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## Editorial

Die endgültige Durchsetzung des Prinzips „Nationalstaat“ im letzten Drittel des 19. Jahrhunderts war nur möglich, weil mit den ausgebauten und differenzierten Schulsystemen zwei widersprüchlich scheinende Prinzipien umgesetzt werden konnten, nämlich nationale Integration und soziale Differenzierung. Die Elementarschulstufe vermittelte der jüngeren Generation nationale *literacy* in Geschichte, Geografie, Singen und allen anderen Schulfächern und förderte mit außerschulischen Aktivitäten wie Schulreisen oder Exkursionen Zusammengehörigkeitsgefühl, während die Übergangsregimes in die gegliederte Sekundarstufe sicherstellten, dass soziale Differenzen möglichst gewahrt oder gar verstärkt werden konnten. Während die Soziologie und mit ihr die bürokratische Statistik halfen, diese Differenzen begrifflich zu fassen („Arbeiterkind“, „Landmädchen“) und ihr Dauer zu verleihen, standen die Medizin und die aufkommende Psychiatrie für diejenigen Kinder bereit, bei denen fraglich war, ob sie „normal“ genug seien, in die Elementarschule einzutreten. Die Vorstellung von Normalität im Zusammenhang mit nationaler Integration hatte so ihren Preis, wie im Beitragsteil *Education and Psychopathologization 1870-1940* deutlich wird, der von den beiden Gasteditoren Patrick Bühler und Michèle Hofmann zusammengestellt wurde.

Das Vertrauen in die Nützlichkeit oder zumindest den Sinn der Wissenschaften wuchs in der Folge und führte nach den Kriegserfahrungen im 20. Jahrhundert dazu, zu glauben, Probleme seien nur dazu da, um mit wissenschaftlichen Mitteln und entsprechenden Maximen oder Technologien gelöst zu werden. Politische Debatten seien Dank der Wissenschaft mittlerweile überflüssig, meinte etwa Daniel Bell 1960 in seinem Bestseller *The End of Ideology* und Francis Fukuyama 1992 in *The End of History* im Anschluss an das Ende des Kalten Krieges. Im selben Jahr veröffentlichte die OECD den ersten Report *Education at a Glance* mit kulturell indifferenten vergleichenden Statistiken, und knapp zehn Jahre später folgte in selber Manier der erste PISA-Report, der deutlich machte, wie die empirische, problemorientierte und politiknahe Psychologie mit Mitteln der vergleichenden Statistik das Feld der Erziehung erobert hatte. Bildungspolitiker wollen ihre Entscheide aufgrund glasklarer Fakten, *evidence-based*, fällen, war die Legitimation für die Umgestaltung der traditionellen universitären Pädagogik, die kaum wusste, wie ihr geschah.

Und dann das: Zunächst stellte sich überhaupt keine Evidenz von *evidence-based* Politik ein, dafür stellte man fest, dass die meisten empirischen psychologischen Untersuchungen nicht reliabel sind und anschließend wurde klar, dass sich die Politiker einen Deut um Fakten – so sie denn tatsächlich welche wären – scherten: Irrationalität, lustvolles Machtstreben und beliebige Interpretation dominieren die Politik und nicht die Datensätze und Statistiken.

Um die expertokratische Allianz von empirisch-psychologischer Bildungsforschung und Politik steht es nicht gut. Das ist kein Grund zur Schadenfreude, sondern zum Nachdenken. Deswegen hat die Zeitschrift *Bildungsforschung. International Journal for the Historiography of Education* die gegenwärtige Situation zu beschreiben versucht und zehn Kolleginnen und Kollegen eingeladen, ihre Gedanken mit der Leserschaft zu teilen. Die Diskussion bringt damit eine wissenschaftliche Tugend wieder ein, die dem „cult of facts“ erlegen war (Edward Hallett Carr 1961), der dem Credo folgte: „Without data you're just another person with an opinion“. Argumente sind gar nicht so schändlich, wenn man wissenschaftlich nicht die Frage der Methode in den Vordergrund rückt, sondern die Bedeutung der reflexiven Qualität bei der Formulierung von Forschungsfragen. Man merkt dann schnell, dass alles radikal historisch und damit kulturellen Deutungsmustern verpflichtet ist, die Institutionen und die Ideen, aber auch die Forschenden und ihre Vorlieben.

Die Redaktion

## Editorial

The final realization of the concept of the “nation-state” in the last third of the 19<sup>th</sup> century was possible only because with the extended and differentiated school system two seemingly contradictory principles could be implemented, namely, national integration and social differentiation. Primary education imparted national literacy to the younger generation in history, geography, singing, and all other school subjects and promoted, through out-of-school activities like school trips and excursions, a feeling of belonging. The transition regimes to the differentiated (tracked) secondary education pathways ensured that social differences were preserved or even reinforced. Sociology and thus also bureaucratic statistics helped to capture these differences conceptually (“working-class child,” “country girl”) and to bestow permanence on them, and medicine and the emerging field of psychiatry were in place for those children for whom it was questionable whether they were “normal” enough to attend elementary school. The idea of normality in connection with national integration thus had costs, as becomes clear in this issue's *Articles* section, *Education and Psychopathologization 1870-1940*, which was put together by guest editors Patrick Bühler and Michèle Hofmann.

Trust in the usefulness, or at least the purpose, of science subsequently grew and, after the war experiences of the 20<sup>th</sup> century, led to the belief that problems are only there to be solved with scientific methods and corresponding maxims or technologies. Policy debates had become unnecessary thanks to science, according to Daniel Bell in 1960 in his bestseller, *The End of Ideology* and Francis Fukuyama in 1992 in *The End of History* in connection with the end of the Cold War, for example. Also in 1992 the OECD published the first *Education at a Glance* report, with its culturally indifferent comparative statistics, and it was followed just 10 years later and in the same way by the first PISA report, which made clear that empirical, problem-centered, and policy-oriented psychology with comparative statistics methods had conquered the field of education. Education policy makers want to make their decisions based on crystal clear facts, “evidence-based,” was the legitimization for the transformation of traditional academic field of education, which hardly knew what was happening.

And then this: At first there was no evidence of evidence-based policy at all. Instead, it was found that most of the empirical research studies in psychology are not reliable, and then it became clear that policy makers could not care less about facts – if there were in fact any. Irrationality, lusty striving for power, and arbitrary interpretation dominate policy, not datasets and statistics.

The expertocratic alliance between policy and empirical psychology research on education is going badly. That is not a reason to gloat but to think. To this purpose, the *Bildungsforschung. International Journal for the Historiography of Education* attempted to describe the current situation and invited 10 colleagues to share their thoughts with

the readers. The *Discussion* section thus brings in afresh a scientific virtue that had succumbed to the “cult of facts” (Edward Hallett Carr 1961) that followed the credo, “Without data you’re just another person with an opinion.” Arguments are not at all so disgraceful, if instead of focusing scientifically on the question of methods we emphasize the importance of the reflective quality when formulating research questions. We then notice very quickly that everything is radically historical and thus bound to patterns of cultural interpretation – the institutions and the ideas, but also the researchers and their preferences.

The editors

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*Patrick Bühler and Michèle Hofmann*  
(Guest editors)

## Education and Psychopathologization 1870-1940

### Erziehung und Psychopathologisierung 1870-1940

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“The notion that a disease can be explained only by a variety of causes is precisely characteristic of thinking about diseases whose causation is *not* understood. And it is diseases thought to be multi-determined (that is, mysterious) that have the widest possibilities as metaphors for what is felt to be socially or morally wrong.”

Susan Sontag

In response to the question “What is health?”, one often quotes the French surgeon René Leriche: “Health is life lived in the silence of the organs” (cited in: Canguilhem 1991, 91). However elegant this saying might be, for two centuries, medicine has been aware that the concept of health is more complicated than this, because diseases can be diagnosed in spite of the silence of the organs. In the course of the 19<sup>th</sup> century, physicians began to use new instruments and methods to examine their patients. Statistics and imaging techniques were arguably the most “powerful” of these instruments and methods because they allowed abnormalities in the human body and mind to be found that were previously not “visible”.<sup>1</sup> This resulted in a broadening of the notion of disease, which had hitherto been based primarily on the patient’s feeling of unease or pain. From then on, the “normal” functioning of the body and mind was defined as the main condition of health, whereas “abnormal” functioning, even if it was a “silent” abnormality, was pathologized.<sup>2</sup> Sickness and health, or abnormality and normality, were no longer defined primarily by the individual person based on the awareness of their own body and mind, they were now attributed to people by experts, by science. This special section focuses on this transformed perception of (ab)normality and its implications. In dealing with a pathologization process that started in the 19<sup>th</sup> century, it outlines the characterization of school as an unhealthy place that makes children ill, which,

1 As Niklas Luhmann emphasized, physicians act based on what they “see” and what they “know” (Luhmann 1990, 183). In the 19<sup>th</sup> century, new instruments such as the stethoscope (1816), the kymograph (1847), the ophthalmoscope (1851), the binaural stethoscope (1852) and the sphygmomanometer (1881), new microscope designs, such as Köhler illumination (1893), and finally X-rays (1895) opened up new perspectives to what physicians could see, hear, and therefore know and do (see Hogle 2007; Porter 2001; Warwick 2005).

2 For disease as a culturally, historically, and regionally defined phenomenon, see Taeger 2013.

in turn, triggered a new interest in the abnormality of children – or one could say: which led to the creation of “the abnormal child” in the first place. While initially, physical abnormalities were of interest, attention subsequently shifted to mental abnormalities. In the 19<sup>th</sup> century schools were perceived as unhealthy places. Classrooms were described as “narrow, dark, musty, unhealthy chambers”, in which the children were “crowded together” (Fetscherin 1834, 58), causing the passing on of vermin and contagious diseases from one pupil to others. But not only vermin and contagious diseases, which were both brought to school by the pupils themselves, posed a problem. In the second half of the 19<sup>th</sup> century, doctors discovered actual “school diseases”: illnesses that were believed to be caused by school attendance itself. In particular these included myopia and scoliosis, but also headache, nosebleed, or indigestion were seen as “school diseases” (see, e.g., Baginsky 1877, 389–490). Starting in the 1860s, numerous physical examinations of thousands of schoolchildren were conducted throughout Europe and the United States (see, e.g., Imboden 2003, 38ff.; Meckel 2007). Because myopia and scoliosis were considered the most widespread “school diseases”, particular attention was paid to the children’s eyes and their backs (see Hofmann 2015). In 1864/65 Hermann Cohn, an ophthalmologist from Breslau, conducted a study that was to become famous for its large number of test subjects (Cohn 1867). As he pointed out himself, Cohn was not the first to undertake eye examinations with schoolchildren. He referred to studies from England, Germany, France, and Austria that had been carried out since the beginning of the 19<sup>th</sup> century. But only his own study, Cohn claimed, made use of the law of large numbers (*ibid.*, 15). With the assistance of teachers, Cohn examined the eyes of more than 10 000 schoolchildren of different ages, and he concluded that the longer pupils attended school, the more often they suffered from myopia. Visual acuity was a scientifically defined norm (expressed as a numeric value) that was measured using eye charts. The chart developed in 1862 by the Dutch ophthalmologist Herman Snellen (Snellen 1862) rapidly became the global standard and was also used by Cohn during his study. Children’s eyes that had a visual acuity between 1.0 and 1.75 were considered “normal” (see Imboden 2003, 141f.). All numeric values that did not lie within this range were considered “abnormal”. Values below 1.0 meant that the child in question suffered from myopia. Thus, “abnormality” became something that was primarily defined by medical experts – instead of by the individual’s subjective perception – and that could be measured with precision using instruments and tools (see Boser/Hofmann 2017). Cohn’s large-scale study was met with great interest and was widely and internationally discussed.<sup>3</sup> Over the following decades, many studies were carried out along the lines of Cohn’s examination. In 1877, Emil Emmert, a lecturer for ophthalmology at the University of Berne, published the results of the eye examinations he had conducted with more than 2000 children in the Swiss cantons of Berne, Solothurn, and Neuchâtel (Emmert 1877). As a preliminary point, Emmert listed as many as 26 national and international studies with more than 50 000 tested subjects. Only a decade later, in a speech delivered at the University of Berne in 1886, the Bernese professor of ophthalmology Ernst Pflüger mentioned 100 studies with now considerably more than 100 000 test subjects (see Pflüger 1887, 4). These studies supported Cohn’s conclusion that the longer pupils attended school, the more often they suffered from myopia. As for scoliosis, a study published in 1865 by Hans Conrad Fahrner, a physician in Zurich, attracted a great deal of attention (Fahrner 1865). Fahrner had examined the different postures of

pupils while they were writing using an “adjustable desk and a piano stool” (*ibid.*, 39) and by observing them at school. He concluded that three or four out of ten children constantly adopted a poor posture and therefore in many cases developed scoliosis during their time at school. In 1879, Max Fankhauser, a physician in Burgdorf, arrived at the same conclusion. He referred to national and international studies with hundreds of schoolchildren, which concluded that the longer pupils attended school, the more often they suffered from scoliosis (see Fankhauser 1879, 203f.). The Bernese orthopedist Felix Schenk also published a study on the connection between the pupils’ writing posture and the occurrence of scoliosis (Schenk 1885). Whereas Fahrner had used an adjustable desk and a piano stool, Schenk applied more sophisticated measuring instruments for his study. These instruments that he had designed himself included a so-called thoracograph that was used to obtain an image of the spine while the child was standing up. Schenk also reached the conclusion that many pupils suffered from scoliosis due to their poor writing posture that was caused by badly designed school furniture. Thanks to his measuring instruments, Schenk was able to scientifically define what he considered to be a poor posture. Thus, the “abnormality” that Schenk set out to measure was created by his instruments in the first place: It was Schenk’s data on poor posture that created the notion of a poor posture (Hofmann 2015, 94f.). Due to the statistical data gathered on the basis of numerous studies with thousands of children and not least because of apparatuses such as Schenk’s thoracograph, physical abnormalities became “visible”. Although studies on myopia and scoliosis were carried out at a local level, mostly in individual cities, they had a global impact, because their results were discussed at international hygiene congresses and world fairs that were held periodically in the second half of the 19<sup>th</sup> century (see Hofmann 2013). The study results corroborated the hypothesis that school attendance was harmful to children’s physical health. The studies identified insufficient lighting conditions in the classrooms, poorly printed schoolbooks, sitting for long periods, and the children’s poor postures resulting from poor school furniture as the main causes for the damage to the children’s eyes and backs. These scientific findings and the health-related knowledge resulting from the studies provided the basis for demands for improvement measures, thus leading to the establishment of the international school hygiene movement (see, e.g., Bakker/Beer 2009; Förster 2014; Harris 1995; Meckel 2013; Moreno Martínez 2006; Noel 2009; Parayre 2011; Stroß 2000). To prevent myopia, scoliosis, and other “school diseases”, school hygienists all over Europe and the United States propagated a large number of measures that were to be implemented in everyday school life. These included improved lighting in classrooms, good print quality for schoolbooks, the reduction of time spent sitting, gymnastic exercises during lessons, the correct positioning of exercise books on the desk, devices to restrain the pupils in a correct posture (*Geradehalter*), and ergonomically designed school furniture. The deficiencies found in school furniture as a result of the medical studies conducted with pupils and the resulting demands triggered a veritable boom in the development of school desk systems in the late 19<sup>th</sup> and early 20<sup>th</sup> century, including desks with a variety of seating systems, adjustable, tiltable, and moveable desks (to facilitate floor cleaning) (see Herman 2011; Hnilica 2003; Kost 1985; Moreno Martínez 2005).<sup>4</sup> In the second half of the 19<sup>th</sup> century, improvements of schools – improved lighting, better desks, more breaks, or exercises, – were advocated in order to fight “diseases” such as myopia, scoliosis, headaches, or nosebleed. In a certain sense, the schools themselves underwent med-

<sup>3</sup> For the study’s reception in the United States, see Meckel 2007, 189ff.

<sup>4</sup> For a “historiographic synthesis” of the “medicalization of education”, see Petrina 2006.

ical treatment, since tired pupils with bad eyesight, stoops, or headaches, were perceived as “symptoms” of “sick” schools: School hygiene in this regard meant, so to speak, to cure “ill” schools of their “unhealthy” furniture, their “pathogenic” architecture, and of their lessons that were a “health hazard”. However, by around 1900, hygienists gradually came to realize that these ailments were probably not caused by school attendance after all (see Hofmann 2016, 79ff.). With this important “change in perspective” (Imboden 2003, 55), the medical task assigned to the education system was also transformed: School hygiene became pupil hygiene (see, e.g., Umehara 2013, 31ff.), the “school physician” (*Schularzt*) turned into a “physician for pupils” (*Schülerarzt*) (Walther 1937, 10). School hygiene began to focus on children and adolescents rather than on infrastructure and teaching units. In a way, schools turned into clinics with the goal of curing unhealthy children.<sup>5</sup> To talk about “school diseases” in the way the expression “was used in the past, meaning diseases that were caused by schools” no longer made any sense, as Gustav Poelchau, a school physician in Charlottenburg, emphasized in 1926 (Poelchau 1926, 98).

A second important change took place around 1900. While before the end of the 19<sup>th</sup> century, school hygiene had primarily paid attention to the body, now the mind was becoming more and more important: School hygiene was turning into “mental hygiene” (Zulliger 1938) as well.<sup>6</sup> Headaches, for example, were no longer considered a “school disease”, but became one of the “important signs” of “nervousness” and “neurasthenia” that afflicted children and adolescents (Wildermuth 1904, 50). The end of the 19<sup>th</sup> century saw the beginning of a wealth of publications on the topic, with papers entitled, for example, “nervousness and education” (Pelman 1888), “nervousness and girls’ education” (Ufer 1890), “mental disorders in schools” (Ufer 1891), the “nervousness of pupils” (Schuschny 1895) (see Bühler 2015, 340f.). Poelchau’s *Instructions for school physicians*, for example, not only dealt with mouth, breathing, eye, cardiac or lung diseases (Poelchau 1926, 99ff., 122ff.), but also with the “nervous system and psyche”, “intelligence disorders”, and “sexual aberrations” (ibid., 118ff., 148). As Heinrich Hanselmann put it in his influential textbook on special education in 1930, it is “an important fact that roughly at the beginning of this century, a new appraisal of emotional life established itself through psychiatry”: “French psychiatrists (Charcot, Janet) and the Austrian neurologist Freud in Vienna have set off a ‘movement’, that has ever since led to a characteristic change of thinking of wide circles” (Hanselmann 1930, 21f.). What was meant by the “characteristic change” can easily be seen from the contents of Hanselmann’s own textbook. Half of his monograph is dedicated to neuropathic, nervous, and so-called difficult children.<sup>7</sup>

The new interest in the mental health of school children was a widespread phenomenon and must be seen as part of a general “psychopathologization” of society at the end of the 19<sup>th</sup> century, when psychiatry started “its long march from the asylum to Main Street” (Shorter

5 Simultaneously, school hygienists took more and more interest in tuberculosis. Unlike the illnesses that had been identified as “school diseases” in the second half of the 19<sup>th</sup> century, tuberculosis did not manifest itself in everyday school life. Tuberculosis, however, was the dominant problem of regional health policies around 1900, due to its high death rate among the adult population. Against this backdrop, school hygienists were able to draw a great deal of attention to tuberculosis, even though the illness was rare amongst children and their demands for school healthcare focused on prevention and early detection of diseases. This led to the establishment of comprehensive school physician services, with medical examinations of all pupils at regular intervals (see Hofmann 2016, 90ff.).

6 For the history of mental hygiene, see, e.g., Cohen 1999, 185ff.; Pols 2010; Ritter 2009, 157ff.

7 For France, Great Britain, and the U.S., see, e.g., Jones 2002; Quincy-Lefebvre 1997; Stewart 2013; Toms 2013.

1997, 180). Forensic psychiatry, military psychiatry, and child psychiatry evolved.<sup>8</sup> This “expansion” coincided with a new and general upswing of psychopathology. Before the 1880s, psychosis and other severe forms of disorders were the daily business of asylum psychiatry. Now, comparatively milder forms of neurosis – such as neurasthenia, hysteria, and nervousness – started becoming more widespread. With these new forms of mental disorders therapeutics also changed: If neuroses were functional, psychogenic troubles, they could only be treated with psychological methods. The growing importance of neuroses and the development of psychotherapy – hypnosis, suggestion, psychoanalysis – coincided (see, e.g., Dowbiggin 2011; Gijswijt-Hofstra/Porter 2001; Martynkewicz 2013; Radkau 1998; Shorter 1993; Schröder 1995; Shuttlesworth 2010, 16ff.). Of course, this “transition to a therapeutic culture” (Dowbiggin 2011, 133) cannot be isolated from the emergence of welfare states and the development of statistics, social sciences, and social services (see, e.g., Hacking 2008; Lengwiler/Madarász 2010; Ruckstuhl 2011). Generally, in the military, in courts of law, in criminology, in social work, in art and literature, and in theology or in the treatment of “vagabonds”, of poverty, or of “marriage problems”, a new scientific “narrative” that explained all sorts of “deviances” as pathological was added to the traditional interpretation of “abnormality” as sinful, as morally wrong: The fallen man became an inferior one (Becker 2002, 21ff., 260ff.; see, e.g., Althammer 2013; Guillemain 2006; Illouz 2008; Putz 2011). Although the preoccupation with mental health was in appearance rigorously scientific, in retrospect it frequently reveals itself as strictly moral: Because psychopathology can rarely rely on “biological markers” (Heinz 2014, 29), mental disorders and psychological troubles have traditionally very frequently been used as a diagnosis for “what is felt to be socially or morally wrong” (Sontag 2002, 62; see also, e.g., Gilman 1988; Roelke 1999).

At the end of the 19<sup>th</sup> century, it was against this backdrop that a “rupture”, a “revolution in the language of educational discourse” began. Whereas before, the “key words” were “character, will, virtue, discipline, morality”, now a new “rhetoric of ‘developmentalism’” gained acceptance: The old “moral-intellectual discourse of education” was overlaid by a new “therapeutic discourse of education”, “which privileges the vocabulary of personality, psychological adjustment, and maladjustment, views children’s behavior problems as symptoms, and which conceives the school as a kind of psychiatric clinic” (Cohen 1999, 95f., 114, 229; see, e.g., Göppel 2010; Stechow 2004, 155ff.). Now, children were no longer just lazy or inattentive, but possibly ill: “sin became sickness” (Bakker 2010, 401). This new “educational discourse” was carried out not only with a new “language”, but also in new practices. This meant that now, education could be compared to medicine, because schooling now also consisted of “diagnosis” and “practical treatment”, as one of the pioneers of this approach, Alfred Binet, underlined (Binet 1912, 34). A colleague of Binet’s from Geneva, Édouard Claparède, used the terms “diagnosis” and “therapy” to make the same comparison (Claparède 1905, 23ff.).<sup>9</sup> With this conception, a new “second-order” education began to emerge: “Avant d’apprendre, il faut apprendre à apprendre. Les problèmes rentrant dans cette catégorie sont relatifs à l’éducation des sens, des mouvements, de l’esprit de l’observation, de l’attention, du jugement, du raisonnement” (ibid., 20). Henceforth, the task of schools was not just to instruct children, but also to check whether they were mentally and physically able to follow the lessons and

8 For Switzerland, see, e.g., Germann 2004; Lengwiler 2000; Schaffner-Hännly 1997.

9 For the history of this new scientific approach in education, see, e.g., Boardman Smuts 2006; Depaep 1993; Dudek 1990; Turmel 2008.

to help them if they had problems (see Bühler 2017). Internationally two of the major institutional “symptoms” of this new development were the creation of special education and the introduction of school physicians and school psychologists (see, e.g., Copeland 1999; O’Brien 2013; Jackson 2000; Ruchat 2003; Vial 1990). With Michel Foucault, one can suspect that schools not only employed the new psychopathological knowledge, but by doing so also played a crucial role in diffusing this new knowledge (Foucault 2003, 186ff.). Whereas the beginning of the pathologization process in question – the body-related part – is well researched, so far, the history of education has only paid little attention to the “psychopathologization” of education, its functions, and its “metaphors”, which is astonishing, considering the fact that discussions on ADHS or inclusive education show how relevant the topic still is. The papers of this special section focus on the beginning of this transnational development by studying the effects of the new preoccupation with the mental health of children, its logic, the discourses it sparked, the different techniques (psychometric testing, etc.) employed, and the actors, institutions, disciplines, and assumptions involved. In short, the special section is interested in the creation of “the problem child” in the late 19<sup>th</sup> and early 20<sup>th</sup> century: “Our current concerns about child sexuality, or nervous breakdowns in the face of educational pressures, are prefigured in this era” (Shuttleworth 2010, 3).

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