also to deliver »racial opinions« and »certificates of descent« for »application to politics and for the development of our social order«.<sup>138</sup>

Apart from Geyer, and especially after Geyer fell at the front, racial opinions were also rendered at the request of the Reichssippenamt by the two assistants Dora Maria Kahlich-Koenner<sup>139</sup> and Karl Tuppa<sup>140</sup> at the University Institute, while the Natural History Museum had such work conducted by Josef Wastl, a student of Rudolf Pösch and Otto Reche. Josef Wastl was probably requested by the Reichssippenamt to deliver »genetic and racial opinions« due to the fact that the Institute was understaffed from

<sup>132</sup> »Der erb- und rassenkundliche Abstammungsnachweis vor der Reichsstelle für Sippenforschung«, see H. Seidler/A. Rett (see footnote 1), 162.

<sup>133</sup> The Reichsstatthalter (Reich Governor) to Weninger, 26/8/1938. UW/IfA, Ordner Korrespondenz 1938.

<sup>134</sup> Karl Tuppa, Eberhard Geyer (fallen), in: *Der Erbarzt* 11 (1943), 121–122.

<sup>135</sup> H. Seidler/A. Rett (see footnote 1); B. Fuchs (see footnote 8).

<sup>136</sup> Provincial court of Vienna to Geyer, 8/6/1938. UW/IfA, Ordner Forensische Korrespondenz.

<sup>137</sup> Weninger to district court of Leopoldstadt, 8/6/1938. UW/IfA, Ordner Forensische Korrespondenz; these files also reveal that Weninger was approached for the delivery of racial opinions already a few months after the Anschluss. Decision by district court of Fünfhaus, 23/8/1938. UW/IfA, Ordner Forensische Korrespondenz.

<sup>138</sup> Eberhard Geyer, Wissenschaft am Scheideweg, in: *Archiv f. Rassen- und Gesellschaftsbiologie* 37 (1944), 1–6, 3 and 5.

<sup>139</sup> Dora Maria Kahlich-Koenner (1905–1970), see B. Fuchs (see footnote 8), 209–212; Karl Tuppa, Dora Maria Kahlich-Koenner, 25/12/1905 – 28/3/1970, in: *Anthrop. Anz.* 32 (1969žž), 291–292.

<sup>140</sup> Karl Tuppa (1899–1981), see Johann Szilvássy, In memoriam Karl Tuppa (1899–1981), in: *Mitt. Anthropol. Ges. Wien* 111 (1981), 102–103.

1941.<sup>141</sup> Josef Wastl was also party member and in charge of the NHM party cell from 1933. He was suspended from service in 1945 along with Karl Tuppa and Dora Maria Kahlich-Koenner. Up to the 1960s, they were commissioned by many courts to prepare authoritative »paternity assessments« as experts in genetic biology.

## Epilogue

Upon the suggestion of a Viennese judge, German anthropologist and ethnologist Otto Reche developed in Vienna comparative analyses of polysymptomatic similarities for use as »circumstantial proof« to supplement the courts' decision-making process in administering justice in cases of disputed paternity.<sup>142</sup> Until then, legal decisions were based on the credibility of the defendants' statements. From the mid-1920s, justice was also administered on the basis of blood group determination. In spite of insufficient theoretical foundation, including ignorance of the hereditary patterns of morphological traits, and critical comments from the legal profession and biologists, Reche succeeded in establishing the method effectively both in Austria and Germany.<sup>143</sup> The procedure was eventually accepted by the legal profession, particularly on account of the economics of legal procedure (including reduced duration of the procedure of proof).

Josef Weninger, Otto Reche's successor to the Vienna Chair, who had initially

voiced scepticism and rejected the new approach, eventually also agreed in the early 1930s to prepare expert opinions in cases of disputed paternity. His decision was linked to the creation of the »Erbbiologische Arbeitsgemeinschaft« (working group on genetic biology), whose task was to participate in the assessment procedures on the one hand, and to furnish the missing basic scientific data through large-scale family surveys on the other. All these programmes and scientific projects must be seen in conjunction with a ubiquitous paradigm shift in biology, which increasingly focused on hereditary theory, with practical application being one of its priority goals.

Apart from its inherent potential to identify blood groups, genetic assessment was based on very weak methodological foundations. It enabled comparison of similarities and dissimilarities of a varying number of somatic features, without specifying the concepts of similarity and dissimilarity in greater detail. Furthermore, the variable manifestations of characteristic traits or variabilities of age or gender were all but clear. Attempts were initially made to address these qualitative problems in pragmatic terms by increasing the number of traits, and subsequently, on an objective theoretical level, by applying »mathematical« models. This was rejected even by the original protagonists.

In spite of all their shortcomings, these new tasks and their practical relevance<sup>144</sup>,

<sup>141</sup> See Maria Teschler-Nicola/Margit Berner, Die Anthropologische Abteilung des Naturhistorischen Museums in der NS-Zeit: Berichte und Dokumentation von Forschungs- und Sammlungsaktivitäten 1938–1945, in: Akademischer Senat d. Universität Wien (ed.), Untersuchungen zur Anatomischen Wissenschaft in Wien 1938–1945, Vienna 1998, 333–358, 345–349.

<sup>142</sup> References to a history of paternity diagnosis can be found in Peter Kramp, Anthropologische Vaterschaftsdiagnose, in: *Grenzgeb. Med.* 1 (1948), 221–232; id., Bibliographie zur anthropologisch-erbbiologischen Abstammungsprüfung, in: *Homo* 2 (1951), 76–83.

<sup>143</sup> Though it was also admitted in other countries, including Russia, Sweden, Denmark, see Poljakoff, quoted according to A. Harrasser, Ergebnisse (see footnote 19), 205.

as well as the economic component involved, were essential for the development and scientific achievements of the Institute in the 1930s.

Weninger considered that the reputation of the Institute was closely associated with the methodology applied by the »Vienna School« which he had developed to an advanced level of sophistication. The method was an essential element in justifying his research projects; it was applied to the formulation of expert opinions: The results obtained from experimental genetic studies led to the assumption that individual morphological features were inherited separately, also in human beings. In classifying morphological details into neat categories, the aim was not only to shed light on the concept of race, but in surveying families and examining twins, to better understand the process of heredity and the impact of the environment as well. Both in terms of methodology and content, this reflects a line of tradition dating back to Rudolf Pöch, pervading the family biology of the late 1920s<sup>145</sup> and the 1930s, and finally culminating in the practical context of new findings applied to and serving the purposes of population biology and racial hygiene.

It is important to note that research did not aim to increase knowledge alone, nor was it conceived as an end in itself; its relevance was mainly due to its application, which included paternity diagnoses. While Blank suspected in 1927 that Reche's method might »usher in a develop-

ment which we cannot as yet divine«<sup>146</sup>, the Nazi takeover and entry into force of laws on the »certification of Aryan descent« became a deplorable certainty only a few years later.<sup>147</sup>

Reche, whose National Socialist political views are reflected in nearly all of his work, and who put his experience at the service of legislators, would not tire to emphasise the »potential« inherent in these research activities and methods, which

*»für die Praxis von sehr großem Wert geworden [sind]: das Wissen vom Erbgang vieler Merkmale hat zur Entwicklung der Methode der Abstammungsgutachten geführt, mit denen es möglich ist, in sehr vielen Fällen zu entscheiden, ob bei zweifelhafter Abstammung ein Mann der Vater des Kindes ist oder nicht; sowohl eine positive als auch eine negative Aussage ist möglich. Diese Methode ist längst unentbehrlich geworden für eine sinnvolle Durchführung rassenhygienischer und rassenspolitischer Maßnahmen; denn nur mit dieser Methode läßt es sich in sehr vielen Fällen verhindern, daß unerwünscht krankhafte und sonst minderwertige Anlagen und fremdes Rassegut sich, sozusagen heimlich, einschleichen.«<sup>148</sup>*

*»have become of major practical value: Knowledge of the hereditary patterns of many features has given rise to the paternity assessment method, which facilitates decisions on the paternity or not of a certain man in many cases of*

<sup>144</sup> Eberhard Geyer†, *Wissenschaft* (see footnote 138), 3.

<sup>145</sup> The first biological family survey, which also included »observation of race-related peculiarities«, was conducted by Hella Pöch in 1917/1918 of refugee families from Czernovice in the camp at Niederdonau near Salzburg. Findings sheets and procedural documents in NHM/AA, Somatology Collection 2697.

<sup>146</sup> E. Blank, *Pater* (see footnote 44), 138.

<sup>147</sup> See Karl Tuppa, *Zur Theorie und Praxis des Abstammungsnachweises*, in: *Wt. klin. Wochenschr.* 52 (1939), 1–10.

<sup>148</sup> Otto Reche, *Die Anthropologie* (see footnote 91), 322.

*doubt; both positive and negative results are possible. The method has long become indispensable for a meaningful implementation of policy measures to improve racial hygiene; for it is the only method capable of preventing the very many cases of undesirable anomalies or other inferior (inherited) traits, or foreign racial material entering through the back door, so to speak.*

The anthropologists were well aware of the blurriness of a method that lacked the necessary basis. While some set certain »standards«, others had come under pressure. But what counts in the final analysis is that the scientists' decisions were eventually accepted as being scientific – whether the methods proved sustainable or not. Any further critical analysis must therefore focus on the experts consulted for advice and their underlying motivation.

## Outlook

The inventory of the Department's collection includes slightly over 100 so-called »racial genetic« opinions commissioned to the above Viennese experts by the Reichssippenamt and other authorities after the Anschluss of 1938. For a more objective evaluation of these experts engaged in genetic and racial studies during Nazism, this specific inventory of sources will form the basis of a critical comparative analysis of the methodology and basic terminological patterns involved. As Robert Routil later admitted, certification of descent was »sometimes based on arbitrary assessment«<sup>149</sup> but invariably

interpreted as scientifically authoritative. Therefore the available source material – indeed of relevant scope – aims to investigate which assessments were provided to the Reichssippenamt by which experts, whether by international standards they effectively acted »to the benefit of their subjects«<sup>150</sup> and which motives were behind these decisions.

One essential aspect of future research conducted by the Anthropological Department of the Natural History Museum will be to trace the lives of persons examined, measured and morphologically »classified« based on their individual data as extracted from these sources and to make recorded material available to the families concerned.

Furthermore, we are planning to follow the scientific lines of tradition more closely and to submit to scrutiny both the combined interests voiced by different actors and the relationship between science, or those acting in its name, and politics. As a matter of fact, »the relationship between science and power can neither be analysed by applying the formula of »fatal involvement« of the former in National Socialism nor by advancing the argument of a science being abused by the Nazi regime.«<sup>151</sup>

## Acknowledgement

I am indebted to Prof. Dr. Horst Seidler, who allowed access to the inventory of the Institute of Anthropology. This study was supported by the Austrian Science Fund (FWF Project No. 13779-HIS). Katarina Matiassek, Doris Schamall and

<sup>149</sup> N. N., Die Menschheit eine Familie. Menschheitsforschung widerlegt Rassenwahn. Katalog zur Ausstellung der Anthropologischen Abteilung des Naturhistorischen Museums in Wien. Selbstverlag des Naturhistorischen Museums, 1–48, 23.

<sup>150</sup> H. Seidler/A. Rett, Reichssippenamt (see footnote 1).

<sup>151</sup> Susanne Heim, »Die reine Luft der wissenschaftlichen Forschung«. Zum Selbstverständnis der Wissenschaftler der Kaiser-Wilhelm-Gesellschaft. Research programme »Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus«, Ergebnisse 7, 2002, 1–49, 40.

Hildtraud Windl provided valuable comments on previous versions of the manuscript. Translation of the paper by Mag. Michaela Zwölfer, LANGUAGE.WORKS.

*M. Teschler-Nicola*

*Department of Anthropology, Natural History Museum, Burgring 7, A-1014 Vienna, Austria*  
*e-mail: maria.teschler@univie.ac.at*  
*maria.teschler@nhm-wien.ac.at*

## **DIJAGNOSTIKA POVIJESTI GENETSKIH I RASISTIČKIH PROCJENA U AUSTRIJI DO 1938. GODINE**

### **S A Ž E T A K**

U radu se istražuje povijest izvješća stručnjaka za genetiku i biologiju u Austriji do 1939. godine. Ovo područje aktivnosti značajno je utjecalo na teme istraživanja kao i na metode istraživanja koje su se primjenjivale u Institutu za antropologiju u Beču, a uzrokovalo je i povećanu primjenu u praksi. U ovom pregledu razmatraju se motivi znanstvenika, koalicija interesnih skupina te orijentacija prema sadržaju ove discipline do 1938., čime su stvorene pretpostavke izvješćima stručnjaka za rasizam u vrijeme nacional-socijalizma.

### **Abbreviations**

BA (Bundesarchiv) – Federal Archive

PK (Partei Kanzlei Korrespondenz) – Party Office correspondence

NHM/AA (Naturhistorisches Museum/Anthropologische Abteilung) – Natural History Museum/Department of Anthropology

DFG (Deutsche Forschungsgemeinschaft) – German Research Foundation

ÖSTA/AVA (Österreichisches Staatsarchiv/ Allgemeines Verwaltungsarchiv) – Austrian State Archives/General Administrative Archive

UW/IfA (Universität Wien/Institut für Anthropologie) – University of Vienna/Institute of Anthropology

P.O.W. – Prisoner of war

WW I – World War I

## ANNEX

### Otto Reche (1879–1966)

- Born May 24, 1879 in Glatz, Silesia
- Studied Medicine and philosophical subjects at the universities of Wroclav, Jena and Berlin
- 1904 doctorate in Zoology, Botany and Geology/Paleozoology; subsequently studied Anthropology, Ethnology and the Prehistoric period at the University of Berlin
- 1906 Assistant (Lecturer) at Hamburgisches Museum für Völkerkunde, in charge of the Africa and South Sea departments; established the Anthropology department; lectures on racial studies, racial hygiene and population politics
- 1906 research studies to southern Hungary, Croatia, Dalmatia, Herzegovina, and Bosnia
- 1908–1909 participated in the »Peiho expedition« from Hamburg to Melanesia, New Guinea, and Micronesia
- 1909 became lecturer (Dozent) at Hamburg's Colonial Institute
- 1918 was appointed Professor of the University of Hamburg
- 1920 (became) corresponding member of the Vienna Anthropological Society
- From September 1, 1924 Director of the Anthropological-Ethnographical Institute of the University of Vienna (succeeding Rudolf Pösch)
- 1925 co-founder and first chairman of »Wiener Gesellschaft für Rassenpflege/Rassenhygiene« (Vienna Society of Racial Hygiene)
- Since 1925 second chairman of the Wiener Anthropologische Gesellschaft (from 1959 honorary member of the Society)
- 1926 introduced polysymptomatic anthropological-genetic paternity assessment
- 1927 founded the Deutsche Gesellschaft für Blutgruppenforschung (German Society of Blood Group Research) and published »Zeitschrift für Rassenphysiologie«
- Since 1927 chief editor of »Volk und Rasse«
- 1927 Ordinarius (Full Professor) of Racial Studies and Ethnology at the University of Leipzig
- 1932 founded and became first chairman of Leipzig local chapter of Deutsche Gesellschaft für Rassenhygiene
- 1934 first chairman of Deutsche Gesellschaft für Rassenforschung (German Society of Racial Research)
- Since 1938 served on the board of the Reichsbund für Biologie (Reich federation of biology); in Leipzig, founded and published »Studien zur Völkerkunde« (studies on ethnology) in 14 volumes and »Studien zur Rassenkunde« (studies on racialism) in 6 volumes
- 1945 retired due to »reaching the age limit«
- May 14, 1965: Austrian Cross of Honour for Science and Art 1st Class
- † March 23, 1966 in Schmalenbeck near Hamburg