

# Educational Research—Neglected Aspects of its History using the Example of Wolfgang Edelstein's Theoretical Work

#### **Tenorth Heinz-Elmar\***

Institute for Educational Sciences, Humboldt-Universität zu Berlin, Unter den Linden 6, 10099 Berlin, Germany

\*Corresponding author: Tenorth Heinz-Elmar, tenorth@hu-berlin.de

**Copyright:** © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

#### Abstract:

The article focuses on aspects of the history of empirical educational research that have received little attention so far. Starting from the standard story that empirical educational research originated in the Max Planck Institute for Human Development in Berlin and was coined there, the contribution shows not only the broader context, which already shatters the primer in the field thesis, but also the inner conflicts and the variance in the concept. Above all, however, the analysis applies to a version of educational research, ignored in its complex form until today, which Wolfgang Edelstein, closely associated with the MPI since its founding, developed early, constituted in an interdisciplinary way, and continuously elaborated intensively. His critical theory of "bildung" represents an option that counters the theoretical voids of empirical educational research with a theoretically substantial research program that is socially critical, but nevertheless anchored in committed empirical research.

#### Keywords:

Educational theory Alienation School theory Interdisciplinarity Alcuin

Online publication: March 3, 2025

#### 1. Thesis and line of argument

The current debate on educational research within and outside of educational science has very different facets, and the literature itself is now legion. The topic has already been codified in handbook form <sup>[1]</sup>, it is discursively prepared <sup>[2,3]</sup>, viewed as an identity problem of educational science <sup>[4]</sup>, placed in the context of the very heterogeneously defined 'educational sciences' <sup>[5]</sup> and also presented programmatically in the systematic

plea for 'empirical educational research' <sup>[6]</sup>. To the bad end, it is sometimes only treated in lamentation about institutionalized segregation in scientific societies. Its history is addressed here and there, but then essentially only apologetically stylized as a legacy of positive traditions <sup>[7]</sup>, without distancing and systematically historicizing its theoretical program. The following analyses attempt to address this desideratum, solely from a theoretical-historical perspective and here too only by

way of example, as is only possible for reasons of scope, but from sources that have so far been ignored. This is done primarily with the intention of demonstrating the constructions of the theoretical program of 'educational research' or 'empirical educational research' against the widely present opponents, but also against the self-confident presentation of its current protagonists as historically contingent constructions, some of which immunize themselves against criticism.

The systematic point of reference for this analysis is the scientific practice of Wolfgang Edelstein, who has been closely associated with the Max Planck Institute for Human Development, which is usually regarded as the central place of origin of this field of work, since its foundation. Educational research developed widely there in the context of educational policy early and dominantly in the 'Becker era' [8], before it matured nationwide with its successors and especially in the post-PISA period to the current flourishing and political and scientific reputation it enjoys today. If we look at this history from Edelstein's perspective, new historical and political aspects emerge, but above all, epistemically different perspectives from the current ones. From Edelstein, one can show that educational research was not only defined methodically, and then empirically, as well as politically. In addition, educational research was always reflected as a theory of education, not only as an analysis of the educational system, without this theory being able to assert itself, either in educational research itself or within traditional scientific pedagogy. Although the thesis here is not that Edelstein has definitively clarified what educational research is or could be, the message of his scientific practice suggests that the history of educational research since 1961 should be viewed differently from a historical epistemological perspective. In any case, this includes not only starting with the historical reconstruction of PISA and the variant of educational research that followed it [9] but also taking into account the entire prehistory after 1945 and the alternatives that were present in the process but excluded. Then, one could see that the current controversies about 'empirical educational research' are being fought on the wrong fronts. One would then no longer have to confuse questions of research organization for interdisciplinary relevant topics, to which education undoubtedly belongs with systematic theoretical work,

nor would one as at the beginning in the MPI, confuse methodological questions, which are usually no more than considerations on practices of data generation and evaluation, with theoretical problems.

Edelstein opens up such perspectives because his life's theme was the unity of empirical research, including historical research, and critical educational theory. He was constantly concerned with nothing less than the question of whether and how the education of the subject is possible in the face of the contradictions of society and the ever-present forms of alienation. This, in turn, is a topic from which systematic questions of educational research, which is currently so hotly debated, can be clarified beyond individuals, organizations and disciplinary questions of power. The MPI has been a central context for this concept of research, if only because the term was coined here. The analyses therefore begin with the MPI, but Edelstein's model of educational research can only be understood in terms of attention and criticism if one takes into account his scientific practice alongside that of the MPI as a further, autonomous space for reflection that is systematically significant for the theory and practice of educational research and educational science. Besides, one can also read the current debates on educational research differently against the background of this dual reference, providing more distanced, less agitated, but perhaps somewhat more productive for the theory and practice of research into education and the educational system.

## 2. 'Educational research' in the program and practice of the MPI - the metatheoretical perspective

### 2.1. The emergence of 'educational research' - the dominant narrative

In external observation, according to the prevailing doctrine, the scientific practice coded as 'educational research' has its origins in the plans of the MPI and Hellmut Becker and his colleagues. Stylized like a myth, its invention is attributed to a sleepless night in 1961. It was then that Wolfgang Edelstein, the young, reformexperienced director of studies at the Odenwaldschule, together with Alexander Kluge (Jürgen Habermas is named as the third author, but was only present during

the day), drafted the 'Plan for an Institute for Educational Research' in a frenzy of work and thus set the momentous turning point. Hellmut Becker, already at that time not only the son of the famous Prussian Minister of Culture Carl Heinrich Becker, but already a prominent lawyer, and mentor of the adult education and rural education movement. Hence, the contact with Edelstein had then presented this 'Plan for an Institute for Educational Research' [10], under his name, to the authorities of the Max Planck Society. Thanks to the support of his Protestant-academic-liberal network [8,11-14], he was finally successful in 1963, despite all reservations about his person and cause in the MPG, initially with an institute in the Max Planck Society and, since 1971, with an institute of the Max Planck Society. Although Edelstein had only been an employee of the institute since 1964, when he left the Odenwald School, he had been a member of the management committee since 1973, following the founding directors, Goldschmidt, Robinsohn and Edding. From 1981, he was director of the research area 'Development and Socialization' until he retired in 1997 and continued to work on his topic as an emeritus professor. Here, in this institute and for this institute, according to the standard history, 'educational research' found its lasting form.

What kind of model of research is this that prevailed within the Institute after lengthy internal debates? You have to observe the myth from a distance, historiographically, and this is equally necessary for the invention part of the myth and the role of the actors involved. Under the name 'Educational Research,' the 'Plan' of 1961 developed the program of diverse, but already existing disciplines integrating and thus also interdisciplinary research on a cross-disciplinary topic, the 'education system,' not 'education.' The institute was to 'clarify the scientific prerequisites of our education system by combining the methods of education and psychology, social research, economics and jurisprudence' and it immediately follows, 'the institute must develop methods and theory of educational research,' and 'in direct connection with research work that is intended to provide the scientific basis for future educational policy.' This was necessary because education policy and the organization of the education system in a 'scientific world' could no longer be practiced without scientific

research [10] and because 'for political decision-making today the combination of scientific knowledge and political conviction is necessary' [10].

When reading the text, the program briefly acknowledges role models abroad, but neither precursors in Germany nor existing institutions there, nor its current preliminary work. On the other hand, diagnoses are immediately made about the status of the disciplines to be integrated, and these are consistently diagnoses of deficits. However, these are long-established diagnoses of deficits, as can already be said for 1961.

If one stays only in the period since 1945/50 and studies, for example, the founding documents presented in 1950 by the Hessian Minister of Education Erwin Stein together with the American Allies and the employees of the Prussian Central Institute who had returned to Germany, e.g. Erich Hylla, for the establishment of the 'Hochschule für Erziehungswissenschaft und internationale pädagogische Forschung', then significant precursors can be found. The relevant documents [15] and research [16-18] not only document the tradition of 'factual research' of the Weimar Republic, but also the 'German Institute for International Pedagogical Research' (DIIPF), which grew out of the HIPF, and its employees at the time: Eugen Lemberg, who had emphasized the need for empirical sociologists well before Becker, Heinrich Roth, who pushed empirical psychology, Hans Heckel for jurisprudence, albeit only as 'school jurisprudence', and Friedrich Edding for 'educational economics'. It is precisely the ensemble of subjects of the Becker Plan and the MPI that existed in Frankfurt long before 1961. Interdisciplinary research into the education system was therefore as little new as the intention to provide policy advice. One should also not ignore the UNESCO Institute for Pedagogy in Hamburg, which has existed since 1952 and from which Becker brought Saul Robinson, a comparatist and curriculum theorist at the same time, to Berlin as founding director.

However, the concept of 'educational research' was new for those involved, even for Becker et al., and the organizational form and affiliation with the Max Planck Society was also new. Even Hans Heckel, then briefly outside the DIPF but a friend of Becker's, described this as the better option in an expert opinion on Becker's founding paper, which caused considerable irritation and even an 'existential crisis' at the DIPf <sup>[18]</sup>. Becker himself had already presented the broad outlines of the 1961 program at the 1959 Sociologists' Conference, albeit as a task of "social research" <sup>[19]</sup>, recognizably influenced by the Frankfurt Institute "for Social Research," at which he had also worked for a short time, but which remained an important reference in the future, as Adorno himself emphasized in his 1961 report <sup>[20]</sup> and other contemporary witnesses confirmed <sup>[21]</sup>.

Some interpreters [22] see other social constellations and networks, e.g. the long aftermath of the George circle, in addition to the theoretical ones in the foundation, which they often read solely from Becker's perspective. But the Protestant-liberal milieu around Hellmut Becker or Hartmut von Hentig, Richard von Weizsäcker or Hermann Heimpel and Georg Picht was not influenced by George as a whole, even if it was undoubtedly very helpful. Theoretically, the reference to George is also not immediately obvious, because even a lecture that Becker gave on the subject of 'Stefan George and Education' in 1983 only recognizes George's poetry as a conceivable source for German lessons, even if only in terms of subject didactics [23]. In terms of scientific theory, on the other hand, the attribution is much more plausible, because one cannot see Max Weber and his ascetic plea for 'science as a profession,' which was highly distanced from all the 'missions' of science, as the godfather of this program, but perhaps rather Erich von Kahler. Belonging to the George circle, he had published his highly regarded essay critical of Weber, 'Beruf der Wissenschaft' [24], worked at Princeton after emigration and expatriation until he died in 1971 and, unlike Weber, was not afraid to speak of a 'mission' of science, any more than Hellmut Becker and his fellow campaigners. They propagated 'enlightenment' change, and innovation as equally important tasks alongside research and only saw educational research as legitimate research if it did not accept Weber's harsh limitations. Becker was at best more cautious in the metaphors. They did not argue religiously, but legally and politically, assumed a 'refereeing office of research' and were only interested in a 'factual orientation that prevents those involved in educational policy from working blindly' [10] and argued in favour of research that is competent to diagnose the situation and to make prognoses and impact analyses without concealing its value commitment. They called this work 'Enlightenment as a profession,' as the title of Becker's biographically centered collection of essays read <sup>[24]</sup>, somewhat paradoxically, since Kant had not charged academic professions with liberation from self-inflicted immaturity 'enlightenment,' but the subjects themselves.

However, you can only understand this program as a whole if you also see the past that needs to be overcome. This was not primarily the Nazi era, although there were also personal reasons for this, as was recently shown by Edding and Becker [25,26], for the MPI and educational planning and economics, but also for the DIPF, Eugen Lemberg and Roth [27], but rather the old pedagogy, the old educational policy and the form of counseling associated with it [28]. The 'German Committee for Education and Training' (DA) began providing policy advice in 1953, with a humanities style of thinking and a traditional orientation, just like the German Rectors' Conference, which relied on Wilhelm Flitner for upper secondary school and university admission. They all lost their credit with their form of argument after 1960 at the latest, at least in the observational social sciences, as the criticism of Helmut Schelsky and Hellmut Becker proves. However, this also proves that the thesis of 'science as a prerequisite for educational policy' had already been explicitly formulated before the Institute began its work, including in a lecture that Becker had given on the topic of 'Social Research and Educational Policy' [19] at the 1959 Sociology Conference - 'Sociology and Modern Society' - in the 'Expert Committee for Education and Training,' which had a strong presence for the first time at that time <sup>[29,30]</sup>. However, he only spoke explicitly under the title 'Educational Research and Educational Policy' in the 1961 'Plan' and then again in 1964 [31], even though he propagated the 'necessity of integrated research' and 'interdisciplinary' research.

But even science-based expansion and renewal of the education system did not only begin in Berlin and with Becker, but had been a topic in politics for some time, and not only among George's friends or in the Protestant milieu. The economics of education, which Becker pushed so hard and defended against the accusation of economism in the education debate, had already been called for in 1957/58 by Rucker, the Bavarian Minister of Education in the SPD cabinet Hoegner, as well as

educational planning and, above all, a 'Science Council' as an instrument of this planning. This 'Council' soon came into being in 1957, somewhat later than the differently constructed German Committee, but no longer as an assembly of dignitaries, but as a combination of science, politics and administration, which made it the model for the Education Council in 1965. Max Horkheimer, for example, had sought contact with Rucker to promote social research [11]. Finally, in 1963, when the Institute began its work in Berlin, the much-criticized academic pedagogy was no longer only philosophically or practically oriented: Heinrich Roth's inaugural lecture in 1962 on the occasion of the move from the DIPF to Göttingen, in which the 'realistic turn in pedagogical research' had been called for so self-defensively and courageously at the same time, was already a year old, and it also formulated a political message: 'It is not about de-theorizing, but de-ideologizing pedagogy, about strengthening its expertise to reduce its susceptibility to ideology' [32]. Finally, in 1963, Eduard Spranger, a relic of pre-war pedagogy and propagandist of state ideology, whom Hellmut Becker had already learned to despise from his father, died, and Spranger's way of thinking found no like-minded successor in German pedagogy, rather defining a further occasion to mark the departure from humanities pedagogy.

In terms of education and science policy, the plans for an Education Council, which boosted educational research and the MPI, were finalized with its foundation in 1965, with Becker as a member. The political function and ambition of the MPI and its research found their social location and political space, together with the strong assumptions about the role of science in the construction and legitimization of the reform processes declared necessary. The close correspondence dominating here, indeed the assumption of harmony between research and action, social development and political reform, science and practice, was not only undisputed by Becker. It was only in 1975 that it was theoretically problematized here and there, in the expert reports for the Education Council [33]. Finally, at the end of its work, the Education Council itself proposed an interdisciplinaryintegrative 'educational research,' not only placed outside the university but even with the attribution of a 'special role' for educational science, which it was never able to achieve either in Becker's circle or in the MPI or afterward [34,35].

### 2.2. The systematic deficits: 'educational research', research without an integrating theory

Educational research at the MPI began in this context, not even theoretically singular, because even the specific program of 'interdisciplinary' and 'integrating' research was at best semantically new. In terms of realization, however, the Institute's practice was rather conventional: projects were proposed along disciplinary lines, with topics ranging from school performance to giftedness, social background and educational careers, curriculum issues, subject didactics, and elite recruitment. These were all topics that had been under discussion since the 1920s (apart from the 'social history of education'). In addition to the disciplinarily defined departments, there was no overarching theory and/or method group in the departmental organization, but at best a connection via the person Becker. However, there was no theoretical integration, the lack of which had already been criticized in Adorno's report in 1961, for example, as well as the desideratum of a 'substantive conception' [36]. Adorno was not at all demanding in this respect; he was satisfied with 'something like a theoretical outline on which the structure of the research plan could be made dependent', the interdisciplinary definition of topics and the organization of the internal learning process based on his research. All of this was only coordinated by the directorate and a management conference.

It was no coincidence that soon after the MPI was founded. Intensive debates were sparked by the question of how the ambitions, especially those of counseling, could be realized through research, beyond the ad hoc task force on which Becker relied for his work in and with the Education Council. The systematic questions, on the other hand, developed into a dispute within the institute, which, in its factionalisation and separation, primarily reflected the social science metatheory debates of the time. Here, arguments dominated that were coded as 'methodological' and 'scientific-theoretical,' but primarily documented scientific-political factions: between tradition and modernity, right and left, pragmatic or critical, empirical or humanistic, also enriched with the Marxist

argument relics of the time, and overall exacerbated by the fact that the specific connection between research and policy advice in the various factions also had to assert itself within the Max Planck Society and against its image of research [8]. However, the networking with the work of the German Education Council, as well as Becker's political role, overlaid, relieved and at the same time accelerated the internal meta-theoretical controversies and the internal and external obligations, including the distance of the research observers.

However, this did not pacify the fierce internal debates. On the one hand, this forced the end of the Education Council's ambitions, which became obvious in 1973 in the face of political controversies, and on the other hand, the generational change in the management of the MPI. This began in 1973 with the appointment of Edelstein and Roeder, who also presented his own 'Reflections on School Research' in 1977, thereby presenting himself as a promoter of 'pedagogy as an empirical science' [37]. If one contextualizes the debates at the Institute nationwide, this program and other texts also belong to the 'melancholy discourse "after the orgy", [38], thus documenting the phase of radical disillusionment with educational policy after 1975. It was completed at the MPI with the appointment of Paul Baltes in 1980, which had the effect of a profound caesura. Beyond the grand propaganda, the logic of an ambitious institute working with the familiar methods of the humanities and social sciences now reigned, equipped with the data-generating and data-processing practices of disciplinary (sociologically or psychologically conceived) research. Now the great political ambitions were also cooled, indeed the observer perspective went so far that the Institute itself provided the analyses in which the illusionary character of the old reform programs, including the comprehensive school hopes, was coolly pointed out and the previously strong and unambiguous political design ambition was abandoned. The Institute's staff also clearly perceived this radical change and the end of the program debates, also in terms of individuals, as can be seen, for example, in the judgment on Roeder or Baltes [14].

Peter Roeder, and then also Paul Baltes, Karl Ulrich Mayer and, as Roeder's successor, Jürgen Baumert, did not, however, develop the program and practice of educational research as Adorno had expected: 'This theory and research, HET should not rest on the analysis of what is, but should, through proven and cogent criticism of the current state of education in all its aspects, at the same time contain the instruction for a correct practice.' [36]. Adorno differentiates his model, initially meta-theoretically, from 'Max Weber's now somewhat flimsy ideal of value freedom,' and then states, in terms of educational theory: 'The realization of the problems and contradictions of the educational system, the critical theory of education that follows from a confrontation with its concept, cannot flourish in the climate of a merely observational neutralism.' But, he also considers the excessive proximity to politics to be a problem: 'Because the Institute must ruthlessly raise and answer the question of right or wrong in education, it cannot make itself dependent on any institutions that, for whatever reason and in whatever direction, are sworn to educational ideas or goals that are already supported as valid. The subject matter of the Institute is not one for departmental research; only the fullest organizational autonomy gives hope of success, [36].

Autonomy was guaranteed by the Max Planck Society and controlled according to its rules for research, but what Adorno had already identified as an essential desideratum in 1961, a theory of its own, remained a constant desideratum. Paradoxically enough, it was also always present at the Institute, but not universally recognized as the dominant theory, although this theory even existed in a prominent position, namely with Wolfgang Edelstein. However, his alternative position can only be seen if it is comprehensively reconstructed as a theory, also in terms of time and starting with the dissertation, not only with the work at the MPI [38], or if he is only interpreted biographically, then above all against the background of expulsion, emigration, and exile. These were significant for his 'Durkheimian view of society,' as Habermas rightly implies. If the dissertation is included, it can observed that he was theoretically sensitized to 'the dialectical side of those anomic potentials,' and together with his biographical experiences, may have been responsible for his 'interest' in 'that field of tension' where 'spontaneous forces of personality development break against social structures, where this dynamic is already eroded at the root in the maelstrom of social inequalities.' [39]. The genesis and validity of the theory should also be separated here.

Edelstein represented an independent 'critical theory of education,' not only in 1973, but constantly, and it is time to introduce his concept of society and education, research and theory, reform and practice into the debate on 'educational research.' His concept shows a type of research on education that is no longer merely metatheoretical, multidisciplinary, and organizational, MPI- or Becker-impregnated, but was theoretically independent and integrative from the outset. At the same time, it rested on the experience of an adequate practice, beyond the premises of the Education Council and education policy, but relevant for interaction, organization and society. However, this theory was more of an outsider at the Institute than an expression of the fact that Edelstein, for example, represented the Institute's selfimage, as is currently suggested not only do the Institute's research papers document its theoretical approach [11], but contemporary witnesses and employees also clearly perceive Edelstein's outsider position, both at the time and to this day, as has been documented in publications [40,41] and confirmed in recent inquiries.

## 3. Education and alienation - Edelstein's theoretical perspective and its development

## 3.1. 'eruditio et sapientia' - the dynamics of education in contradiction to society: the origin of Edelstein's theory

Wolfgang Edelstein did not first elaborate his interdisciplinary concept of educational research and his critical theory of education at the MPI, but already presented it in his dissertation of 1962 [42]. It is systematically explicated there in a preface, which is dated 1964 and precedes the printed version of 1965, but is developed in detail throughout in the interpretation of its sources. This introduction to the work is unusual, as a philological dissertation presented at the Middle Latin Department of Heidelberg University opens with theoretical remarks that read like an educational sociological text of the late 20th century and already hint at the beginning of what the text elaborates and substantiates: To read the sources appropriately, it is

necessary to place their subject in 'the educational context of a "tradition-led society" as a whole. This structure of society, guided by tradition and theoretically interpreted by David Riesman, refers in her texts, here in Alcuin's letters, to the "orbis christianus" as the governing form of life, its "norma rectitudinis" and its dominant meaning, the fides orthodoxia. However, it is dependent on education, for its realization, on the processing of the crudeness of nature, out of which man first becomes man. This order of society in time, education as a control of the generational relationship, contains, this is the central thesis, at the same time a latent contradiction, the tense dynamic of individual expectations and social orders and possibilities that develop biographically. It can be recognized if one considers 'the psycho-social continuum in which the motivations of the individuals and the character of their social relationships are laid out' in the process, and these theoretical dimensions identified in the sources, motivations and social relationships, remain central for Edelstein into the 21st century.

From a methodological point of view, however, this dynamic only becomes apparent when the researcher goes 'to the threshold of a sociological understanding of structure' in the interpretation of his texts to see the stubbornness of the educational field within the dominant structures. Then, according to Edelstein, the 'dialectic of alienation' already becomes visible in Carolingian society and its reflection and practice of education, just as Alcuin can show with his idea of "erudition" as 'education,' the processing and cultivation of the raw nature of man. This would also require leaving familiar paths of interpretation, education would not have to be defined once again in terms of the results or content, the well-known "artes," as codified in the 'curriculum of the West' [43], but as a process of "eruditio." In this process, the "discipuli" construct themselves through their learning activities, primarily in the joint communicative handling of texts in a materially and formally traditional learning world, but fed by the immanent practices and goals of "sapientia," which develop their independence in dealing with the world and thus their power and dynamics. Edelstein would have found early confirmation of this understanding of education in critical theory, as Max Horkheimer had comparably introduced the concept of education in his matriculation speech for the winter semester of 1952/1953: 'We usually call a person uneducated when he appears to us as unpolished, when he represents nature that is not socially molded, not socially mediated' [44]. Horkheimer then recalls 'the Latin eruditio, the ancient expression for learned education, that a person is taken out of the state of crudeness.' From here he diagnoses a 'crisis of education' given the fact of the 'eradication of nature, its destruction into mere material,' with the consequence that 'the concept of education in the most literal sense has been deprived of its substance by the fact that there is no longer anything uneducated, no unmastered nature in the human realm that could be educated.' 'Uneducation' is the consequence of this "process of universal socialization" (as Adorno will also diagnose in the "Theory of Half-Education").

The terms that are still familiar in every critical theory today, from 'alienation' to 'reification,' the theses on the 'dynamics' of education and the facilitation of emancipation - here from the 'former theological classification,' even in a society guided by tradition, which is immanent in the structures thanks to the "cunning' of development," are thus already present in the arguments of 1965 and identifiable in the sources. Of course, it is also true that you can only see all of this if you view and analyze the past theoretically and if you view 'education' from a social theory and sociological perspective in its social context and at the same time in its logic. Secondly, you can only see it if you think in structuralist terms, distinguishing between surface and deep structure, "langue and parole," in the dimensions of meaning. Saussure is criticized early on for his methodological approach to the text-fixated medievalists, whereby the doctoral student Edelstein develops his criticism of none other than Josef Fleckenstein, who was awarded his doctorate in 1952 with a thesis on Charlemagne's educational reform by another great medievalist, Gerd Tellenbach.

This reading of his dissertation, the way Edelstein wanted it to be understood, guided by critical theory but grounded in the sources, is confirmed by a conversation Edelstein had with Alexander Kluge in 2010 (on the occasion of the 50th anniversary of the MPI for Educational Research). He not only explained education again with recourse to 'eruditio,' but also recalled his early plan for the genesis of the dissertation and admitted: 'I wanted to write a quasi-Marxist dissertation,'

namely on 'school as a place of alienation.' It was only because the sociologist Helmut Plessner, whom he had asked first, found this too risky and he was unable to ask Helmut Schelsky promptly that he recalled his philological and linguistic studies and thematized Alcuin and the Carolingian reform philologically, albeit with his own 'Marxist view.' Marx is not quoted in 1965, for example, but Hegel and 'German idealism' are; Adorno also appears, albeit with remarks on the tension between tradition and progress from the 'Philosophy of the New Music' (p. 161, and note 55, p. 217 in note 96 with a reference to Adorno's 'Philosophy of the New Music' of 1956), with arguments that Adorno also uses in the 1959 Theory of Half-Education. In his dissertation (1965), Edelstein does not write any of the analyses of school that were common at the time, but rather a study on the function of 'eruditio,' but this is presented as an educational social form in traditional societies. Finally, he shows the 'dynamics' of this practice as a process of education that asserts itself against the prevailing teaching practice and can anticipate a different world, because 'education is always at the same time the future design of a society.' Edelstein also sees in the dissertation and for the Carolingian period 'a peculiar dialectic of "inwardness", 'or', as he says 'if a later category is admissible here: subjectivity' and objective reification, if one only considers 'the educational sociological structure of that epoch its unity, its contradictions and its transformations.' Education is then 'scientia propter se ipsam appetenda,' inherently logical, just as friendship is defined by Seneca as 'amicitia propter se ipsam appetenda,' because 'friendship must be pursued for its own sake,' just as 'education is pursued for its own sake,' as 'humane education' is still interpreted today. But precisely because of this inherent logic, it creates a productive contradiction that is systematically implied by it.

Edelstein himself critically examines his reading of the intrinsic logic of education in the Middle Ages, to which such intrinsic logic is not primarily attributed. But apart from the fact that he finds confirmation in current research, in which a critical argumentation is already seen for medieval philosophy [45] or the 'scholarly obstinacy' and 'scholasticism as the culture of schools' is now also understood 'as a utopian place in the era of church reform' [46]. Above all, however, the interpretation

of "erudition" as education remains as strange as it is seemingly exaggerated when, for example, he formulates it in Hegelian terms and describes education as 'the possibilities of eruditio in its being-for-itself' (Hegel Philosophy of Right, §§ 57, 270, 87), as "free subjectivity". But, he interprets this without 'evaluating it absolutely,' only wanting to prove the historical dynamics to 'analytically uncover the potency of educational processes.' Methodologically, this argument is justified in the style of critical sociology: 'It was only a matter of analytically coming to grips with the secret intention, the "cunning" of the development, the potentiality of the categories that justify the understanding of "education" in a given epoch and to follow them in their consequences.' Edelstein thus protects himself against the obvious objection 'that such an antagonistic characterization is overdrawn.' At the same time, however, he already sees the other side of this 'potentiality' historically by looking ahead. In the broader European tradition of educational thinking, 'paradoxically, the "substantial" categories merge into the aesthetic realm', and 'the inner contradiction of what is called "education" in the European tradition' is revealed in its complex form, which also needs to be criticized, because 'an inherently dialectical entity is now not only caught up in dialectical contradiction but also in categorical ambivalence.'

### 3.2. Theory of education as the centre of 'educational research'

This position not only governed his teaching practice at the Odenwaldschule, which he still interpreted and presented in terms of, for example, exemplary learning [47,48]. Looking ahead and at Edelstein's theoretical practice in his research during his time at the MPI, it also increasingly guided the arguments with which he participated in the strategic research debate at the institute. In 1966, his 'Überlegungen zur Forschungsstrategie und Arbeitsorganisation des Instituts für Bildungsforschung' [49] initially offered only a research strategy for the question of how good educational policy is possible, which was explained in the concept of relevance, the shibboleth of the contemporary debate. He thus provides a metatheoretical strategy rather than a conceptualization of the content of the entire institute. In 1973, he participated again, now with considerations on curriculum research under the ambitious title 'Struktur,

Prozess, Diskurs. Preliminary considerations on a structural curriculum theory, [50].

This text shows his specific theoretical intention and, by centering on the subject side and with his sociopsychological concept of alienation [51] also his place in the contemporary Marx debate instead of on political-economic structures. This debate was just beginning to work through the 'subjective deficit' of Marx's theory [52] and to see people and society, as well as educational processes differently. Edelstein remains orientated towards Marx, but never becomes a political economist or even a partydoctrinaire Stalinist. At the same time, the 1973 text can be read as an indication of the caesura that emerged in the 1970s, especially in 1973 in terms of educational policy and the associated research. Edelstein now favored alternative political strategies and radical self-criticism, while Hellmut Becker, for example, continued to work energetically and emphatically to adhere to his premises of educational reform against all empirical evidence, as his preface to the German edition of Jenck's 'Inequality' shows [53].

Edelstein argued quite differently in 1973. Not only does he attempt to outdo Robinson and the MPI in terms of curriculum theory, but he also wants to unite metatheory and theory, method and action orientation in a new and now systematic way and at the same time process the experiences with educational policy up to the end of the reform illusions. Theoretically, this leads to the justification of a 'metascientific program of science,' even if it is only briefly and specifically stated what this would mean in integrative and interdisciplinary terms (and the fact that even Stalin is quoted does not make him a Stalinist). First of all, however, it must be noted in 1973: He was no longer interested in organizational problems in educational research; indeed, the term itself, like 'education,' has not been mentioned since then. Now other and concrete research topics dominate, which are raised in the process of teaching and school. In terms of content, according to a later self-explanation [54], this was, like the experiment in Iceland, where he had lived as an emigrant and was continuously active as a political advisor and researcher. He says that he was motivated 'on the one hand' by the 'cognitive turn' in psychology, 'on the other hand by a reflection on teaching processes and corresponding curriculum constructions that marked a departure from learning theory traditions.' The context for the need for revision was the 'Sputnik shock,' an indication 'of the school's inability to build up sufficient interest and ability to act in dealing with science, which was regarded as a prerequisite for socially mediated competence' [54]. Edelstein therefore first proves himself to be an experienced didactician who sees that 'the functional goals of a new education can become the dogmatized content of a new training', because "the renunciation of the category of mediation leads to a new immediacy of content", so that a "return to the archaic" threatens [54]. This didactic, process-related perspective was lacking in the work of the MPI in 1973 and it is constantly missing, right up to the outcome-focused current work of educational research in general.

In 1973, the old concepts of 'structure' and education as a 'process' were theoretically guiding for Edelstein, as they had been in 1965, now expanded to include 'discourse,' which clarifies the questions of validity and didactics. The socio-theoretical reference also returns, now related to scientified civilisation. It is from here that the corresponding curriculum theory is developed, the 'structure of the discipline,' science as a social constitutive principle is thus sought and 'the "constitution of science in the subjects" must be secured, [55]. Curriculum issues are no longer constructed systemically based on socio-economic needs, as was previously the case in the MPI and elsewhere, but based on the learner and the competencies required for them. Edelstein also had to, in some cases 'form the structure of a subject as a school subject in the first place' and 'first define the function of a knowledge construction that was given in other subjects, at least according to tradition.' However, this theoretical construction work, he states, 'also offered opportunities for a more intensive clarification of the implications of structure, the process of knowledge construction, teaching, mediation and discourse [50]. Criteria for the discourse on structure is the process in which the structure comes into its own, the functionality of the structure in the process of knowledge construction in the classroom, [54]. In these explanations, he also uses the references that are central to him, from Piaget to Bruner and Hilda Taba, but also Martin Wagenschein as a pedagogical neo-classicist. In the exemplary study from 1976, which can be read in parallel

and presents a social science curriculum for the German debate, the general didactic premises and those of science didactics are bundled together, including Habermas' reflections on science as ideology, together with the experiences of his own OSO practice and the expectations of the practice of teaching and the competence of the learners to be ensured.

### 3.3. Edelstein's theory of education - the unrecognized outsider of educational research after 1970

The status of this 1973 paper, 'not intended for publication,' perhaps explains why it was virtually ignored in the German and international debate, just as little as Edelstein as a basic theorist of curriculum construction. If one only examines the standard works of curriculum research close to his reflections [56,57] and the current debate on subject-orientated teaching and learning [58,59], then he is at best very marginally received. Reference is made to the orientation towards the 'structure of the discipline' as a model of curriculum reform, often very distanced [60], but usually only briefly in the reference to Bruner or to 'Man - A Course of Study' as an example. There is no mention of Edelstein as an innovative recipient; the discussion of the specialized nature of teaching and the reference to science didactics and science propaedeutics remains very much within the German grammar school tradition, with very few exceptions in the social science curriculum [61,62], and without sufficiently recognizing the options in the structure of the discipline that Edelstein had already opened up in 1973. In the curriculum theory and research of the 1970s and up to the present day, he appears with other texts, e.g. with his pleas for the participation of teachers in curriculum revision [63,64], for the legitimizing function of science between discursive or ideological practices [65], in his expert role in the planning of the Hessian framework guidelines of 1967, or with empirical studies of 1968. Almost more frequently seen are the general works on learning theory, as documented in the anthology with Dieter Hopf, or the contributions to teaching analysis [50], then later the writings on moral theory, then also in pedagogy labeling itself as critical [66], which otherwise does not perceive Edelstein as its precursor. Such patterns of reception can perhaps be attributed even more strongly to the theoretical status of this field - apart from the preference for reference in one's milieu for curriculum research. As early as 1983, it was stated that 'the educational science/didactic turns have become numerous in recent decades,' accompanied by the comment that this was sufficient proof of the "chaos of recent theorizing" [67]. Overall, however, this also shows the status of 'educational research' at the beginning of the 1970s, even in the supposed core area of theoretical and methodological innovation, curriculum research, and the low quality that was generally accorded to it.

Theoretically significant for this point in time, and not only in Edelstein's work, is the clear historical and social-theoretical criticism of reform-oriented educational policy. However, his position is once again unusual, both for the time and for the Institute. In his analysis of the policy, he agrees with the judgments of Hans Maier [50], the conservative CSU Minister of Education in Bavaria, but he rejects any anti-pedagogy or radical criticism of schools and at the same time explicitly refers to Heinz-Joachim Heydorn in a brief reference, systematically seen in detail and with identical arguments. With his work on 'education and domination,' this Frankfurt educational philosopher founded his school of critical educational science [68-70], which is still critically discussed today [71] and which Edelstein also includes, critically and selectively, in his analysis. Heydorn stated that the effect of the comprehensive school-orientated education policy was the threat of 'inequality for all' because the emancipatory learning opportunities that traditional, classical education had opened up for the elites were now no longer available to anyone. According to Edelstein's analogous criticism, the practice of reform and the work of schools, including comprehensive schools, emphatically demonstrated that the reformers had lost their understanding of the content and process of education in favour of structural issues, and one can understand why Edelstein agrees with this. According to Heydorn, classical humanistic education and the old languages could not be replaced. Edelstein generalizes the learning expectations in a scientific civilization, antitraditional and curriculum-critical at the same time, saying that education is only possible through individual work on and in confrontation with the 'structure of the discipline,' but not only on the old languages.

The comprehensive school, on the other hand, and its school-theoretical apologists not only see the function of the curriculum and the necessary forms of learning as didactically incorrect but also fail to recognize the current contradiction between the 'learning world and living world' [72], as Edelstein has systematized his criticism. His dual is intended to open up the perspective that the learning world, the school, is designed in such a way that the motivation of the learners there is not destroyed, but that they can have experiences 'that promote the willingness to take responsibility in the learning world of the school and cultivate the habitus of the pupils in the life world of the pupils' [73]. The basic assumptions of democratic education as developed by Edelstein can also be recognized here, after he has bid farewell to the illusions of the first educational reform, but also does not want to adopt the orientation of the post-PISA reform practice. Although he remains critical of the everyday school, he is also optimistic about the school as a world of its own, which he also considers suitable for dealing with the structural deficits of society. In other words, education, including school education, proves its power and necessity even in the modern age.

### 3.4. The socio-theoretical foundations of Edelstein's educational theory: education in an anomic society

However, his social theory and diagnosis no longer refer to traditional societies, but to the present. He still thinks from a distance to society, but not in terms of political economy, but in terms of moral theory and educational dimensions. Emile Durkheim now takes the place of modern society that David Riesman had for traditional society. For the diagnosis of modernity and given its structural deficits, he emphasizes Durkheim's diagnosis of its 'anomic' structure and sees moral education as a structural moment to make individuals, especially young people [74], capable of acting in and for these societies, under generally recognized norms. His theory of education, reflected in social theory, is therefore intended to demonstrate that 'moral education' is as necessary as possible. His perspective remains educational theory but is differentiated in terms of the function of education for traditional or modern societies. In traditional societies, he sees the potential for change associated with education, and this is also how he argued for Iceland when he based his advice and his studies on the inherent tensions between tradition and modernity <sup>[75]</sup>. For modern societies, on the other hand, education reveals the potential to help the forgotten general to assert itself, because it has not disappeared despite particularization <sup>[74]</sup>.

These diagnoses give rise to the topic, which he has extensively investigated with Monika Keller and others, in the research practice of the Institute and his department, and which he describes as 'social psychology' in a theoretically appropriate way. Research in this field is one of the classic interdisciplinary forms of work, located on the border between psychology and sociology. Edelstein also works here and constantly with his old concepts (structure, process, discourse) which have transdisciplinary status, cannot be attributed to one discipline alone, but can all be assigned to the topic to be theorized, education, and thus receive their specificity. He also works with methods (conceptual construction, historical-sociological analysis and criticism, and empirical research) which can be seen as the fulfillment of the MPI's claim to conduct interdisciplinary and integrated research. In contrast to what Becker said in his founding paper and what the school theory-inspired group around Roeder and Baumert practiced, Edelstein's work, as he explicitly stated, is not concerned with the 'education system,' but with 'education' as the comprehensive topic and problem that needs to be elucidated under the question of how it is possible to achieve what is socially and individually desired.

His social psychology is therefore also developed as a critical social theory that examines the validity of norms and morals, the conditions of the constitution of intersubjectivity and social understanding, and the fundamental questions of the possibility of critical education. Incidentally, he always argues in an old European and secular way at the same time, free from all ecclesiastically of religion, as his arguments in the LER debate prove <sup>[76]</sup>. He places the explanation of the constitution of individuality, the analysis of education in the process as a 'sociogenesis of agency,' at the center of his considerations. Since 1965 and up to the present day, he has also explained his subject from the 'structural context' of society, about 'the psycho-social continuum in which the motivations of individuals and the character

of their social relationships are laid out' [42]. In these socio-psychological, clearly interdisciplinary studies, education has been systematically analyzed again since the end of the 20th century. The reform intention also remains, as this theory also provides the framework for the democratic-theoretical determination of the function and possibilities of schools [77-80]. Edelstein bundles these references of theory and practice, educational process and reflection, school and social interaction in a critical theory of education, in the unity of analysis and critique, and reflection on practice and action in a dense sequence of works [81-86]. Ultimately, he provides a model of educational research without even using the name. However, the differences in the perspectives, methods and intentions of the post-PISA dominant 'empirical' educational research are evident.

### 3.5. Edelstein's educational theory as observed by academic pedagogy

It should be added, however, that he was not only an outsider at the MPI with this strategy, but also did not only make friends with many representatives of education and educational science, for understandable reasons. Explaining his position, he first warned the teachers: 'For it is clear, although this truth is not very popular in schools and teacher training: only useful psychological theories open up the chance of meaningful practice in the classroom. Learning and teaching are central psychological processes' [77]. Educators who are occasionally very selectively orientated in their criticism of Edelstein, however, without including the development of his analyses [87] do not accept the dominance of psychology. They also take a reserved view of his critical image of schools, just as they judge the emphatic fixation on democratic pedagogy as a reform pedagogical illusion, if only because schools are not the place that Edelstein imagines democratic pedagogy to be [88].

Others still see the reform schools as a reference in the exaggerated expectations of practice and the Odenwald practice as a model, which Edelstein does not even deny when he praises his learning processes at Walter Schäfer and retrospectively states so clearly 'The Odenwald School has been identity-constitutive for me' [89]. His reform concept documents this, as he explicitly refers to rural educational institutions and says:

'in order to bind young people, school must become a social, political, cultural and moral community in which self-efficacy and initiative, responsibility and solidarity, performance and cooperation can be demanded according to the situation and pre-trained for extracurricular and post-school contexts of use and utilization.' This also includes 'curricular autonomy and the individually effective differentiation of school programs and performance requirements,' which are also 'entirely compatible with systemically applicable performance standards and central administrative regulations' [72,77]. But, he also recognizes the real desideratum beyond the individual reform schools: 'What would be new would be the system-wide implementation of a school that is organized in a planned manner with a view to educational purposes and operates self-effectively with a broad and autonomous planning horizon and curricular differentiation, school-specific profile formation, intensively developed community life and a willingness to delegate responsibility both to the teaching staff and to pupils and parents, [72,77]. The fact that he ultimately recognized the risks of such communities is demonstrated by his early and sharp distance from Gerold Becker.

After all, it was probably not flattering for pedagogy that he was highly critical of its role in teacher training. After all, he said, it only created a form of professionalism that made teachers experts in their subject, but only taught the art of pedagogical craftsmanship. As expected, he proposed a reform of teacher training based on psychology [90], but this quickly failed due to the established university training system. Even his attempts to strengthen the willingness of the actors to act and reform are psychologically based, as it would be necessary to build up strong self-efficacy convictions [91]. However, neither the current 'empirical' educational researchers nor the majority of educational science follow this model of educational research and practice construction in their debates on 'educational research.' Edelstein provides a substantial contrast to the images of their preferred form of the disciplines that research education and upbringing. This also leads to the lesson that his practice provides for the current situation of educational research and educational science.

### 4. Educational research, pedagogy, educational science - historical lessons of reconstruction

The concept of educational research, especially as 'empirical,' currently refers first and foremost to a highly controversial field of discourse, and Edelstein explicitly plays no role in this. The thesis put forward here is not that Edelstein has definitively clarified what educational research is or could be and that should simply accept him. The message of his scientific practice is different. It suggests looking at the controversial debates from a distance, historicizing them and remembering the lesson that has been available in educational research since 1961 at the latest and with the debates in the MPI, and not just starting with PISA and the career of the variant of educational research that followed it. The long history of educational research proves that the controversial battles are still being fought on the wrong fronts today and that questions of research organization for interdisciplinary relevant topics should not be confused with theoretical work, just as methodological questions, which are usually no more than considerations on practices of data generation and evaluation, do not clarify theoretical problems.

One could therefore learn from Adorno and Edelstein that the quality and specificity of educational research are only determined by systematic concepts, models and theories that are sought for education as an interdisciplinary topic that is theorized in an interdisciplinary-integrative way in different but relatable scientific practices. 'Educational research,' as the title term in the German name of the MPI still says, can therefore also be defined with great but distinct variance, not only about the "education system" as a focus, as Becker still defined it in 1961, but also about "education," as Edelstein demonstrated. Finally, not forget Helmut Fend, who, for example, also included schools in his comprehensive and systematic 'Developmental Psychology of Adolescence' [92] and practiced educational research with a view to the education system and education at the same time - this was and is a separate, initially DFG-funded program, which Fend himself also classified as a specific feature in the history of educational research [93]. Not to forget, outcome-orientated research also existed before PISA and the associated studies. One need only think of the learning status analyses developed by Rainer Lehmann at the University of Hamburg, in particular, for advising education policy and in the context of the IEA (International Educational Achievement) [94]. This research, although early on it was also sharply polemicized against the 'I(d) E(st) A(bsurdum)' mathematics studies [95], also became methodologically formative for the TIMMS studies, among others [96].

However, not only the theoretical space of psychology and sociology or even educational science is relevant for education, nor cognitive psychology alone, but, as with Edelstein, thematically and theoretically the entire space of cognition and development, of learning, motivations and emotions, also of corporeality and practice, in other words, the entirety of the theories of temporality, sociality and materiality of the world. The current English title of the MPI, 'Institute for Human Development,' is already more open to designating human ontogenesis as a topic, as the current research program also propagates. Thematically centered in this way, one could also relate the research work of all the thematically relevant Max Planck Institutes in the humanities and social sciences between Berlin and Munich, Cologne and Leipzig. Even in the tradition of Pestalozzi, for example, the thesis that man is the product of his man is the product of his 'nature, his sex and his self.' In this respect, reductions are already classically excluded, as they are in the concentration on the education system as well as in the pedagogisation of the subject of education. The question is whether, with this concentration on research, the counselling claim of the MPI's founding phase can still be maintained. It is probably a clever form of division of labour in non-university research on the subject of education to leave "theoria cum praxi" as a systematically claimed connection between research and practical advice, analysis and political construction to the institutes of the Leibniz Association. In contrast, the primacy of theory is the self-perception of the MPG, also in its historiography [97].

The current pedagogical debate on educational research, which is often still reduced to supposedly unambiguous 'empirical' or 'educational sciences,' should be left to the actors who are particularly active in the field of academic educational science. There, disciplinary identity problems and demarcation battles dominate,

sometimes fueled by anger at the institutionalized segregation of 'empirical educational research.' Scientific pedagogy, on the other hand, should first self-critically remind itself that it has never been able to fulfill the Education Council's attribution of the 'special role of educational science' before it confronts others with criticism and demands. It is more realistic to see one's own 'blurred boundaries' productively and to learn from communication across disciplinary boundaries without stylizing the special German problems as a systematic solution [98]. It is worth recalling that 'education' as a norm and goal has not been forgotten even in empirical educational research [99], but the term is not available as an elaborated theoretical program in educational terms. Educational science and empirical educational research are therefore recommended to follow Edelstein's lead, to utilize the wealth of concepts that have proven themselves in research, to consider psychological concepts such as development or learning and self-efficacy, but also sociological theories or the reflective tradition of German pedagogy. It is even possible to get involved in 'education' if you follow Bernfeld, for example, who has nature and psyche, society, and professional practice in mind at the same time. In other words, it is important to say goodbye to status battles; what is theoretically relevant is the debate about theoretical models of research. Even here, it is becoming apparent that the long-unquestioned dominant supply-utilization model of the post-PISA tradition has now become a problem even for its inventors and users [100]. One could therefore finally focus on the 'process.'

Even if we want to follow Edelstein, 'critical' educational theory remains a problem in its own right insofar as the normative implications of his position are similarly in need of discussion as the strong assumptions critical of capitalism in the Heydorn and Adorno succession or his commitment to Marx, however defined. This is a broad field that cannot or need not be dealt with here, partly because Edelstein's position in this tradition was independent and not politicizing. But it encourages the observer when, in a recent reminder of Adorno's MPI report, it is recommended that a strongly normative, 'a substantial critical concept of education' is indispensable but that it can also be used 'only for heuristic purposes' [11]. Critical education as a hypothesis for examining one's

own questions, researching whether and how such strong normative expectations can be realized, and whether and when they are justifiable, that is the theoretically recommendable option. Edelstein and his fellow campaigners, for example, had to live with the experience that the highest of Kohlberg's levels of moral competence could hardly be generalized. There have also been good reasons for criticizing the goal of the 'higher education of humanity' since and with Kant. Although Edelstein saw concrete school work as a way of dealing with such great

expectations, somehow, since the Enlightenment era, asking educationalists how better societies are possible has boiled down to the practice of pedagogy and, as we have known ever since, is a never-ending task. So why don't educational researchers, including educational science, leave such transformation processes to the pedagogues and thus not burden research any further? Cooperation between practical and research knowledge is also a tried and tested option.

#### - Disclosure statement -----

The author declares no conflict of interest.

#### References

- [1] Zedler P, Döbert H, 2010, Educational Research in Educational Science. Handbook of Educational Research, Springer, Wiesbaden, 23–45.
- [2] Terhart E, 2012, Educational Sciences: An Embarrassment Solution, Catch-All Category, Fighting Term? Journal of Pedagogy, 58(1): 22–39.
- [3] Terhart E, 2016, Empirical Educational Research and Its Disciplines—Processes of Change and Lines of Conflict in Unstable Expert Cultures. Empirical Educational Research: The Critical View and the Response to the Critics, Springer, Wiesbaden, 73–87
- [4] Keiner E, 2015, Pedagogy, Educational Science, Empirical Educational Research Terms and Functional Contexts. Blurred Boundaries A Discipline in Dialogue, Bad Heilbrunn: Klinkhardt, 13–34.
- [5] Schreiber F, Cramer C, 2023, What Are Educational Sciences? Systematisation of Diverse Conceptions in the Scientific Literature. Journal of Educational Science, 26(1): 185–210.
- [6] Gräsel C, 2011, What is Empirical Educational Research? Empirical Educational Research, Springer, Wiesbaden, 13–27.
- [7] Ditton H, 2011, Lines of Development in Educational Research: From the German Education Council to Current Topics. Empirical Educational Research, Springer, Wiesbaden, 29–42.
- [8] Behm B, 2023, On the Genesis and Transformation of an Interdisciplinary Social Science in the Context of the Max Planck Society (preprint), MPI, Berlin.
- [9] Aljets E, 2015, The Rise of Empirical Educational Research. A Contribution to Institutionalist Sociology of Science (with a Foreword by Uwe Schimank and Georg Krücken), Springer, Wiesbaden, 32–44.
- [10] Becker H, 1961, Plan for an Institute for Educational Research. Archive on the History of the Max Planck Society, MPI, Berlin.
- [11] Herrmann U, 2014, Educational Research Without a Critical Theory of Education? An Expert Opinion by Theodor W. Adorno on the Founding of a (Max Planck) Institute for Law, Sociology and Economics of Education in 1961. Pedagogical Correspondence, 49: 9–22.
- [12] Leschinsky A, 1996, The Max Planck Institute for Human Development in Berlin. Non-University Educational Science in Germany: An Attempt at Historical Stocktaking, Böhlau, Cologne, 171–190.
- [13] Thomas U, 2017, History of the Max Planck Institute for Human Development in Berlin. Handbook of the History of

- German-Language Sociology, Springer, Wiesbaden, 1–16.
- [14] Wiarda JM, 2015, What Does Counselling Do to the Counsellor? On the Consequences of Policy Advice for Science Using the Example of the Max Planck Institute for Human Development. (Doctoral Dissertation), Berlin, 1–328.
- [15] Frommelt B, Rittberger M, 2010, GFPF & DIPF: Documents of a Co-operation Since 1950. Frankfurt a.M.: German Institute for International Educational Research.
- [16] Behm B, Reh S, 2016, Empirical Educational Research Necessarily Non-University? An Exploration of the History of West German Educational Research Using the Example of the German Institute for International Educational Research (DIPF), Empirical Educational Research. The Critical View and the Response to the Critics (ZfE Edition), Springer, Wiesbaden, 107–127.
- [17] Behm B, 2017, On the Beginnings of Educational Research in West Germany 1946–1963. A History of Knowledge Look at a 'Forgotten' History. Contributions to a History of Educational Science Knowledge in Germany Between 1945 and 1990, Zeitschrift für Pädagogik, 63rd supplement, Beltz, Weinheim, 34–69.
- [18] Mast P, 1996, Von der Hochschule zum Deutschen Institut für Internationale Pädagogische Forschung in Frankfurt am Main 1950–1981. A Contribution to the History of Pedagogical Factual Research, German Institute, Frankfurt am Main.
- [19] Becker H, 1959, Social Research and Educational Policy. Quantität und Qualität, Grundfragen der Bildungspolitik (2nd ed.), Freiburg, 347–362.
- [20] Adorno TW, 1959, Theory of Half-Education. Sociologica II, Frankfurt a. M., 168–192.
- [21] Edelstein W, 1994, Ein Radikaler Bürgerlicher (Memorial Speech on Hellmut Becker). Neue Sammlung, 34(1994): 17–25.
- [22] Raulff U, 2009, Circle Without a Master. Stefan George's Afterlife. Munich, Beck.
- [23] Becker H, 1983, Stefan George and Education. Enduring Contradictions, Tasks of Education in Our Time, Freiburg, 250–257.
- [24] Kahler E, 1920, Der Beruf der Wissenschaft [The Profession of Science]. Georg Bondi, Berlin.
- [25] Becker H, Hager F, 1992, Enlightenment as a Profession. Conversations About Education and Politics, Piper, Munich, 55–59.
- [26] Behm B, 2022, How Could He Defect to Adorno/Horkheimer? Some Biographical Additions to Hellmut Becker's Academic Socialisation and Career from 1931 to the Post-War Period and Reflections on the 'Caesura' of 1945. SLR, 45(84): 78–104.
- [27] Behm B, Rohstock A, 2020, Loyalty. On the Covert Regulation of Thought Movements in Scientific Fields. An Exploration Using the Example of the History of West German Educational Researchers, Contributions to the 26th Congress of the German Society for Educational Science, Barbara Budrich, Opladen, 51–70.
- [28] Rohstock A, 2019, From Nazi Statistician to Educational Researcher in the Federal Republic. Friedrich Edding and His Involvement in National Socialism, The Foundation of Disciplinary Memory as a Social Practice, 2019: 120–157.
- [29] Tenorth HE, 2014, Policy Advice and the Changing Role of the Expert or: The Expertise of Educational Science. Das Selbstverständnis der Erziehungswissenschaft: Geschichte und Gegenwart, Basel, Weinheim, 2014: 139–171.
- [30] Behrmann GC, 2006, Educational Expansion and Democratic Mission. The Rise of the Social Sciences as Educational Sciences in the Federal Republic of Germany. Scepticism and Commitment: Works on the History of Education and Teacher Education. Contributions to Teacher Education (vol. 1), 77–123.
- [31] Behrmann GC, 2013, Founding Years of Educational Sociology. Sociology, 42: 169–184.
- [32] Becker H, 1968, Educational Research and Educational Policy. Quantität und Qualität (2nd ed.), Freiburg, 388-405
- [33] Roth H, 1963, The Realistic Turn in Pedagogical Research. The German School, 196(2): 109–119.
- [34] Hornstein W, 1975, Lernen im Jugendalter: Ergebnisse, Fragestellungen und Probleme sozialwissenschaftlicher Forschung (Gutachten und Studien der Bildungskommission), Klett, Stuttgart, 54.

- [35] Roth H, Friedrich D, 1975, Educational Research: Problems, Perspectives, Priorities. Expertises and Studies of the Education Commission, Klett, Stuttgart, 50–51.
- [36] Adorno TW, 1961, Expert Opinion on the Necessity of Establishing an 'Institute for the Law, Sociology and Economics of Education', 10 May 1961. Pädagogische Korrespondenz, 49: 5–8.
- [37] Roeder P, et al., 1977, Reflections on School Research. Klett, Stuttgart, 89–94.
- [38] Terhart E, 2001, Educational Research, Educational Administration, Educational Reality: A Systematic Approach. Policy Counselling through Educational Research, Budrich, Opladen, 17–32.
- [39] Habermas J, 1997, On the Validity of Moral Judgements: Philosophical Notes on a Psychological Topic. In Speeches on the Retirement of Wolfgang Edelstein, MPI for Educational Research, Berlin, 42–55.
- [40] Hartung D, 1997, Wolfgang Edelstein, the Last Basic Researcher? In Speeches on the Retirement of Wolfgang Edelstein, MPI, Berlin, 60–73.
- [41] Naumann J, 1993, Educational Research as an Alibi? Lust und Last der Aufklärung: A Book for the 80th Birthday of Hellmut Becker, Beltz, Weinheim/Basel, 294–304.
- [42] Edelstein W, 1965, Eruditio and Sapientia: World View and Education in the Carolingian Period. Studies on Alcuin's Letters, Rombach, Freiburg i.Br, 221–226.
- [43] Dolch J, 1965, Curriculum of the Occident: Two and a Half Millennia of Its History, Henn, Ratingen, 123–125.
- [44] Horkheimer M, 1952, The Concept of Education. Sozialphilosophische Studien, Fischer Verlag, Frankfurt a. M., 163–172.
- [45] Perler D, 2006, Doubt and Certainty. Sceptical Debates in the Middle Ages, Klostermann, Frankfurt a. M, 214–216.
- [46] Rexroth F, 2018, Happy Scholasticism. The Scientific Revolution of the Middle Ages, C. H. Beck, Munich, 505.
- [47] Edelstein W, 1960a, Exemplary Learning: The Example of Latin, Odenwaldschule, Oberhambach, 32–36.
- [48] Edelstein W, 1960b, Exemplary Learning: Example of Unspecialised Language Teaching. With an epilogue by Ruth Koch, Odenwaldschule, Oberhambach, 99–102.
- [49] Edelstein W, 1966, Reflections on the Research Strategy and Work Organisation of the Institute for Educational Research, 108–112.
- [50] Edelstein W, 1973, Structure, Process, Discourse: Preliminary Considerations on a Structural Curriculum Theory, MPI for Educational Research, Berlin, 156–159.
- [51] Jaeggi R, 2005, Alienation: On the Topicality of a Socio-Philosophical Problem, Suhrkamp, Frankfurt a. M., 168–170.
- [52] Ottomeyer K, 1974, Social Behaviour and Economics in Capitalism. Preliminary Considerations on the Systematic Mediation of Interaction Theory and Critique of Political Economy, PolitLaden Erlangen, Gaiganz, 268–271.
- [53] Becker H, 1973, Preface to the German Edition. Equal Opportunities, Rowohlt, Reinbek, 9–12.
- [54] Edelstein W, 1995a, Social Science Curriculum in Iceland: An Example of Developmentally Didactically Orientated Curriculum Construction. LLF-Berichte / Interdisziplinäres Zentrum für Lern- und Lehrforschung, thesis, University of Potsdam.
- [55] Oser F, 1990, Critique and Reconstruction: The Three Scientific Lives of Wolfgang Edelstein. Development and Learning: Contributions to the Symposium on the Occasion of Wolfgang Edelstein's 60th Birthday, MPI for Educational Research, Berlin, 87–94.
- [56] Frey K, 1975, Curriculum Handbook, Piper, Munich, 45–47.
- [57] Hameyer U, Frey K, Haft H, 1983, Handbook of Curriculum Research, 21–24.
- [58] Goodson IF, Hopmann S, Riquarts K, 1999, The School Subject as a Framework for Action: A Comparative Study of the History and Function of School Subjects. Supplement 7 of Bildung und Erziehung, Böhlau, Cologne Weimar Vienna, 30–31
- [59] Heer M, Heinen U, 2019, Hearing the Voices of the Subjects, Schöningh, Paderborn, 18–20.

- [60] Rumpf H, 1975, Introductory Clarifications of Curricular Technical Language. Curriculum Handbook, Piper, Munich, 60–69.
- [61] Brügelmann H, 1975, Strategies of Curriculum Reform. A Critical Review of Curriculum Work in the Länder of the FRG (dissertation), Tübingen, 80–83.
- [62] Knab D, 1975, Curriculum Reform at Centralised Institutes. Curriculum Handbook Vol. I, 345–351.
- [63] Hesse HA, Manz W, 1972, Introduction to Curriculum Research, Kohlhammer, Stuttgart, 19–22.
- [64] Menck P, 1975, Lesson Analysis and Didactic Construction, Scriptor, Frankfurt a. M., 31–35.
- [65] Edelstein W, 1974, Discursive or Ideological Legitimisation Through Science: On the Recent Discussion of Framework Guidelines. Neue Sammlung, 14(1974): 133–143.
- [66] Gruschka A, 1994, Civic Coldness and Pedagogy: Morality in Society and Education, 109–123.
- [67] Reich K, 1983, Curriculum Theories in the Field of Teaching and Its Didactics. Einführende Verdeutlichungen zur Curricularen Fachsprache, Piper, Munich, 1: 139–157.
- [68] Heydorn HJ, 1973, On Contradiction in the Educational Process. The Argument, 80: 1–12.
- [69] Heydorn HJ, 1979, On the Contradiction of Education and Domination. Bildungstheoretische Schriften, Syndikat, Frankfurt a. M, 109–111.
- [70] Heydorn HJ, 1980, Inequality for All: On the Redefinition of the Concept of Education. Bildungstheoretische Schriften, Syndikat, Frankfurt a. M., 133–137.
- [71] Tenorth HE, 1999, The Second Chance. Or: On the Validity of Critical Claims of 'Critical Educational Science', Kritische Erziehungswissenschaft am Neubeginn?!, Suhrkamp, Frankfurt a. M., 1999: 135–161.
- [72] Edelstein W, 2000, Learning World and Living World: Reflections on School Reform. Neue Sammlung, 40(2000): 369–382.
- [73] Edelstein W, 2008, Reflections on the Class Council: Education for Democracy and Responsibility. Die Ganztagsschule, 48.
- [74] Edelstein W, 1995b, Universal Functions in Particular Systems: A Developmental View of Educational Regulation in Closed Educational Systems. Pluralisms and Education: Current World Trends in Law, Policy, and Administration, MPI for Human Development and Education, Berkeley, 1995: 13–28.
- [75] Björnsson S, Edelstein W, Kreppner K, 1977, Explorations in Social Inequality: Stratification Dynamics in Social and Individual Development in Iceland. MPI for Human Development (Studien und Berichte, 38), Berlin, 18–21.
- [76] Edelstein W, Grozinger KE, Gruehn S, et al., 2011, Life Organisation Ethics Religious Studies: On the Foundation of a New School Subject. Analyses and Recommendations, Beltz, Weinheim/Basel, 45–49.
- [77] Edelstein W, Grözinger KE, Gruehn S, et al., 2001, Life Organisation Ethics Religious Studies: On the Foundation of a New School Subject. Analyses and Recommendations, Beltz, Weinheim, 118–123.
- [78] Edelstein W, 2005a, Reflections on the Pedagogy of Democracy. Demokratiekompetenz. Contributions from Political Science, Pedagogy and Political Education, Opladen, 106–111.
- [79] Edelstein W, Fauser P, 2001, Learning and Living Democracy. Expert Report on the Program of the Federal-Länder Commission for Educational Planning. Materials on Educational Planning and Research Funding, Bonn, 65–68.
- [80] Edelstein W, Beutel W, Edler K, et al., 2014, Democracy Education and School Reform. Schwalbach Ts., 70–73.
- [81] Edelstein W, 1989, The Development of Socio-Moral Meaning Making: Domains, Categories, and Perspective Taking. Beiträge aus dem Forschungsbereich Entwicklung und Sozialisation, Nr. 21/ES, MPI for Educational Research, Berlin, 107–110.
- [82] Edelstein W, 1993, Moral und Person, Suhrkamp, Frankfurt a.M., 20–23.
- [83] Edelstein W, 2005b, Morality in Context, Elsevier, Oxford, 33–36.

- [84] Edelstein W, Hopf D, 1973, Conditions of the Educational Process: Psychological and Pedagogical Research on Teaching and Learning at School, Klett, Stuttgart, 90–92.
- [85] Edelstein W, 1982, Perspectivity and Interpretation: Contributions to the Development of Social Understanding (Ed. with Monika Keller), Suhrkamp, Frankfurt a.M., 44–47.
- [86] Edelstein W, 1986, On the Determination of Morality: Philosophical and Sociological Contributions to Moral Research (Ed. with G. Nunne-Winkler), Suhrkamp, Frankfurt a.M., 19–24.
- [87] Benner D, Kemper H, 2007, Theory and History of Reform Pedagogy. Part 3.2: State School Reform and Reform Pedagogical School Experiments in the Western Occupation Zones and in the FRG, Beltz, Weinheim/Basel, 151–153.
- [88] Reichenbach R, 2017, Why Pedagogical Theory of School? Fragmente zu einer Pädagogischen Theorie der Schule. Educational Science Perspectives on a Void, 2017: 10–31, Beltz, Weinheim/Munich, 122–126.
- [89] Edelstein W, 2010, 'The Odenwaldschule Has Been Constitutive of My Identity'. 100 Years of the Odenwaldschule: The Chequered Path of a Reform School, VBB, Berlin, 138–157.
- [90] Edelstein W, Herrmann U, 1993, Potsdam Model of Teacher Training. Transformations of the German Educational Landscape: Learning Process with an Uncertain Outcome, Beltz, Weinheim/Basel, 199–217.
- [91] Edelstein W, 2002, Self-Efficacy, Innovation and School Reform: A Diagnosis of the Situation. Self-Efficacy and Motivational Processes in Educational Institutions, Beltz, Weinheim, 2002: 13–27.
- [92] Fend H, 1997, Dealing with School in Adolescence: Development and Loss of Learning Motivation, Self-Esteem and Empathy. Developmental Psychology of Adolescence in the Modern Age, 186–188.
- [93] Fend H, 2010, Educational Research from 1965 to 2008: A Contemporary Witness Report on Progress, Setbacks and Highlights. Beobachten Messen Experimentieren: Contributions to the History of Empirical Pedagogy/Educational Science, Bad Heilbrunn, Klinkhardt, 275–303.
- [94] Lehmann R, Peek R, Pieper I, et al., 1995, Reading Comprehension and Reading Habits of German Pupils, Beltz, Weinheim, 189–191.
- [95] Freudenthal H, 1975, Pupil Performance in International Comparison. Journal of Education, 21: 889–910.
- [96] Baumert J, Lehmann R, 1997, TIMSS International Comparison of Mathematics and Science Education. Descriptive Findings. Leske & Budrich, Opladen, 213–215.
- [97] Hoffmann D, Kolboske B, Renn J, 2014, 'Recognition Must Precede Application': Towards a History of the Kaiser Wilhelm / Max Planck Society. Berlin: Edition Open Access, https://www.mprl-series.mpg.de/proceedings/6/index.html.
- [98] Gross B, Hofbauer S, Keiner E, 2022, The 'Science of Education': Different Terms, Concepts, Cultures and Epistemologies? A Contribution to a Social Epistemology. SPES-Rivista di Politica, Educazione e Storia, 16: 19–37.
- [99] Tenorth HE, 2016, Educational Theory and Educational Research, Education and Basic Cultural Competences—An Attempt at Clarification, Also Using the Example of the PISA Studies. Empirical Educational Research. The Critical View and the Answer to the Critics, 2016: 45–71.
- [100] Tenorth HE, 2023a, Learning from Humboldt A Plea for Educational Theory-Based Educational Research. Wilhelm von Humboldt: 'Kulturwissenschaftliche Forschung zwischen Praxis, Theorie und Empirie der Bildung', Bad Heilbrunn: Klinkhardt, 166–168.

#### Publisher's note

Whioce Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.