

# **Making Eugenics a Public Issue: A Reception Study of the First German Compendium on Racial Hygiene, 1921-1940**

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During the 1920s, the world-wide eugenics movement reached a peak level of popularity. Historians have stressed the key role of the textbook "Human Heredity and Racial Hygiene" in the popularisation of eugenic thinking in Germany. In this textbook the well known scientists Erwin Baur (1875-1933), Eugen Fischer (1874-1967) and Fritz Lenz (1887-1976) tried to combine genetics, anthropology and racial hygiene to form a "Magna Carta" of eugenics. This paper aims at quantitatively reconstructing the book's development into a standard work. 325 contemporary reviews of the book were analysed. More than 80% of the reviewers evaluated the book positively recommending it to a variety of readers. Most of the reviewers were Medical Doctors concentrating on the eugenic aspects of the book. The reception study makes the reciprocity of eugenics as an accepted science and academics forming it into science prevalent. Explanations for the uniform reaction of the scientific community are discussed.

*Key words:* reception study, interwar years, eugenics

Since Francis Galton coined the term "Eugenics" in 1883 the associated movement spread all over the western world. Although the idea of controlling human breeding for the sake of improving the genetic quality of future generations seems to have haunted people throughout history the idea remained rather abstract until the nineteenth century. During this century the abstract vision merged with modern statistical, evolutionary and genetic theories. Out of the

fusion the eugenic movement was born. Based on the concept of improving humankind with the help of positive and negative eugenics, eugenicists all over the world made human reproduction a public issue. By the means of "positive eugenics" it was intended to support the procreation of individuals with allegedly desired hereditary traits whereas "negative eugenics" sought to prevent people with allegedly negative hereditary traits from breeding.

Much has been said and written about eugenics, its development and its decline. Bibliographies listing the vast literature on this topic fill books. An example is the book-length bibliography by Beck (1995) concentrating on the impact of eugenics on disabled and psychiatric patients in Germany during the so called "Third Reich". An older review of the literature on the history of eugenics that summarised the scholarship through the 1970s has been provided by Farrall (1979). Only selected papers can be cited here to give an impression of the various angles from which the eugenic movement has been approached. Besides several comparative works (Paul, 1995; Köhl, 1997; Weindling, 1999) a number of national or geographically orientated analyses have been published. The movement's history has been examined for e.g. Scandinavia (Broberg and Roll-Hansen, 1996), Great Britain (MacKenzie, 1976), Canada (MacLaren, 1990), the USA (Ludmerer, 1969), Japan (Otsubo and Bartholomew, 1998), France (Schneider, 1990) and Germany (Weindling, 1989a, Weingart, 1988). Despite their national focus these studies never lost sight of the international scope of eugenics. Thus, it has long been clear that the eugenics movement was, besides its political and scientific aspects, a trans-national social movement (Barrett and Kurzman, 2004).

To understand the process of formulating eugenic theories the quoted historiographic works rely on contemporary (text-)books on the topic. An example is Galton's "Hereditary Genius" that is usually said to be one of the first books summarising "modern" eugenic concepts. The study of the contemporary reception of ideas serves as a link

between the theoretical and the social aspects of eugenics. The questions that are answered by such studies are "who is referring in which context to which book by which author" and "how do different groups of readers react upon a certain book". One of the first reception studies in the context of eugenics was performed by Alvar Ellegard who examined the reception of Darwin's theory of evolution in the British periodical press (Ellegard, 1958). Drawing on more than 100 reviews published in periodicals Ellegard found that Darwin's book caused an immediate reaction in literary and scientific periodicals, whereas the popular press at the beginning largely ignored it. Gökyigit examined the reception of Galton's "Hereditary Genius" by analysing a dozen review articles published in 1870 right after the book's appearance in 1869. She found that the book was neither poorly nor well received but differently by each reviewer (Gökyigit, 1994: 219).

The purpose of this paper is to propose a semi-quantitative method for a reception study aiming at measuring the impact of conceptual works on social movements. To state it more precisely: the impact of a conceptual work on popularising concepts within a social movement will be examined. The reviewer's assessment of a book will be examined collectively and the group of the reviewers itself will be analysed. Thus, a method for quantifying a book's acceptance will be scrutinized.

The German context of the developing eugenics movement between 1920 and 1940 will be used as an example for exploring the proposed method. An analysis of the impact of the work "Menschliche Erblchkeitslehre und

Rassenhygiene" (Human Heredity and Racial Hygiene) by Erwin Baur, Eugen Fischer and Fritz Lenz will serve as the specific case study.

### The German Context

In Germany eugenic ideas were popularised from the beginning of the 20<sup>th</sup> century onwards under the term "Racial Hygiene".<sup>1</sup> The history of the German Racial Hygiene movement has been analysed from as many aspects as the international. The most comprehensive books among the many works are Paul Weindling's (1989a) "Health, race, and German politics between national unification and Nazism, 1870-1945" and Weingart *et al.*'s (1988) "Rasse, Blut und Gene: Geschichte der Eugenik und Rassenhygiene in Deutschland" (Race, Blood and Genes: History of Eugenics and Racial Hygiene in Germany). Although focussing on the years between 1933 and 1945 Proctor's (1988) "Racial hygiene: medicine under the Nazis" also sheds light on the origins and the development of the German movement. For a shorter introduction see also the papers by Lilienthal (1979) or Weiss (1987). On the national and international aspects of the German movement see Weindling (1989b), the relations between science and politics within the movement have been described by Weingart (1989). Many more works would merit being mentioned here, but this would fill a separate paper. To sum up, different approaches guiding research have led to different interpretations of the development, institutionalisation and realisation of eugenic thinking in Germany. Whereas previous works concentrated on the history of ideas re-

lated to eugenics, more recent literature added aspects of social and political history, as well as aspects of scientific theory. A historiographic overview and an evaluation of the current historiography has been provided by Kröner (1998: 9-13).

Although the focus of research shifted and older viewpoints had to be revised, all authors of the era agreed on the importance and significance of the mentioned two volume book by Baur, Fischer and Lenz for the German Racial Hygiene Movement. This book is usually considered to be the contemporary "standard textbook" of German Eugenics. Weingart, Kroll and Bayertz (1988: 312-319) go as far as to state that with the publication of this book in 1921 the German racial hygiene movement had obtained its own "Charter of heredity". Thus, they consider the publication of the book to be an important step in the process of professionalising racial hygiene as a scientific discipline. Existing works seem to justify this assessment. Analyses of reviews in order to stress the book's significance have been performed before. However, most of these review analyses did not aim at a systematic quantitative approach. They had different focuses. From a merely quantitative perspective they remained in a fragmentary form. Loren R. Graham (1977: 1147) for example describes the Russian reception of Baur's, Fischer's and Lenz's work. Bentley Glass (1981: 357-358) refers to two American reviews. Kröner *et al.* (1994: 34-37) quote eight review articles. Lösch (1997: 136-151), discussing mainly Fischer's contribution to the work, analyses four reviews and notes further eight. Proctor (1988: 57-59) quotes 15 reviews, one of which is not a review ar-

title but an obituary notice addressed to Erwin Baur. Weingart *et al.* (1988: 316-319) cite two comments on the book, one of which is from a review, the other is from an article about “state and scope of eugenics” by the anthropologist Karl Saller.

This article presents the results of a systematic quantitative analysis of the reviews on the book by Baur, Fischer and Lenz (Fangerau, 2001). In the following the method of this systematic analysis will be described and its value for further studies on different topics than eugenics will be discussed. After a short presentation of the book and its contents, the systematic analysis of contemporary reviews is described. Leaving aside social, personal or political factors influencing the reviewers, the general acceptance or disapproval of the book by its contemporaries shall be quantified. In addition, the process of making the book a “standard textbook” will be reconstructed. At the end possible pitfalls and the scope of the method will be displayed.

### The “Baur-Fischer-Lenz”

When the first edition of Erwin Baur’s, Eugen Fischer’s and Fritz Lenz’s textbook on human heredity and racial hygiene (hereafter referred to as BFL) was published in 1921 it captured the zeitgeist. In that time it fit into the trend of the scientifically orientated eugenics movement in Germany. In the aftermath of the First World War the German general public had developed a broader interest in racial hygiene and population politics. The lost war had fostered a general fear of biological decline and degeneration. Glass (1981: 362-367) has argued, based

on the correspondence between Erwin Baur and Albert F. Blakeslee, that Baur’s engagement in Racial Hygiene was partly rooted in the consequences of the lost war. The Racial Hygienists (Eugenicists) sought to use this climate for the propagation of their aims. They wanted to institutionalise Racial Hygiene as an academic discipline. For that purpose they needed a scholarly textbook to refer to. Since there did not exist any comprehensive book on Racial Hygiene in German covering its various aspects from genetics and anthropology to medicine and politics the geneticist Erwin Baur (1875-1933) approached Eugen Fischer (1874-1967) and Fritz Lenz (1887-1976) with the idea to write such a textbook.<sup>2</sup> The nationalist publisher J. F. Lehmanns known for his initiative in publishing books on issues surrounding eugenics (see Stark, 1976; 1981; Stöckel, 2002; Thomann, 1993) willingly agreed to finance, publish and promote the planned work.

Erwin Baur was an internationally recognised research worker in the field of breeding. By the time the book was published he was director of the first German university institute for the theory of heredity in Friedrichshagen (see Gilsenbach, 1990; Hagemann, 1978; Harwood, 1993). The anthropologist Eugen Fischer had become famous with his research work on South African “half-breeds” (Rehobother Bastards) with which he claimed to have proven the validity of Mendel’s laws in human beings (see Lösch, 1997). Fritz Lenz held a professorship for hygiene since 1919, and was to become the first associated professor for Racial Hygiene in Munich in 1923 (see Proctor, 1988; Rissom, 1983). For the first time a geneticist, an anthro-

pologist and a hygienist had joined forces to give a synopsis of the current knowledge on human heredity and racial hygiene.

Their textbook consisted of two volumes and was a great success. It went through five editions between 1921 and 1940 (Baur *et al.*, 1921; 1923; 1927; 1931; 1932; 1936; 1940). However, the fifth edition was never finished. The published section was the second half of the first volume and was written by additional authors. Lohff and Warwas (2002: 236) found that there was a general breakdown in the number of eugenics literature published by J. F. Lehmanns after 1940. Facing these data they are of the opinion that the publishing house concentrated on literature important for the war. Maybe this is the reason why a fifth edition of the other parts of the BFL had never been realised.

In the first volume the authors intended to give a scientific basis for their second volume which was dedicated to the political issues of “practical racial hygiene”. While the first volume consisted of chapters written by Baur, Fischer and Lenz, the second volume was the single work of Fritz Lenz.

To open the first volume, Erwin Baur presents an overview of the general theory of inheritance. He gives an introduction to Mendel’s laws and explains Morgan’s experiments on *Drosophila melanogaster* while mentioning his own experiments on *Antirrhinum majus*. Following this, Fischer describes the varying characteristics of human beings applying anthropological criteria. On this basis he classifies different human races. It is an important fact that he points out hereditary criteria in characterising races in contrast to the classical anthro-

pology which merely used to compare anatomical proportions. Contemporaries applauded this “modern” approach (Bluhm, 1937: 335; Harrasser, 1936: 277f.; Marcuse, 1921: 234; Verschuer, 1937: 363). The historian Niels Lösch (1997: 144) considers this approach to be the main attribute of Fischer’s anthropology. According to Lösch it is this orientation towards hereditary criteria, which makes Fischer’s contribution stand out against the purely measuring, comparing, classical anthropology. All of the subsequent chapters were written by Fritz Lenz. His parts taken on their own would form a book in its own right even without the preceding material by Baur and Fischer.

The core of Lenz’s work in the first volume is a chapter about hereditary illnesses. This chapter grew from edition to edition and was kept up to date over the years. It is an encyclopaedic collection of all known hereditary diseases at that time which was extended from 93 pages in the first edition to 512 pages in the fifth edition. It is followed by a section on “Heritability of intellectual gifts”. In this chapter Lenz follows a strategy that Garland Allen (1983) has described as the standard strategy of eugenicists: Lenz is developing a value-orientated hierarchy of taxonomically defined human races (see Fischer’s chapters). The value he refers to is “cultural value” as it conformed to the prejudices of the contemporary German middle class (Weiss, 1992: 7). As proof for his theses Lenz is referring to the results of intelligence tests, biological data and observed living conditions, which he interprets genetically. He considers the quoted factors to be genetically determined, a practice that has already been criticised by contemporaries. The American F. H.

Hankins (1938: 147) for example commented on these sections of the book: "As a whole the work is useful for its summaries of numerous researches on human inheritance, being more comprehensive in this respect than any single work in English. Its value, however, is seriously marred by its frequently uncritical acceptance of genealogical data...". The well known Hermann J. Muller (1933: 20) added: "Intelligence quotients, which are now known to be strongly influenced by training, serve as their courts of highest appeal. In addition, they twist the records of history and anthropology so as to favor the preconceptions born of their own egotism".

In the second volume Lenz exposes the eugenic theories of biological and sociological selection and degeneration. He suggests measures for private and public racial hygiene. On the basis of the biological data given in the first volume, Lenz outlines the complete program of racial hygiene aimed at the betterment of man. The methods and outcomes he describes range from education, influencing world views and tax and political systems, to sterilisation, abortion, and the prohibition of marriages.

### **Finding Reviews**

Because the BFL is considered within historiography to be one of the books that had an important impact on the Racial Hygiene movement, this article presents an assessment of the opinion of Baur's, Fischer's and Lenz's contemporaries on the book as it was expressed in review articles. This methodology will allow for the quantification of the acceptance or refutation/rejection of the book.

It was possible to trace a total of 325 book reviews on Baur, Fischer and Lenz's publication. These had all been published between 1921 and 1940. The major source was the review section (section C) of the "International Bibliography of periodical literature" (Dietrich, 1901-1943). This is an extensive and comprehensive bibliography of the leading German and foreign journals of various fields of knowledge and science. In the year 1896 the bibliography contained 8500 articles which had been published in about 275 mostly scientific German journals. (Dietrich Abt. A., 1.1896). The list of included periodicals was expanded over the years and suggestions for journals to be added were considered and accepted. According to the editors, the bibliography strived for "most possible completeness" with respect to what seemed necessary and possible to record. This had the effect that in the year of the BFL's first edition 2000 different German journals, and from the year 1925 on, more than 1200 foreign periodicals had been registered. (Dietrich Abt. C, 1921; 1925/26 ["List of journals"]). Concerning the foreign journals the editors tried to achieve most possible completeness in the inclusion of publications listed in the "Total-Catalogue of foreign Journals" ("Gesamtverzeichnis der ausländischen Zeitschriften"). (Dietrich Abt. C, vol. 44, 1925/26). An Index like the Index medicus and its successors (Carnegie Institution of Washington, 1879-1927) was not appropriate for this research project because it does not include book reviews for the period in question. 303 review articles could be found with the help of Dietrich's bibliography. 22 could be added by analysing the cross-references given in the

previously found reviews. 27 of the traced reviews were published in a language other than German.

All in all the bibliography edited by Dietrich seems to offer an adequate instrument to assess the German and foreign acceptance of the theses given in the BFL. Furthermore, the quantitative and qualitative analysis of the critiques makes it possible to reconstruct the single stages on the book's way to becoming a corner stone of the racial hygienists' propaganda.

### **Semi-quantitative Review Analysis**

Due to the structure of the book as a two-volume work reviews were published either on the first, the second or both volumes. Most of the 325 reviews criticised the 3<sup>rd</sup> edition of the BFL. 103 of them had been published on this edition between 1927 and 1931. An English translation of the first volume of the BFL titled "Human Heredity" was published in 1931. 13 reviews on this translation could be traced. In 1932, only one year after the third edition, the fourth edition of the second volume was made available as an unchanged reprint. As such it only received two reviews. The most often reviewed single volume was the first volume of the fourth edition with 75 reviews. A list of the reviews is provided by Fangerau (2001: 254-264). In the following I will discuss a synopsis of the reviews, where I take into account the periodicals they have been published in.

In accordance with the works of Günther (1982: 63) and Kroll (1983) the number of reviews per edition seems to reflect the status of the institutionalisation of Racial Hygiene in Germany. According to these authors the Racial Hy-

giene movement reached its zenith in 1927 when the Kaiser Wilhelm Institute für Anthropologie, menschliche Erblehre und Eugenik (KWI for Anthropology, Human Heredity and Eugenics) was founded. The foundation was an object of international prestige for German science and the Weimar Republic (Schmuhl, 2005: 57-59). Correspondingly there was an increase in the number of reviews globally until the third edition (1927/1931) and a decrease in the number of reviews after the establishment of the KWI. With the declining need for institutionalisation, the number of reviews goes down. For the first edition (1921), 37 reviews could be traced. The second edition (1923) received 55 reviews. The two volumes of the third edition were published separately at different times. The first volume (1927) was reviewed 51 times, the second (1931) 50 times. Two reviews could be found reviewing both volumes together. Thus, the German edition was reviewed 103 times (plus 13 reviews that could be traced on the English edition). The fourth edition (first volume 1932, second volume 1936) did not receive that much attention anymore. Furthermore, 75 out of 78 reviews on that edition were on the first volume. Accordingly, during the years 1931-1932, before the National Socialist came to power, the BFL reached the highest attention. The never finished fifth edition (1940) only received 39 reviews. Reviewer's interest in the book had considerably decreased (Table 1).

As the racial hygiene movement originated from different theories as a conglomeration of distinct sciences and humanities, reviews had been published in manifold journals of miscellaneous orientations. Clinical medical journals, however, predominated in reviewing the

Table 1. Number of reviews per edition.

	1 <sup>st</sup> edition (1921)	2 <sup>nd</sup> edition (1923)	3 <sup>rd</sup> edition (1927/1931)	4 <sup>th</sup> edition (1932/1936)	5 <sup>th</sup> edition, 1 <sup>st</sup> vol. 2 <sup>nd</sup> half (1940)
Both volumes	11	24	2	1	0
1 <sup>st</sup> volume	14	15	51	75	39
2 <sup>nd</sup> volume	12	16	50	2	0
Human Heredity	0	0	13	0	0
Total	37	55	116	78	39

BFL. Without counting the hygienic and anatomic publications as medical periodicals they add up to one third of all journals (N=109, 33.5%). Among them were eminent journals like “Fortschritte der Medizin”, “Centralblatt für Chirurgie”, “Psychiatrisch-Neurologische Wochenschrift”, and “Der Nervenarzt”. The second largest group is formed by hygienic journals – including periodicals on Social Hygiene (N=25, 8%) – followed by anthropological journals (N=24, 7%). The broad fields of “Religion and World View” (N=18, 6%), “Genetics and Eugenics” (N=17, 5%), “General Knowledge” (N=16, 5%) and “Politics and Social Sciences” (N=15, 5%) follow closely. The comparably low number of journals orientated purely towards “Genetics and Eugenics” indicates how many other disciplines were interested in the BFL and how strong the predominance of (clinical) medical journals was in reviewing the BFL. The great variety of interested disciplines is depicted in table 2.

The allotment of medical doctors in proportion to all verified reviewers – all of them academically trained authors (see Fangerau, 2001: 219-242) – is even

higher (Table 2). Out of 164 reviewers that could be biographically verified 102 had received training in medicine or held a medical doctorate (62%). The second and third largest groups are formed by anthropologists (N=16, 10%) and zoologists (N=12, 7%). The great variety of disciplines that was shown in the journal’s subject areas shrinks down to three dominating fields facing these reviewer-centred figures. Book reviewers from three disciplines wrote almost 80% of all critiques. In comparison, the eleven most often represented journal subject categories have to be added up to reach a review cover of 80% in the examined sample. The reason for that is that medical doctors published their critiques in both medical and differently orientated journals. Furthermore, many specialists publishing reviews in journals of their speciality were originally academically trained medical doctors. Agnes Bluhm, for example, was a trained medical doctor, she worked as a geneticist and published inter alia reviews in the “Deutsche Medizinische Wochenschrift” (category Clinical Medicine) or “Die Naturwissenschaften” (category Science and



*Table 2. Subject categories of the journals identified as having published reviews on the BFL and disciplines of the reviewers.*

<b>Subject category</b>	<b>No. of journals</b>	<b>No. of reviewers (initial training)</b>
Clinical Medicine	109	102 Medical Doctors (MDs)
Hygiene and Social Hygiene	25	
Anthropology	24	16 (5 of them MDs)
Religion and World Views	18	1 Vicar
Genetics and Eugenics	17	4
General Knowledge	16	
Politics and Social Sciences	15	5 Sociologists
Education and Social Pedagogics	14	5 Pedagogues
Anatomy	10	
Literature and Culture	10	1 Writer
Sexology	9	
Law	8	5 Lawyers
Science and Technology	8	2 Chemists, 1 Scientist (not specified)
Biology	7	12 Zoologists, 4 Botanists, 1 Biologist
Statistics	7	2 Statisticians
Homoeopathy + Nature Healing	4	
Criminology	4	
Psychology	4	2 Psychologists
Economics	4	
Ethnology	3	
Genealogy	2	
Pharmacology	2	
Philology	2	
Geography	1	
Military Science	1	
Philosophy	1	1 Philosopher
<b>Total</b>	<b>325</b>	<b>164</b>

For each subject category the number of journal issues belonging to that category is given in the second column. In the third column the number of reviewers having been (initially) trained in the respective discipline is given.

Technology, with a focus on the general reader), the psychiatric geneticist Hans Luxenburger, also a medical doctor, reviewed the BFL inter alia in “Monatschrift für Kriminalpsychologie und Strafrechtsreform” (Criminology), “Archiv für Rassen- und Gesellschaftsbiologie” (Genetics and Eugenics) or “Medizinische Welt” (Clinical Medicine).

The dominance of medicine among the reviews reflects the high interest doctors had in eugenics. This interest was partly grounded in the widening of the nosological spectrum by the identification of hereditary diseases and partly due to the fact that eugenic measures were considered as prophylactic therapeutic measures. One review of the doctor and anthropologist Albert Harrasser serves as a good example. He summarised these sources of interest stating that a) Lenz’s part of the book was the most modern handbook on hereditary diseases and – alluding to the German sterilisation law – that b) the book’s section dealing with hereditary psychiatric disorders had already gained practical significance (Harrasser, 1936).

### **Trends in Evaluation**

The large number of identified reviews does not allow for a detailed qualitative description of each single review. Each review is different in certain aspects. Trends in the evaluation of the BFL, however, can be traced and analysed. Therefore, the qualitative assessment of the book by the reviewers was sorted in different categories in order to be quantified. Three categories – portraying the complex mosaic of 325 reviews, admittedly in simplified terms – help to characterise the reviews.

#### 1. Form:

Reviews are either reporting the appearance of the book or are reporting the contents without commenting. These reviews were called “reporting”. Other reviews are commenting on the contents of the BFL without going into details concerning the content. They were classified as “commenting”. Reviews reporting and commenting were named as such.

#### 2. Orientation of the reviews in content:

In analogy to the contents of the BFL the reviewers are concentrating on special topics of the book according to their interest. Roughly four different focal points can be traced:

- a) Reviews concentrating on aspects of racial hygiene, race theory, racial anthropology and racial ideology.
- b) Reviews focussing on hereditary diseases of special organs or human heredity in general. They are mostly emphasizing the reviewers’ speciality and are, therefore, called “concentrating on subject specific issues”.
- c) Reviews combining aspects a) and b).
- d) Reviews not fitting in any of the above categories.

#### 3. Evaluation:

Looking at the tendency of the reviews in their position towards the BFL schematically five levels of agreement were defined: from full agreement (positive review) to total disapproval (negative review) of the book. Undecided reviews can be found in the middle of this scale. 17 reviews that do not evaluate the book at all were given an own grouping.

The analysis of the reviews according to the given categories reveals that the

majority of the reviewers focus on questions surrounding racial hygiene-racial theory and that the vast majority evaluated the book positively (Table 3).

Reviews that focused on issues surrounding racial theory are the most numerous (N=166, 51.1%). Only 51 reviews placed an emphasis on subject specific issues surrounding the hereditary diseases or the reviewers specialty ("Combining both aspects" N=51, 15,7%, as well). 30 of these (27.5%) were published

in medical journals. Reviews focusing on racial theory amount to 39 (35.8%) in medical journals ("Neither-nor" N=19, 17.4%). According to the structure of the BFL the second volume received more reviews concentrating on aspects of racial theory and racial hygiene than the first. The latter received more subject specific reviews. The fifth edition (1st vol., 2nd half) being mostly an encyclopaedia of hereditary diseases (as the parts of Baur and Fischer are missing)

Table 3: Quantitative analysis of the reviews according to three categories defined above. Levels of evaluation range from positive (+) to negative (-), Ø stands for no evaluation.

Form	Content	Total	+	(+)	+/-	(-)	-	Ø
<i>Reporting</i>								
	Concentrating on Racial Hygiene	72	67	3	0	0	0	2
	Concentrating on subject specific issues	30	24	3	0	1	0	2
	Combining both aspects	30	28	1	0	0	0	1
	Neither - nor	53	45	1	0	0	0	7
<i>Commenting</i>								
	Concentrating on Racial Hygiene	16	5	1	3	2	3	2
	Concentrating on subject specific issues	1	0	0	1	0	0	0
	Combining both aspects	0	0	0	0	0	0	0
	Neither - nor	0	0	0	0	0	0	0
<i>Reporting+ Commenting</i>								
	Concentrating on Racial Hygiene	78	36	28	3	6	3	2
	Concentrating on subject specific issues	20	8	10	1	0	1	0
	Combining both aspects	21	6	12	3	0	0	0
	Neither - nor	4	2	1	0	0	0	1
<b>Total</b>		<b>325</b>	<b>221</b>	<b>60</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>17</b>

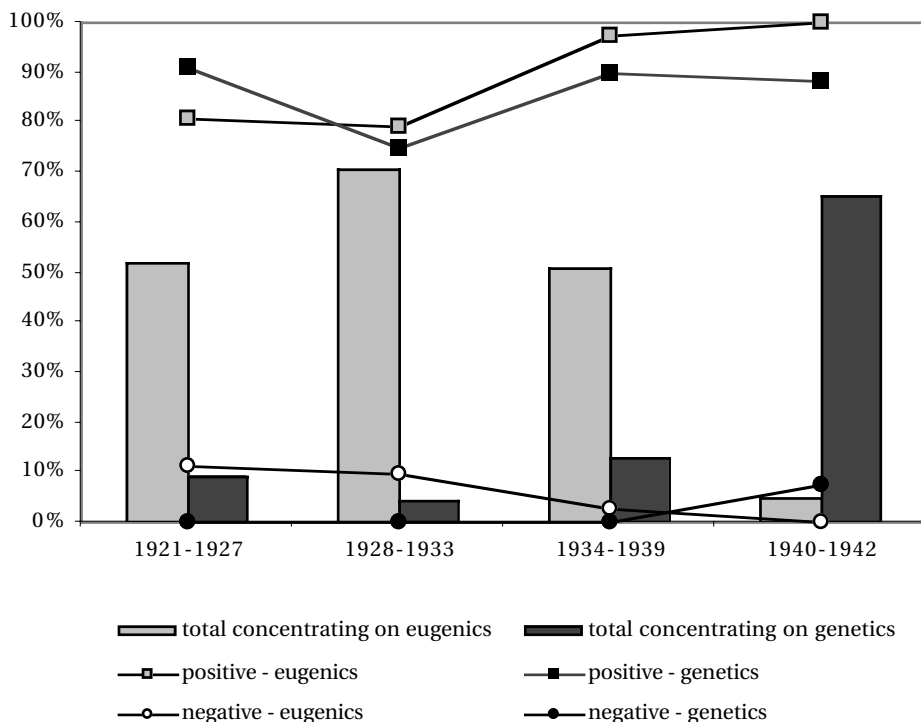
received 26 (66.6%) reviews concentrating on subject specific issues. Reviewers focussing on aspects of racial theory are more often commenting directly on the BFL than reviewers concentrating on subject specific issues.

When grouping the reviews and their qualitative assessment chronologically it can be shown that after the takeover of the National Socialists negative comments on the book increasingly refer to subject specific issues. The book's aspects dealing with eugenics are evaluated increasingly in a positive light after 1933. However, it has to be taken into account that the fragmentary 1940 issue focused on genetic issues and thus naturally only 5% of all reviews referred to

eugenic aspects. Nevertheless, when the time frames of 1921-1927 and 1934-1939 are compared, the proportions of reviews concentrating on subject specific issues or on eugenic issues are similar. Contrasting this parallelism, the proportion of reviews evaluating the BFL's eugenic aspects positively rises considerably by almost 20% between 1921-1927 and 1934-1939, whereas the proportion of reviews evaluating genetic aspects positively is almost the same within the time frames compared. One can presume that this effect is caused by the German reviewer's adaptation to the eugenic philosophy of the National Socialists (Figure 1).

In summary, one can say that the

Figure 1. Percentage of reviews on subject specific issues (collectively termed "genetics") and on issues specific for Racial Hygiene (termed "eugenics").



analysis of the evaluation of the BFL reveals an overwhelming acceptance of the book among its reviewers. 281 reviews with a positive tendency (87%) are opposed by only 16 negative (5%) reviews. Out of these 16 negative reviews five were published in another language than German. Nevertheless, a separate analysis of the non-German reviews reveals that 74% (N=20) of them evaluate the book positively. Thus, reviewers that did not write in German seem to be – collectively taken – slightly more critical towards Baur, Fischer and Lenz than others, without showing a completely different tendency. The ratio of positive and negative reviews remains basically the same from edition to edition. A shift towards a more positive evaluation, which one might expect after 1933 when the National Socialistic regime started, can not be proven. Only the sub-analysis displayed in Figure 1 shows a slight political effect on the reviews concentrating on eugenic aspects of Baur's, Fischer's and Lenz's book.

### **How did the BFL become the "standard textbook"?**

The fact that the BFL could become the "standard textbook" on Racial Hygiene of its time was not only due to the economic instinct or the political commitment of its publisher or due to the scientific reputation of the three authors. This development was also a result of the described large number of positive reviews popularising the work. In the act of promoting the book it was of great importance that the reviewers (like the authors) brought to bear their scientific reputation and their social prestige. Supporting this publication they advocated

Racial Hygiene. They made it a public issue.

The book did not become a "standard work" automatically by itself. It was turned into such by the reviewers. There even seems to be a method behind that process, at least the process follows a pattern. Step by step from edition to edition the work is promoted from "recommendable in general" via "outstanding" to "a masterpiece" and "the one and only standard work" respectively. Insider-titles like "*our* Baur-Fischer-Lenz" did more than was necessary to let the book seem to be accepted and favoured by experts and specialists.

In one of the first critiques dealing with the first edition Otmar von Verschuer (1921: 150) called the first volume "a valuable book". The contents of the same edition were labelled "a thorough piece of work" by the psychiatrist Ernst Rüdin (1921: 1299). (Otmar von Verschuer became a co-author of the later fifth edition). The anthropologist G. Kraitschek (1922: 144) praised the second edition "an exquisite work". The third edition then received the attribute "standard work/treatise/compendium" in 15 cases and Eugen Bleuler (1927: 1288) characterised it as "... the systematic basis for human heredity and racial hygiene in general ...". Viktor Lebzelter (1936: 124) noted in reference to the fourth edition that the book "... almost has an official character in Germany..." before Karl Thums (1940: 298; 1941: 658) addressed the fifth edition as "standard treatise", "our Baur-Fischer-Lenz" and "classical one and only work in the medical world's literature".

In 47 of the 325 analysed reviews the title "standard work" is awarded to the BFL. As early as in 1922 this term has

been used for the first time by the dermatologist E. Meirowsky (1922: 123) when he gave a report on the first edition. The shortened form “Baur-Fischer-Lenz” also became its own standard label. Attributes, such as “the great”, (A.H., 1931: 791) “the well-known” (Glatzel, 1940: 673) or “the classical” (Ostertag, 1941: 339) had been used for the first time in a review on the 2<sup>nd</sup> edition given by the “Zeitschrift für Kinderforschung” in 1924 (Scheidt, 1924: 17).

## Discussion

This article has explored and analysed the reaction of contemporaries to the textbook on Racial Hygiene by Erwin Baur, Eugen Fischer and Fritz Lenz using a review analysis. The idea was to gather enough material to supplement previously performed qualitative analyses by quantitative data on the acceptance or rejection of Baur’s, Fischer’s and Lenz’s book. Ellegard’s ground-breaking study on “Darwin and the General Reader” served as a model for the study. Ellegard examined 115 periodicals for their reactions on Darwin’s theory of evolution.

Whereas Ellegard included any literary reaction to Darwin’s theory, this study explicitly concentrated on “review articles” to capture and count the main tendency towards the book. A methodically new element was the systematic approach via Dietrich’s bibliography and a systematic semi-quantitative analysis. The benefit of such an approach is twofold. On the one hand the systematic collection of reviews via Dietrich’s results (in the case of the BFL) in a large number of reviews to be analysed. Although such a collection can never be complete, as it

only includes journals listed in the bibliography, a considerable number of reviews can be found. The higher the number of reviews to be analysed reduces the danger of making general assumptions on the basis of extreme views. A selection bias is minimised with the growing number of analysable reviews. On the other hand the systematic analysis according to previously defined categories makes the large number of heterogeneous reviews comparable. The creation of comparable research categories harmonises the great variety of critiques and allows for a qualitative and quantitative interpretation of their contents. In conclusion, the systematic collection and analysis of reviews makes the reconstruction of the opinion of a contemporary “collective of reviewers” on a (scientific) work possible. Historical streams of thoughts, thought styles and, above all, the contemporaries’ evaluation of a book can be reconstructed by this approach free from a historiographical bias. This bias could have been caused by the knowledge gathered between the publication of the book in question and the moment of historical analysis.

The search for reviews on the BFL with the help of Dietrich’s was successful in quantitative terms. 325 reviews gathered with this source offer great empirical material. Conclusions from the analysis of the reviews can be chiefly drawn on three different interpretative levels:

1. The journals publishing reviews can be categorised according to their academic disciplines. This allows for statements concerning the different disciplines or academic spheres being interested in the book and in Racial Hygiene

accordingly (Table 2).

2. The reviewers themselves can be (in the majority of cases) identified and sorted according to their biographies. Such a collective biography hints at the main promoters of eugenics or at least at the bearers of a eugenic thought style (Table 2).

3. What the reviewers actually say can be categorised according to dominant trends as regards content, form and their evaluation of the book. Given the relatively high number of the reviews examined, the analysis of this categorisation is a useful tool for quantifying the acceptance of Baur's, Fischer's and Lenz's book (Table 3, Figure 1). The approach chosen supplements qualitative, interpretative analyses of the reception of the BFL with collective and quantitative data. The general acceptance of the book among its contemporaries can be clearly defined.

A synopsis of these levels matched with the chronological developments reveals the following picture. The group of reviewers is as far as their level of education is concerned a relatively homogeneous group. Taking into account that most of them were educated medical doctors the group becomes even more homogeneous. All of them belong to the collective dealing with Racial Hygiene and one can expect that they are the ones dominating the discourse on eugenics in Germany. Previous research also suggests that there was no controversial discussion about the BFL among this group (Fangerau and Müller, 2002; Fangerau, 2003: 74-80). A vast acceptance of the theses lined out by Baur, Fischer and Lenz in their book is to be found. Critical comments are rare and the vast majority welcomes the book.

Therefore, the first question of this paper whether the BFL can be considered as an important book for the German Racial Hygiene movement can be – taking the large amount of analysed reviews – answered positively. Historiographical evaluations of the book like that of Proctor (1988: 50) “...The book strongly influenced German biomedical thinking and provided scientific legitimacy for many of the views that came to be favored in the Nazi era” are backed with empirical data. These data do not only justify statements like Proctor's but differentiate them. For example, the genetic parts of the BFL were underrepresented in the reviews until 1940 and negative reviews on the eugenic parts almost disappeared after the 1936 issue. Furthermore, the collective of people pushing forward the book, representing the “German biomedical thinking”, can be reconstructed with the help of the reception study. The danger of being accused of reiterating “prejudices” of the past concerning the book's eminence can be refuted with the help of an empirical reception study. Lenz himself, for example, claimed that his book had influenced Hitler when he was writing “Mein Kampf” (Lenz, 1931: 302). This statement is intended to promote the BFL. Just on the basis of Lenz's claim one might overestimate the impact of the BFL and ascribe importance to the book without having tested its impact on the community of geneticists and eugenicists. The review analysis provides the necessary data for such a test.

An additional hypothesis one might derive from the given data is that the collective of reviewers willingly made the BFL a standard textbook to foster professionalisation and institutionalisation of their field knowing that a “profession”

ought to have a standard textbook. The book gave an account of the national and international state of the art in racial hygiene and human heredity of its time and it combined the very topics. Thus, it helped to immunise the racial hygiene movement against criticism of its scientific and academic nature. After the second edition of the BFL in 1923 objections could only be put forward with regard to technical aspects of eugenic measures or with regard to the science of genetics.

These conclusions, together with the interpretative levels, disclose the strength and the weakness of the method applied. A quantitative approach seems to be objective and replicable. However, a purely quantitative interpretation of the reviews is impossible and futile. A qualitative element needs to be involved at least for the formation of categories that are to be investigated. As the acceptance of a book is being examined, the first qualitative element is the question whether the reviewers' evaluation is positive or negative. Further qualitative elements are the trends in the reviews as regards the content, the categorisation of journals and the collection of reviewers' biographies. A purely qualitative analysis – as it was performed for the question of how the book was turned into a standard work – lacks the authority of the quantitative approach. It can be biased by the selection of reviews or the historian's previous knowledge.

To minimise the bias that is involved in interpretative or qualitative statements the categorisation of the reviewers' evaluation has been performed twice by the author (within two years). The concordance rate was high, only 6 out of the 325 reviews were categorised

differently (“neutral” instead of “positive” or “negative”).

Although 325 reviews could be traced this list is probably far from being exhaustive. As stated above 22 reviews could be added to the initial number by cross-referencing alone. Nevertheless, compared to the number of reviews traceable for other books the number seems to be sufficient for quantifying statements. Controls with Dietrich's bibliography showed that H.F.K. Günther's very popular books on the German race were reviewed roughly 350 times. All the books written by the German-American physiologist Jacques Loeb were reviewed roughly 250 times. Although Dietrich's bibliography itself was very useful for finding reviews it seems appropriate to hint at certain pitfalls of this bibliography. Despite the limited time-frame covered by Dietrich's (it starts 1901) German periodicals are dominant. Therefore, Dietrich's is an adequate source for reviews on a book like the one by Baur, Fischer and Lenz written in German for the German market. However, reviews on books written in different languages may be underrepresented.

Despite this, review analyses are a useful way of assessing the reception of books within the context of their appearance. In addition, a systematic compilation of reviews makes quantifying statements on a book's reception possible. The combination of a qualitative and a quantitative approach measures a book's esteem among contemporaries while offering a distinction between the assessments related to the different focuses of the book. The reconstruction of the collective of reviewers even hints at sociological aspects that might be involved in a book's reception.



As far as the Baur-Fischer-Lenz is concerned the analysis does not rewrite the history of eugenics in Germany. Nevertheless, current knowledge about the movement is backed by the data offered by the study. Current interpretations of the movement's development and the status of the BFL within this development find new evidence in the quantitative data given by this review analysis. The data hint at the book's status as one step in the process of the institutionalisation of Racial Hygiene. Furthermore, the collective of academics popularising and bringing forward eugenic ideas is clearly portrayed.

Because the results of the review analysis can be tested against the touchstone of current knowledge about the eugenics movement the validity of the method used is tested itself. Further reception studies on books that are said to have had an influence on science, politics, society, religious or social movements seem to merit further investigation. The proposed method offers a systematic tool for such investigations.

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### Notes

- 1 In this paper the terms "Eugenics" and "Racial Hygiene" are used synonymously although among the German eugenicists there was a discussion during the 1920s about the question whether they could be used synonymously. Whereas one group preferred the German term, the other wanted to keep the international term (cf. Weingart, Kroll & Bayertz, 1988: 313ff.).
- 2 This information stems from two unpub-

lished letters written by Lenz's wife Emmy Lenz (born Weitz) to her sister (05.12.1918) and her parents (9.12.1918). Transcripts were made available to the grateful author by Fritz Lenz's son Hanfried Lenz.

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