

WOMEN IN PSYCHOLOGICAL HISTORY - FORMS OF INTEGRATION IN PSYCHOLOGY AND WOMEN'S LECTURING ACTIVITIES AT GERMAN PSYCHOLOGY CONGRESSES 1904-1978

HELGA SPRUNG (BERLIN)
LOTHAR SPRUNG (BERLIN)

Wanderer, there is no path
it is your steps which create it
Antonio Machado y Ruiz

ABSTRACT

The paper present some models and data for reconstruction of a 100-year-old process of integration fo women into academic psychology. In the first part we describe the models of integration. In the second part we have carried out a bibliometric and a thematic analysis of published papers presented by women at German congresses of psychology from 1904-1978. Similar preferences of themes can be shown in the United States. If today there is talk of the third or fourth generation of women to be active in academic professions since the beginning of women's studies at the start of the 20th Century in Germany, then this has to be qualified somewhat according to the analisis of the participation of women in German psychology congresses. The analyses show thar more tan one generation of women was missing due to the nazi rule, World War II and the post-war period.

RESUMEN

El artículo presenta algunos modelos y datos de la reconstrucción del proceso de integración de la mujer en la psicología académica. En la primera parte describimos los modelos de integración. En la segunda parte realizamos un análisis bibliométrico y temático de artículos publicados presentados por mujeres en congresos de psicología en Alemania desde 1904 hasta 1978. Similares preferencias de temas pueden ser

encontradas en Estados Unidos. Si hoy hay que hablar de la tercera o cuarta generación de mujeres que son activas en la profesión académica desde el comienzo de los estudios de la mujer desde los principios del siglo XX en Alemania, entonces esto tiene algo que ver con los análisis de la participación de la mujer en los congresos de psicología alemanes. Los análisis muestran que más de una generación de mujeres han desaparecido, debido al dominio nazi en la Segunda Guerra Mundial y en la postguerra.

INTRODUCTION

It sounds trivial to say that women too have made a contribution to the development of modern psychology in the German-speaking area. Their specific role, however, has so far not been clear. For the 19th and early 20th Centuries in particular, in other words up to the beginning of women's studies, specific data sources are not easy to find. For this century there is some interesting self-portrayal by female psychologists of the academic generation, for instance Charlotte Bühler (1972), Rosa Katz (1972) and Anitra Karsten (1979). For some time there has in addition been a greater historiographic interest in the topic. Portraits of Charlotte Bühler (1893-1974) by Bürmann and Herwartz-Emden (1993), of Martha Muchow (1892-1933) by Miller (1993), of Franziska Baumgarten-Tramer (1883-1970) by Heller and Daub (1995) and of Rosa Katz (1885-1976) by Berger (1994) may serve as examples. In 1991 Helmut Lück edited a volume of lectures and other works on the subject of «Women in the history of psychology» (Lück, 1991) and the present speaker did one semester of teaching in each of the academic years 1992/93 and 1993/94 on women in the history of psychology at the Free University of Berlin.

THE HISTORY OF WOMEN'S STUDIES AND FORMS OF INTEGRATION IN MODERN PSYCHOLOGY

In Germany women were given access to universities and colleges at the beginning of the 20th Century. For a long time before that the university in Zurich had granted women the right to study, having accepted the first female students in the winter semester of 1843/44 (Verein, 1988). In 1901 Baden was the first federal state in Germany to open its university to women, Bavaria followed in 1903, Württemberg in 1904, Saxony and Thuringia in 1906 and Prussia in 1908 (Meyers Lexikon, 1926). In 1920 women were given the right to take a second doctorate as

a qualification for university teaching. From this time onward many women took advantage of the newly-won opportunities offered. In Berlin in 1923, for example, 20% of students were already women (Bock & Jank, 1990). But access to science and to studies is one thing; lifelong, equal and natural integration of women into academic work and into the academic system is another (Feyl, 1981, Weiland, 1983, Salzmann, 1985, Wagner, 1985, Fölsing, 1990, Sprung, 1991, Kuhn, 1992, Krawietz & Degenhardt, 1996).

Using psychology as an example we would like to look into the question of how women have been integrated into the development of modern psychology and where their achievement has been. If we review the period from the end of the 19th to about the middle of the 20th Century, then we may distinguish at least four modes (or «models») of entry: 1. The partner model: women as private employees of their partners; 2. The lone fighter model: women who have found their own way into academic life, some of whom have later made their own academic career; 3. The staff member model: women who were staff members of prominent scholars, some of whom later have made their own academic career; 4. The team model: women as members of an academic working group, some of whom have gone on to make their own academic careers. The models also appear in combination and sometimes change within the course of the life of an individual. We could add a further model, which we will not pursue here and which could be called the «father-daughter model». Examples would be Wilhelm Wundt and Sigmund Freud and their respective daughters Eleonore and Anna.

THE PARTNER MODEL

It is above all around the turn of the century that we find women who were important - if unpaid - assistants to their husbands or life companions. The partner model characterizes the path of women by which they entered academic life as staff members of their husbands. We mention here just three examples for illustration. The German-language «Dictionary of Philosophical Terms» by Rudolf Eisler (Eisler, 1930) - the first edition of which appeared in 1900 - was written with crucial assistance from his wife. There is no reference to this in the book itself (Scheerer, 1982). Marie Dürr is known to have translated «Psychology» by William James, which her husband Ernst Dürr edited and wrote the foreword and commentary for. She was named as translator in the book. The cooperation between Clara and William Stern in developmental psychology is well known (Deutsch, 1991, 1994).

THE LONE FIGHTER MODEL

Following admission of women to studies there was then a direct entry into psychology. The beginning was made by one lone fighter. The lone fighter model characterizes the path taken by women who have found their own way to science and some of whom later made a career of their own. For example there was Franziska Baumgarten-Tramer (1883-1970), who became well known among other things through her achievements in industrial psychology, and Maria Jahoda (born 1907), who, for example, in 1933 in cooperation with Zeisel and Lazarsfeld published the well known study «Die Arbeitslosen von Marienthal» (The unemployed of Marienthal), for which she carried out the major part of the work. Later she did a variety of academic work, as evidenced by a recently published volume of her works (Jahoda, 1994)

THE STAFF MEMBER MODEL

This model describes the path taken by women who, having been staff members with prominent scientists, later made their own independent careers. Some of them got to know their life companion during their studies and these were at first their mentors. later they developed their own scientific fields and made careers of their own. Rosa Katz (1885-1976) and Charlotte Bühler (1893-1974) are examples of female psychologists who succeeded in making their own entry into psychology, which they then consolidated and extended with the help of their partners. Further examples are Martha Muchow (1892-1933), who in the 1920s and early 30s worked for William Stern in Hamburg, and Bärbel Inhelder (born 1913), who for decades was the most important co-worker of Jean Piaget in Geneva.

Comparable tendencies can be seen in other countries. A great deal of material has been processed especially in the USA (Stevens & Gardner, 1982; APA 1984; Furumoto, 1987; O'Connell & Russo, 1988, 1990). Table 1 shows a particular section. It indicates which scientists well known women in psychology are or were married to.

TABLE 1: WOMAN OF PSYCHOLOGY WHO WERE/ARE MARRIED TO PROMINENT MEN IN RELATED FIELDS (FROM: STEVENS & GARDNER, 1982, pp. 23-24)

WOMAN	MATE	FIELD
Ada Gould Allport	Gordon Allport	Psychology
Anne Anastasi	John P. Foley	Psychology
Louise Barker	Roger Barker	Psychology
Lucy Day Boring	Edwin G. Boring	Psychology
Karen S. Cattell	Raymond B. Cattell	Psychology
Mamie Phipps Clark	Kenneth Clark	Psychology
Helene Deutsch	Felix Deutsch	Psychiatry
Sybille Eysenck	Hans J. Eysenck	Psychology
Else Frenkel-Brunswik	Egon Brunswik	Psychology
Frieda Fromm-Reichmann	Erich Fromm	Psychoanalyse
Beatrice Gardner	R. A. Gardner	Psychology
Eleanor J. Gibson	James J. Gibson	Psychology
Ruth B. Guilford	J. Paul Guilford	Psychology
Margaret Harlow	Harry Harlow	Psychology
Grace Haider	Fritz Haider	Psychology
Josephine Hilgard	Ernest Hilgard	Psychology
Leta S. Hollingworth	Harry L. Hollingworth	Psychology
Virginia Johnson	William H. Masters	Psychology
Tracy Kendler	Howard H. Kendler	Psychology
Eleanor Maccoby	Nathan Maccoby	Psychology
Cathrine Cox Miles	Walter R. Miles	Psychology
Willie Mae Mowrer	O. H. Mowrer	Psychology
Lois B. Murphy	Gardner Murphy	Psychology
Beata M. Rank	Otto Rank	Psychoanalyse
Rosalie Rayner	John B. Watson	Psychology
Pauline Sears	Robert R. Sears	Psychology
Carolyn Sherif	Muzafer Sherif	Psychology
Gwendolyn Stevens	Sheldon Gardner	Psychology
Janet Taylor	Kenneth Spence	Psychology
Thelma Thurstone	Luis Thurstone	Psychology
Marian Radke Yarrow	Leon J. Yarrow	Psychology
Ada Yerkes	Robert M. Yerkes	Psychology

THE TEAM MODEL

Another model that was important for the beginning of an academic career for a large number of women was their work in a well run research team. The team model characterizes the academic path taken by women as members of a working group, on the basis of which some were later able to make an independent career of their own. One example is the research group on emotional and behavioural psychology headed by Kurt Lewin in Berlin in the 1920s and early 1930s.

We have already reported on this group elsewhere (Sprung, Sprung & Woodward, 1995), so here we will simply confine ourselves to naming his Berlin female pupils and their research topics together with the year of their publication:

Bluma Zeigarnik (1927). The retention of complete and incomplete actions. (*Das Behalten erledigter und unerledigter Handlungen.*)

Anitra Karsten (1928). Mental satiation. (*Psychische Sättigung.*)

Maria Ovsiankina (1928). The resumption of interrupted actions. (*Die Wiederaufnahme unterbrochener Handlungen.*)

Gita Birenbaum (1930). The forgetting of a resolve. (*Das Vergessen einer Vornahme.*)

Tamara Dembo (1931). Frustration as dynamic problem. (*Der Ärger als dynamisches Problem.*)

Wera Mahler (1933). Substitute actions of various degrees of reality. (*Ersatzhandlungen verschiedener Realitätsgrade.*)

Käte Lissner (1933). The relief of needs by substitute actions. (*Die Entspannung von Bedürfnissen durch Ersatzhandlungen.*)

Sara Fajans (1933). The significance of distance for the strength of the attraction in infants and young children. (*Die Bedeutung der Entfernung für die Stärke eines Aufforderungscharakters beim Säugling und Kleinkind.*)

Sarah Sliosberg (1934). On the dynamic of substitution between play and serious situations. (*Zur Dynamik des Ersatzes in Spiel- und Ernstsituationen.*)

Sara Forer (1934). An investigation of Decroly's method of learning to read. (*Eine Untersuchung zur Lese-Lern-Methode Decroly's.*)

Margarete Jucknat (1937). Level of aspiration and consciousness of self. (*Anspruchsniveau und Selbstbewußtsein.*)

(From: Sprung, 1992, Sprung, Sprung & Woodward, 1995; cf. also Jaroschewskij, 1989).

Another example of the team model from the 1920s and 30s is the circle of Charlotte and Karl Bühler in Vienna, which was concerned above all with developmental psychology, developmental diagnostics and life span analysis. Karl Bühler was called to Vienna in 1922 and Charlotte Bühler followed a year later. In 1926 she became extraordinary professor at the same institute. This produced a good basis for a working group to develop on. Developmental psychology and development diagnostics among children and adolescents was the field above all of Hildegard Hetzer, Lotte Schenk-Danzinger, Lieselotte Frankel, Käthe Wolf, Paul Lazarsfeld and Karl Reiniger. Those who dealt with life span analysis were above all Else Frenkel, Lieselotte Fischer, Hedda Bolger and Peter Hofstätter (Schenk-Danzinger & Thoma, 1963).

LECTURING ACTIVITIES BY WOMEN AT GERMAN-SPEAKING PSYCHOLOGY CONGRESSES

One indicator of the integration of women into academic psychology are papers given at psychology congresses. For that reason, in order to gather data, we have carried out a bibliometric and a thematic analysis of published papers presented by women at German congresses of psychology. The congresses were specifically the Congresses of Experimental Psychology and later the Congresses of the German Society for Psychology. The period analysed was between the First Congress in 1904 to the last Congress in 1978. The thematic analysis consisted of classifying the subjects of lectures into disciplines and fields of contemporary psychology. For the categorial system fields were chosen which figure in today's regulations for degree studies in psychology. Table 2 summarizes the frequency analysis of the papers.

TABLE 2: FREQUENCY ANALYSIS 1904-1938

Table 2 shows the percentage of papers presented by women at congresses from 1904 to 1938. This period spans the end of the second German Reich (1904-1918), the Weimar Republic (1918- 1933) and the nazi period (1933-1938). In analysing the frequency we were able in part to fall back on an earlier analysis carried out by Traxel (1985). As can be clearly seen, during the time of the Kaiser, from 1904 to 1914, only a few papers were given by women, in absolute figurã only five. But it must be taken into account that of the five papers three were given by Americans and one by a Swiss woman, and only one paper was given by a German, Clara Stern. During the First World War from 1914 to 1918 there was no congress. During the Weimar Republic from 1921 to 1931 the number of papers given by women gradually increased. In 1931 the highest peak was reached, with 15 papers, which was 18%. During the nazi period, from 1934 to 1938 there were no papers by women. During the Second World War from 1939 to 1945 there were no congresses.

Let us now turn to the thematic analysis. Table 3 shows the classification of congress papers into various fields of psychology.

<u>Fields of psychology</u>	<u>Relative frequency</u>
general psychology	21,6%
industrial psychology and organizational psychology	2,7%
biopsychology	0,0%
diagnostics and intervention	18,9%
developmental psychology	48,7%
clinical psychology	0,0%
methodology	0,0%
educational psychology	0,0%
personality psychology	0,0%
social psychology	8,1%

TABLE 3: THEMATIC ANALYSIS 1904-1938

Thematically the following trends emerge. With 48.7%, papers on developmental psychology dominate, followed by general psychology with 21.6%. Then come the papers on diagnostics and intervention with 18.9% and social psychology with 8.1%. The top three themes account for about 90% of papers.

Coming to the post-war period we may now turn our attention first of all to the period in which all-German congresses took place.

TABLE 4: FREQUENCY ANALYSIS 1948-1959

Table 4 shows the frequency analysis of 6 congresses during the post-war period. Summarizing this period, one can say that the average proportion of papers given by women during the post-war period was about 10%. In absolute figures there were 20 papers.

The thematic analysis produces the following picture.

<u>Fields of psychology</u>	<u>Relative frequency</u>
general psychology	14,3%
industrial psychology and organizational psychology	0,0%
biopsychology	0,0%
diagnostics and intervention	28,6%
developmental psychology	10,7%
clinical psychology	0,0%
methododology	0,0%
educational psychology	28,6%
personality psychology	3,6%
social psychology	14,3%

TABLE 5: THEMATIC ANALYSIS 1948-1959

From the point of view of content most papers during this period can be classified under the applied fields. Their topics show the following trends. Diagnostics and intervention and educational psychology account for some 29% of the papers, social psychology about 14% and developmental psychology about 11%. In all, these fields account for about 82% of the papers.

The last period analysed by us was from 1962 to 1978. It was the time of the open division of Germany, and our statements apply only to the then West Germany. From the scientific point of view it was a time of massive expansion of psychology in the German-speaking area. It was a time in which many new universities and many new institutes were founded and the number of posts for psychologists in research and practice increased considerably. Table 6 shows the results of frequency analyses of the 9 congresses which took place within this period.

TABLE 6: FREQUENCY ANALYSIS 1962-1978

Table 6 shows that the proportion of female speakers rose again. It rose from about 10% in 1962 to 25 % in 1974. In 1972 it almost reached its 1931 level of 18% of the papers. In absolute figures, 271 papers were given by women during this period.

TABLE 7: GIVES THE RESULTS OF THE THEMATIC ANALYSIS

<u>Fields of psychology</u>	<u>Relative frequency</u>
general psychology	7,6%
industrial psychology and organizational psychology	1,5%
biopsychology	6,3%
diagnostics and intervention	5,2%
developmental psychology	21,4%
clinical psychology	15,5%
methododology	2,9%
educational psychology	14,8%
personality psychology	2,2%
social psychology	22,5%

TABLE 7: THEMATIC ANALYSIS 1962-1978

Regarding the themes the following trends emerge. Some 23% of the papers were on social psychology. Developmental psychology takes second place with about 21%. Clinical psychology was the subject of about 16% of the papers, while educational psychology accounted for some 15% of the papers. All told, they account for 71% of papers. It emerges that the subjects of the papers given by women are to be found among the fields preferred previously.

Similar preferences can be shown in other countries. Studies in the United States which were the subject, for example, of doctoral theses by women in psychology, result in the figures shown in Table 8. The columns contain the absolute numbers of women doctoral candidates and the percentages for the various psychological fields.

Subject (absolute and in percentages)	1920-1974	1974	1976	1978	1980	1982
clinical psychology	8687 24,2%	771 30,2%	883 31,1%	1061 39,4%	1106 43,9%	1165 44,1%

Subject (absolute and in percentages)	1920-1974	1974	1976	1978	1980	1982
counselling psychology	1793 24,0%	201 31,3%	267 34,1%	278 33,1%	299 46,8%	346 44,8%
developmental psychology and gerontopsychology	1346 48,1%	162 51,2%	190 53,7%	208 49,5%	207 58,5%	192 65,1%
educational psychology	1936 24,7%	122 32,0%	124 36,3%	145 37,9%	137 44,5%	140 53,6%
school psychology	641 32,3%	89 42,7%	143 46,2%	125 46,4%	176 47,2%	166 51,8%
experimental psychology	3936 18,5%	354 23,7%	357 24,6%	299 28,4%	307 31,9%	240 40,4%
comparative psychology	234 15,4%	23 17,4%	28 32,1%	20 45,0%	8 25,0%	12 50,0%
physiological psychology	1201 20,4%	118 31,4%	133 28,6%	126 28,6%	108 22,2%	90 25,6%
industrial psychology and personal psychology	95 5,7%	80 8,8%	73 13,7%	74 20,3%	66 24,2%	83 27,7%
personality psychology	588 25,5%	60 26,7%	62 50,0%	41 31,7%	43 41,9%	36 47,2%
psychometrics	404 14,1%	24 33,3%	27 3,7%	15 26,7%	21 47,6%	8 12,5%
social psychology	2488 22,9%	202 29,2%	209 29,2%	204 37,3%	190 41,1%	179 47,5%
general psychology	4626 23,7%	250 29,2%	218 35,3%	299 35,1%	210 44,3%	240 42,9%
other fields	942 26,2%	142 40,1%	169 30,8%	160 36,3%	220 37,3%	257 48,2%
total	32855 22,7%	2598 30,8%	2883 32,8%	3055 36,9%	3098 42,3%	3154 45,5%

Table 8: Subjects of doctoral theses in psychology by women in the USA: 1920-1982 (from: APA, 1984. *Women in the American Psychological Association*, Source: National Science Foundation and National Research Council)

If we first look at the percentages in the period from 1920 to 1974, we can see that the proportion of women PhDs in developmental psychology and gerontopsychology at 48.1% and school psychology at 32.3% is the highest. The share of physiological psychology at 20.4% is somewhat less and is followed by that of experimental psychology (18.5%), comparative psychology (15.4%) and psychometrics (14.1%). The preference structure changes slightly when we look at the figures in the last column of the table for 1982. Here developmental psychology is at the top with 65%, followed, also with a high figure, by educational psychology with 53.6%, school psychology 51.8%, counselling psychology 44.8%, clinical psychology 44%, personality psychology 47.2% and experimental psychology 40.4%. Regarding the figures for 1982 it has to be borne in mind that at that time 45.5% of Ph.D. students were women, compared with 22.7% in the years 1920-1974.

The same preferences can be observed in the United States, if we look at the working areas of psychology at the universities and in practice. Statistics on the female members of the American Psychological Association with MA degrees show that women are represented in developmental psychology with 65.6%, school psychology 57.5%, personality psychology 50.0%, physiological psychology 50.8%, educational psychology 46.7%, social psychology 46.2% and clinical psychology 44.7%. The picture is a similar one for Ph.D. subjects. For reasons of space we will not present tabular displays in either case.

SUMMARY AND DISCUSSION

Our goal was to present some models and data for a detailed reconstruction, yet to be carried out, of a 100-year-old process of direct integration of women into academic psychology. If today there is talk of the third or fourth generation of women to be active in academic professions since the beginning of women's studies at the start of the 20th Century in Germany, then this has to be qualified somewhat according to the analysis of the participation of women in German psychology congresses. The analyses show that more than one generation of women was missing due to the Nazi rule, World War II and the post-war period. The situation is probably similar in other sciences. Today, however, in view of the results

it could be suggested that it is probably correct that women - in order to make an academic career in psychology - just like men, have to fulfil or develop certain preconditions which one can only indicate roughly with such slogans as determination, ambition, energy, industriousness, confidence, competence, tolerance of frustration etc. Unfortunately, however, for the lifelong academic development of women the adequate role models and the social conditions for making the academic career compatible with partnership and children. Women authors who have addressed such problems point among other things to the different ideas regarding gender-specific psychic and social differences and the resulting difficulties which exist in the professional integration and assertion even of highly competent women (Denmark, 1980, Salzmann, 1985, Wagner, 1985, Nevels & Coché, 1993, Krawietz & Degenhardt, 1996). Since there are disabling notions in both sexes about gender-specific differences and role expectations of women, they often add to the social difficulties. Perhaps historiographic studies on successful integrative and assertive form of integration of women in our science make a contribution to the development of better integration models. In Traxel's sense that would be an active history writing, which corresponds to our predominant historiographic idea (Traxel, 1985).

REFERENCES

- APA (1984). *Woman in the American Psychological Association. Committee on Woman in Psychology*. Washington: APA Press
- BERGER, M. (1994). Rosa Katz - Eine vergessene Psychologin. *Geschichte der Psychologie - Nachrichtenblatt der Fachgruppe Geschichte der Psychologie der Deutschen Gesellschaft für Psychologie* 11. Heft 2. Nr. 26. 28-29.
- BIRENBAUM, Gita (1930). Das Vergessen einer Vornahme (Isolierte seelische Systeme und dynamische Gesamtbereiche). *Psychologische Forschung* 13. 218-284.
- BOCK, U. & D. JANK (1990). *Studierende, lehrende und forschende FRAUEN IN BERLIN: 1908-1945* Friedrich Wilhelms Universität zu BERLIN. 1948-1990 Freie Universität Berlin. Ausstellungsführer der Universitätsbibliothek der Freien Universität Berlin. Berlin: UNIVERSITÄTSBIBLIOTHEK DER FREIEN Universität Berlin.

- BÜHLER, Charlotte (1972). Charlotte Bühler. In L. J. Pongratz, W. Traxel & E. G. Wehner (Hrsg.). *Psychologie in Selbstdarstellungen*. Band I. Bern, Stuttgart, Wien: Huber.
- BÜRMANN, Ilse & HERWARTZ-EMDEN, Leonie (1993). Charlotte Bühler: Leben und Werk einer selbstbewußten Wissenschaftlerin des 20. Jahrhunderts. *Psychologische Rundschau* 44. Heft 4. 205-225.
- DEMBO, Tamara (1931). Der Ärger als dynamisches Problem. *Psychologische Forschung* 15. 1-144.
- DENMARK, Florence, L. (1980). From Rocking the Cradle to Rocking the Boat. *American Psychologist* 35. Issue 12. 1057-1065.
- DEUTSCH, W. (Hrsg.). (1991). *Über die verborgene Aktualität von William Stern*. Frankfurt am Main et al.: Lang.
- DEUTSCH, W. (1994). Nicht nur Frau und Mutter - Clara Sterns Platz in der Geschichte der Psychologie. *Psychologie und Geschichte* 5. Heft 3/4. 171-182.
- EISLER, R. (1930). *Wörterbuch der Philosophischen Begriffe*. 4. Auflage. Berlin: Mittler & Sohn.
- FAJANS, Sara (1933). Die Bedeutung der Entfernung für die Stärke eines Aufforderungscharakters beim Säugling und Kleinkind (Erfolg, Ausdauer und Aktivität beim Säugling und Kleinkind). *Psychologische Forschung* 17. 215-267.
- FEYL, Renate (1981). *Der lautlose Aufbruch. Frauen in der Wissenschaft*. Berlin: Verlag Neues Leben.
- FORER, Sara (1934). Eine Untersuchung zur Lese-Lern-Methode Decroly's. *Zeitschrift für Kinderforschung* 42. 11-44.
- FÖLSING, Ulla (1990). *Nobel - Frauen. Naturwissenschaftlerinnen im Porträt*. München: Beck.
- FURUMOTO, Laurel (1987). On the Margins: Woman and the professionalization of psychology in the United States, 1890-1940. In Ash, M.G. & Woodward, W.R. (Eds.). *Psychology in Twentieth - Century Thought and Society*. Cambridge et al.: University Press. 93-113.
- HELLER, D. & DAUB, Edelgard (1995). Franziska Baumgarten-Tramer: Unveröffentlichte Quellen zur Psychotechnik und zur Ethik der Angewandten Psychologie. Bericht zum DFG-Projekt Az.: He 1192/4-1. Institut für Psychologie der RWTH Aachen. Aachen, den 1. 2. 1995.

- JAHODA, Maria (1994). Sozialpsychologie der Politik und Kultur. Ausgewählte Schriften. Herausgegeben und eingeleitet von Ch. Fleck. Graz, Wien: Nausner & Nausner.
- JAROSCHEWSKIJ, M.G. (1989). Ein Gespräch mit Bluma Zeigarnik über Kurt Lewin. (Übersetzung aus dem Russischen von Ch. Dittmann und Th. Kussmann). *Psychologische Rundschau* 2. 104-110.
- JUCKNAT, Margarete (1937). Anspruchsniveau und Selbstbewußtsein. *Psychologische Forschung* 22. 89-179.
- KARSTEN, Anitra (1928). Psychische Sättigung. *Psychologische Forschung* 10. 142-254.
- KARSTEN, Anitra (1979). Anitra Karsten. In L. J. Pongratz, W. Traxel & E. G. Wehner (Hrsg.). *Psychologie in Selbstdarstellungen*. Band 2. Bern, Stuttgart, Wien: Huber.
- KATZ, Rosa (1972). Rosa Katz. In L. J. Pongratz, W. Traxel & E. G. Wehner (Hrsg.). *Psychologie in Selbstdarstellungen*. Band 1. Bern, Stuttgart, Wien: Huber.
- KUHN, Annette (Hrsg.)(1992). *Die Chronik der Frau*. Dortmund: Chronik.
- KRAWITZ, Bärbel & DEGENHARDT, Annette (1996). Was unterscheidet Studentinnen der Sprach- und Naturwissenschaften? *Forschung Frankfurt. Wissenschaftsmagazin der Johann Wolfgang Goethe-Universität Frankfurt am Main* 1. 26-34.
- LISSNER, Käte (1933). Die Entspannung von Bedürfnissen durch Ersatzhandlungen. *Psychologische Forschung* 18. 218-250.
- LÜCK, H.E. (Hrsg.)(1991). Protokoll und Referate/Hausarbeiten zur Präsenzveranstaltung zur Sozialgeschichte der Psychologie. Thema: Frauen in der Geschichte der Psychologie am 14. Dezember 1991 an der FernUniversität Hagen. Manuskriptdruck.
- MAHLER, Wera (1933). Ersatzhandlungen verschiedenen Realitätsgrades. *Psychologische Forschung* 18. 27-89.
- NEVELS, Lourene, A. & Coché, Judith, M. (1993). *Powerfull Wisdom. Voices of Distinguished Woman Psychotherapists*. San Francisco: Jossey-Bass.
- MEYERS Lexikon (1926). *Frauenfrage*. Vierter Band (1114). Leipzig: Bibliographisches Institut. 7. Auflage.
- MILLER, R. (1993). Martha Muchow. In Lück, H. E. & Miller, R. (Hrsg.). *Illustrierte Geschichte der Psychologie*. München: Quintessenz. 191-

193. (English version: Bringmann, W.G., Lück, H.E., Miller, R. & Early, C.E. (Eds.)(1996). *A Pictorial History of Psychology*. Carol Streams: Quintessence. In press).
- O'CONNELL, Agnes N. and Russo, Nancy F. (Eds.)(1988). *Models of Achievement. Reflections of Eminent Woman in Psychology*. Vol. 2. Hillsdale, New Jersey, Hove and London: Erlbaum.
- O'CONNELL, Agnes N. and Russo, Nancy F. (Eds.)(1990). *Woman in Psychology. A Bio-Bibliographic Sourcebook*. New York et al.: Greenwood Press.
- OVSJANKINA, Maria (1928). Die Wiederaufnahme unterbrochener Handlungen. *Psychologische Forschung* 11. 302-379.
- SALZMANN, Myriam (1985). Als Fremdarbeiterinnen in der Männerwelt. In: P. Feyerabend und Ch. Thomas (Hrsg.): *Grenzprobleme der Wissenschaften*. Zürich: Verlag der Fachvereine. 227-231.
- SCHAEFER, E. (1982). Personal information at the International William Preyer-Symposium at the Friedrich-Schiller-Universität at Jena.
- SCHENK-DANZINGER, Lotte und Thomae, H. (Hrsg.)(1963). *Gegenwartsprobleme der Entwicklungspsychologie*. Festschrift für Charlotte Bühler. Göttingen: Hogrefe.
- SLOSBERG, Sarah. (1934). Zur Dynamik des Ersatzes in Spiel- und Ernstsituationen. *Psychologische Forschung* 19. 122-181.
- SPRUNG, Helga (1991). *Bourgeois Berlin Salons: Meeting Places for Culture and the Sciences*. In W.R. Woodward & R.S. Cohen (Eds.). *World Views and Scientific Discipline Formation*. Dordrecht: Kluwer. 401-414.
- SPRUNG, Helga (1992). Kurt Lewin und seine Berliner Schülerinnen. In W. Schönplüg (Hrsg.). *Kurt Lewins - Person, Werk, Umfeld*. Frankfurt am Main u.a.: Lang. 149-160.
- SPRUNG, Helga, SPRUNG, L. & Woodward, W. R. (1995). *Woman in the History of German-Speaking Psychology: The Model of Kurt Lewin's Research Group in Berlin*. *Cuadernos Argentinos de Historia de la Psicologia* 1. No. 1-2. 61-82.
- STEVENS, GWENDOLYN & GARDNER, Sheldon (1982). *The Woman of Psychology*. Volume I: Pioneers and Innovators. Volumes II: Expansion and Refinement. Cambridge, Massachusetts: Schenkman.
- TRAXEL, W. (1985). *Geschichte für die Gegenwart*. Vorträge und Aufsätze

zur Psychologiegeschichte. Passauer Schriften zur Psychologiegeschichte Nr. 3. Passau: Passavia.

VEREIN FEMINISTISCHE WISSENSCHAFT Schweiz (Hrsg.) (1988). Ebenso neu als kühn: 120 Jahre Frauenstudium an der Universität Zürich. Zürich: eFeF-Verlag.

WAGNER, Ina (1985). Frauen in den Naturwissenschaften: Institutionelle und kognitive Widerstände. In P. Feyerabend & Ch. Thomas (Hrsg.): Grenzprobleme der Wissenschaften. Zürich: Verlag der Fachvereine. 215-225.

WEILAND, Daniela (1983). Geschichte der Frauenemanzipation in Deutschland und Österreich. Biographien, Programme, Organisationen. Düsseldorf: Econ.

ZEIGARNIK, Bluma (1927). Das Behalten erledigter und unerledigter Handlungen. Psychologische Forschung 9. 1-85.

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Authors addresses:

Office: summer term 1996:
Dr. Helga Sprung
Prof.Dr. Lothar Sprung
Free University Berlin
Department of General Psychology,
Biopsychology and
Cognitive Psychology (WE 07)
Habelschwerdter Allee 45
D - 14195 Berlin
Germany
Fax: + (030) 838 56 21

Home:
Helga Sprung
Lothar Sprung
Fontanestr. 15
D - 12459 Berlin
Germany
Phone: + (030) 63 58 903