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**ROUNDTABLE: 'CHILDHOOD, MATERIAL CULTURE AND CULTURAL  
KNOWLEDGE'**

**ABSTRACT**

This roundtable discussion takes the diversity of discourse and practice shaping modern knowledge about childhood as an opportunity to engage with recent historiographical approaches in the history of science. It draws attention to symmetries and references among scientific, material, literary and artistic cultures and their respective forms of knowledge. The five participating scholars come from various fields in the humanities and social sciences and illustrate historiographical and methodological questions at a range of examples: Topics include the emergence of children's rooms in US consumer magazines; research on the unborn in nineteenth century sciences of development; the framing of autism in nascent child psychiatry; German literary discourses about the child's initiation in scripture; and the socio-politics of racial identity in the photographic depiction of African American infant corpses in the early twentieth century. Throughout the course of the paper,

childhood emerges as a topic particularly prone to interdisciplinary perspectives that consider the history of science part of a broader history of knowledge.

## TEXT

With the rise of the human sciences in the late nineteenth century, children became objects of empirical scientific investigation. A multitude of new disciplines, including paediatrics, child studies, child psychology, pedagogy, and ergonomics, inaugurated experimental and psychophysical exploration: the performance of children was measured with new technological devices such as the ergograph and the *Ästhesiometer*; the working of their minds analysed in drawings and toy-usage; their learning abilities assessed in laboratories and experimental settings; their behaviour disciplined through educational programs and ergonomically designed working environments.<sup>1</sup> This developing scientific and material culture focused on the child was mirrored, multiplied and countered in artistic, cultural and social discourses; be it in the booming genre of school-literature, reform pedagogical projects, or political agendas of '*Staatsbürgerliche Erziehung*,'<sup>2</sup> knowledge about children figured centre stage in the public sphere.<sup>3</sup>

The diversity of discourse and practice shaping modern knowledge about childhood makes childhood a test case for recent historiographical approaches and methodological discussions in the history of science. In particular, it lends itself to histories of knowledge that no longer conceptualize science as a distinct enterprise but rather as a cultural practice that does not necessarily differ fundamentally from other cultural practices, including literature, arts and even household activities.<sup>4</sup> However, approaching scientific and cultural practices as part of an interdisciplinary

history of knowledge poses particular methodological challenges. How do we deal, for instance, with a diverse set of analytic tools and how do we relate different forms of knowledge to each other? What kind of historical claims can be made on the basis of literary (i.e. fictional) texts and objects of art? How exactly do these sources relate to scientific and medical discourses and practices? And, how can we assess the materiality and mediality of knowledge production?

The following conversation addresses these and other questions through the example of the history of childhood in Western Europe and the USA since the late nineteenth century. It draws on discussions and results of the conference ‘Childhood – Between Material Culture and Cultural Representation’, which took place in May 2014 at Princeton University. The participants are Caroline Arni (University of Basel), a historian of science; Daniel Thomas Cook (Rutgers University), a child studies scholar; Davide Giuriato (University of Zürich), a German literature scholar; Novina Goehlsdorf (Humboldt University of Berlin), a scholar in cultural history and theory; and Wangui Muigai (Princeton University), a historian of medicine. The questions were asked and the article edited by Felix Rietmann (Princeton University), a historian of science and medicine, and Mareike Schildmann (Humboldt University of Berlin), a German literature scholar.

***F.R., M.S.:*** To open the discussion, we would like to start with a basic question that lies at the heart of recent methodological concerns but is rarely directly addressed: how can we understand the relationship between material culture, including objects, material practices, and spatial set-ups, on the one hand, and theoretical concepts, images and ideas of childhood on the other hand?<sup>5</sup> Is the distinction between the

material and the conceptual helpful for understanding, both historically and theoretically, the generation of knowledge about childhood?

If we consider the scholarly field of childhood studies, we see a distinctive openness to material and medial conditions of both experience and representations of childhood.<sup>6</sup> Dan, your work, for example, explores various aspects of material culture in the history of childhood. Your contribution to the conference specifically focuses on spatial configurations: you argue, based on a reading of consumer periodicals and architectural designs, that the emergence of children's rooms in the USA in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries went hand in hand with the rise of new moral attitudes towards children. Could you elaborate on how you approach architectural drawings, and how these drawings and your analysis of spatial settings inform your evaluation of conceptual changes in the history of childhood?

**D.C.:** My intent, at this stage of thinking, centred on discerning the broad contours of how something that may be identified as a 'child's room' came into social being. The vast array of social arrangements in the United States in the 19<sup>th</sup> century complicates matters quite a bit—i.e., urban and rural geographies; the industrially developed Northeast in contrast the developing Midwest and West; the American South undergoing a long, enduring transformation from plantation, slavery economies and civil war. Hence, it is important to keep in mind that the 'child' occupied multiple social locations as regards to these and other configurations. That said, I decided initially to work on relatively easily accessible public sources from consumer-oriented periodical magazines, specialty magazines on home furnishings and architecture, and newspapers to glean a sense of when and how the 'child's room'

arose as an object of discourse in and for an arising middle class. At issue in this discussion, then, is how writers of public advice framed the contents, purpose and context of 'children's rooms', understood as domestic spaces (as opposed to school rooms, for instance). The study draws upon these materials as a way of assessing how the child's room arose as a cultural object to be negotiated and shaped through discourse as well as through paint, rugs, objects and design.

For the time period covered in the paper for the conference, the child's room is most notable by its absence in architectural design, rather than by its presence. Specifically dedicated nurseries had been in evidence in English, Continental and New World context in homes occupied by the well-to-do, but few renderings of rooms or domestic spaces specifically designated for children beyond the infant stage until the early 20<sup>th</sup> century. Farmhouses, country houses, city houses and apartments were not designed to accommodate children, and definitely not designed to accommodate childhood. Rather, children of various ages were fitted into existing structures occupying the smaller bedrooms, side rooms and lofts, often sleeping many to a room. For example, the 1850 pattern book on country houses by Alexander Jackson Downing, noted architect and landscape designer, included suggested space for a nursery on the principal floor to assist the women (or nursemaid) in taking care of infants.<sup>7</sup> It is not until the early 20<sup>th</sup> century in the US context that rooms for children begin to appear in design renderings for newly-built homes<sup>8</sup> and it isn't until after World War II that a consideration of children—their 'needs,' 'wants' and activities—come to be incorporated into the consideration of the overall social and functional shape of domestic spaces. Figure 1, taken from a consumer magazine in 1905, offers an early example of a designated 'child's room',

purposefully incorporated into the redesign of living space in a house converted from a stable.

Fig. 1. Floor plan for converted stable showing child's room on the second floor.

*House & Garden* (September 1905), p. 55.

When specific rooms in the home had not regularly been assigned to children (boys or girls specifically), one is in a position to observe an on-going process of the social definition of spaces, of children and childhoods and of their intersections and interactions. Writings in consumer-oriented publications from the 1860s to 1910s increasingly attend to configuring childhood spatially and morally with regard to the 'proper' spaces and their furnishings within the physical home and thus, I argue, in relation to social life generally. The notion that the child 'needs' its own space for aesthetic experience and pedagogy found another, supplementary function—that of providing the developing child an arena, in which, in a sense, to auto-cultivate without the interference of outmoded, parental directives. Realize, these discourses should be approached as ideological and aspirational, rather than simply as statements of fact. The point is that architectural drawings, in the period covered, speak at once to the cultural momentum of an absence and the moral projection of a new presence. The general implication revolves around the ways in which emergent recognitions of the 'child' and of childhood engage in mutual definition and fabrication at moral, social and spatial registers.

**F.R., M.S.:** Wangui, the role of material environments in shaping ideas about childhood also informs your research on the history of African American childhood in the early twentieth century. How do considerations of material and visual culture figure in your work?

**W.M.:** I share Dan's interest in material and visual culture, but I think that the African American context affords a particular view on symbolic aspects linked to the socio-politics of racial identity.

As Dan has mentioned, at the turn of the century, Americans struggled to understand what children's lives, livelihoods, and deaths meant in an increasingly commercial and urban world: a network of individuals and institutions, including social reformers, charities, medical associations, and public agencies, established programs to protect the economically 'worthless,' but emotionally 'priceless' child.<sup>9</sup> Calls to 'save the babies' filled black and white newspapers alike, further endorsing national and local efforts to safeguard young lives.

However, African American infants and children occupied an ambiguous position within these movements. They stood in the crosshairs of conflicting efforts to fiercely protect children's lives, efforts to maintain racial segregation, and threats of racial violence. Blacks in the South and North could, for instance, only gain access, if at all, to certain hospitals and maternal and infant health services. Black political leaders responded with conflicting views. On the one hand, activists such as W.E.B. Du Bois embraced positive eugenic positions, encouraging members of the race to build healthy families.<sup>10</sup> On the other hand, many African Americans questioned and challenged the underlying assumptions of the Progressive era campaigns. Through a

range of media – short stories, poems, plays, and memoirs – African American women such as Georgia Douglas Johnson, Nella Larsen, Angelina Weld Grimké and Mary Church Terrell, argued that, for black infants, being ‘saved’ still meant facing a life of racial discrimination and violence. Such protests linked concerns about infant’s lives to the hardening of Jim Crow laws and increased attention to and surveillance of women’s reproductive bodies.<sup>11</sup>

Visual and material sources offer additional perspectives on these politics of childhood and racial identity. One example comes from the rise of African American funeral homes and circulation of funeral portraits. In the early twentieth century funeral homes emerged as the central site for embalming, casket viewing and ceremonies; funeral directors no longer travelled to individual homes to care for the deceased, but instead worked out of parlours where they coordinated the transport, preparation and display of bodies from hospital to parlour to cemetery.<sup>12</sup> Families made use of this site to visit and take final photographs of their deceased.<sup>13</sup>

James Van Der Zee’s Harlem photographs from the 1920s and 1930s portray some of these families and the ways they wanted to memorialize their children. Through deliberate choices in attire, backdrop, posture, material objects (toys, clothes, household furniture) and facial expression, as well as photomontage techniques, Van Der Zee’s photographs of deceased infants projected a dignified image of African American mourning rituals.

Figure 2: James Van Der Zee, Owen Dodson, and Camille Billops, *The Harlem Book of the Dead* (New York: Morgan & Morgan, 1978), p. 37.



While these portraits were set in funeral homes, they maintained the appearance of intimate family portraits. Underneath their often highly stylized aesthetics, the photos pointed to the harsh realities that African American families living in densely populated urban neighbourhoods faced. According to Van Der Zee, 'Most of these babies died of pneumonia; chest gets filled up with colds because they were living in cold flats. It was a very common thing in those days for people to be without heat.'<sup>14</sup> And while Van Der Zee refrained from characterizing his clients as extremely poor or wealthy, they were able to afford his \$35 photographs at a time when a black family living in Harlem earned an average \$25 per week and paid \$40 per month for rent.<sup>15</sup> At the same time, the photographs reveal how black families sought to demonstrate their social status. African American parents strove to establish middle class lifestyles in neighbourhoods like Harlem, and Van Der Zee's emotionally charged depictions emphasized these families' efforts to maintain poise and their tenuous social position, in the face of death.

This convergence of material culture and race consciousness is evident not only in the context surrounding the construction of the photographs, but also in how they were displayed. Visual objects, particularly photographs, of African American children are part of a long history of representing the political stakes of African American freedom and destiny.<sup>16</sup> And as Michelle Mitchell has argued, the placement of 'certain forms of material culture within domestic spaces' such as books and coloured dolls in African American homes were symbols of racial progress as much as they were tools for self-education.<sup>17</sup> The circulation and exhibition of funeral photographs – whether privately kept, prominently displayed in the home, or mailed to relatives – conveyed a family's losses as well as their aspirations and

achievements. In other words, the photographs symbolically maintained the materiality of the child and I use them to establish a link between the politics of race survival and the visual and material culture of childhood, African American life, and death.

**F.R., M.S.:** Caroline, while Dan and Wangui both explore the relationship between material cultures and social identities (concerning children in the American middle classes and African American communities, respectively), your work addresses questions about the generation of knowledge about childhood in science and medicine. In this context, your study of the history of the ‘pre-natal’ investigates the relationship between particular research practices and broad conceptual changes. Drawing on the work of Reinhart Koselleck, you argue that a shift in the temporal structure of the concept of the ‘unborn’ is key for understanding research in nineteenth century sciences of development. How do you relate this conceptual change to scientific and medical practice?

**C.A.:** Before I turn to the question of research practice, let me give some background about how I got interested in the ‘prenatal’ or ‘antenatal’. It came to my attention in the work of the French alienist Charles Féré who, in the 1880s, turned to gestation in the context of his interest in ‘degeneration’. Following up on the tradition in France, Féré understood morphological and functional anomalies in the child as being caused by toxic milieus of any kind, interfering with the hereditary transmission of traits or, rather, pathologically transforming transmission.<sup>18</sup> Within this framework, he experimentally combined research on congenital malformation with research on

congenital pathology by conceptualizing both as injuries to development caused by environmental factors such as malnutrition or toxins like alcohol but also a pregnant women's mental state. Féré's key conclusion was that in defining the injury and its effect, the specific nature of the agent did matter, but even more so the time of its occurrence during gestation.<sup>19</sup> When the Scottish gynaecologist John William Ballantyne subsequently lanced a novel medical sub-discipline called 'antenatal pathology' he relied heavily on Féré's work by putting forward a temporal concept of anomalies in the child: they had to be explained by accidental events 'before birth' which had troubled 'normal' development.<sup>20</sup>

While the notion of the 'antenatal' was, at the time, a neologism that slowly displaced the hitherto common notion of the 'intrauterine', it codified a conceptual shift in the history of the 'unborn' that had been underway for more than a century during which embryologists 'produced development' – to make use of Nick Hopwood's felicitous phrasing – by gathering embryos from women's bodies and dissecting specimens.<sup>21</sup> In development, time is a productive process that makes the embryo by relating past, present and future to each other in a specific mode: a phenomenon is understood through how it has been conditioned by what preceded it and how it sets conditions for what will follow. This is what Koselleck analysed as the 'historical' configuration of time, founding, throughout the 19<sup>th</sup> century, not only history as a scientific discipline, but also organizing emerging life and human sciences where, as Foucault famously argued, 'history' came to define 'the birthplace of the empirical'.<sup>22</sup> Now, to fully grasp how the 'prenatal' emerged as an explanatory framework accounting for anomalies in the child we have to move beyond embryology. At the same time as embryology *made* development with regard to

morphogenesis, physiologists concerned themselves with the genesis of vital functions.<sup>23</sup> In this vein, young Johannes Müller in the 1820s, for example, examined ‘foetal respiration’ by cutting foetuses out from sheep and placing them under a bell jar to manipulate oxygen supply.<sup>24</sup> Such research, through its very practice (replacing the mother sheep by a bell jar), shifted the ‘epistemic thing’ (HJ Rheinberger)<sup>25</sup> by specifying the ‘developing organism’ *made* in embryology as the ‘developing organism in a milieu’ *made* in embryology-cum-physiology. This provided the framework for the question of ‘influence’, which, for its part, constituted the conceptual grounds on which ‘prenatal pathology’ could eventually systematize research on pathogenic transmission and congenital disease/anomaly.

If, at the beginning of the 20<sup>th</sup> century, the temporal notion of the ‘prenatal’ came to denominate what shapes – besides hereditary traits and education – the abilities of the child, this was not just a simple shift ‘from space to time’. I rather try to think about it as an inversion in the relation between time and space: Barbara Duden has shown how the turning of the ‘unborn’ into a biological object – defined as a developing organism – replaced what before had been the becoming of a child understood as an ‘enclosed beginning’.<sup>26</sup> There, space surrounded time, while in the *developing organism in its milieu* time surrounded space. This inversion went along with transformations of space and time: the visible but opaque space of a woman’s body became the non-visible but knowable space of a gestational milieu, and the experienced time of expectation became the productive time of stages and phases. In that sense, gestation became ‘historical’: as an unborn child’s present conditioning its future. These shifts both shaped and emerged through research practices like those to which I shortly alluded.

**F.R., M.S.:** You not only include physiological and medical but also child psychological perspectives into your examination of the prenatal. Where do you see the link?

**C.A.:** What I have described above had implications for how birth was conceived: If the unborn is an organism specified by how its development unfolds in a milieu, birth constitutes a rupture; yet this rupture is realized by an organism whose development does not stop at birth – as psychologists were making clear in the second half of the 19<sup>th</sup> century, adding a next step to a developmental continuum that began with conception.<sup>27</sup> The psychological perspective did not just project development beyond birth. Given the temporal structure of development, it had to take into account what had come before. Hence, as the concept of development expanded from the genesis of anatomical forms to the genesis of physiological functions to the genesis of psychic activities, child psychologists worked their way backwards on the developmental continuum, founding each developmental state in its antecedent precondition: from the child to the foetus to the embryo. In that sense William Thierry Preyer claimed that the division between his famous ‘*Seele des Kindes*’ (1882) and his lesser known but very influential ‘*Specielle Physiologie des Embryo*’ (1883) was merely technical in that it eased his work (and that of his readers). Both books, he insisted, treated one and the same topic: the coming into being of a human subject.

Now, again: if the developmental continuum across birth was a concept, it came about through practice more than through anything else: Namely where human

newborns, animal foeti and human preemies became not just objects of experimentation in the respective fields of child psychology (newborns) and foetal physiology (animal foeti/human preemies), but moreover served as ersatz-objects for each other in a research strategy that was obsessed with what was 'already there' or 'not yet there' at birth.<sup>28</sup> At the core of such research was the question of 'sensitivity' as the capacity of the organism where (foetal) physiology turned into (infant) psychology. In that vein, Preyer concluded his *Specielle Physiologie des Embryo* with a chapter on 'embryonic sensitivity', after having opened *Die Seele des Kindes* with one on the 'development of senses and feelings' in the newborn/infant. However, if a developmental continuum leads from physiology to psychology, it undermines the very possibility of relegating the former to the unborn and reserving the latter to the born: Given that the emergence of psychic activity during infancy presupposes the emergence of a physiological capacity during gestation – where does psychogenesis begin? After or before birth? By providing a link between before and after birth in its specific way, the developmental continuum yielded the question of when the human organism became a human subject. And it did so through practice: If the experimental object of a concrete foetus/newborn stands in for the epistemic thing of development it refers the researcher constantly to its past and future states – it is always more than what it is at a given moment. This is why I think that when writing the history of the 'prenatal' we have to investigate the intersection not only between embryology and foetal physiology but also between foetal physiology and child psychology. This sheds light on how nascent child psychology, in the 19<sup>th</sup> and early 20<sup>th</sup> century, was linked to the larger question of the coming-into-being of new humans.

**F.R., M.S:** Caroline's emphasis on research practices in the establishment of child psychological knowledge is fascinating, also, if we consider the long cultural history of depicting the child as a strange and inaccessible being. Caroline's contribution resonates here with Carolyn Steedmann's *Strange Dislocations*, which directly links nineteenth century research on development and growth in the life sciences to a modern notion of childhood: through the developmental paradigm the child became the figure of a remote past, constitutive of the history within individuals and at the origin of an interiorized self.<sup>29</sup>

Novina, your current research on the history of autism also explores the remoteness or 'otherness' of childhood, albeit in the very different context of the disciplinary formation of child psychiatry in the 1930s and 40s. You suggest not only that the elusiveness of the child remained a pertinent epistemological problem but also that the autistic child carried the problem of accessibility to the extreme, making medical and scientific investigation even more dependent on methods and technologies of (non-verbal) mediation. How would you locate the initial descriptions and conceptualization of infantile autism within a broader history of knowledge of the child and in relation to the history of child psychiatry?

**N.G.:** The figure of the autistic child emerged, indeed, as a strange new kind of being in psychiatric literature around 1940, almost simultaneously described by Hans Asperger in Austria and Leo Kanner in the USA.<sup>30</sup> We have to keep in mind that, at that time, child psychiatry was only at the verge of its formation as medical specialty. Care for children, considered mentally ill or troublesome, was provided in multiple

institutional settings, both old and new ones. These included adult psychiatry and paediatrics, but also new interdisciplinary structures that developed with the child study movements and the formation of child psychology in the late nineteenth and early twentieth century. Most important among the latter were child guidance clinics in the USA and wards for “Heilpädagogik” (“remedial pedagogy”) in Germany and Austria.<sup>31</sup>

Hans Asperger, a paediatrician at the University Children's Hospital in Vienna and influential in the school of remedial pedagogy, first applied the term ‘autistic psychopaths’ to children in 1938. Asperger was describing patients whose ‘relations to the world’ appeared ‘limited’ to him.<sup>32</sup> In 1943, Austrian-born physician Leo Kanner released case histories of children from the first child ‘Psychiatric Consultation Clinic’ in the USA, founded in 1930 at Johns Hopkins Hospital in Baltimore. He believed the children incapable of forming affective relationships, and, perhaps most shockingly, unwilling to do so. ‘Total strangers’ by birth, psychotic in his view, Kanner coined their disorder ‘early infantile autism’.<sup>33</sup> Kanner’s and Asperger’s contemporaneous portrayals of inaccessible children call up older figurations of the child as mysterious ‘other’.

This is remarkable when we consider that the notion of ‘the unintelligible child’ – alongside the question of psychogenesis that Caroline emphasizes – can be linked to the establishment of child psychology: from the turn of the 20th century, pedagogues, paediatricians, child psychologists and social workers sought to systematically explore the child, to map its behaviour and development and to differentiate normal from supposedly abnormal mental states. Strategies included examining the specific language and ‘mind’<sup>34</sup> of the child, and analysing play and



intelligence. So the unintelligibility of the child had decreased by the time infantile autism was characterized as a disorder marked by lack of comprehensible language, a 'closed' mind, absence of play, and resistance to the measure of cognitive abilities. On the one hand, observation of irregularities was made possible by knowledge concerning the 'normal', non-pathological child; on the other hand, the autistic child undermined the scientific methods by which children had been approached, creating new epistemological problems.

As such, the challenge of conceptualizing and diagnosing autism triggered knowledge production and impacted developments in the history of science. We can interpret the first descriptions of infantile autism as early vital signs of the nascent discipline of child psychiatry, given that Kanner and Asperger both were key protagonists for the discipline's establishment. The influence of the unintelligible child in stimulating the rise of child psychology is here comparable to the role of the autistic child in fostering the consolidation of child psychiatry as a specialized field of knowledge.<sup>35</sup>

***F.R., M.S.:*** You suggest that inscription practices, i.e. methods and technologies of writing, note-taking, and archiving, played a pivotal role in this process, already shaping the earliest conceptions of infantile autism in the 1940s. Inscription and 'paper' practices as basic forms of research practices came into the focus of scholarly inquiry in the 1980s and 90s with Bruno Latour's study of 'paperwork' and Friedrich Kittler's exploration of 'notation systems' in the history of science and media studies, respectively.<sup>36</sup> Recent scholarship has significantly extended these works, now exploring the role of 'paper tools' (Ursula Klein)<sup>37</sup> for the generation of knowledge in a dizzying variety of contexts, disciplines and medial settings, ranging from notes in

laboratories and hospitals to children's drawings in schoolrooms.<sup>38</sup> How do you understand the significance of notation systems for the emergence of autism as a childhood disorder?

**N.G.:** Notation systems were crucial for the clinical categorization of infantile autism: they form the basis of Asperger's and Kanner's case studies and provided a framework for the views of newly emerging child psychiatrists. However, the *limits* of notation – the difficulties of observation and recording – also played a significant role in shaping early concepts of infantile autism. Asperger and Kanner were writing about children characterized by their '*aleness*'<sup>39</sup>, by a lack of exchange and social connections. The children's symptoms hindered their examination and representation – making a hindered examination and representation symptomatic. This is particularly manifest in the medical records of the children Kanner diagnosed with autism. The 'Psychiatric Consultation Clinic' was attached to a pre-existing paediatric division, aiming for an '*alliance*'<sup>40</sup> between paediatrics and psychiatry. Patient files were essential paper tools for this alliance. They ensured the collection, combination and dispersal of all available information on each child – statements from parents and social workers, dialogues with the children, notes made by physicians or child psychiatrists.<sup>41</sup> The files were part of a strategy of intense patient monitoring: Kanner demanded that detailed notes be taken, believing that any marginal behaviour could turn out to be meaningful.<sup>42</sup> As such, the files contain abundant, often redundant notes, much of which consists in copied and re-edited written data. These practices of inscription can be understood as a notation system in Kittler's use of the term: Kittler employs the term notation system (in German:

*Aufschreibesystem*)<sup>43</sup> to point out that any medium – be it alphabetic scripture or the gramophone – always already precedes the epistemic outcome it effectuates.

In the files of the patients eventually diagnosed with autism the gathered data is often interrupted by comments on how difficult it was to gather data at all. The absence of any interpretable utterance and the inability to communicate with these children apparently forced the psychiatrists to approach them in an experimental way, confronting them with stimuli within a standardized setting in an attempt to register any reaction. The protocols of these examinations reveal that it was the lack of any striking occurrence that was most striking. What could be observed was neither spectacular nor of any hermeneutic value, and what made those non-events worth recording was their unrelatedness to the situation and their resistance to interpretation. These children remained enigmatic – even within the writing itself.

**F.R., M.S.:** Davide, the relationship between practises of writing and knowledge about childhood is also relevant for your work in German literature studies. You draw here on a wealth of scholarship that has, since Kittler, explored the importance of ‘notation systems’, viz. of institutional, technological and material conditions of writing, not only for scientific but also for poetic production. You pay particular attention to the ‘writing scene’ of the child – a concept that stems from the German Literature Scholar Rüdiger Campe. How does an investigation of the ‘writing scene’ help you to relate the discursive framework of (German) literature around 1900 to a broader history of knowledge about childhood?

**D.G.:** My research on the “writing scene” is part of a broader inquiry into the relationship between childhood and the symbolic orders of language and scripture that I will briefly outline. My interest in childhood was sparked about fifteen years ago, as I began my dissertation project in German literature, where I focused on Walter Benjamin’s *Berlin Childhood around 1900*. A little later I translated Giorgio Agamben’s book *Infancy and History* from 1978.<sup>44</sup> Taking his orientation from the meaning of the Latin word *infans*, Agamben develops a theory of infancy focusing on the child as a ‘non-speaking’ being. The figure of the child marks an origin that language cannot recover and thus opens the possibility of conceptualizing the human as originally insubstantial empty space. Agamben’s conceptualization of the child in terms of language theory greatly helped me with my own reflections on Benjamin’s memories of childhood. Benjamin’s goal was not to follow the conventional autobiography and reconstruct the history of his own childhood. Rather, the memories are directed towards a ‘space before representation’ (Barbara Wittmann),<sup>45</sup> a space that is anonymous and cannot be recaptured. This has two implications which specifically determine poetical writing about childhood: firstly, the elusive infantile sphere necessitates a mode of representation characterized by leaps, interruptions, and discontinuities, as if any talk about childhood is ultimately condemned to run aground on the limits of the sayable; secondly, the impossibility of completely getting hold of childhood in and through memory leads to a writing process that testifies to the difficulties of arriving at an end. It is thus no surprise that Benjamin never ended *Berlin Childhood*, always returning to the text and rewriting it or adding more. His childhood memories are a series of drafts, as if something provisional would inhere to all writing about childhood.<sup>46</sup>

For a reading of *Berlin Childhood* another factor seemed important to me, namely the particular attention Benjamin paid to how a child actually deals with language and scripture. This interest is not directed towards a transcendental origin of language, but stems from empirical observations of a child's life-world: watching his son Stefan, who was born in 1918, Benjamin develops an acute sense for the particularities of a human being who stands on the threshold to symbolic order. Because children access the world through the senses, for them language is not some abstract system of invariable meanings. Delighting in word plays, creative misunderstandings and coining new words, the child maintains a sense for the materiality of language, which adults usually forget and suppress. With critical intent, Benjamin recalls the merits of the child's life-world – and from this stems his immersion in the material aspect of writing, which he experimented with repeatedly, for instance his characteristic micro-sized handwriting.

Rüdiger Campe coined the concept of the 'writing scene' to understand the act of writing as a constitutive relationship between physical, techno-instrumental, and cognitive aspects.<sup>47</sup> The concept allowed me to look at Benjamin's writing practice in its medial and material particularities and relate it to a conceptual curiosity about the world of the child. Thus, Benjamin's characteristic micrography can be read as both an abstract but also concrete and playful approach to how the child deals with scripture. This approach is not only biographically conditioned, but runs parallel to investigations in contemporary child psychology, which was, for example, strongly interested in the phenomenon of scribbling in children – see the work of Karl Bühler. Akin to how Novina has shown for scientific practices, the study of notation systems

in literary practices can also reveal unexpected insights into the case-specific engagement with the mysterious 'other'.

In a further step, it was important to see that Benjamin's reflections on the world of a child is in fact also part of a broader historical discourse. When one considers the works of authors such as Rainer Maria Rilke, Robert Walser and Franz Kafka, it becomes apparent that literature around 1900 is in the process of developing a new view on childhood and – moreover – it does so by drawing on the scientific innovations of the time. What emerges here is nothing other than an epochal change in knowledge about children and childhood – for the first time, in both literature and the human sciences, childhood is approached detached from issues of education and upbringing. This is, of course, not a specifically German phenomenon: For example, Sally Shuttleworth has shown that we can observe the emergence of a similar interest in the "mind of the child" in the works of British and American authors such as Charles Dickens and Henry James.<sup>48</sup> Decisive in this process is the rise of child psychology and pathology in the second half of the 19<sup>th</sup> century, as Caroline described; another contributing factor, especially for the German context, is the reform pedagogics at the turn into the 20<sup>th</sup> century, which is not pedagogy in the conventional sense, for it aims to 'liberate' the child and enable its autonomous self-development: The child is now seen as having its own way of seeing, feeling, and thinking. This is taken as a source of inspiration: if one wants to change the world, then it is first necessary to see it (again) through a child's eyes. Literature around 1900 – and Kittler was the first to show this, using the example of Rilke<sup>49</sup> – takes up this claim, and so it not only mirrors the shifts in the knowledge about childhood but indeed is actively involved.

**C.A.:** I find it very interesting how Davide approaches the making of childhood in literary and scientific discourse around 1900 by examining the perception of the alterity of the child and its elusiveness. In my research on how the unborn was configured as a developmental phase in which the child originates, I have come to see the question of alterity as something that posed itself as an unresolvable problem to human scientific research.

When it came to how the born was related to the unborn and vice-versa, it seems to me that my protagonists dealt with more than the question of how to describe, analyse, and explain this relation. They actually faced an ontological challenge that had emerged when the unborn became a biological object around 1800. It was difficult enough, for embryologists, to detect a human organism in early embryonic states, which differed so much from the human form.<sup>50</sup> The concept of development did the job, making evident organismal continuity through morphogenesis in the 'Entwicklungsreihe'. But what about the interiority which distinguished the human from other organisms (animals, plants)? It had been guaranteed to the unborn before, in traditional theories of 'ensoulment' going along with the maternal experience of 'quickenings'.<sup>51</sup> But what now as, within the context of emerging anthropology, 'man' had lost its transcendence and the soul was to be replaced by the psyche as an organic function among others: how to assess the ontological status of the unborn which had yet to gain the very subjectivity that qualified the human?<sup>52</sup> In other words: What is a human organism that will be a human subject? While this ontological question was explicit around 1800 when physiologists debated whether the unborn led the life of a plant, an animal or a dormant human, in the following

decades it fed into what I have stated above: an intense concern with conceptualizing a psychophysiological continuum that would make for an ontological continuum across birth.

However, the ontological unease did not go away. On the contrary: Researchers constantly ran into the problem of the beginning of subjectivity, that is, the threshold where the physiological became the psychological. Birth was the candidate, but the implication was untenable: if subjectivity began at birth, the unborn was not fully human. It is telling that psychoanalyst Siegfried Bernfeld, in 1925, spoke of 'fear' as that which makes 'us' shy away from 'having to deny the newborn psychic capacities'.<sup>53</sup> In that ontological indetermination, the unborn was an 'internal other' to Western ontology.<sup>54</sup> I think we have to explore further the historicity of this ontological problem as something at the core of research on development across human and life scientific disciplines. It might further elucidate the correspondences we observe between literature and the sciences by symmetrizing them as both constituting ontological practices (among others).<sup>55</sup>

***F.R., M.S.:*** It seems to us that the idea of 'symmetrizing' literature and the sciences through practice comes with a methodological challenge. So far we have looked on a multitude of different contexts including architectural journals in middle class America, funeral photographs in African American communities, literary discourses in turn-of-the-century Germany, and scientific and medical practices in Europe and the USA. This diversity of historical discourses raises the question of how to approach the relationship between different fields of knowledge and how to handle different types of sources from an interdisciplinary perspective? Novina, what roles



do the correlations of various domains and disciplines play for your research on the history of autism? And how do you deal with the challenging heterogeneity of sources?

**N.G.:** In my research, I take several domains and their interrelations into consideration, assuming that the psychiatric conceptualization of infantile autism in the 1940s can be understood against the background of a growing interest in questions of interpersonal communication. I suggest that the 'rise' of the autistic child as discursive figure and the fascination with it can be seen in light of contemporaneous debates about the social bond and its fissures. The early child psychiatrists represented autistic children as 'total strangers'<sup>56</sup> at a time when literary and scholarly works were also evoking strangers and abysses between people. I am thinking of texts like Albert Camus *The Stranger* or George Simmel's treatise with the same title.<sup>57</sup> I see knowledge about autism as a specific kind of knowledge about social cohesion, and I explore it in relation to knowledge produced in multiple fields, as far as they all focus on man's social connectivity.<sup>58</sup>

To further explain this point with reference to the history of autism: Kanner and Asperger presupposed an early, perhaps prenatal, interest in exchanging messages with one's surroundings. Asperger assumed the existence of an 'instinct' by which children are 'normally' connected to the outside world and highlighted the deviance of autistic patients:

Long before the child understands the words of the educator, ... he learns to obey – not to abstract words, but to the look of the mother, the tone of her voice, her face and her

gestures, in short: the indescribable display of her *expressive appearances*. ... In our case, however, it is precisely this magnificent regulatory mechanism that is defective.<sup>59</sup>

By declaring this ability to interact a preverbal 'regulatory mechanism' and its dysfunction a pathological disorder, Asperger contributed to the normalization, even anthropologization, of communicative potentials. Like Kanner, he enforced the understanding of sociability as sane human nature. Without explicitly naming it as such, Asperger and Kanner identified autism as a disorder of communication. In doing so, they touched on questions that were discussed simultaneously in other areas and continued to be of relevance in the post-war-period.

The 'regulatory mechanism' that Asperger missed in face of his autistic patients can be seen as anticipating certain feedback-processes that, in the wake of the first cybernetic debates, informed theories and practices to engineer group dynamics. After World War II,<sup>60</sup> cybernetics reflected on the 'regulation of individuals and the optimization of their traffic'<sup>61</sup>, and for anthropologist and psychiatrist Gregory Bateson, member of the first cybernetic generation, the 'social man' stood at the centre of these discussions. 'Communication', Bateson suggested, 'has become the social matrix of modern life.' In my view, the phenomenon of infantile autism can be read against this background of a cultural and technological history of communication and within the context of debates about social coherence.

This does not, however, imply that the heterogeneity of the sources may be neglected; it is not the occurrence of similar issues within various domains but the differences in how those issues are being displayed, which is of interest.

**F.R., M.S.:** Dan and Wangui, you both work with sources that predominantly figure in popular (rather than professional) discourses such as periodical magazines, funeral photographs, advice literature, and newspaper. On the one hand, these sources offer a perspective on notions of childhood beyond rigid disciplinary borders and can, for example, give voice to underrepresented groups, such as the African American community in Wangui's study. On the other hand, they pose heuristic challenges: rather than explicitly articulating knowledge about childhood (as scientific and pedagogical texts tend to do), they implicitly embed such knowledge in pragmatic questions about everyday life and education.<sup>62</sup> How do you extract from these sources underlying conceptual issues? What are the advantages and what are the challenges in working with them?

**D.C.:** As mentioned above, to glean a sense of when and how the 'child's room' arose as an object of discourse, I initially decided to work on relatively easily accessible public sources from consumer-oriented periodical magazines, mothering magazines and specialty magazines focusing on home furnishings and architecture, as well as newspapers. As modes of public discourse, I think that they enact certain kinds of truth directed at particular audiences who often are selectively engaged in the topic or issue at hand. One might say the same of an academic journal. The targeted nature of the audience and allied set of concerns in these publications together craft something of a sieve or filter which, at once, distils the problem or question at hand into relevant categories and bits and, in so doing, provides evidence of perspective and social practice. For instance, an article in a 1890 women's magazine addressing the moral dimensions of taste as they can be found in

the materiality of a girl's room evinces a perspective, ideology and position in and toward a particular social world and—importantly—enunciates the cultural impetus and legitimacy to address such issues in the first place. The difficulty lies in avoiding the pitfalls of apprehending these texts simply as mirrors or windows providing direct access to some apparent truth, while nonetheless grasping from them traces of various social truths. Such texts must always be put in relation to other texts and materials from different sources and different kinds of sources—governmental, visual, testimonial, archival—in a tireless effort to ascertain the specific slice of the world to which they refer and from which they speak.

Getting a hold of the public discussion on a topic like 'children's rooms' helps direct me to the questions and problems asked and not asked, posed and not posed. Materials found in public magazines provide a kind of baseline, if you will, of framing, metaphor, elision and association, which give clues to social practice, without mistaking the magazines and articles for everyday social practice. Yet, they constitute forms of social practice in the way authors voice interconnectivities — interconnectivities of the 'child,' of senses of a moral-material order, of the place that parents and (later) manufacturers have in the fabrication of particular version of childhood. In brief, children's rooms reside in narratives —narratives which entangle childhood, itself narratively construed, with such things as social class, taste, gender, beauty, education and (often) unnamed racial and ethnic identities. Collectively and over time, one gleans something of a convergence in narratives about children's rooms, even as there remain divergent and contradictory strands.

**F.R., M.S.:** Wangui, how do you deal with the diversity of your source material, and how do different narratives intersect in your research?

**W.M.:** What were the concerns, ideals, and anxieties that African American parents faced when raising children? Where did they turn for guidance, advice, and comfort? How did they translate those ideas into day-to-day practices? These are some of the questions I try to grapple with, and in doing so I find myself turning not only to social scientific texts and sociological studies, but also visual sources, written and oral texts such as memoirs, advice columns, health guides, photographs, songs, and plays. African Americans articulated their ideas and experiences with infant life and death through a variety of media. Considering multiple sources of evidence, rather than focusing primarily on professional publications, reveals a rich and complex set of ideas about health, death and the lives that everyday African Americans sought for themselves and their offspring.

I'll use the example of baby contest images to demonstrate how I approach popular visual sources and how I embed them into narratives. Black organizations such as the National Urban League held baby contests in community health centres and housing complexes, and the contests took place alongside maternal and infant clinics and other health-related events. In addition to receiving prizes, the winning African American babies and their mothers were often featured in nationally circulating publications such as *Opportunity*, the NUL's monthly journal, and *Crisis*, the official magazine of the National Association of the Advancement of Colored People.

From 1912 to 1934, each October issue of *Crisis* was devoted to parenting and childhood and featured selected photographs of healthy infants and children from

‘degreed and pedigreed’ African American homes. On one level such images provided visual models for how black families should present and represent themselves.<sup>63</sup> But the photographs also open a window into a world where African American women, regardless of literacy or educational and economic means, sought out hygienic instruction and health supplies, revealing some of the material circumstances surrounding early twentieth century health care for African Americans.<sup>64</sup>

These images appeared alongside articles written by black intellectuals and local community leaders, blurring the distinction between popular and professional discourses on African American children. Reviewing these issues of the *Crisis* and other black publications, I noticed images of black babies and young children appeared on the same pages as advertisements and articles on birth control, Northern migration, and lynching. Images of children were, thus, woven into broad discussions of the problems and opportunities facing blacks.<sup>65</sup> In the eyes of magazine editors such as Du Bois, ‘black children were both the inspiration for political action and the course through which change would come,’ and editors pleaded with their readership to submit photographs of African American children, writing ‘we want all the good clear pictures of healthy human babies that we can get.’<sup>66</sup> In this way, visual sources and material practices illuminate some of the socio-politics of affirming racial identity, combating negative portrayals of blacks, and protecting infant life.

**F.R., M.S.:** Davide, while most of our participants work with factual texts, your contribution explicitly addresses literary fiction. How would you describe the role

and status of literary texts in the history of knowledge about childhood? Do you understand representations of childhood in literary works as comments on or even parts of contemporary (scientific) discourses about childhood, or do you rather see them as alternative images and a different kind of knowledge from that in non-artistic fields?

**D.G.:** It is my assumption that the literary discourse is very important for a general history of childhood and the other knowledge-based discourses on the child. There are – at least – two reasons for this: firstly, literature enables us to corroborate cultural and social historical theses on childhood because it absorbs and mirrors discussions in other discourses such as anthropology, pedagogy, and sociology. To take one example, literary history underpins Philippe Ariès' famous thesis that childhood needs to be examined as a cultural phenomenon, and not as a biological fact, and as a cultural phenomenon it possesses a history, emerging namely in conjunction with the formation of the bourgeois subject in the mid-18<sup>th</sup> century.<sup>67</sup> No matter how justified it is to criticize Ariès by pointing out depictions of childhood and children in antiquity and the Middle Ages, it is simply irrefutable that literature first begins to take a substantial interest in childhood as a form of existence *sui generis* from around the 1750s onwards. The boom in autobiographical childhood memories and the rise of the Bildungsroman such as Goethe's *Wilhelm Meister Apprenticeship* are only two particularly illustrative symptoms of this development, which runs parallel to the shift in society from the traditional extended family to the modern nuclear family and the associated centring of social attention onto the child.<sup>68</sup>

Secondly, literary texts shape and propagate a reservoir of ideas, and as such they are a contributing factor to social processes. Part of the allure was that the discovery of childhood in the 18<sup>th</sup> century is tantamount to the discovery of a realm, which is inaccessible to adults. One could even go so far as to say: as a space not readily accessible and situated prior to the onset of a stable cultural order, 'childhood' represents one of the greatest enigmas Modernity faced. This is why our understanding of childhood is determined by 'gigantic projections' (Dieter Richter),<sup>69</sup> and these are a genuinely poetic act. It is characteristic that the founding document of modern pedagogy, Jean-Jacques Rousseau's *Émile*, is a mixture of tractate and fictional text. And it is characteristic that, since the mid-18<sup>th</sup> century, different competing images of childhood are in circulation, and have been significantly influenced by literature: the Enlightenment's view of the child as an *unformed* and thus inferior being, and the Romantic myth of childhood as an *unspoiled* and thus higher, innocent, creative and poetic form of existence. These are two diametrically opposed constructs, both of which reveal, however, an increasing alienation from the early phase of human development. As a literary scholar, one almost inevitably concludes that any discourse on the child possesses the status of a fiction. In my view, both the poetical as well as the scientific texts are indispensable for a history of knowledge on childhood – what is decisive for me is that we explore the text with attention to which *image* of childhood is conveyed, because these images reveal to us how, since the late 18th century, the individual imagines his/her origins and the culture its history.

I would therefore not say that images of childhood in literary discourses hold an alternative position to those in scientific discourses - the common basis of interests,



questions, and ideas is too large. However, literary discourse differs from scientific language in being unburdened by the dominance of conceptual understanding, simply because its purpose is less practical. Thus, authors such as Hölderlin, Hoffmann, Stifter, Kafka, or R. Walser may insist on the mysteriousness of the child and develop distinctly personal perspectives on the world of the child.<sup>70</sup>

**F.R., M.S.:** Davide described, how, on the one hand, literary texts can be understood as media, which mirror and shape cultural or scientific knowledge. On the other hand, he also argues that scientific discourses necessarily contain fictional elements, and he sees here a specific competence of literature scholars. Novina you take both literary texts and the rhetorical dimensions of scientific texts into account, focusing, for example, on the use of certain technical metaphors in early psychiatric articles on autism. What status for you do these metaphors have and how do they help you to think about the relation between different fields of knowledge?

**N.G.:** As mentioned above, I attempt to locate the early discourse on infantile autism within a broad cultural discussion of man as a communicative creature, a discussion that was taking place in various domains. I do not claim, however, that there was necessarily any explicit transfer of ideas, models or metaphors between the different fields of knowledge or disciplines. For example, when Asperger describes an autistic child as 'turned off' and grasps interpersonal dynamics in terms of technological processes, his use of this metaphor expresses his own embeddedness within a culture that was increasingly determined by telecommunication, that is these texts were produced within a specific cultural and epistemological context.

With regard to the literary writings I am exploring in my work on autism, I fully agree with Davide's argument about literature as an important source within a history of knowledge. In novels like Camus' *The Stranger*, one does indeed find figures, which might have been or would today be considered autistic. However, I don't wish to imply that those fictitious figures should be diagnosed in this way, but rather seen as evidence of phenomena being simultaneously, albeit differently, enacted in science and literature.

**F.R., M.S.:** Novina's contribution points to several stakes in the framing of autism - a cultural pre-occupation with communication, a social quest for coherence, and a disciplinary interest in the formation of child psychiatry. During this discussion, all of you have mentioned similar scientific, moral, and/or political investments in images of childhood, be it the social status of African Americans or the pedagogical reforms at the turn of the century. We think that one central question emerging from these considerations concerns the implications for our present knowledge about childhood: how do the various historical transformations that you have mentioned shape our present understanding of childhood? How would you describe their larger political and cultural implications? Dan, your study seems here particularly concerned with moral and pedagogical issues.

**D.C.:** Indeed, and more specifically I think that the view of the child arising in the late 1800s, and coming into robust delineation in the 1920s in the US context, manifests as transformations in a number of cultural practices and beliefs which were definitive of middle-class Victorian life mid-century. The most relevant and

prominent of these transformations centres on the relationship between taste and materiality. A clear segment of Victorian life understood taste as the dynamic relationship between inner character and outer appearance. These Victorians were never certain as to whether character completely determined one's relationship to the material world, but they clearly worried that material things could overtake taste. Hence, the ambiguity of what and how things mean — i.e., what they indicate — remained at the forefront of consideration.

At the time when consideration began to turn toward what is right and proper for young children to have in their rooms, there was an increasingly present commercial culture of ready-made and popular things. Writers — many self-proclaimed 'mother' or child specialists — understood the child's room as not simply a place to store children but as an incubator of character. 'Nice' things, it was asserted, would help mould the child's character and ultimately win out against any inclinations toward the ugly and the untidy. The Victorian faith in the power of beauty and simplicity transformed into a pedagogic discourse, whereby transcendent 'taste' gives way to the notion that the child contains within itself all it needs to become fully human.

These Victorians, perhaps more self-consciously than other 'Westerners',<sup>71</sup> considered objects — in their very presence as materials — active in the construction and construal of self and other. Not just dead 'matter' to be taken up or disregarded by agentive human beings, things and goods formed key substances from which character was made and remade. Part of the trick, skill and distinction of taste resided in being able to negotiate the delicate dance between internal disposition and external life. An ever-increasing material-consumer world made these efforts progressively fraught with uncertainty, especially when the children's

sensibilities were at issue. Here, in what I call the ‘soft pedagogy of things’,<sup>72</sup> resides an underlying logic and dynamic of childhood — i.e., since children could not avoid the materiality of the world, they would need to engage in and with it, but do so with a purposefulness and under guidance, to ensure a properly moral trajectory.

By the 1920s, the power and lure of things and the ability to source and curate ‘proper’ things became, at once, both more evident and more opaque. Discourses on taste become replaced with discourses on the child as a knowing active being who requires ‘his’ own space for exploration and development. The invocation of viewpoint and voice of the child as primary and authoritative in décor — and, as such, an indicative of a deep truth about the child’s self knowledge — is part of a larger cultural arc of privileging the ‘child’s’ perspective in the context of popular, material and commercial culture.<sup>73</sup> The figure of the child in the rising US middle class culture at this time was increasingly individualized and analytically extracted from the context of home, family and community to be observed and understood as something self-contained, best understood by experts who could complement primitive, natural growth with the introduction of well designed things — things which the child instinctively would appreciate. These notions certainly find an echo in the contemporary obsession of discerning what constitutes authentic play for children — i.e., whether and how ‘real’ play includes engagement with digital technologies and to what extent it needs to be directed and guided, or simply sheltered from moral pollutants.

**F.R., M.S.:** Moving from pedagogy to politics, Davide, in your contribution to the conference, you relate the figure of the saved child in Adalbert Stifter’s *Der*

*Waldgänger* to a new bio-political paradigm that emerged since ca. 1800. What would you describe as the bio-political perspective on the child in Stifter's text? Do you think that this perspective has implications for the meaning of childhood in the twentieth century?

**D.G.:** Stifter's story reflects on different facets of childhood and is ideally suited for understanding post-Romantic perceptions, which emerged around the middle of the 19<sup>th</sup> century. Up until now research has primarily focused on the story of the wild gamekeeper's son, in which Stifter examined the peculiar language world of children. As in other stories from his middle and later work, Stifter takes up a Classical-Romantic *topos*; circulating since the mid-1750s, it imagines childhood to be a primordial poetical existence by virtue of the child's spontaneous creativity. However, in Stifter's stories the children are no geniuses, they are not the creators of a higher and purer art as for example Goethe's *Mignon* is: whenever they poeticize, they disturb or unsettle, for their language is opaque and confused. Hence, they are more or less latently pathologized, always pushed onto the margins of society, standing as strangers on the edge of civilized society and defying integration – like Kaspar Hauser, with whom the Romantic idealizations of childhood are shattered and irreversible experiences of alienation become etched in the mind of modern subjects (Eva Geulen).<sup>74</sup>

In my contribution<sup>75</sup> I also attempt to show how the narrative places the issue of whether socialization is even possible in a broader framework. The text is not only modern because the process of cultururation reveals traits of crisis. If we consider that the story possesses a political dimension, then the issue of human propagation,

which had become increasingly pressing for modern population policy, is quickly discernable. Drawing on legal and sociological texts of the time, such as Wilhelm Riehl's *Die Familie* (1861) or Lorenz von Stein's *System der Staatswissenschaft* (1852), the playing field on which the narrative takes place is the 'biological threshold of modernity' (Michel Foucault).<sup>76</sup> The main conflict in the text emerges from the demand that the sole and ultimate purpose of marriage be to have children and secure their existence; moreover, a rigid biologizing looms when broaching the question what a child 'really' is – for example, when it is denied that adopted children can take the place of biological children. Here Stifter raises questions as to the political status of the family, and these are just as topical today when we consider how much importance is attached to demographic discussions. For all those who ask themselves whether they have to produce children in order to be regarded as useful members of society, Stifter's story is a reference text rich in content.

**F.R., M.S.:** Wangui, concerns about reproduction also figure predominantly in the political struggles that you have mentioned above – be it the eugenic views promoted by progressive black leaders, or in the radical critique of these views advanced by black female activists such as Nella Larsen. How would you describe the legacy of these debates?

**W.M.:** African American infant death is an issue of continuing concern in U.S. society where health inequities across race and class persist. Infant mortality rates in the United States are higher than in most industrialized countries, with African American infant mortality more than twice the rate for whites.<sup>77</sup> I think that my study can

contribute here to a critical awareness of the historical dimensions of these disparities, offering a context for how race operates not as a naturalized, statistical variable but partakes in a complex socio-political process that is constantly being remade and renegotiated.

At the turn of the century, African Americans sought to make sense of high infant death tolls while challenging ideas that high mortality rates were evidence of racial degeneracy, maternal ignorance, familial instability, behavioural vices, and lack of hygienic knowledge.<sup>78</sup> The underlying question turned around the value of life, and how age, in addition to race and gender, shaped beliefs about the lives considered worth saving.

Black laywomen played key roles in organizing community health programs,<sup>79</sup> and black female intellectuals and artists articulated the challenges motherhood posed to their physical, professional, and political values. As some remarked, despite Progressive Era campaigns to ‘save the babies,’ black children still faced a future of racial discrimination and violence.<sup>80</sup>

Blacks questioned what type of world their children were being born into, a different facet of the pronatalist paradigm that Davide has pointed out. Reflecting on the death of his first-born, Du Bois recalled his fruitless attempts to find a physician willing to treat his black son. On the day of the burial, he felt his heart filled with an ‘awful gladness,’ a sense of relief in knowing that his son had escaped a life within the Veil – that he had left ‘before the world had dubbed your ambition insolence, had held your ideals unattainable, and taught you to cringe and bow. Better far this nameless void that stops my life than a sea of sorrow for you.’<sup>81</sup> This paradoxical phrase – the feeling of ‘awful gladness’ – raised a painful and troubling question that

haunted Du Bois and other African Americans: was it better for their young to die than to endure a life of racial discrimination and disappointment? In fiction we see Helen Crane, the protagonist of Nella Larsen's 1928 novel *Quicksand*, posing a similar question when she asks 'marriage—that means children to me. And why add more suffering to the world? Why add any more unwanted, tortured Negroes to America? Why do Negroes have children?'<sup>82</sup>

Such perspectives contain a lesson for contemporary public policy debates, which tend to focus on black women's (in)ability to secure reliable medical care.<sup>83</sup> The focus on individual action often obscures a host of other factors, including the role of disease, family and neighbourhood resources, and economic environments that influence infant survival. And, as the history of infant mortality reduction campaigns demonstrates, these are only the latest iteration of concerns based on changing ideas about race, family structure, causes of death, government responsibility and place of children in society. Attention to the socio-political consequences of rationalizing health disparities is thus crucial for identifying productive, rather than stigmatizing interventions.

**F.R., M.S.:** Caroline, how do we understand the larger cultural and political implications of a change in the temporality of a concept such as the unborn? Are there any consequences for our present knowledge about childhood?

**C.A.:** I do indeed think that there are larger implications not just for knowledge about childhood but for childhood itself – or perhaps I should rather say: for children. I have argued that the un/born child is invested with a temporal concept



that constantly relates between past, present and future, and that this conception is furthermore (bringing me back to how I stumbled into the prenatal) invested with a concern for detrimental impacts. 'Development' temporally structures such impacts by transforming events in the present into future features or behaviours – which led psychologist Jerome Kagan, in 1964, to call development a 'cryptograph'.<sup>84</sup> Féré's research on prenatal pathology was set off by exactly such an encryption, since his motivating concern was to find out how the 'trauma' experienced by pregnant women during the Prussian *siège* of Paris and the revolutionary events of the Commune in 1870/71 possibly resulted in the disproportionate amount of physical and behavioural anomalies that could be observed in children in the 1880s.

Vincanne Adams, Michelle Murphy and Adele E. Clarke have recently described, in terms of 'anticipation', a chronopolitical regime that lets the present be determined by a possible future. I do agree with them that such a regime is a 'defining quality' of our time.<sup>85</sup> However, I think it is not novel. It corresponds to the way the concept of development has, in the 19<sup>th</sup> century, come to encode time or – to put it the other way round – to the way time has encoded the coming-into-being of humans. From the outset, research into prenatal pathology was concerned with how to prevent harmful influence. We know the way this shaped – within a biopolitical framework – policies of pregnancy, establishing the idea of 'antenatal care' which today feeds into a thoroughly commodified promise of 'optimization'.<sup>86</sup> It might be interesting to think about how this temporal regime deprives children (as well as pregnant women, for that matter) of a present free of its relation to the past and the future.

**F.R., M.S.:** We introduced this conversation by pointing to the historiographical challenge posed by the diversity of practices and discourses around modern knowledge about childhood. You have amply shown us that we may understand this diversity not so much as a challenge but rather as a - still too rarely used - opportunity for engaging with the symmetries and references among scientific, material, literary, and artistic cultures and their respective forms of knowledge, ranging from spatial and visual representations, patient files, and literary texts to long-term conceptual changes. The last section especially highlighted the continuing relevance of these explorations for both the humanities and the social sciences. We hope that this discussion will spark further investigations, which we think can only benefit from interdisciplinary perspectives.

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<sup>1</sup> There is a considerable body of scholarship on various aspects of this transformation, although few works explicitly engage with histories of knowledge about childhood. On the child study movements in the USA and Europe: Christine von Oertzen, 'Science in the cradle: Millicent Shinn and her home-based network of baby observers, 1890–1910.' *Centaurus* (2013) 55, pp. 175–195; Sally Shuttleworth, *The Mind of the Child: Child Development in Literature, Science, and Medicine, 1840-1900*, Oxford: Oxford University Press, 2010; A.B. Smuts, *Science in the Service of Children, 1893–1935*, New Haven: Yale University Press, 2006; Marc Daepe, *Zum Wohl des Kindes? Pädologie, pädagogische Psychologie und experimentelle Pädagogik in Europa und den USA, 1890–1940*, Weinheim: Leuven University Press, 1993. On drawings and toy usage: Barbara Wittmann, *Bedeutungsvolle Kritzeleien: Die Kinderzeichnung als Instrument der Humanwissenschaften, 1880–1950*, unpublished habilitation, Bauhaus University, 2012; Mao Douglas, *Fateful Beauty: Aesthetic Environments, Juvenile Development and Literature, 1860–1960*, Princeton: Princeton University Press, 2008; Marilyn R. Brown (ed.), *Picturing Children: Constructions of Childhood between Rousseau and Freud*, Burlington, VT: Ashgate, 2002. On ergonomics, physiology and (reform) pedagogics: Gwendolyn Whittaker, *Überbürdung – Subversion – Ermächtigung: Die Schule und die literarische Moderne 1880 – 1918*, Göttingen: V&R unipress, 2013; Caroline Hopf, *Die experimentelle Pädagogik: Empirische Erziehungswissenschaft in Deutschland am Anfang des 20. Jahrhunderts*, Bad Heilbrunn: Klinkhart, 2004; Jürgen Oelkers, 'Physiologie, Pädagogik und Schulreform im 19. Jahrhundert', in Philipp Sarasin and Jakob Tanner (eds.), *Physiologie und industrielle Gesellschaft: Studien zur Verwissenschaftlichung des Körpers im 19. und 20. Jahrhundert*, Frankfurt am Main: Suhrkamp, 1998, pp. 245–285; Ernst Meumann, *Vorlesungen zur Einführungen in die experimentelle Pädagogik und ihre psychologischen Grundlagen*, Leipzig: Engelmann, 1907. For a sociologically informed perspective: Marta Gutman and Ning de Coninck-Smith (eds.), *Designing Modern Childhoods: History, Space and the Material Culture of Childhood*, New Brunswick, NJ: Rutgers University Press, 2008.

<sup>2</sup> Friedrich Wilhelm Foerster, *Staatsbürgerliche Erziehung: Prinzipienfragen politischer Ethik und politischer Pädagogik*, Leipzig: Teubner, 1914.

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<sup>3</sup> E.g. Davide Giuriato, 'Tintenbuben. Kindheit und Literatur um 1900 (Rilke, R. Walser, Benjamin)', *Poetica* (2010) 42, pp. 325–351; Robin Bernstein, *Racial Innocence: Performing American Childhood from Slavery to Civil Rights*, New York: New York University Press, 2011; Wittmann, op. cit. (1).

<sup>4</sup> Cf. Jürgen Renn, 'From the history of science to the history of knowledge – and back', *Centaurus* (2015) 57, pp. 37–53. In literature studies, poetologies of knowledge similarly understand literature as a form of knowledge conditioned by and contributing to larger cultural discourses that include the human and the natural sciences. Cf. Joseph Vogl, 'Poetologie des Wissens', in Harun Maye and Leander Scholz (eds.), *Einführung in die Kulturwissenschaft*, München: Fink, 2011, pp. 49–71.

<sup>5</sup> The need to find some coherence in the historical study of material culture also motivated a 2009 forum in the *American Historical Review*: 'Historians and the Study of Material Culture.' In the discussion, the editors focused on questions about the relationship between things and words, between things and humans, and between things and broader culture. The present discussion partly goes beyond these questions in considering the materiality of texts themselves and focusing on the relationship between materiality and knowledge, rather than things and texts. See Leora Auslander et al. 'AHR Conversation', *The American Historical Review* (2009) 114, pp. 1355–1404.

<sup>6</sup> To mention one example, the *Journal for the History of Childhood and Youth* contains a separate section, called 'Object Lessons,' dedicated to the study of 'material culture.' According to the editors, the section was meant to 'foster discussion of the objects and experiences in children's lives.' See Laura L. Lovett, 'Introduction', *The Journal for the History of Childhood and Youth* (2010) 3, pp. 1–3, on p. 1. See also Karin Calvert, *Children in the House: The Material Culture of Early Childhood 1600–1900*, Boston: Northeastern University Press, 1992; Gutman and Coninck-Smith, op. cit. (1).

<sup>7</sup> Andrew Jackson Downing, *The Architecture of Country Houses*, New York: Dover Publications, 1850 [1969], opposite p. 146 and opposite p. 164.

<sup>8</sup> Walter Crabtree, 'A House Built for \$4500', *House & Garden* (September 1907), pp. 110–111.

<sup>9</sup> Viviana A. Zelizer, *Pricing the Priceless Child: The Changing Social Value of Children*, New York: Basic Books, 1985, p. 12; also see the special issue of *The Journal of the History of Childhood and Youth* on 'Pricing the Priceless Child: A Retrospective' (2012) 5(3).

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<sup>10</sup> Daylanne K. English, *Unnatural Selections: Eugenics in American Modernism and the Harlem Renaissance*, Chapel Hill: University of North Carolina Press, 2004, pp. 48–49; Daylanne K. English, ‘W. E. B. Du Bois’s Family Crisis’, *American Literature* (2000), 72, pp. 291–319.

<sup>11</sup> Leslie J. Reagan, *When Abortion Was a Crime: Women, Medicine, and Law in the United States, 1867–1973*, Berkeley: University of California Press, 1997; Glenda Elizabeth Gilmore, *Gender and Jim Crow: Women and the Politics of White Supremacy in North Carolina, 1896–1920*, Chapel Hill: University of North Carolina Press, 1996.

<sup>12</sup> Suzanne E. Smith, *To Serve the Living: Funeral Directors and the African American Way of Death*. Cambridge: Harvard University Press, 2010, pp. 67–68.

<sup>13</sup> Funeral photographs are also part of a long and rich history of African American funeral practices, dating back to slave nighttime ceremonies and burial aid societies. See Karla F. C. Holloway, *Passed On: African American Mourning Stories: A Memorial*, Durham: Duke University Press, 2002; Vincent Brown, *The Reaper’s Garden: Death and Power in the World of Atlantic Slavery*, Cambridge: Harvard University Press, 2008.

<sup>14</sup> James Van Der Zee, Owen Dodson and Camille Billops, *The Harlem Book of the Dead*, New York: Morgan & Morgan, 1978, pp. 82–85.

<sup>15</sup> A comparable working-class white family in Manhattan paid \$316 a year (\$26 per month) for rent and earned more, see Cheryl Lynn Greenberg, ‘Or Does It Explode?’ *Black Harlem in the Great Depression*, New York: Oxford University Press, 1991, p. 28; Van Der Zee, Dodson and Billops, op. cit. (14), p. 4.

<sup>16</sup> See Mary Niall Mitchell’s analysis of photographs of African American children during the Civil War and through Reconstruction, in *Raising Freedom’s Child: Black Children and Visions of the Future after Slavery*, New York: New York University Press, 2008; also see Bernstein, op. cit. (3).

<sup>17</sup> Michele Mitchell, *Righteous Propagation: African Americans and the Politics of Racial Destiny after Reconstruction*, Chapel Hill: University of North Carolina Press, 2004, pp. 177–179.

<sup>18</sup> Cf. on milieu theories and the idea of ‘heredo-intoxication’ in France: J. Andrew Mendelsohn, ‘Medicine and the making of bodily inequality in twentieth-century Europe,’ in Jean-Paul Gaudillière

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and Ilana Löwy (eds.), *Heredity and Infection: The History of Disease Transmission*, London: Routledge, 2001, pp. 21–79.

<sup>19</sup> Cf. Caroline Arni, 'The prenatal: contingencies of procreation and transmission in the nineteenth and early twentieth century', in Christina Brandt and Staffan Müller-Wille (eds.), *Heredity Explored: Between Public Domain and Experimental Science, 1850–1930*, Cambridge: MIT Press, 2016.

<sup>20</sup> On Ballantyne: Salim Al-Gailani, 'Pregnancy, pathology and public morals: making antenatal care in Edinburgh around 1900', in Janet Greenlees and Linda Bryder (eds.), *Western Maternity and Medicine, 1880–1990*, London: Pickering & Chatto, 2013, pp. 31–46. Prenatal pathology comes to full bloom nowadays in the research field called 'Developmental Origins of Health and Disease'. Cf.: Peter D. Gluckmann, Mark A. Hanson, and Tatjana Buklijas, 'Maternal and transgenerational influences on human health', in Snaith Gissis and Eva Jablonka (eds.), *Transformations of Lamarckism: From Subtle Fluids to Molecular Biology*, Cambridge: MIT Press, 2011, pp. 237–249.

<sup>21</sup> Nick Hopwood, 'Producing development: the anatomy of human embryos and the norms of Wilhelm His', *Bulletin of the History of Medicine* (2000) 74, pp. 29–79; and Janina Wellmann, *Die Form des Werdens: Eine Kulturgeschichte der Embryologie, 1760–1830*, Göttingen: Wallstein Verlag, 2010.

<sup>22</sup> Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, London: Routledge, 1974, p. 219; Reinhart Koselleck, *The Practice of Conceptual History: Timing History, Spacing Concepts*, Stanford: Stanford University Press, 2002, and *Futures Past: On the Semantics of Historical Time*, New York: Columbia University Press, 2004. For how this concept of time played out in concepts of ontogeny and phylogeny respectively: Temkin Owsei, 'German concepts of ontogeny and history around 1800', *Bulletin of the History of Medicine* (1950) 24, pp. 227–246; Peter J. Bowler, *Life's a Splendid Drama: Evolutionary Biology and the Reconstruction of Life's Ancestry 1860–1940*, Chicago: University of Chicago Press, 1996. For a critical discussion of the temporalization of the living: Bettina Bock von Wülfigen et al. (eds.), 'Temporalities of Reproduction,' special issue, *History and Philosophy of the Life Sciences* (2015) 1.

<sup>23</sup> This was an evident endeavor, given the fact that the organism was understood as a structure-function complex: Tobias Cheung, 'What is an 'organism'? On the occurrence of a new term and its

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conceptual transformations 1680–1850', *History of Philosophy of the Life Sciences* (2010), 32, pp. 155–194. However, fetal physiology has so far not received much historiographical attention, which might be due to the fact that it did not gain a subdisciplinary identity akin to embryology – despite attempts by authors such as Johannes Müller or William Thierry Preyer. Some literature esp. for the early 20<sup>th</sup> century is examined in Sara Dubow, *Ourselves Unborn: A History of the Fetus in Modern America*, Oxford: Oxford University Press, 2011.

<sup>24</sup> Johannes Müller, 'Zur Physiologie des Foetus', *Zeitschrift für die Anthropologie* (1824), 2<sup>nd</sup> quarterly, pp. 423–483.

<sup>25</sup> Hans-Jörg Rheinberger's notion of 'epistemic thing' draws attention to how research, like the one described, is kept in motion by the constant difference between a technical object (e.g. an embryo at day 28) and an object of scientific curiosity (the developing organism). Hans-Jörg Rheinberger, *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*, Stanford: Stanford University Press, 1997.

<sup>26</sup> Barbara Duden, 'The fetus on the 'farther shore': toward a history of the unborn', in Lynn M. Morgan and Meredith W. Michaels (eds.), *Fetal Subjects, Feminist Positions*, Philadelphia: University of Pennsylvania Press, 1999, pp. 13–25.

<sup>27</sup> Cf. Caroline Arni, 'Traversing birth: continuity and contingency in research on development in 19th-century life and human sciences', *History and Philosophy of the Life Sciences* (2015) 37(1), pp. 50–67. On the concept of development and the emergence of child psychology: Dominique Ottavi, *De Darwin à Piaget: Pour une histoire de la psychologie de l'enfant*, Paris: CNRS Edition, 2001; Georges Canguilhem et al., *Du développement à l'évolution au XIXe siècle*, Paris: PUF, [1962] 2003; André Turmel, *A Historical Sociology of Childhood: Developmental Thinking, Categorization and Graphic Visualization*, Cambridge UK: Cambridge University Press, 2008. Cf. on development and literature: Nicola Gess, *Primitives Denken: Wilde, Kinder und Wahnsinnige in der literarischen Moderne (Müller, Musil, Benn, Benjamin)*, München: Fink, 2013.

<sup>28</sup> Besides Preyer and among others: Adolf Kussmaul, *Untersuchungen über das Seelenleben des neugeborenen Menschen*, Leipzig: C.F. Winter'sche Verlagshandlung, 1859.

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<sup>29</sup> Carolyn Steedman, *Strange Dislocations: Childhood and the Idea of Human Interiority, 1780-1930*, Cambridge: Harvard University Press, 1995.

<sup>30</sup> Nazi Germany annexed Austria in 1938.

<sup>31</sup> On the history of the child-study movement and its relation to the conceptualization of autism: Majia Holmer Nadesan, *Constructing Autism: Unravelling the 'Truth' and Understanding the Social*, London, New York: Routledge, 2005, pp. 53-79. On child guidance clinics in the USA: Smuts op. cit. (1). On the history of child psychiatry in Germany and Austria: Anette Engbarth, *Die Geschichte der Kinder- und Jugendpsychiatrie und ihre Bedeutung für die heutige Praxis*, Frankfurt am Main: Lang, 2003.

<sup>32</sup> Hans Asperger, 'Das psychisch abnorme Kind', *Wiener Klinische Wochenschrift* (1938) 51 (49), p.1316, my translation. Asperger published a long study on the topic in 1944: Hans Asperger, 'Die 'Autistischen Psychopathen' im Kindesalter', *Archiv für Psychiatrie und Nervenkrankheiten* (1944) 117, pp. 76–136.

<sup>33</sup> Leo Kanner, 'Autistic disturbances of affective contact,' *Nervous Child* (1943) 2, pp. 217–50, on p. 249. Asperger and Kanner appropriated and reframed the term 'autism' that Swiss psychiatrist Eugen Bleuler had used for a symptom of schizophrenia: the extreme withdrawal of patients, involving the predominance of their inner world. See Eugen Bleuler, 'Dementia Praecox oder Gruppe der Schizophrenien', in Gustav Aschaffenburg (ed.), *Handbuch der Psychiatrie*, Wien: Deuticke, 1911, pp. 52–56.

<sup>34</sup> E.g. William T. Preyer, *Die Seele des Kindes: Beobachtungen über die geistige Entwicklung des Menschen in den ersten Lebensjahren*, Leipzig: Grieben, 1895.

<sup>35</sup> On the importance of infantile autism and childhood schizophrenia for child psychiatry: Kathleen W. Jones, *Taming the Troublesome Child: American Families, Child Guidance, and the Limits of Psychiatric Authority*, Cambridge, MA: Harvard University Press, 2002, p. 217.

<sup>36</sup> For an overview, see Timothy Lenoir (ed.), *Inscribing Science: Scientific Texts and the Materiality of Communication*, Stanford, Calif: Stanford University Press, 1998. On the notion of paperwork: Bruno Latour, 'Drawing things together', in Michael Lynch (ed.), *Representation in Scientific Practice*,



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Cambridge: MIT Press, 1990, pp. 19–68, on p. 52. On notation systems: Friedrich Kittler, *Discourse Networks 1800/1900*, Stanford: Stanford University Press, 1990. Also: Bruno Latour and Steve Woolgar, *Laboratory Life: The Construction of Scientific Facts*, Princeton: Princeton University Press, 1986; Hans-Jörg Rheinberger, *Experiment, Differenz, Schrift: Zur Geschichte epistemischer Dinge*, Marburg an der Lahn: Basiliken-Press, 1992.

<sup>37</sup> Ursula Klein introduced the term ‘paper tools’ to describe the function of chemical formulas in European organic chemistry: Ursula Klein, ‘Paper tools in experimental cultures – the case of Berzelian formulas’, *Studies in History and Philosophy of Science* (2001) 32, pp. 265–312.

<sup>38</sup> For an introduction on recent approaches to the epistemic role of inscription practices see Christoph Hoffmann, ‘Festhalten, Bereitstellen: Verfahren der Aufzeichnung,’ in Christoph Hoffmann, (ed.), *Daten sichern: Schreiben und Zeichnen als Verfahren der Aufzeichnung*, Berlin: Diaphanes, 2008, pp. 7–20. Other examples include: Barbara Wittmann (ed.), *Spuren erzeugen: Zeichnen und Schreiben als Verfahren der Selbstaufzeichnung*, Berlin: Diaphanes, 2009; Karin Krauthausen, Omar W. Nasim (eds.), *Notieren, Skizzieren: Schreiben und Zeichnen als Verfahren des Entwurfs*, Berlin: Diaphanes, 2010.

<sup>39</sup> Kanner, op. cit. (33), p. 242, emphasis in the original.

<sup>40</sup> Leo Kanner, ‘The development and present status of psychiatry in pediatrics’, *Journal of Pediatrics* (1937), 11(3), pp. 418–35, p. 429.

<sup>41</sup> My analysis of the patient files is based on samples from Kanner’s patient records at the Mason Chesney Medical Archives (Johns Hopkins Institutions). Kanner’s patients’ medical records from the Harriet Lane Home for Invalid Children are located at the Health Information Management Division of The Johns Hopkins Hospital. I was able to find copies of the files of four of the eleven patients who are portrayed in Kanner’s first publication on autistic disturbances.

<sup>42</sup> Meyer to Leo Kanner, undated, Adolf Meyer Papers, Alan Mason Chesney Medical Archives, Johns Hopkins Medical Institutions, Unit I/2001/2.

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<sup>43</sup> *Aufschreibesysteme* has been translated as notation systems, discourse networks, and ‘writing-down-systems’. See Daniel Paul Schreber, *Memoirs of My Nervous Illness*, London: Wm. Dawson & Sons Ltd., 1955; Kittler, op. cit. (36), p. xii.

<sup>44</sup> Giorgio Agamben, *Kindheit und Geschichte: Zerstörung der Erfahrung und Ursprung der Geschichte*, Frankfurt am Main: Suhrkamp, 2003.

<sup>45</sup> Barbara Wittmann, ‘Zeichnen, im Dunkeln: Psychophysiologie einer Kulturtechnik um 1900’, in Werner Busch, Oliver Jehle and Carolin Meister (eds.), *Randgänge der Zeichnung*, München: Fink, 2007, pp. 165–186.

<sup>46</sup> Davide Giuriato, *Mikrographien: Zu einer Poetologie des Schreibens in Walter Benjamins Kindheitserinnerungen*, München: Fink 2006.

<sup>47</sup> Rüdiger Campe, ‘Die Schreibszene, Schreiben’, in Hans Ulrich Gumbrecht and K. Ludwig Pfeiffer (eds.), *Paradoxien, Dissonanzen, Zusammenbrüche: Situationen offener Epistemologie*, Frankfurt am Main: Suhrkamp, 1991, pp. 759–772.

<sup>48</sup> Shuttleworth, op. cit. (1)

<sup>49</sup> Kittler, op. cit. (36), pp. 317–335.

<sup>50</sup> Soemmerring addresses the problem with an aesthetic argument: Ulrike Enke, ‘Von der Schönheit der Embryonen: Samuel Thomas Soemmerings Werk *Icones embryonum humanorum* (1799)’, in Barbara Duden, Jürgen Schlumbohm, and Patrice Veit (eds.), *Geschichte des Ungeborenen*, Göttingen: Vandenhoeck & Ruprecht, 2002, pp. 205–235.

<sup>51</sup> Duden, op. cit. (26); Adriano Prosperi, *Die Gabe der Seele: Geschichte eines Kindsmordes*, Frankfurt a. Main: Suhrkamp, 2007.

<sup>52</sup> I draw on the work of Philippe Descola on modern naturalism and on his structuralist approach to an analysis of ontologies: Philippe Descola, *Beyond Nature and Culture*, Chicago: University of Chicago Press, 2013. On the ‘empiricization of the human’: Sergio Moravia, ‘The enlightenment and the sciences of man’, *History of Science* (1980) 18(4), pp. 247–268; Wolf Lepenies, ‘Naturgeschichte und Anthropologie im 18. Jahrhundert’, in Bernhard Fabian, Wilhelm Schmidt-Biggemann, and Rudolf

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Vierhaus (eds.), *Deutschlands kulturelle Entfaltung: Die Neubestimmung des Menschen*, München: Kraus International Publications, 1980, pp. 211–226.

<sup>53</sup> Siegfried Bernfeld, *Psychologie des Säuglings*, Wien: Verlag von Julius Springer, 1925, p. 27.

<sup>54</sup> On the coinage of the ‘internal other’ in the theoretical framework of an anthropological turn to ‘ontologies’: Matei Candea and Lys Alcayna-Stevens, ‘Internal others: ethnographies of naturalism’, *The Cambridge Journal of Anthropology* (2012) 30(2), pp. 36–47.

<sup>55</sup> On the ‘making’ (or not) of children out of fetuses through social practice: Luc Boltanski, *La Condition fœtale: Une sociologie de l'avortement et de l'engendrement*, Paris: Gallimard, 2004; Lynn M. Morgan, ‘Fetal Relationality in Feminist Philosophy: An Anthropological Critique’, *Hypatia* (1996) 11(3), pp. 47–70.

<sup>56</sup> Kanner, op. cit. (33), p. 249.

<sup>57</sup> Albert Camus, *The Stranger*, New York: A. A. Knopf, 1946; Georg Simmel, ‘The stranger’, in Donald N. Levine (ed.), *On Individuality and Social Forms*, Chicago: The University of Chicago Press, 1971, pp. 143–149. See also Alfred Schütz, ‘The stranger: an essay in social psychology’, *American Journal of Sociology* (1944) 49(6), pp. 499–507.

<sup>58</sup> Simmel described the object of his métier as the ‘reciprocal influencing’ of humans. Georg Simmel, ‘The problem of sociology’, *American Journal of Sociology* (1909) 15(3), pp. 289–320, on p. 297. Discussions in philosophy and anthropology explored how humans connected or the ‘limits of community’, as implied in the title of the 1924 book by German anthropologist Helmuth Plessner: Helmut Plessner, *The Limits of Community: A Critique of Social Radicalism*, New York: Humanity Books, 1999.

<sup>59</sup> Asperger, op. cit. (32), p. 91, my translation.

<sup>60</sup> The roots of the cybernetic movement go back to the early 1940s but the project was officially founded with the Macy Conferences in 1946 to 1953.

<sup>61</sup> Joseph Vogl, ‘Regierung und Regelkreis: Ein historisches Vorspiel’, in Claus Pias (ed.), *CYBERNETICS/KYBERNETIK: The Macy-Conferences 1946–1953*, 2 vols., Berlin: Diaphanes, 2004, vol. 2, p. 67, my translation.

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<sup>62</sup> Arguably the distinction between popular and scientific/pedagogical sources is not clear-cut. In fact, recent conceptualizations of science as 'a form of communicative action' (James Secord) can be read as explicit challenges to this distinction. However, the methodological question raised above still remains. See James A. Secord, 'Knowledge in transit', *Isis* (2004) 95(4), pp. 654–72; and Jonathan R. Topham, 'Introduction', *Isis* (2009) 100 (2), pp. 310–18.

<sup>63</sup> Sandra Crouse Quinn and Stephen B. Thomas, 'The national negro health week, 1915 to 1951: a descriptive account', *Minority Health Today* (2001) 2, pp. 44–49; Carolyn Leonard Carson 'And the results showed promise... physicians, childbirth, and southern black migrant women', *Journal of American Ethnic History* (1994) 14, pp. 32–64.

<sup>64</sup> John T. Clark, 'The migrant in Pittsburgh', *Opportunity* (1923) 1, pp. 303–307.

<sup>65</sup> Clark, op. cit. (64). Also: Kevin K. Gaines, *Uplifting the Race: Black Leadership, Politics, and Culture in the Twentieth Century*, Chapel Hill: University of North Carolina Press, 1996.

<sup>66</sup> W.E.B. Du Bois, 'Opinion of W. E. B. Du Bois', *Crisis* (September 1924), p. 199; Katharine Capshaw Smith, *Children's Literature of the Harlem Renaissance*, Bloomington and Indianapolis: Indiana University Press, 2004, p. 52.

<sup>67</sup> Philippe Ariès, *L'Enfant et la vie familiale sous l'Ancien Régime*, Paris: Plon, 1960.

<sup>68</sup> There is a considerable body of scholarship about a new view on childhood emerging around 1800 in modern European and American literature. Examples include: Carolyn Steedman, op. cit (29); Lorna Martens, *The Promise of Memory: Childhood Recollection and Its Objects in Literary Modernism*, Cambridge: Harvard University Press, 2011; Hans-Heino Ewers, *Kindheit als poetische Daseinsform: Studien zur Entstehung der romantischen Kindheitsutopie im 18. Jahrhundert; Herder, Jean Paul, Novalis und Tieck*, München: Fink, 1989; Rosemary Lloyd, *The Land of Lost Content: Children and Childhood in Nineteenth-Century French Literature*, Oxford: Oxford University Press, 1992.

<sup>69</sup> Dieter Richter, *Das fremde Kind: Zur Entstehung der Kindheitsbilder des bürgerlichen Zeitalters*, Frankfurt am Main: S. Fischer, 1987, p. 25.

<sup>70</sup> Cf. Davide Giuriato, 'Geschichten vom kleinen Hans (Freud–Kafka)', in Inka Mülde-Bach and Michael Ott (eds.), *Was der Fall ist: Casus und Lapsus*, München: Fink, 2015, pp. 129–143.

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- <sup>71</sup> Daniel Miller (ed.), *Materiality*, Durham: Duke University Press, 2005.
- <sup>72</sup> Daniel Thomas Cook, 'Moral order and moral ordering in public advice about american children's rooms, 1876–1909', *Strenæ* [online journal] (2014) 7, published on June 1, 2014, DOI: 10.4000/strenae.1155.
- <sup>73</sup> Daniel Thomas Cook, *The Commodification of Childhood*, Durham: Duke University Press, 2004.
- <sup>74</sup> Eva Geulen, 'Adalbert Stifters Kinder-Kunst: Drei Fallstudien', *Deutsche Vierteljahresschrift für Literaturwissenschaft und Geistesgeschichte* (1993) 67, pp. 648–668.
- <sup>75</sup> Davide Giuriato, 'Kinder retten: Biopolitik in Stifters Erzählung 'Der Waldgänger'', *Internationales Archiv für Sozialgeschichte der Literatur* (2015) 40(2), 441–458.
- <sup>76</sup> Michel Foucault, *Der Wille zum Wissen: Sexualität und Wahrheit I*, Frankfurt am Main: Suhrkamp, 1983, p. 170.
- <sup>77</sup> Marian F. MacDorman et al., 'International comparisons of infant mortality and related factors: United States and Europe, 2010', *National Vital Statistics Reports* (2014) 63, pp. 1–6.
- <sup>78</sup> W.E.B. Du Bois, *The Philadelphia Negro: A Social Study*, New York: Schocken Books, 1899; Andrea Patterson, 'Germs and Jim Crow: the impact of microbiology on public health policies in progressive era american south', *Journal of the History of Biology* (2009) 42, p. 529–559.
- <sup>79</sup> Susan Lynn Smith, *Sick and Tired of Being Sick and Tired: Black Women's Health Activism in America, 1890–1950*, Philadelphia: University of Pennsylvania Press, 1995; Darlene Clark Hine, *Black Women in White: Racial Conflict and Cooperation in the Nursing Profession, 1890–1950*, Bloomington: Indiana University Press, 1989.
- <sup>80</sup> For example the memoir of Mary Church Terrell, *A Colored Woman in a White World*, Washington D.C.: Ransdell Publishing Co., 1940, pp. 106–108; also: Georgia Douglas Johnson's poetry collection *Bronze: A Book of Verse* (1922) as well as her correspondence regarding the inspiration for writing *Bronze*, "I wrote *Bronze* –it is entirely racial and one section deals entirely with motherhood—that motherhood that has as its basic note—black children born into the world's displeasure," Georgia Douglas Johnson to Arna Bontemps, 1941 letter as quoted in Elizabeth McHenry, *Forgotten Readers*:

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*Recovering the Lost History of African-American Literary Societies*, Durham: Duke University Press, 2002, p. 280.

<sup>81</sup> W.E.B. Du Bois, 'Of the passing of the first-born', Chap. XI in *The Souls of Black Folk*, Chicago: A.C. McClurg & Co., 1903.

<sup>82</sup> Nella Larsen, *Quicksand*, New York: Alfred A. Knopf, 1928, p. 103.

<sup>83</sup> Sarah Partridge et al., 'Inadequate prenatal care utilization and risks of infant mortality and poor birth outcome: a retrospective analysis of 28,729,765 U.S. deliveries over 8 years', *American Journal of Perinatology* (2012) 29(10), pp. 787–94.

<sup>84</sup> Jerome Kagan, 'American Longitudinal Research on Psychological Development', *Child Development* (1964) 35, pp. 1–32, on p. 2.

<sup>85</sup> Vincanne Adams et al., 'Anticipation: technoscience, life, affect, temporality', *Subjectivity* (2009) 28(1), pp. 246–65, on p. 246.

<sup>86</sup> On antenatal care with regard to the emergence of the prenatal: Al-Gailani, 2013, op. cit. (20); Paule Herschkorn-Barnu, 'Adolphe Pinard et l'enfant à naître: l'invention de la médecine foetale', *Devenir* (1996) 3, pp. 77–87. On optimization: Nikolas Rose, *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*, Princeton: Princeton University Press, 2007.