

RESEARCH ARTICLE

# The world of deviance in the classroom: Psychological experiments on schoolchildren in Weimar Germany

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## Argument

The article uses three case studies from the 1920s to explore how psychologists and elementary school teachers employed psychological techniques to gain knowledge about elementary school children and their milieu. It begins by describing the role of the elementary school and the elementary school teacher in the Weimar Republic. It then discusses the so-called “observation sheets” that were used in elementary schools in the 1920s to gain insights into the mental and moral characteristics of pupils. Third, it examines psychological experiments undertaken in elementary school classrooms based on the exemplar case of a single teacher/experimenter, before concluding with a comparison of the two practices. I argue that psychology gained in standing through this history, becoming recognized as a foundational science in the context of education. Teachers used the professionalization of observation techniques in school to enhance their socio-epistemic status.

**Keywords:** history of psychology; Weimar Republic; psychology and school

## Introduction

After the Revolution of 1918–1919, many social actors were unsure how new normative structures could be justified, communicated, and implemented in a republican and democratic German state. Among the many spheres of life in which such questions arose, the so-called “*people’s school*” (*Volksschule*, hereafter elementary school) was a key location in which normative structures were discussed. One essential new knowledge practice in this context was an ensemble of psychological methods designed to provide insight into the intellectual and moral development of pupils. This insight was intended to be used to improve both the ability to mold the students and strategies for drawing conclusions about their milieu.

Political actors discussed how traditional normative structures could be reconfigured within the framework of the modern state. A central transformation here was the positioning of new techniques of knowledge and government in relation to traditional strategies (Lamberti 2002, 107–119; Raphael 2012). This transition pertained to educational politics as well, with both religious and secular actors seeking to re-understand education against the backdrop of academic disciplines that offered themselves as resources for precisely organizing this reconfiguration, marked especially by the goal of academizing elementary teacher education (article 143 of the Weimar Constitution, see Lamberti 2002, 60). For the school sector, one precondition for doing this was furthering the basis of knowledge of the psychological and sociological conditions of students from all strata of society.

Discussions about the use of scientific knowledge were particularly integrated into the ultimately unsuccessful attempt to create a unified school system following the discussions about the Weimar constitution in 1918–19. The party-political controversies and compromises revolved in particular around the question of how religion could be integrated into schools and how a new

secular morality could be constructed that was able to replace old orthodoxies (Lamberti 2002, 60). Psychologists as well as teachers inspired by psychology saw this as an opportunity to contribute to social transformation by promising to collect mass data on the attitudes, beliefs, and codes of conduct of pupils.<sup>1</sup> Given that around 1920 psychologists were few in number, collecting information in schools was one of the few ways in which mass data about the mental state of the population could be obtained at all. However, elementary school teachers had been developing a discourse on methods of observing pupils since the beginning of the nineteenth century, which generated a conflict of competence, raising questions as to how this initiative would work and who was best qualified to undertake it.

The present article uses three case studies from the 1920s to explore how psychological techniques were employed to gain knowledge about elementary school students and their milieu. To understand this, it is first necessary to outline, based on existing scholarship, the role of the elementary school in the Weimar Republic (“Psychology and the School after 1919”). The second part of the article will then discuss the so-called “observation sheets” that were used in elementary schools to gain insights into the mental and moral characteristics of pupils (“Observing”). These observation sheets were introduced in an attempt to better assess which students were to be placed in which secondary school, and provided a realm of activity in which psychologists could assert their expertise. The third part (“Experimenting”), examines psychological experiments undertaken in elementary school classrooms based on a case study of the activities of Maria Zillig. The fourth part compares both practices (“Observing and Experimenting”) with one another. Actors recognized that the school was a place where, through observation, information could be collected about the influence on children of the milieu of the parental home, in addition to observations about their psyche.<sup>2</sup> The school and the child were thus opportunities to obtain data on the doorstep of the home, especially of the working-class children of the big cities, in addition to the observations of social workers.

This article is designed to contribute to research into the application of psychological knowledge in different areas of practice. Annette Mülberger emphasizes the necessity of studying the local contexts of the application of psychological knowledge. Accordingly, she has studied intelligence tests in Spanish schools, paying attention to the specific context in which such tests were introduced (Mülberger 2012). While Mülberger underlines the need to broaden our horizon and integrate insights from geographical peripheries not usually covered by research, I want to stress that social fields within societies that are often rendered invisible deserve more attention as well. As far as psychology is concerned, spheres in which women were able to contribute—schools and other pedagogical contexts—are often treated as of secondary importance, although they are amongst the most significant domains in which the application of psychological knowledge occurred (Rutherford 2020; Pettit 2013; Morawski 1985).

Based on the case studies, it is difficult to assess whether the scientific experiments studied can be seen as part of a larger narrative of modernity or as a counter-movement to conservative currents. Thus far, the analysis of the use of psychology in different contexts might rather be analyzed as part of the “scientization of the social” (Raphael 1996; 2012), that is “a larger process that has transformed an esoteric, academic knowledge about man in society into public categories, professional routines, and behavioral patterns” (Raphael 2012, 41). Nevertheless, we need to know a lot more about exactly what difference the use of scientific knowledge made, as opposed to traditional forms of administration.

One thing that has become clear is that the modernization of the school system during the Weimar Republic included a more fragmented and fine-grained notion of social control. As the Chemnitz-based teacher R. Mütze wrote, the assessment of a pupil “must be reinforced by

<sup>1</sup>With regard to the more general framework of the history of testing, see Carson 2007, 2014.

<sup>2</sup>See, for example Wieser 2020 for the military, Wolfram 2018 for the juridical sphere, and Geuter 2000 for the thesis about the professionalization of psychology.

constant observation on a psychological basis” (Mütze 1919, 93). Likewise, the Catholic teacher Franz Weigl wanted to replace the observation sheets hitherto used in schools with new ones informed by psychology (Weigl 1917b, 74). Teachers were not just to be educators, but knowledge actors who, based on their expertise, could optimally organize social circumstances and be advisors of the state, especially in circumstances where resources were scarce and the damages of war drastic.

The case studies do not lead to general conclusions that are valid for all of the German *Länder*, which in the 1920s formulated their own school policies as far as the constitution allowed (see Lamberti 2002). Instead, I want to use the case studies to show, first, how new kinds of knowledge actors used observational practices in schools. Second, I want to show that these knowledge practices cannot possibly be understood without taking into account the social background of the particular actors. Third, I will show that the psychological knowledge used was rather useful to the “re-thinking” of education in line with the subject-political requirements of the Weimar Republic. Here I argue that psychology offered a transformation of the field of career opportunities and professionalization actors that had previously been comparatively low-status. It encouraged teachers to assume a new status, and thus to use a classical observational knowledge to make pedagogical practices attractive to the needs of the new state. As in other cases of the relationship of the psy-sciences with the state, it remains uncertain to what extent this psychological knowledge was incorporated into political decision-making processes. What becomes clear, however, is, fourth, how psychology as a practice of data acquisition undergirded a claim for political legitimacy.

Given the source material available, it is difficult to draw general conclusions about how widespread psychological observation and psychological experiments were in elementary schools. In looking for sources that contained information about the psychologists’ personal situatedness, I was pleased to discover primary sources about the psychologist Maria Zillig. These primary sources are important because they show how an individual’s positioning in relation to other professions that assessed the mental state of human beings at the time (physicians, university psychology, teachers, etc.) influenced the choice of experimental techniques and settings. The article also relies on archival documentation of the observation sheets in the Municipal Archives Frankfurt (*Institut für Stadtgeschichte*, Frankfurt on the Main). It must be noted here that the completed observation sheets were often considered not worth keeping, and therefore we are now, unfortunately, unable to say how widespread the practice was or how carefully teachers filled out these forms. In addition, the article is based on archival sources from other German archives as well as published texts.

The research literature available for situating the topic of this article is very diverse. The use of psychological techniques in schools has yet to be researched in detail, though some steps in this direction have been taken (see Mülberger 2012; Lerch 2018).<sup>3</sup> Historians of psychology have dealt with psychology at the university, in the military, in the juridical sphere, and in psychotechnical aptitude testing.<sup>4</sup> I was able to glean significant information from research on the history of elementary schools as well as feminist historiography on forms of female work (see Skopp 1980; Schneider 1990; Huerkamp 1996; Lamberti 2002). Also pertinent to this article is the historiography of administrative professionalization (Ellwein 1997; Raphael 1996), as well as of the professional roles that developed in that context (Sachße 2003; Rutherford 2015, 2020).

<sup>3</sup>The Swiss psychologist Franziska Baumgarten, for example, used such a test design in her „Kollektiv-Einführungsmethode“, see Seemann and Schlicht 2020.

<sup>4</sup>Psychologists adopted the concept of the milieu from sociological texts, although it originally came from the biological sciences. In the context of the debate about environmental influences or inborn attributes, the “milieu” was a means of underlining the importance of social facts. See for example Zillig (1930), where she reflects on the question whether the family background of the children, their “milieu,” played a major role in the development of their ethical stances (61).

## Part one: Psychology and the school after 1919

After 1919, in those *Länder* where Social Democrats or German Democratic Parties gained power, as Lamberti shows, “schoolteachers found considerable support for the new pedagogy and other reforms” (Lamberti 2002, 106). School Reforms in the Weimar Republic mirrored many of the demands of progressive teachers. For the proponents of such reforms, part of the motivation was the “enormous sacrifice of human life demanded by the state in the world war” (Lamberti 2002, 44). Occasioned by a discussion about a so-called Interdenominational Academy of Teacher Education (*Simultanakademie*) in the Prussian city of Frankfurt on the Main, psychologist Willy Hellpach (1877–1955), for example, wrote about the role of the school in the new German “free state” (*Freiheitsstaat*): “The school of the new state receives a tremendous political mission, and this is natural, since all discussions about which form of German school is the best for the education of the German man of the future are revived” (Hellpach 1925).

Overall, the Weimar Republic saw itself as a “young nation,” and the discussion about the future of youth was therefore central across all political camps (Stambolis 2022). Similarly, the attempt to modernize the school system was widely shared. In Saxony, the executive board of the progressive Saxon Teachers’ Association demanded that the school system be reorganized according to “scientific and pedagogical principles” and, in commenting on controversies surrounding elementary schools during the decades after the war, it did not hold back: “When, after the upheaval of the state, the external and internal reorganization of the school was purposefully carried out according to these principles, the fightback from the opposing side took on a form that eclipsed everything that had previously existed” (Vorstand des sächsischen Lehrervereins 1925, 2). The psychologist Herbert Winkler (1896–1946) also sought to replace the obsolete “class state” with a system in which “mental faculties” and “innate talent” were the only requirements for a successful career (Lamberti 2002, 109).

The teachers’ reference to advanced scientific techniques of the social and human sciences was not necessarily related to the controversy over the confessional school.<sup>5</sup> In the 1920s, more and more denominational teachers also began to take an interest in these methods, presumably because they had become a recognized tool in the professionalization of pedagogy, which could be used both to improve one’s own status and to enforce one’s own political goals. Nevertheless, it remains true that in the beginning it was primarily the socialist or social democratic teachers that tried to introduce psychological techniques into discussions among teachers about education. Once established, however, the reference to and the use of these techniques became useful for many actors. For example the psychologist Otto Bobertag (1879–1934), already during National Socialism in 1934, wrote that the psychological observation of pupils (*psychologische Schülerbeobachtung*) should definitely be encouraged, and that it would contribute to breaking the “rule of the inferior” (*Herrschaft der Minderwertigen*).<sup>6</sup> Bobertag shows how easily the

<sup>5</sup>In the 1920s, actors were involved in lively and heated debates about whether it was possible and desirable to provide secular moral education. In essence, the retention of denominational elementary schools in the Weimar Constitution has come to be known in research as the “Weimar school compromise”. While the SPD was moving towards a secular, unified school, the debates surrounding the school ultimately led to a compromise that primarily involved the State and the Church in deciding the power over the organization of religious education (Kluchert 2012, 443). As Kluchert shows, another problem that arose during the constitutional debates was the negotiation between the powers of the *Reich* and the *Länder*. The articles on school education in the Weimar Constitution (143–149, 174) then dealt with a wide range of issues, and the Weimar compromise on education took strong account of the interests of the churches. The compromise stipulated that the multi-denominational primary school (*Volksschule*) would be the rule, but that primary schools of a particular denomination could also be set up at the request of parents. In fact, denominational segregation of schools remained the rule (Kluchert 2012, 444). On class barriers, the SPD won its wish that all children should attend the same primary school, regardless of their social status or the wealth of their parents. According to Kluchert, the debates on the School Articles were sometimes so heated that the entire constitution was at stake.

<sup>6</sup>Probably a reference to the book *Die Herrschaft der Minderwertigen* (1927) by Edgar Julius Jung. The book is one of the standard works of right-wing, fascist and national-conservative authors, and expresses the thesis that the Weimar Republic was precisely “the rule of the inferior” that had to be ended.

scientific techniques of psychology could be incorporated into the National Socialist goal of selecting and eliminating the unfit. Since Bobertag thought that the “inferior” could be identified by a “racial” analysis, he strongly favored including “raciology” (*Rassenkunde*) in observation and assessment of students (Bobertag 1934, 198).

The Weimar Republic too had to offer a model for replacing traditional hierarchical models, in this case with meritocratic ones. It was clear that if criteria of social standing were to be weakened, and the assessment of mental capacities valorized, then assessments in the educational sector would become particularly important. In this regard, psychology provided different methods for gaining knowledge about the moral condition of the adolescent population, and there were ongoing arguments about which methods could produce truly objective knowledge. The influential Munich psychologist and pedagogue Aloys Fischer (1880–1937), for example, emphasized in his “moral-psychological research methods” that student observation should be done inconspicuously, that the psychologist should be able to “smuggle the observation into his whole life, so to speak” (Fischer 1928, 277). Fischer recommended tests or experiments only when either a very specific skill was to be tested or methods were used to divert the student’s attention from the experiment (by way of comparison, Fischer referred to Sigmund Freud’s and Carl Gustav Jung’s association method).<sup>7</sup>

In aptitude testing in particular, it was important to consider not only people’s intelligence, but also their “morals.” Unlike intelligence tests, historians of psychology have rarely studied morality tests, as Jan Verplaetse points out (Verplaetse 2008). According to him, a first phase of European morality tests spanned the period 1910–30. He distinguishes two major traditions, the “ranking test” and the “justification test.” The ranking test essentially consisted of an attempt to classify moral vices or virtues with regard to their value or harmfulness in the eyes of the persons tested. The justification test involved asking children and adolescents to justify moral choices after being presented with certain moral problems (in the form of a short story, for example). Justification tests had existed since the late nineteenth century, and ranking tests since the 1910s. Both types were conducted in a range of contexts, but often in schools. Aloys Fischer, for example, carried out a justification test with 300 school children in Chemnitz (Verplaetse 2008, 267).

The historical ramifications of justification and ranking testing have yet to be fully explored. While Verplaetse argues that justification test research had little impact on discussions surrounding the reform of criminal law (Verplaetse 2008, 277), it is likely that there is a distinct history of interaction between such tests and educational practices in schools.<sup>8</sup> In any case, the reception of the justification test in Germany shows that actors from the school system and the field of law worked together, hoping to obtain structured data on the morality of the population. Both fields were used to gather data on the moral condition of children and to apply techniques to bend children to the sanctioned social order. Consequently, both the justification test and ranking test have been used in contexts where this kind of adjustment was relevant (the school, the prison, the psychiatric ward) (Verplaetse 2008). This encouraged continuous modifications to tailor these research practices to the demands of practice, as well as to the demands of scientificity. For some of the actors, this meant being more precise about quantitative measurability. In his “Elements for the Moral-psychological Evaluation of Adolescents,” for example, the school physician Michael Schäfer tried to capture not only their mental (intelligence) age but also a measurable moral age (Schäfer 1913). His work has been regarded as a precursor of Lawrence Kohlberg’s experiments after 1945 (Heidbrink 1989).

<sup>7</sup>A broader genealogy of experiments on the morality of elementary school students would take us back to the nineteenth century and need to include a discussion of non-religious justifications of morality and ethics (Cf., e.g., Rengier 1925; Weir 2014).

<sup>8</sup>Bühler, in Reininger 1929, 5.

### *Information about the population at elementary school*

One of the objectives linked to the various state reforms of primary education was to obtain a better picture of the population's living conditions. The disintegration of rural communities, the rapid socio-economic change in society as a whole, and the First World War, had all greatly increased the interest of state authorities in such information, to put the "right man at the right place" (Mütze 1919, 94). In today's terms, this "scientization of the social" (Raphael 1996) was a multifaceted process with different ramifications in different areas of society. As school attendance was compulsory, the observation of children in elementary schools was a way of maintaining a constant flow of information about one's population—not only about the children themselves, but also about their "milieu"<sup>9</sup>, the families, the urban or rural structures in which they lived, or the forms of sexuality they encountered.

In many ways, pedagogy, very much informed by psychology, lent itself to gaining deeper and more relevant knowledge about pupils and their behavior, not only in the classroom but also in the household, as especially elementary school teachers were required to maintain contact with the parental home (see, for instance, Rengier 1925). Psychologically informed elementary school teachers thus appeared to be ideal informants for observing the milieu of students and the dynamics of their emotional development in the classroom. In certain contexts, they were thus also excellent collectors of data on the psychological structure of young national talent. Particularly extensive, for instance, was the large-scale psychological observation of "school newcomers" carried out in cooperation between teachers and the Vienna Psychological Institute, which led to Karl Reininger's monograph *Das soziale Verhalten von Schulneulingen* (The Social Behavior of School Newcomers) (Reininger 1929). Charlotte Bühler of the Vienna Psychological Institute reports that forty-six "employees" of the Psychological Institute visited the school for two weeks as inconspicuous observers (Reininger 1929, 5), thus following observational practices designed to maintain "natural" conditions for the children.<sup>10</sup> Likewise, the psychologist Martha Muchow (1892–1933) recommended the use of teachers' observations and criticized experiments, because the teachers could observe the "spontaneous, natural behavior of the child" (Muchow 1920, 355).

As a psychological observer, the elementary school teacher differed from other teachers and educational actors in both epistemic status and symbolic capital. Traditionally, the socio-economic status of elementary school teachers was quite low (Skopp 1980). Female elementary school teachers in particular increasingly fought for recognition within the framework of teachers' associations from the end of the nineteenth century, as Joanne Schneider investigates with respect to the self-image of Bavarian female elementary school teachers (Schneider 1990) and Gisela Danz shows based on interviews with female elementary school teachers (Danz 1990). At the same time, as Schneider shows, the aspiring female elementary school teachers created a competitive dynamic with various places in the network of pedagogical expertise. Male elementary school teachers were especially threatened by this intrusion into a field of expertise that was already characterized by a low status.

Elementary school teachers were paid less than other teachers and not highly respected. Yet, daily newspapers presented the elementary school as a central venue of social transformation, and this also occasioned scientific reflection. In a contribution to a conference on the new role of the elementary school organized by the Berlin Central Institute for Education and Instruction (*Zentralinstitut für Erziehung und Unterricht*) (1931), the pedagogue Erich Hylla recapitulated the development of the Prussian elementary school. According to him, the new elementary school stood for the goal of an "active ability to live" and of a new kind of individual, "a person who feels

<sup>9</sup>Similar techniques have been used in other contexts, too, e. g. in the Marienthal-Study (see Jahoda and Zeisel 1933; Lazarsfeld 1961). In the school context, too, the argument for not altering the environment of the children was commonly voiced.

<sup>10</sup>Schneider (1990) investigates this for female Bavarian elementary school teachers.

responsible for himself, who actively intervenes in and shapes events from the outside without being driven or coerced” (Hylla 1931, 11).

In this context, psychological observation techniques and experiments appeared promising for finding out what kind of state interventions would be necessary to shape precisely this republican citizen in elementary school. Discussions about the reform of the elementary school thus had to negotiate the tension between traditional ideas of order and promises of scientific planning and control. The “selection” of both less and highly gifted pupils was a particularly central goal of the increasingly competence-centered school, which was oriented towards “disposition and inclination” and no longer towards the social and religious background of the parents.<sup>11</sup> In so doing, it had to meet the twin imperatives of being a school for a “people” in the liberal sense of personal choice and freedom, and of contributing to the formation of a “national community”. In addition, schools were expected to support the increasing differentiation of “talents” (Hylla 1931, 26). This role of the elementary school became all the more important as vocational guidance was introduced in some German states and teachers were required, through their reports, to support processes associated with the “selection” (*Auslese*) of students. There was thus at least lip service to the idea that the new form of selection should be based less on the preservation of traditional hierarchies and more on selecting capable students based on knowledge. If such decisions could be grounded in a scientifically valid form of knowledge, they appeared even more justified. The history of juridical psychology (Kerchner 1998) and intelligence testing (Gould 1981) has shown that, under the guise of scientificity, many types of traditional gender and class hierarchies have been preserved. At the same time, however, references to scientifically constructed standards of capability and aptitude became more and more widespread in the educational system.

We cannot understand the epistemic practices of elementary school teachers without considering their broader social role. This did not merely consist in following a profession, but had links to religious devotion to welfare and charity, as becomes apparent in the struggles of female teachers. Discussions about so-called “teacher celibacy” in female teachers’ associations show that elementary school teachers were required to show a dedication to their profession that went beyond what was expected in ordinary employment.<sup>12</sup> Some female teachers who were active in emancipation movements advocated the prohibition of marriage because, they felt, women otherwise stood a poor chance in professional life. Female activists thus believed that a married female teacher would not be able to take on the extracurricular duties of a primary school teacher at all (Schneider 1990, 93). Teachers visited families at home, a social role that was traditionally rooted in the welfare system, which is why elementary school teachers were often torn between the alternatives of a religious career or a school career.<sup>13</sup> Despite constitutional equality, female school teachers therefore remained disadvantaged in comparison with male colleagues.

The disadvantage of women in the education system was particularly visible in professional politics because of the status anxiety of the male elementary school teachers, who feared an additional deterioration of their status through the intrusion of women into their professional sphere. For women, the profession was a way to become independent, yet they were initially unable to adapt to an already existing social role. The stereotype of the woman as caring, particularly of the religious woman who did social work without remuneration, was therefore formative (Sachße 2003). The elementary school teacher visiting the student in the family home was familiar to people, especially in rural areas, as was the relationship of trust that children and families developed with the elementary school teacher. In rural areas, the elementary school had to appear, as it were, as an extension of the doorstep, so that Muchow’s assumption, quoted above, of

<sup>11</sup>See the interviews with female elementary teachers in Danz 1990.

<sup>12</sup>Huerkamp analyzes this structural inequality and shows that it was due to the confessional orientation of elementary schools, on the one hand, and due to the fact that only a minority of Jewish pupils attended Jewish elementary schools (Huerkamp 1996, 27).

<sup>13</sup>For the history of the teacher’s associations, see Lamberti 2000, 2001, 2002.

being able to observe the pupils in the classroom in their “natural” behavior also seems explicable. Finally, given that in the 1920s, in Bavaria, Prussia and other German states, studying at university became an option for elementary school teachers, applying the psychological knowledge acquired at university to work at school was a logical next step. This increase in social and epistemic prestige was important, and conservatives such as the psychologist and philosopher Eduard Spranger feared a general qualitative deterioration of the university due to the admission of elementary school teachers (Lamberti 2002, 115).

Psychology played a role in the development of a new educational system as part of the training of teachers, but it was also an intellectual resource for channeling their desire for professionalization and specialization. The university thus also created new types of career paths for women, who often came from educated middle-class backgrounds, which structurally favored Jewish women.<sup>14</sup> These women took advantage of the psychological and pedagogical educational opportunities, became scientifically active, and published within the framework of their profession. Teachers, on the other hand, used the symbolic capital of psychology to enhance the standing of their profession. Thus, teachers’ associations formed at the beginning of the twentieth century operated their own psychological institutes, for instance in Munich or Leipzig.<sup>15</sup>

### Part two: Observing

Teachers’ inherited practice of observing students was transformed by the integration of psychological knowledge. Yet, the promise of a long-term source of data that would illuminate the moral situation of students and their milieus remained essentially this: a promise. At the same time, the form in which student observation in elementary school was discussed in different German countries (*Länder*) varies greatly. In particular, the question of whether teachers and psychologists tended to compete or cooperate was in practice answered differently from country (*Land*) to country. In Prussia, the observation of students by teachers, initiated by a decree of the Prussian Minister of Education in 1920, had become obligatory in the context of the provision of vocational guidance (Lerch 2018, 9). Here, however, the ensuing discussions between teachers and psychologists tended to be characterized by mutual criticism and disappointment, and the questionnaire that was finally introduced incorporated almost none of the psychologists’ suggestions (Lerch 2018, 50). In Saxony, the influential Leipzig Teachers’ Association (*Leipziger Lehrerverein*) ran its own institute of experimental psychology that maintained friendly relations with psychology at the university (Taubert–Striese 1996, 49). In Bavaria, organizations run by teachers were similarly dedicated to the development of psychological knowledge techniques, with a view to introducing them into school, and in Prussia, too, psychological observation in elementary school was actively discussed.<sup>16</sup> The relationships between teachers and psychologists, as well as psychological knowledge, were thus diverse, above all because the umbrella structures of local teachers’ associations did not necessarily formulate binding positions, which allowed local groups to take their own. We can only examine individual cases where the sources allow a closer analysis, as well as reconstruct longer-term developments on the basis of ministerial and official decrees.

After some discussion at the end of the nineteenth century, psychological observation sheets, sometimes also called investigation sheets (*Beobachtungsbögen* or *Ermittlungsbögen*), were once again discussed in the 1920s as a way of periodically obtaining mass data on the psychological

<sup>14</sup>In the wake of the professionalization of psychology, for example in the context of William Stern’s experiments in the emerging field of developmental psychology, it was suggested that the application of psychological observation in schools be expanded, especially in Breslau and Bunzlau (see Schmidt 1991; Heinemann 2016). In Frankfurt and in other German cities, there was much discussion about how to deal with so called “idiot” children and whether a psychological observation sheet could be useful in this context (see Laquer 1902, 17).

<sup>15</sup>One reaction was e.g. Weigl 1917a, cf. also Mann 1915; Rengier 1925.

<sup>16</sup>Cf. Institut für Stadtgeschichte Frankfurt, Schulamt III/15-1990, 1711 and Gelhard 2012.



structure and the students' milieu or disposition.<sup>17</sup> The influential differential psychology of William Stern at the Hamburg Psychological Institute played a decisive role in promoting the use of the intelligence tests developed by Alfred Binet and Théodore Simon, as well as their adaptations in Germany by Otto Bobertag, Stern himself and others. This school of thought was built on the conviction that the scope of psychology was not restricted to the investigation of general mental functions, but that it could also offer techniques for investigating individual differences. Differential psychology was particularly relevant for use in schools, which dealt with individual differences in practice, and led, for example, to the practice of creating "psychograms" of school classes.<sup>18</sup> Stern himself, after initial failures with other approaches, tested his differential psychology in elementary school classes (Stern 1904, 6). Wilhelm Ruttman hoped that the application of psychograms would contribute to furthering science, but would also engender "rich blessings for the personal mission of the teacher" (Ruttman 1916, 484).

The implementation of observation sheets varied. While Berlin classes for gifted children in 1917 admitted children on the basis of an experimental test, the Hamburg equivalent additionally made use of an observation sheet for the longer-term, four to eight-week observation of pupils. Observation sheets also differed in their emphasis on mental, milieu-related and physical characteristics. The Frankfurt observation sheet, for example, focused more on the children's feelings and will than that used in Hamburg.<sup>19</sup>

The extent to which teachers completed the observation sheets is uncertain, but we do know that the initial comprehensive sheets, which included from thirty to about one hundred questions, were eventually rationalized into much shorter question lists. The degree of administrative constraint imposed on teachers varied as well. In Dresden, for example, the school board decided on September 7, 1921, to make the use of the observation sheet mandatory for all elementary school teachers.<sup>20</sup>

### Case study 1: The Leipzig Teachers' Association

The Leipzig Teachers' Association (*Leipziger Lehrerverein*) was a reform-oriented organization that pursued progressive pedagogical ideas and advocated restructuring the school sector away from more traditional ideas.<sup>21</sup> This context was characterized by discussions about the so-called "active learning school" (*Arbeitsschule*), which contrasted with the ideal of classical education and erudition and instead favored preparing students for real life: usually a life in which manual dexterity was of far more consequence than knowledge of classical drama and Latin.

Student observation featured prominently in the *Pedagogical-Psychological Contributions from the Institute of the Leipzig Teachers' Association* (*Pädagogisch-psychologischen Arbeiten aus dem Institut des Leipziger Lehrervereins*), a yearbook and publication venue for psychologists, educators and teachers that ran from 1919–1933. Amongst other studies of school classes, volume 18 (1930) contains a series of studies on the "casuistry of a school class" (*Kasuistik einer Schulklasse*) with six different contributions, for example on group formation in a class at a girls' vocational school (Kurt Ille) or on the "power relations in a rural primary school class" (Alfred Zieger).

In 1925, the Leipzig Teachers' Association established a working group led by Herbert Winkler (1896–1946) to investigate how "abnormal" children could be distinguished from normal children by means of psychological techniques, in particular an "investigation sheet." Winkler himself

<sup>17</sup>Institut für Stadtgeschichte Frankfurt, Schulamt, III/15-1990, 1711; Brief des Rats zu Dresden an die Leitungen der Städtischen Volks- und Hilfsschulen, Dresden, 30. 9. 1921.

<sup>18</sup>For research on the Leipzig Teacher's Association, see Taubert-Striese 1996.

<sup>19</sup>See Wolfradt 2015.

<sup>20</sup>Also published as a collective volume: Winkler 1927a.

<sup>21</sup>Institute director Max Döring attributed this increasing research into the "character" of children to the revival of characterology and holistic approaches within psychology (Döring 1927, 3).

exemplifies the intersection of professional spheres and was at the same time a teacher and a psychologist with a doctorate. At the time he headed the working group, he taught at Leipzig (Wolfradt 2015). The working group consisted of teachers, some of whom worked in institutions for children that had been categorized as abnormal. The group was aware of the problems associated with the term “normal” and, with the help of an “investigation form” (*Ermittlungsbogen*) to be drawn up, sought to distinguish between abnormality caused by the child’s disposition and that caused by the environment. The *Pädagogisch-psychologische Arbeiten*, Volume 16 (1927) contain a series of articles entitled “The conspicuous (*auffällig*) child” that focused on this question. This approach was to be developed into an observation guide to help teachers recognize the characteristics of difficult-to-educate children with greater certainty.<sup>22</sup>

At the same time, as the publications of the Leipzig Teachers’ Association show, these observation techniques could not be standardized completely because they relied strongly on the personal characteristics of the teachers themselves, their circumspection, attentiveness, and empathy. Teachers therefore needed to show a combination of psychological knowledge and professional empathy required for the professional persona of teacher-as-psychologist. In doing so, they were able to draw on methods from contemporary psychology. In addition to the statistically informed questionnaire method, they emphasized their professional empathy by accentuating their ability to understand the student intuitively. The value of professional empathy was also being emphasized in contemporary psychological methods, like in characterology.<sup>23</sup>

In the context of this valorization of the teachers themselves as an instrument of observation, the assessment of personality traits became more prominent, especially of the “will.” Senior teacher Richard Wetzel, for example, wrote a contribution about the “willenskränke” (“*sick of will*”) child. He wanted to do justice to the important goals of identifying “socially unusable” (“*sozial unbrauchbare*”) children (Wetzel 1927, 54). In line with the broader trend towards investigating the entire personality (*Gesamtpersönlichkeit*) during the second half of the 1920s, Wetzel argued that his typology of will-disturbed children only made sense in the context of their holistic personality. And in the framework of the democratic concept of performance, his approach was meant to serve as a prerequisite for finding suitable institutions to provide children with the optimal pedagogical facility and interventional strategy.<sup>24</sup> In the eyes of Winkler, this justified penetrating into the soul of the students: “Follow the abnormal expressions of life up to their inner roots (parents, schoolteacher and psychiatrist should be consulted!)” (Winkler 1927b, 68–69). This could effect a “strengthening” of the child by curative treatment, and thus at the same time an increase in their “total performance” (Winkler 1927b, 72).

### Case study 2: Frankfurt

In 1921, members of the Frankfurt board of education Heinrich Schüßler and Karl Eckhardt developed a psychological observation sheet for elementary school pupils. As in the previous case studies, it is unclear to what extent this sheet was used by teachers. However, the fact that the accompanying instruction booklet went through no less than fifteen editions suggests that the observation sheet did indeed see some use.

Karl Eckhardt (1877–1961) was a teacher and member of the board of education for the Biedenkopf district of Hesse, and chairman of the Association for Youth Research (*Vereinigung für Jugendkunde*) from 1909 to 1920. Eckhardt’s concepts of education would later harmonize with National Socialist educational ideas, and in 1938 he published a book on primary schooling aligned with the Nazi regime’s ideology (Eckhardt 1938; cf. Einsiedler 2015, 22). In the 1920s, however, he had already been working for some time on the question of the role of the elementary

<sup>22</sup>See Schäfer 1994.

<sup>23</sup>Quoted in Schäfer 1994, 195.

<sup>24</sup>Specifically relevant here: Verplaetse 2008.

school in the state and of psychology in school. As early as 1906, Eckhardt lamented teachers' lack of interest in pedagogy and its foundational science, psychology (Eckhardt 1906, 411). In his 1921 edition of *Die Grundschule (The Primary School)*, which went through twelve editions, he supported rather modern approaches to schooling (see Einsiedler 2015, 20–21).

Frankfurt was known as a place of pedagogical reform. In 1919, the city was ruled by a majority of Social Democrats and, despite some controversy, responded positively to the school reform proposals of progressive teachers (Schäfer 1994). The “unified school” (*Einheitsschule*) was central to these discussions, advocating the establishment of a single educational pathway for all children, the incorporation of scientific results and the fundamental importance of the elementary school (*Volksschule*). Although the demand of teachers in Frankfurt to integrate elementary school teacher training into the university was rejected by the Prussian government in 1922, they nevertheless held fast to this demand (Schäfer 1994, 219). Mayor Hermann Luppe suspected that the teachers' activities were motivated by professional politics, namely, the ambition to improve the position of elementary school teachers, who had previously been trained at teacher training seminars (Schäfer 1994, 188). From 1876 onwards, the Frankfurt teachers' association also catered particularly to elementary school teachers. In this context, the initiatives to integrate psychological knowledge into the work of elementary schools must be understood both as an attempt to accumulate symbolic capital and as a strategy to mitigate the injustices of the old educational system. In 1931, Schüßler reflected on the reform efforts, which in his eyes had not gone far enough, with disappointment. An “internal transformation on a grand scale” was still needed, he felt (Schäfer 1994, 195). In this context, he also emphasized the state's desire to gain access and insight into the mental life of children.

The observation sheet for use in elementary schools was an extension of the aspiration to replace the old ways with a new educational regime based on psychology. In contrast to the use of experimental aptitude testing in Berlin, the Frankfurt questionnaire followed the Hamburg model of undertaking longer observations and even lengthened the observation period to an entire school year. This observation sheet focused on recording the students' emotional or will life:

In this area [of the life of the mind and the will] lies, in our opinion, the focus of the observation sheet, because the experiment cannot provide sufficient clarity here. Twice as big is therefore the responsibility of the teacher who makes entries. His conscientiousness, the scientific as well as the moral one, must be exalted to the highest level (Eckhardt and Schüßler 1920, 198).

According to the authors, teachers were supposed to have comprehensive knowledge of the students and their milieu, and thus also explore the “environment” of the students in the manifold ways that were at their disposal. Inasmuch as psychological observation of the student was to become the teacher's second nature, their life's work, it was also, in Lorraine Daston's sense, a “way of life,” (Daston 2011). Observing pupils was to become part of the incorporated attitude that allowed information about pupils to be identified throughout: “Therefore, during consultations with the parents or during visits, one should find out how and where the parents live . . . , what the father's profession is (workshop at home? home work?), whether the siblings or the mother work, who prepares the food, where the child plays, who are his playmates, [and] under what circumstances he does his schoolwork” (Eckhardt and Schüßler 1920, 203). While this kind of observation required the teacher to really investigate the school environment, the observation technique was chosen so as to avoid influencing students and instead to gain knowledge about them without changing them unduly. According to Schüßler and Eckhardt, the naive, uninfluenced student as an object of observation would yield more reliable knowledge than would an experimental subject: “The classroom should not become a psychological laboratory” (Eckhardt and Schüßler 1920, 190).

As part of the creation of a scientific persona, this was a clever move. On the one hand, the value of elementary school teachers would be reevaluated, because they now contributed to scientific research. On the other hand, it also set the teachers apart from the psychologists, who could only carry out such extended observation with difficulty—as was the case with Bühler’s aforementioned observation in Vienna. Through the observation of pupils, the teacher in Schüßler’s and Eckhardt’s conception could take a look past the doorstep, because the pupils themselves were observers of their milieu. In this capacity, children could be seen as witnesses to a world into which the eyes of the state could sometimes peer, but not consistently. Crossing the doorstep, here, meant collecting and interpreting the knowledge of these observers.

### Part three: Experimenting

As we have seen, the question of whether data on the moral constitution of students should be obtained by means of extended observation or through momentary, proactive experimentation was a point of debate amongst late nineteenth and early twentieth-century psychologists and pedagogues. In the period before the First World War, Ernst Meumann (1862–1915), one of the leading German pedagogues and at the time and founding director of the *Institute for Youth Studies (Institut für Jugendkunde)* at the Hamburg Colonial Institute (the precursor of Hamburg University), further situated psychological studies of morality in the context of the conflict between secular and religious views (Meumann 1912). Meumann pointed out, among other things, that a deeper understanding of the moral development of youth was necessary in order to assess the value of sexual education (Meumann 1912, 195). For him, individual and intuitive knowledge of the child was not sufficient for deriving general regulations “for the moral treatment of youth” (ibid.). He also assumed that the child was above all a product of its environment, as apparent from, for example, his distinction between the working proletarian child and the sheltered child of a wealthy family (ibid., 196–197). Compared to moral statistics and other methods such as the diary method, he believed that the experiment was “by far the most successful method for researching the moral life of children” (ibid., 209).

Though there were objections to the feasibility or advisability of “ethical experiments,” Meumann held that they were possible and necessary. For example, one could observe the conscientiousness of children in the execution of a task, or experimentally compare different pedagogical approaches to developing their will. Meumann’s list of necessary experiments included experiments on children’s testimony (ibid., 210–211), which later were pivotal for Maria Zillig (whose case is described below). The format of the results of such experiments varied (from quantitative data to more narrative and situational descriptions), but a trend toward a preference for quantitative data can be seen in the area of “morality” testing during the 1920s, following the lead of intelligence testing.

While in the case of psychological observation the main conflict was between psychologists and (elementary) school teachers, moral-psychological experiments revolved around the weakening of religious justifications for morality. Unlike the *Kulturkampf* of the nineteenth century, which revolved around the animosities between Protestants and Catholics, the conflicts of the 1920s were between secularists and Christians, as Todd Weir and Udi Greenberg argue (Weir and Greenberg 2022, 692). In this regard, the secularist currents were able to draw from various sources, one of them being Marxism, others rather relating to different types of nineteenth-century liberal free-thought (Weir 2014). For example, the “International Congresses on Moral Education,” which ran from 1908 to 1934, strove precisely to find alternative, scientific foundations for the morality of a new age.

From the beginning of the twentieth century, an increasing number of methods had been developed to investigate the morality of children, which explicitly criticized religious legitimizations (Verplaetse 2008). This in turn prompted reactions from the powerful churches,

especially in Bavaria. In Munich, psychological working groups under the guidance of Aloys Fischer and Franz Xaver Weigl (1878–1952) conducted research into various moral-psychological questions. Weigl, himself a teacher, clearly situated this research in the context of his rejection of the secularization of the school, and he sought to conduct psychological research in a Catholic context that would respect both the scientific core of psychology and the moral authority of religion. This finds expression in Weigl's empirical research and in his perspective on attempts to reform religious education, which were particularly opposed to the Leipzig initiatives (Weigl 1921; Barth 1919).<sup>25</sup> In a report from 1926, Weigl summarized the work of his Working Group for Experimental Pedagogical Research of the Catholic Pedagogical Association of Munich.<sup>26</sup> As was the case for other experiments, his aim was hardly to differentiate and empirically examine normative systems, but rather to develop methods whereby the solution that was regarded as ethically correct could be taught effectively.<sup>27</sup> This is essentially also true for the work of Aloys Fischer, whose systematization of “moral-psychological methods of investigation” (*moralpsychologische Untersuchungsmethoden*) examined whether or not children had reached a certain moral maturity (Fischer 1928).

### Case study 3: Maria Zillig

Maria Zillig was a Würzburg psychologist and elementary school teacher and is an example of the complex identity politics and epistemic difficulties that arose when women established themselves as psychological experts. She worked as a teacher at an elementary school and conducted psychological research, mostly based on her own experiments with her school children.

Zillig's experiments on the moral situation in school classes of the 1920s and 30s reacted to the anomie that had arisen in the context of experimental psychology with the disappearance of the ultimate foundation of ethical norms in religion. For many, recourse to scientific norms and research appeared to be a promising solution for preserving the structure of bourgeois normative systems by making them evident in the regularities of the life of the soul itself. Zillig herself came from those educated middle classes. Her father Peter Zillig (1855–1929) had been influential in Würzburg's school politics, and she and her sister became elementary school teachers. Following her convictions, she fought to pay for her own education and attended private courses to prepare for her Abitur examination.<sup>28</sup> This ultimately allowed her to study at the University of Würzburg, from which she graduated *summa cum laude* with a doctorate in psychology under psychologist Karl Marbe (1869–1953).

Zillig conducted her first research project from 1927 in the context of the low birth rate war years. Here she was concerned with the question of “adaptability”, a psychotechnical category linked to the question of how quickly workers could switch from one type of task to another. Zillig adapted this kind of research to the context of the school and, more specifically, to experiments on the reliability of statements. She assumed that the quality of a statement was to be analyzed in terms of “performance” in the same way as the completion of a product in a factory. Like other activities, a good testimony depended on the attitude (careful, precise, forgetful, etc.) of students. Zillig therefore transferred the research on adaptability to her school class by investigating how strongly the statements of female students about their classmates depended on their “attitude,” a theme inspired by similar research by her teacher Marbe. She thus wanted to relate the character of a person to specific intellectual performances (here: statements) on the basis of experimental psychology.<sup>29</sup>

<sup>25</sup>Bayerische Staatsbibliothek, Munich, papers of Winfried Zillig, curriculum vitae of Maria Zillig, Ana 516 F.I.1., p. 8.

<sup>26</sup>This translation can be seen in (Zillig 1928). Marbe published research on “attitudes” around the same time (Marbe 1926).

<sup>27</sup>Bayerische Staatsbibliothek, Munich, papers of Winfried Zillig, curriculum vitae of Maria Zillig, Ana 516 F.I.1., p. 26.

<sup>28</sup>Bayerische Staatsbibliothek, Munich, papers of Winfried Zillig, curriculum vitae of Maria Zillig, Ana 516 F.I.1., p. 19.

<sup>29</sup>Bayerische Staatsbibliothek, Munich, papers of Winfried Zillig, curriculum vitae of Maria Zillig, Ana 516 F.I.1., p. 12.

In her curriculum vitae, Zillig noted that she had been working at an elementary school in the Würzburg district of Zellerau since 1921, and we may reasonably assume that she continued to work there.<sup>30</sup> She also noted that her students came from “different social classes,” but mainly from the middle classes.<sup>31</sup> Zillig, in line with other moral-psychological approaches, wanted to make morality a scientific object—as had happened with intelligence. At the same time, she allowed judgments to structure her research that were clearly not derived from the experimental setting but from the normative order of the educated middle classes of Würzburg and Bavaria. This is particularly evident in her treatment of the theme of “lying,” a character trait that Zillig investigated in various experimental settings.

Lying has traditionally been a strong violation of both religious and civil codes of conduct. “Lying” as a character trait was thus all the more a reflection of “immorality” or “inferiority” in the context of these codes of conduct. Summarizing her research on this trait in a comprehensive article, she compared the behavior of students from her own elementary school class with students from an “asylum” (Zillig 1931). The latter came from an unfavorable “milieu,” which in Zillig’s eyes explained their higher degree of “mendacity,” but did not prevent her from simultaneously considering “lying” as a good predictor of an overall “inferior character”. In her eyes lying thus could be used in aptitude tests to determine whether a subject had a suitable character (*ibid.*, 81). Children from lower classes were more dishonest, and this also implied a correlation with disorderliness, low thrift, lack of obedience, immodesty and other negative character traits (*ibid.*, 334).

Zillig’s work is only one example of a series of contemporary research projects that translated similar normative expectations for order into the language of science. As with the other research considered here, Zillig’s approach was strongly tied to her social location and responded to the macrostructures of her time. Firstly, Zillig—like the instigators of other, similar projects—was a person who (as a woman and as an elementary school teacher) was doubly underprivileged in the universe of science and who used the opportunities open to her to rise, socially and epistemically. This was only possible through personal sacrifice; for Zillig, the greatest of them all was the so-called teacher’s celibacy.<sup>32</sup> Secondly, this form of psychological research, like Weigl’s or Fischer’s moral-psychological experiments and questionnaire studies, emerged in a context in which morality had become a scientific concern. Zillig’s research thus held the promise to provide data on the moral situation of the population and suggested how it could be improved.

In the educational, psychological and socio-political discourses of the 1920s, the younger generation was greatly valued, because the future depended on it, but at the same time, discourses about spiritual and economic “waywardness” expressed a fear that this generation might be deteriorating (Dickinson 1996). Consequently, Zillig and other psychologists reacted to the need of these actors to know more about the moral condition of the national youth.

Thirdly, Zillig’s work is representative because she helped to establish a branch of psychology that involved experiments with students. The intelligence tests of Binet and Simon and their German adaptations provided a model in this respect. The school class and its psychological dynamics thus became a legitimate scientific object. This was premised on compulsory school attendance, which assured an excellent statistical sample for psychological research. Experiments in school classes could thus, with some justification, be claimed to underwrite statements about the whole population. Since many experiments, also in the Würzburg context, were conducted within the collegial circles of university professors, this interaction between teachers and psychologists enriched the group of experimenters for some time to come. The fact that Zillig was both in one—psychologist and elementary school teacher—made this type of research even easier.

<sup>30</sup>Bayerische Staatsbibliothek, Munich, papers of Winfried Zillig, curriculum vitae of Maria Zillig, Ana 516 F.I.1., p. 13.

<sup>31</sup>The gendered aspects of the choice of both research objects and techniques have been highlighted by Rutherford 2015.

<sup>32</sup>Regarding the history of psychology, scientific personae were thematized by Bordogna 2005.

Finally, the works of Zillig and others articulate a new conception of teacher-student relationships. The teacher was still emotionally bound to the class and shouldered emotional duties. Zillig reports on how she was loved and adored by her students.<sup>33</sup> However, her mission now consisted less in continuing to apply the ethos of religious devotion to caring for the next generation. Instead, she would now undertake this task in a secular context, and more in the guise of a scientific expert who was able to work out suitable modes of intervention based on objective data.

#### Part four: Observing and experimenting

The promise of deploying psychological observation and experiments to obtain data on the moral constitution of the population, and of being able to investigate this constitution on the basis of elementary school students, helped consolidate a new form of pedagogical and psychological expertise. The attempt to gain knowledge of the child's soul through systematic psychological observation must be seen in the context of the attempt to organize social subsystems more effectively. The elementary school was a place that, in the eyes of psychologists and psychologically informed teachers, provided access not only to the child but also to the child's milieu. Hence, the elementary school facilitated the study of differences between city and country and between different social classes and genders. As a school for all the people, as established in the Weimar Constitution of 1919, the elementary school became a socio-epistemic constellation that, in principle, made it possible to study the state of mind and the mental capacities of the population. However, this hope, and the associated aspiration to increase the effectiveness of the use of labor (which, as a country marked by wartime losses, was very important in post-World War I Germany), remained essentially unfulfilled. Vocational counseling, industrial psychotechnology, and even psychological observation in schools remained subordinated to other societal and rather traditionally structured subsystems. And yet, despite its limited fulfilment, this hope nevertheless provided an essential stepping stone in the history of professionalization of elementary school teachers.

#### *The classroom as data pool*

Discussions about the epistemic legitimacy of psychology, especially during its early years, very often included the epistemic dignity of the people involved in particular epistemic constellations – experimenters, observers, subjects. Likewise, during the establishment of the Würzburg “psychology of thought” (later cognitive psychology), the epistemic technique of “self-observation” always also concerned the epistemic and social prestige that only self-observers could enjoy (Kusch 2001). Thus, psychologists had to work out, again and again, whether their scientific insights depended on skills that only particular individuals could call their own. In some areas, this opened up opportunities for women to exploit the gender-related role stereotypes commonly ascribed to them. For example, female teachers who wanted to do psychological research could take advantage of the fact that women were traditionally thought to have a greater capacity for “empathy.”<sup>34</sup> Teachers could also claim this epistemic virtue, which required direct contact and prolonged acquaintance with the pupils, which is why they preferred observation to experiment.

Against this background, a combination of interacting components must be expected to be implicated in the generation of psychological knowledge about the morality of the population in the classroom. A particular kind of scientific persona had to be consolidated and, in some way or

<sup>33</sup>One commentary on this is Marbe 1913. Here, Marbe especially comments on the discussions between philosophers and psychologists.

<sup>34</sup>With regard to the more general framework of the history of testing, cf. see Carson 2007, 2014.

the other, this persona had to reflect on the question as to how and how far they wish to modify norms within the political sphere. They then had to contrive epistemic techniques that were effective in consolidating observational and experimental knowledge about the moral constitution of the population, and that preserved their own status as a researcher in the classroom. To see the classroom not only as a place for disciplining the youth, but also as an opportunity to explore the moral structure of the population was only possible against a background of complex social and epistemic shifts. A key event in these shifts was the construction of a new knowledge actor, a new scientific persona, the psychologically informed elementary school teacher.<sup>35</sup>

In social terms, the elementary school teacher was, as shown above, underprivileged relative to more qualified and more highly respected teachers, and female elementary school teachers confronted a double wall of exclusion from the circle of scientific knowledge actors. At the same time, however, this social (and economic) marginalization created an opening for actors who had been excluded from the epistemic realm of science in other respects. Thus, some women who were interested in psychology were able to succeed as elementary school teachers. The example of Zillig shows that such a commitment prompted intense reflection on the specific role experimenters filled in the context of a school class. Zillig's preference for certain epistemic values, such as objectivity and scientific universalism, was due to her rejection of the role of an elementary school teacher and must be seen against the background of her affirmation of values that were respected in the Würzburg school of experimental psychology at the time. Other elementary school teachers chose, as seen in Leipzig, the middle of the road, emphasizing the value of the teacher's experience on the one hand, and classical scientific values, such as the depersonalization of scientific knowledge, on the other. In the Leipzig variant of this scientific persona, the teacher became a sensory system gifted with the intuition required to register the soul of the elementary school pupil. Zillig's rejection of any form of intuition or other subject-centered epistemic virtues went hand in hand with her double rejection of the traditional social roles of the woman and of the elementary school teacher. Her only remaining option was to affirm the emptiness of the "view from nowhere," or scientific universalism.

The epistemic techniques outlined above were political in a very direct sense: they were interventions in the norms of social coexistence. Elementary school teachers asked themselves which normative foundations society ought to have in the first place, how these foundations could be established, and finally, how they could be entrenched through education. Drawing on science in general and on psychology in particular to do all this was not self-evident. However, during the Weimar Republic, the emerging university chairs in psychology and pedagogy offered elementary school teachers an opportunity for socio-epistemic rise. Psychology thus became a political argument in two respects. On the one hand, it functioned as a status-political strategy that supported the advancement of elementary school teachers in the context of other teacher roles and society. On the other hand, teachers strove for more influence in the political sphere as a whole. Thus the scientific persona of the empathetic scientist introduced by them implied a demand to participate in the establishment of the normative foundations of the new society. The translation of these fundamental conflicts into the field of psy-sciences and moral-psychological experiments had the effect that in this field, too, fundamental conflicts such as those between secular or religious instruction were reflected by moral-psychological expert working groups, as illustrated by the case of the catholic Franz Xaver Weigl. As an empathetic scientist and administrative expert, the psychologically informed elementary school teacher was also qualified to step into representative positions in educational policy.

In contrast to these socio-epistemic strategies, the scrutiny of elementary school students by means of psychological observation sheets falls into the tradition of administrative questionnaires, which have been extensively discussed in the history of science. They represent an attempt to use

<sup>35</sup>See, for example, for the military, Wieser 2020, for the juridical sphere, Wolfram 2018, and for the thesis about the professionalization of psychology, Geuter 2000.



new psychological forms of knowledge to infiltrate, so to speak, a firmly established knowledge technique in the sphere of governmental practices. Statistical questionnaires similar to those examined by Christine von Oerzten or by Sophie Ledebur (this topical issue), for example, allowed psychologists to deploy psychological categories all the more easily by replacing or differentiating existing categories. Governmental actors had already taken an interest in the development of schoolchildren, but now psychological observation sheets introduced more differentiated sub-questions about the psychological, physical and social development of the children. Moreover, governmental actors were already interested in the parental backgrounds of school children, but now psychological questionnaires added more differentiated questions about the milieu, the heritability or the social situation of the children. As is also true for other psychological techniques, the psychological questionnaires were tools for integrating previously common observation techniques for understanding the inner life of children within a psychological discipline. They translated concepts which had already been used to describe this inner life into psychological categories, and often—but not always—further differentiated these categories and the connected epistemic techniques in the process.

Psychological experiments in the classroom need to be described differently again and were carried out by a much smaller number of these contemporary knowledge actors. Psychologists conducted moral-psychological experiments as part of psychological working groups of teachers, discussed them at conferences, and rare individuals, such as Zillig, also conducted such experiments by themselves. Although I have noted that Meumann regarded the experiment as the royal road to moral-psychological research, in her articles Zillig did not attach much importance to such demarcation battles. At least in the case of Zillig, psychological experimentation was strongly linked to the social context of the Würzburg Psychological Institute, where it was used as an emancipation technique against “understanding psychology” and philosophy.<sup>36</sup> Zillig thus saw psychological experimentation as a way of achieving a separation between normative assumptions and objective, scientific statements, which made experiments particularly attractive for research into moral attitudes. This is true regardless of the choice of a specific research topic, which in the cases of Zillig, Weigl, and Fischer was strongly shaped by their respective bourgeois values.

As shown above, psychologists and teachers in both described branches of research, observational and experimental, either willingly supported or tacitly tolerated the new regime after 1933. This is important to underline since after 1945 the history of psychology tended strongly to underestimate the role and importance of psychology during the Third Reich, and sometimes even claimed that psychologists had been persecuted. This was accompanied by the assumption that the revival of scientific knowledge could sweep away the irrationalism of the Nazi era, as Elisabeth Lippert assumed for example (Lippert 1948, 19–20). However, as stated above through the example of Otto Bobertag, psychologists and teachers extended and offered modern knowledge techniques through the new racist assumptions to help the new regime. Edward Dickinson claimed that “modernity and science were not responsible for the crimes of the Nazis. The Nazis were” (Dickinson 2004, 21). In any case, the use of psychological techniques in the elementary school raises the question of how “modern” these translations of old concepts into new ones were, how far they helped in furthering the promise of a new normativity, and in what ways they fit into different political regimes.

## Conclusion

In this article, I presented case studies from the 1920s, of the use of observation sheets in elementary schools in Leipzig and Frankfurt during the Weimar Republic, and of the experiments into the moral character of school children by the contemporary Würzburg psychologist and elementary school teacher Maria Zillig. The case studies show how actors from the education sector and the field of psychology offered techniques to buttress the idea of a meritocratic

<sup>36</sup>Research into the history of morality tests is in short supply, see Verplaetse 2008.

education system and a meritocratic society as a whole. As for other techniques coming from psychology—like for example psychotechnics—it remains unclear if and how these new knowledge techniques made a difference with regard to older practices of organizing human capital. The fact that teacher's associations, elementary school teachers, and psychologists increasingly referenced psychological techniques shows, however, that the promise of organizing human capital with regard to "aptitude," and of being able thus to implement some "selection" (*Auslese*) of talents, seemed attractive.

More than before, the school became a knowledge resource. At a time when psychologists were not yet capable of collecting mass data on a large scale and over a long period of time, the school became the promise of knowledge that crossed the doorsteps of households. Thus, the psychological knowledge techniques, both experiments and observation sheets, were intended to produce knowledge about the mental constitution of the students, but also to use the pupils' knowledge to generate information about their milieu that filled the shadow that lay over the children's home with light. A precarious alliance between elementary school teachers and psychologists formed in an attempt to produce this knowledge in a scientific way and to determine who exactly was the right person to conduct such research. One figure of knowledge who could gain in status here was the elementary school teacher.

The article has shown, firstly, that observational techniques made it possible for elementary school teachers to use psychological knowledge to accumulate symbolic capital and to enhance their socio-epistemic status. This was especially attractive for female elementary school teachers who, relative to the "higher" teaching professions and to male colleagues, were doubly underprivileged. The adoption of psychological knowledge techniques and gaining access to university courses was therefore a means for gaining recognition. Secondly and related, the knowledge techniques and ideals used were inextricably linked to the social roles of teachers and women. Elementary school teachers who were engaged in the professional politics of their role emphasized intuition and empathy to create a scientific persona situated in-between science and education. The observation and investigation sheets used by elementary schools were a weapon in the fight for professional recognition. At the same time they served to align teachers' practices of evaluating the children's minds and their milieu with a republican conception of "aptitude," which made it increasingly important to offer every citizen the right place to be productive. While it remains unclear whether and to what extent these knowledge practices were indeed effective, it is clear that psychology gained in standing through this history: it became recognized as a foundational science in the context of education.

Finally, the article argues that the history of knowledge techniques cannot be adequately understood without considering non-academic actors. At least in the 1910s and 1920s, psychological observation in schools consisted of an alliance of teachers and psychologists, and made use of teachers' pre-existing observational knowledge. They were the actual actors who had access to the worlds behind the doorsteps, and to a knowledge practice that had existed for a long time in order to organize this knowledge and use it for social categorization and disciplining. The psychologists then took up this knowledge and equipped it with the symbolic capital of science.

**Acknowledgements.** I would like to thank the participants of the conference "Data at the Doorstep" in Vienna for their helpful comments, my co-editors Anna Echthölter and Sophie Ledebur, and the peer reviewers for their helpful and constructive criticism.

**Abbreviations.** SächsStA-L = Sächsisches Staatsarchiv, Staatsarchiv Leipzig = Saxon State Archives, Leipzig

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