

Decoding emotions

Autistic students and historical empathy

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Abstract

The ability to entertain and consider the perspective of a historical person is frequently considered to be an essential element of historical thinking. However, students with autism spectrum disorder – a group whose historical thinking has so far not been the subject of empirical research – often struggle with adopting someone else's perspective. This paper discusses the challenges autistic students encountered when faced with historical source material and asked to mentally change perspectives, as well as the strategies they employed in this situation. Arguing from the perspective of neurodiversity, this paper outlines the potential for all learners – neurodiverse and neurotypical alike – contained in these strategies.

Keywords

Autism, neurodiversity, historical thinking, historical empathy, historical perspective-taking

1. Introduction

"I often found it difficult to imagine what the other person might be feeling" (I-2, 00:05:59). With this quote, 21-year-old student Christine retrospectively describes her main challenges in history education. She is referring to a specific feature of autistic thinking that is often described in psychological and educational literature, namely the difficulty of changing mental perspectives. However, such a mental operation is essential for historical thinking, as it forms the basis for understanding the actions of people in the past. In this article, I will describe and interpret some of the challenges autistic students in an exploratory study faced when asked to assume the perspective of historical people, as well as the strategies students employed in these situations. The paper thus marks a first step into a field of research that has not yet been explored by history didactics, namely the historical thinking of students diagnosed with autism spectrum disorder. In order to contextualise the empirical material, I will first outline the development of scientific and social perspectives on autism (section 2) and define the central theoretical concepts of this study (section 3). Following this, I will give a brief overview of the history didactics discourse on inclusive history teaching (section 4). In section 5, I will describe the research design, while section 6 presents and discusses key findings. Section 7 will provide concluding remarks.

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2. From Kanner and Asperger to neurodiversity: perspectives on autism

The ICD-11, the current version of the World Health Organization's (WHO) International Classification of Diseases, defines autism as follows:

Autism spectrum disorder is characterised by persistent deficits in the ability to initiate and to sustain reciprocal social interaction and social communication, and by a range of restricted, repetitive, and inflexible patterns of behaviour, interests or activities that are clearly atypical or excessive for the individual's age and sociocultural context. [...] Individuals along the spectrum exhibit a full range of intellectual functioning and language abilities. (WHO, 2025, p. 392)

The fact that the ICD, just like the American Psychiatric Association's DSM-5, uses the term "autism spectrum disorder" highlights the very different forms in which autism can occur. In order to do justice to this broad spectrum, a diagnosis of autism must be based on a combination of different criteria relating to social communication and reciprocal interaction, stereotypical or ritualized behaviour, and, in the DSM-5, hyper- or hyporeactivity to sensory stimuli (American Psychiatric Association, 2013, pp. 50–51).

In addition to other variants, autism spectrum disorder primarily encompasses two forms of autism first described in the 1940s, which were treated as separate phenomena in earlier editions of both manuals and are directly associated with two names: infantile autism, mainly associated with Hungarian-American psychologist Leo Kanner, and Asperger's syndrome, named after the Austrian paediatrician Hans Asperger (Silberman, 2015). While Kanner insisted for a long time that autism was a serious but extremely rare mental disorder that only affected children, Asperger took a slightly different view: He believed that the cases of "autistic psychopathy" he studied were indicative of a wide range of abilities and interests, ranging from serious mental disorders to "original and creative points of view" and "exceptional intellectual maturity" (Asperger, 1944, p. 115; my translation).

Since Kanner and Asperger, academic perspectives on autism have undergone several fundamental changes. This is not the place to recount the fascinating medical (Waltz, 2023), psychological,¹ cultural and social histories of autism in detail. Instead, I can only refer to a fundamental, multi-step paradigm shift in the approach to autism and related psychological phenomena. While it was initially mainly doctors and psychologists who claimed interpretative authority over autism, the importance of relatives, especially parents, increased during the 1980s and 1990s. As contemporary historian Rüdiger Graf puts it, this led to a shift in perspectives, with "external knowledge of the third person, gained through behavioural observations, testing procedures and parent interviews" being supplemented by the "more practical knowledge of the second person, gained through ongoing, everyday interaction with parents and care-givers" (Graf, 2020, p. 283; my translation). This broadening of perspectives was linked to the efforts of parent initiatives to secure places in regular schools as well as appropriate medical, psychological and social support for their children. In addition, parent associations campaigned for intensified medical research on the causes of autism and possible cures, as illustrated by the name of the influential parent initiative "Cure Autism Now!". An expansion of diagnostic criteria in the 1990s led to a sharp increase in the proportion of adults with autism who were highly functional and, in some cases, very successful in their careers. This development was accompanied by a sense of self-empowerment among those affected, who now demanded at least a say in the matter, but often also claimed the authority to define autism. From then on, "first-person introspective knowledge," to borrow another of Rüdiger Graf's (2020, p. 283) terms, was to be the yardstick for scientific, but above all for social perspectives on autism (Charlton, 1998). This was accompanied by a fundamental reassessment of autism, which, from the perspective of autistic activists, should

1 Francesca Happé and Uta Frith (2020, p. 218) outline seven fundamental changes: „(1) from a narrow definition to wide diagnostic criteria; (2) from a rare to a relatively common condition, although probably still under-recognised in women; (3) from something affecting children, to a lifelong condition; (4) from something discrete and distinct, to a dimensional view; (5) from one thing to many 'autisms', and a compound or 'fractionable' condition; (6) from a focus on 'pure' autism, to recognition that complexity and comorbidity is the norm; and finally, (7) from conceptualising autism purely as a 'developmental disorder', to recognising a neurodiversity perspective, operationalised in participatory research models.“

no longer be considered a disease to be cured, but rather a result of natural variation in human neural architecture. The guiding paradigm of this perspective is the concept of neurodiversity, derived from the concept of biodiversity. Just as variations occur within an ecosystem that are not only normal but also strengthen the resilience of the system, neurodiversity is thought of as a natural diversity of human ways of perceiving, feeling, and thinking. Under this premise, people who perceive themselves as deviating from the norm can be described as neurodivergent.

3. Historical thinking and historical empathy

Within the German research discourse on historical thinking and learning, there are various conceptual approaches. The vast majority of these relate to the concept of historical consciousness or to competences of historical thinking derived from it. The present study was based on the model of historical thinking developed by the 'Histograph' working group (Thünemann & Jansen, 2022). This approach provides a synthetic concept based primarily on the dimensions of historical consciousness as outlined by Karl-Ernst Jeismann (2000), incorporating ideas from the approaches of Jörn Rüsen (2017), Wolfgang Hasberg (2013) and others. These ideas relate in particular to the role of emotions, which are systematically taken into account in the 'Histograph' approach both at the level of historical thinking and in the context of classroom communication (Bracke & Flaving, 2022). At the heart of the model lies the handling of four operations of historical thinking, which can be carried out in both a synthetic and an analytical mode: historical questions, historical case analyses, historical causal judgements and historical value judgements.

An important aspect of learning about history is the ability to understand the significance of perspective at different levels. In the German-language discourse, a distinction is made here between the multiplicity of perspectives in sources, the controversial nature of (professional and popular) historiography, and the diversity of pupils' judgements (Bergmann, 2000). Students should learn to examine the significance of perspective at these levels and to analyse its relevance. This also involves, at least tentatively and to some extent, putting themselves in the shoes of the historical actors. "One can try," as Saskia Handro (2015, p. 39) puts it with reference to Hans-Georg Gadamer, "to put oneself in the situation of the people involved, to practise empathy, to understand with sensitivity. Yet this act of thinking always takes place in a concrete present, against a specific horizon of understanding."

In the English-language discourse, too, perspective-taking is regarded in several models as a key competence of historical thinking (Dickinson & Lee, 1995; Seixas & Morton, 2013). The term 'historical empathy' is regularly used in this context (Lee & Ashby, 2001; Endacott & Brooks, 2013), a term that is less commonly encountered in German-speaking discourse (Brauer, 2013). This term is prone to misunderstanding. This is because the everyday use of the term 'empathy' carries connotations from which no objectives for history teaching should be derived: On the one hand, history teaching should not aim to elicit from students specific emotional reactions towards or feelings of kinship with historical actors; whilst such reactions are possible, they should not be deliberately induced, as this would amount to the emotional manipulation of learners. On the other hand, it should not be suggested that students' emotional and affective experiences correspond to the perceptions of contemporaries in the historical situation under investigation. Instead, a competent approach to the concept of historical empathy

means being able to see and entertain as conditionally appropriate (not necessarily to accept or share) connections between intentions, circumstances, and actions. It is not merely knowing that certain historical agents or groups had a particular perspective on their world, but being able to see how that perspective would actually have affected actions in particular circumstances (Lee & Ashby, 2001, p. 24).

In a similar fashion, Tyson Retz (2022, p. 218) has warned that

[r]ather than being the name for a way of knowing rooted in the very self-conception of the history discipline, empathy is most commonly associated with feeling for people who lived in the past. [...] I have suggested that empathetic inquiry in history should direct itself towards a specific kind of context – the context in which it was possible for past agents to hold their beliefs as true and to act upon them accordingly. Perhaps this use of 'empathetic inquiry' is still deceptive, and it will need to be stated that historical understanding involves attending to a certain kind of historical context.

In the terminology of German history didactics, this means making historical causal judgments (Thünemann & Jansen, 2022, pp. 84–86) by situating historical actions in their relevant context.

Because of the potential misunderstandings arising from use of the term, some authors, such as the historians of the senses and emotions Rob Boddice and Mark M. Smith (2020, p. 27), have argued that “we should rather consciously abandon empathy, while forcing a critical awareness of implicit tendencies to *feel with* historical actors.” However, since this term is commonly used in the English-language literature and also bears the advantage of highlighting the emotional dimension of both historical thinking in general and imaginative operations of perspective-taking specifically (Endacott & Brooks, 2013), to completely discard the concept seems premature.

While perspective-taking is central to various models of historical thinking, there is good empirical evidence that even neurotypical (i.e. non-autistic) learners find it very challenging. Studies on history teaching in Germany (Hartmann et al., 2009; Lange, 2011; Günther-Arndt, 2016), the United Kingdom (Lee & Ashby, 2001; Barton, 2001), Finland (Rantala et al., 2016), and the Netherlands (De Leur et al., 2017), among other countries, have identified typical explanatory strategies used when attempting to adopt a historical perspective and, in some cases, have proposed models of developmental stages in perspective-taking. The various studies agree that learners find it difficult to imagine a past that is fundamentally different from the present, in which people explained the world to themselves in ways other than their own and in which different normative concepts applied. Attempts to take a historical person’s perspective in history lessons therefore often lead to presentist distortions when learners try to explain past actions on the basis of worldviews, norms, and social rules that are familiar to them. Combined with a view of historical change based on progress, people of the past therefore often appear to students as deficient, as morally less developed than “us,” as insufficiently informed and educated, or simply as stupid.

With regard to autistic learners, there is empirical evidence to support the fact that they experience specific challenges when asked to mentally take someone else’s perspective or emotions into consideration (Yirmiya & Seidman, 2021). While some psychologists argue that this difficulty points to a lack of a *Theory of Mind* (ToM) (Happé, 1994; Baron-Cohen, 1995), other authors, especially autism activists, have strenuously argued against both this assumption as well as the claim that autists find it difficult to mentally change perspectives.² However, the current state of autism research still posits “that ToM deficits are widespread in ASD [people with autism spectrum disorder]” (Chevallier, 2021, p. 4825). Whether the challenges autistic learners face when asked to adopt a *historical* person’s perspective are similar to or different from those of their neurotypical classmates, however, is completely unknown at this point. The major reason for this is to be found in the fact that the historical thinking of autistic learners has thus far not been researched empirically, as the next section will outline.

4. Autism in schools and in history lessons

While there is a very active field of research focused on inclusive and diversity-conscious history education in Germany (Alavi & Lücke, 2016; Kühberger & Schneider, 2016; Barsch et al., 2020; Musenberg et al., 2021; Rein, 2021; Barsch & Rein, 2025), autism and other phenomena covered by the neurodiversity paradigm, such as ADHD, have not yet played a significant role in this field.³ An important concept in this field is that of “Eigen-Sinn”, which can roughly be translated as idiosyncrasy but also contains notions of being one’s own master (Musenber, 2016). One important originator of the concept is historian Alf Lüdtke (1995, pp. 313–314), who emphasizes the importance of the spelling (the conventional German spelling would be “Eigensinn”): “„The ‚dis-compounding‘ of writing it as Eigen-Sinn stresses its root signification of ‚one’s own sense, own meaning‘. It is semantically linked to aneignen (appropriate, reappropriate, reclaim).” In my mind, these notions make it a very appropriate concept for analysing autistic thinking; however, it has thus far not been used for this purpose. Instead, the discourse on inclusive history education has mainly focused on how to enable a wide spectrum of students with different abilities and attributes to participate. Authors often discuss how to remove barriers to access, sometimes physical ones, but more often immaterial ones. Therefore, the language used in this field of research often uses terms derived from architecture and construction, such as accessibility and scaffolding

2 For example, Yergeau (2018, p. 19) believes „all incarnations of ToM to be decidedly inhumane.“

3 Autism is mentioned only in Barsch (2025), pp. 39–42.

(e.g., Barsch & Kühberger, 2020; Barsch & Lücke, 2020; Körber et al., 2020). An exception to this general observation are the broader discourses on language-sensitive history teaching and the relevance of gender for history education (Handro, 2023; Bennewitz & Burkhardt, 2016). Overall, however, the focus is on supportive measures, for example when discussing whether primary and/or secondary sources can be translated into plain language in order to enable learners with cognitive impairments or language deficits to access historical learning without unduly reducing historical complexity (Alavi, 2015). This focus on enabling participation is particularly evident when it comes to inclusive history teaching in the narrower sense, i.e. the joint schooling of learners with and without physical and/or mental disabilities. It would be an exaggeration to speak of a deficit-oriented approach in this regard; nevertheless, despite all efforts to develop concepts for differentiated lesson planning, it can be said that large parts of the discourse in German history didactics, grouped around the categories of historical consciousness and historical thinking competences, are characterised by a concept of historical thinking modelled on the historiographical research process. Overall, categories such as subject orientation in lesson design or plurality of students' historical judgement play an important role in this field of research; with the exception of Bärbel Völkel's (2017) phenomenological approach, however, the relevant literature refers to a shared (and possibly unavoidable) conception of historical thinking that is oriented towards the scholarly research process. In other words, it is tacitly assumed that processes of perception, feeling, information processing and thinking proceed in a similar way between individuals. Whether such a primarily analytical understanding of historical thinking tends to exclude autistic people, or whether they even have an advantage over neurotypical learners in certain aspects due to the specific rationality sometimes attributed to them (Haider et al., 2023a, p. 29), is still completely unclear.

Not only in history education research, but also in historiography, autism has so far been a marginal research topic, addressed at most in the context of medical or psychiatric history or with regard to the Nazi euthanasia program (Graf, 2022). However, these works do not focus on the perspective of autistic people themselves. Those branches of historiographical research that would be particularly suited to such questions—I am thinking primarily of disability history (Kudlick, 2003; Lingelbach & Schlund, 2014; Sterne, 2021; Barsch & Bösl, 2022; Mackert, 2022) and the history of emotions and the senses (Frevort, 2009; Smith, 2021)—have, to my knowledge, not yet dealt with autism. However, the books by Silberman (2015) and Sheffer (2018) are two volumes on the history of Autism well worth reading that are aimed at a broader audience.

The situation is different in education sciences. In this field, several guidelines for teachers have been published, advising educators on how to design neurodiversity-sensitive classrooms, plan lessons and lead classroom discourse with autistic students, and design tasks and learning materials (Schirmer, 2019; Meer-Walter, 2021; Haider et al., 2023b). These guidelines focus particularly on three aspects: autistic learners' sensory perception, which can quickly lead to sensory overload; challenges in dealing with social conventions and implicit meanings; and specifics in information processing. Overall, the primary goal is to make schools and teaching neurodiversity-sensitive and to create a learning environment in which autistic students can realise their potential (Lindmeier et al., 2023). Given that autistic children are now estimated to make up 1–1.5 % of an age cohort (Graf, 2020, p. 80) and that a majority of autistic children in Germany attend mainstream schools,⁴ such interdisciplinary guidance is by no means only relevant for teachers at special needs schools, but also for their colleagues at mainstream schools.

5. Method

In order to take a first step into this field of research, 10 autistic students aged between 14 and 22 were interviewed as part of an exploratory interview study. Contact with five participants was established through a psychological practice where they received supportive therapeutic services in addition to their lessons at secondary schools. In order to do justice to the range of the autism spectrum, I also interviewed five students who attend a vocational college for people with physical disabilities or with autism spectrum disorders. Three participants had previously attended a regular school, while two had received special education.

⁴ Surprisingly, there is no official data on this matter. However, in several non-representative parent surveys conducted by the German Autism Association (*Bundesverband autismus Deutschland e. V.*), 65–80 % of parents stated that their children attend mainstream schools (Czerwenka, 2017; Grummt et al., 2022).

The semi-structured interviews followed a standardised guide and were evaluated using qualitative content analysis. Depending on the needs of the interviewees, the interviews were conducted by me alone, in the presence of the psychologist or a teacher, or by the therapist alone. The interviews were audio-recorded and lasted between 15 and 45 minutes. They took place on the premises of the psychological practice or the vocational college, i.e. in surroundings familiar to the participants.

The interview guide was divided into two parts. The first set of questions focused on the learners' historical interests as well as their perception of their history lessons. For example, they were asked about the typical structure of a history lesson, about teaching methods they encounter and topics they enjoy, and about the presumed function of the subject. In a longer second part, participants were presented with historical sources on which they were asked to give their opinion. In order to identify possible specific features of a neurodivergent approach, materials were used that had already been used in previous studies (Bernhardt, 2010; Pohl et al., 2018; Köster & Schindler, 2020). This strategy was chosen assuming that participants in these previous studies had mainly been neurotypical students. Thematically, all materials pertain to US racial segregation in the 20th century. This focus was chosen in order to determine the extent to which the particularly strong sense of justice attributed to autistic people in the literature and their sometimes rigid approach to norms and regulations affect historical thinking.

First, respondents were shown two photographs depicting signs indicating waiting rooms for white and black Americans. In a second step, the respondents read a short excerpt from the American Declaration of Independence, including the famous phrase "All men are created equal". In addition to their general assessment of segregation, learners were asked how the statements in the written and visual source can be reconciled with each other.⁵ Following this, students were asked to describe the 1937 photograph by American photographer Margaret Bourke-White titled "At the Time of the Louisville Flood" and to ponder why it is considered a very famous image. Another part of the interview centred on the question of whether wording in historical children's books which might be considered offensive from today's perspective should be altered in new editions.

The interviews were transcribed and analysed using a content analysis method based on the content-structuring approach outlined by Kuckartz (2018, pp. 97–121). The main categories were established deductively. They are based on the current state of research into the specific characteristics of neurodiverse thinking and experience. These include, for example, the historical change of rules and norms; the handling of social conventions; the significance of perspectivity at different levels of historiography (primary sources, secondary sources/accounts, students' judgements); the significance of emotions and their social embeddedness, both at the level of historical actors and at the level of students; the handling of cognitive dissonance; detail-centred vs holistic approaches to the material presented. Based on these main categories, subcategories were developed inductively from the material. For example, the main category 'mutability of norms' included, amongst others, the subcategories 'definition of equality', 'scope of "all men"', 'discriminatory language', 'cancel culture' and 'postcolonial perspectives'. The overarching aim of the analysis was to identify three aspects: firstly, structural commonalities in the specific 'Eigen-Sinn' of neurodivergent learners; secondly, challenges in historical learning based on an autistic experience; and thirdly, the related coping strategies.

6. Initial findings: Historical perspective-taking and empathy among autistic students

In the following section, I will present and discuss findings related to historical empathy and perspective-taking. For reasons of space, other aspects of the study, such as students' interest in history and thematic preferences, their perception of a 'typical' history lesson or their methodological competences, cannot be addressed here. However, two caveats should be noted in advance: even in the small sample on which this article is based, there were indications of the wide range of the autism spectrum. The participants dealt with the stimuli and materials in different ways, with some displaying different facets of a neurodivergent experience as described in the literature. However, these were expressed in very individual ways. It is therefore hardly

5 This part of the interview followed the approach taken in Pohl et al., 2018.

possible to draw generalised conclusions based on the available data. Furthermore, the following considerations are observations and conclusions from the external perspective of an academic observer. In-depth follow-up studies should combine these with perspectives of autistic self-perception in a participatory approach.

6.1 Avoidance of perspective-taking

In an earlier written survey, neurotypical learners often attempted to resolve the contradiction between the statements in the Declaration of Independence and the visual sources documenting segregation by referring to the inner world, ideas, and motives of individual historical actors. In their answers, the respondents pointed out, for example, that for the authors of the Declaration of Independence, the phrase “all men” referred only to white people, or they imagined scenarios in which white Americans perceived supposed African American refugees as a threat – the latter possibly a transfer of discourses familiar to the learners in their everyday lives (unpublished data collected for Pohl et al., 2018).

The findings from the interviews suggest that some autistic learners think and argue differently here. This is already indicated by the first source material, the photographs of the waiting rooms. While neurotypical learners in an earlier survey when presented with the same material mostly imagined how a version of their present selves would have acted in the historical situation, many autistic students seem to avoid explanations that involve imaginatively putting themselves in the shoes of historical actors. Like neurotypical learners, they often refer to the significance of racist attitudes as an explanation; however, they do not primarily address these as the ideas and beliefs of specific actors, but rather as abstract social phenomena. Michael is an example of this. The 19-year-old was completing his first day at vocational college on the day of the interview and spontaneously took part in the study. During the conversation, Michael exhibited several behaviours typical of many autistic people: he avoided eye contact and instead looked past me or at the ceiling. He spoke calmly and measuredly, with numerous pauses and little modulation of voice.⁶ He also revealed the greatest amount of historical knowledge about American segregation policy of all the respondents. When asked why African Americans had to use different waiting rooms than their white compatriots, the self-proclaimed socialist pointed to the connections between colonialism and racism. When I asked him for an explanation for the apparent contradiction between the Declaration of Independence and segregation policies, he returned to this argument. “The economic system of the United States required slaves for a long time, and, well, that was linked to the justification of civilisation. Or just... simply... yes, superiority because they are Christian. And, well, that Christianity then became whiteness and that... Well, but in any case, it was used to justify discrimination against Black people” (I-6, 00:19:10–00:19:50).⁷ Michael is arguing here on the level of abstract social structures. Of course, this line of argument does not necessarily have to be a result of his autism. However, it enables him to answer my questions without having to adopt someone else’s perspective.

Using the potential ideas of others, especially historical persons, as an explanation is not plausible or feasible for many neurodivergent learners. A similar sentiment also seemed to characterize 22-year-old Greta’s memory of the Nazi euthanasia program being discussed in class: “Yes, it’s just- it sucks, but somehow to always, ‘How could that happen?’, somehow, sometimes I couldn’t quite accept it anymore. [...] People can be crazy and extremes are never good. I don’t know, what can I say, yeah” (I-7, 00:04:40–00:04:53). Here, one might assume that Greta was speaking out against the expectation that she should be personally affected beyond a basic historical value judgment. Such expectations are often rejected by learners in empirical contexts (e.g., Klein, 2012). However, when I asked her whether she thinks too many expectations are attached to the topic of Nazism, she replied: “No, but every time there’s this amazement. ‘How can that be?’ Or—yes, there are evil people who do evil things. That’s how it is. Yes, I don’t know” (I-7, 00:05:00–00:05:04). The fact that people ask about the motives of Nazi perpetrators in history class did not seem plausible or productive to Greta. Like Michael before her, she did not use the approach widely documented among neurotypical learners of imagining oneself in the historical situation. Given the breadth of the autism spectrum, however, it is perhaps not surprising that there is a clear counterexample in the sample. 16-year-old Clemens, using the term “empathy” in its everyday meaning, explicitly argued that the use of the n-word is impossible for “anyone

6 In her comparative analysis of speech patterns frequently associated with autism and their counterparts in culturally valued text, Julia Miele Rodas (2018, pp. 57–64) calls this type of speech „discretion“.

7 All student responses are my translation.

with at least a smidge of empathy who can empathise and know that such a thing is simply not acceptable because it hurts other people's feelings" (I-5, 00:13:52–00:14:10). However, he was the only participant to argue this way.

As stated above, historical perspective-taking means making causal connections between people's intention, their circumstances and their actions. A – somewhat schematic – difference between autistic and non-autistic learners can be found in these causal judgements: For neurotypical learners, understanding other people's perspectives in history is challenging because people who behave differently from how they themselves would behave appear deficient or backward to them. They often find it difficult to consider the *circumstances* of actions and perspectives, including historical changes in attitudes and intentions, which is why they sometimes use value judgements rather than causal ones. For autistic people, on the other hand, taking *intentions* into account sometimes presents itself as either an almost impossible task or an implausible strategy.

6.2 Considering other people's emotions

One possible reason for this lies in the fact that understanding or adopting other people's perspectives always involves dealing with emotions. This does not mean that students actually feel the same way as people in the past when they try to understand their perspectives. In fact, emotions are highly complex, multidimensional phenomena that, in addition to affective experience and physiological reactions, also include expressive, motivational, and, last but not least, evaluative and cognitive elements (Bracke & Flaving, 2022, pp. 102–106; Brauer, 2013). Historical empathy, or tentatively adopting historical perspectives, therefore does not mean sharing affective experiences with historical actors, but rather understanding how, in past contexts, the individual assessment of a situation, i.e., the cognitive-evaluative element, was accompanied by affective experiences, physical reactions, and the motivation for specific actions (Endacott & Brooks, 2013). Such an interplay of these emotional dimensions also occurs in autistic people, who often experience both sensory perceptions and affective impulses much more intensely than neurotypical people and, above all, unfiltered, without the ability to prioritize and block them out. However, they frequently find it difficult to imagine these processes in other people. For example, 21-year-old Christine recalled that she found tasks in her history class that required putting herself in another person's shoes very difficult: "I often found it difficult to understand what the person might be feeling overall" (I-2, 00:05:59). A little later, Christine picked up on this thought again: "I found it difficult when they said, yes, [mocking voice] [...] 'How do you think people felt at that time?' Or sometimes we had to write something like letters from the perspective of someone who lived at that time. Like, 'Write a letter to politicians or to the [...] government.' And 'You are, I don't know, a merchant in the 19th century.' And then I always think, 'Yeah. OK, I don't know. What do I know?' Yeah, exactly, I always found that really annoying" (I-2, 00:09:55–00:10:32).

6.3 Compensation through cognitive effort

The difficulties mentioned here may also be related to the fact that autistic people are frequently unable to *intuitively* grasp the expressive and social dimensions of emotions (Yirmiya & Seidman, 2021). Many autistic people can compensate for this to a certain extent with increased cognitive effort, for example by learning the formula "tears = sadness." However, they often struggle to apply this in a manner that takes both the context and social conventions into account. Recognizing tears of joy can therefore be just as challenging as identifying sadness when tears are suppressed, or detecting feigned emotions.

Autistic people therefore often have to compensate through cognitive effort for their inability to intuitively decipher the expressive component of emotions. They cannot necessarily deduce an emotion from a facial expression. This fact is also evident in students' descriptions of the photo by Margaret Bourke-White. 18-year-old Tanya, who always kept her statements very brief, noted that the picture shows a happy white family and sad black people. When asked how she recognizes this sadness, she replied: "Because they have buckets and everything" (I-9, 00:13:37). This answer surprised me, and I asked her to explain the connection between the buckets and bags on the one hand and the sadness on the other. Tanya replied in her usual monosyllabic manner: "Maybe because they're looking for water and food and stuff" (I-9, 00:14:00).⁸ Tanya

8 In her speech patterns, Tanya displayed even more "discretion" (to use Rodas' term once again) than Michael did.

recognized emotion through an analytical conclusion: a person standing in line with baskets and buckets is probably dependent on food donations. Anyone in such a situation could be sad. Other respondents drew similar conclusions (I-1, 00:11:56–00:13:00).⁹

6.4 The challenge of social conventions

Dealing with emotions in the context of historical perspective-taking is difficult not only because the emotional states of historical actors often have to be inferred first, but also because all components of an emotion are socially framed and thus change over time. It is this social framing of the experience and expression of emotions that makes historical contextualisation essential. In an interview, 16-year-old Charlotte responded to the question of whether separate waiting rooms for white and black people trigger an emotion or an evaluation in her as follows: “It doesn’t really trigger any [long pause] feeling. But it definitely is—well, actually, it is an uncomfortable feeling or a bit of anger that makes you think, um, ‘Why aren’t they worth the same as white people’ and, um, I don’t think it’s good that people were valued so differently in the past” (I-3, 00:08:15–00:08:50). After initially stating that the images did not trigger any feelings, Charlotte changed her mind and said she experiences “a bit of anger”. Perhaps she only began to feel an emotional response after she had cognitively processed the historical situation depicted. But it is also possible that she felt an emotional response was expected of her, that she was aware of the fact that there are social conventions pertaining to emotions. Michael, mentioned above, expressed this impression quite explicitly: “I don’t know what kind of evaluation you expect. [...] So no, I don’t feel anything and I don’t expect anything. So yes. I know what I see there. But I don’t know ... exactly” (I-6, 00:17:06–00:17:29). It seems plausible to me that Michael’s hesitant answer is related to the fact that he was trying to analytically understand the intuitive way in which neurotypical people deal with emotions and related conventions. He is aware that neurotypical people expect emotional or evaluative reactions in certain situations. For him, however, such evaluations and feelings do not occur automatically, but require analytical conclusion.

7. Conclusion

If one considers the neurodivergent characteristics described here in relation to historical empathy from the perspective of the above-mentioned model of historical thinking, preliminary characteristics of an autistic ‘Eigen-Sinn’ begin to emerge. With regard to the different operations of historical thinking, these can be systematised as follows:

1. The learners’ *historical questions* were only indirectly addressed in the interviews. However, the findings suggest that these questions are more likely to relate to the special interests of autistic pupils (e.g. I-4, 00:07:55–00:09:50), to questions concerning the material environment or to social structures, rather than to the individual motives and emotions of specific historical actors.
2. Autistic learners apply analytical strategies to explore *historical case analyses* even in cases where their neurotypical classmates tend to rely on their emotional intuition. During the interviews, some interviewees expressed a preference for a detail- and fact-oriented approach to historical case analyses, rather than historical judgements (e.g. I-2, 00:07:25–00:07:35).
3. Unlike neurotypical learners, the intentions and emotions of historical persons do not play a central role in the formation of *historical causal judgements* among several interviewees, and are sometimes actively avoided. Rather than using them as explanans, some autistic learners tend to regard emotions as a complex explanandum. It is precisely with regard to this mode of historical thinking that two effective strategies have been identified, which will be presented below.
4. Autistic learners have no fundamental difficulty in making *historical value judgements*. Numerous, and at times very emphatic, examples can be found in the interviews.¹⁰ However, mediating between one’s own assessment and the historical participants’ perception of the situation is a major challenge for many students – both neurotypical and neurodivergent.

⁹ This student, Tyler, also provided a very methodical description of the picture, again employing “discrete” language

¹⁰ Upon looking at the images of segregated waiting rooms, Clemens burst out: „This is absolute shit!“ (I-5, 00:05:29).

Signs of an autistic ‘Eigen-Sinn’ are to be found above all in the particular importance attached to questions of justice and equality, as well as in an occasionally utilitarian approach to norms.¹¹

The examples discussed point towards neurodivergent solution strategies for problems that require historical causal judgements through perspective-taking. These strategies could be described as the structuring of attitudes and decoding emotional reactions. These are two ways of dealing with the challenging, and for autistic people often impossible, task of imagining the emotions and motives of other people. When applied reflectively, however, both strategies could prove to be a corrective to widespread everyday theories, thus supporting Yergeau’s (2018, p. 34) claim “that being autistic confers ways of being, thinking, and making meaning that are not in and of themselves lesser—and may at times be advantageous.” The structuring of attitudes can prevent us from adhering to a view of history dominated by supposedly great men who make history (Barton, 2001; Günther-Arndt, 2016), since this strategy does not seek the cause of historical change in the inclinations, attitudes and preferences of individual historical actors. The strategy of decoding emotions, on the other hand, avoids attributing one’s own feelings, attitudes and perspectives to historical actors. Instead, it focuses on the aspect that is already crucial for historical empathy as defined by Lee and Ashby (2001): understanding how the cognitive-evaluative dimension of emotions, affective experience and motivation to act interacted in historical individuals. This is no easy task, neither for neurotypical nor for neurodivergent learners, and often not even for historical research. But it should not be an easy task, as the historians of the senses and emotions Rob Boddice and Mark Smith (2020, p. 16) note: “We submit that the histories of emotions and the senses are not supposed to be easy, for they push against one of the most fundamental and unquestioned phenomenological assumptions of our own lives, namely, that how we feel must be how other people felt.” Perhaps this assumption is less fundamental for autistic people, and perhaps this could prove to be an analytical advantage in historical thinking. Neurotypical learners might even benefit from viewing the emotions and perceptions of people in the past in the way that autistic learners regularly do when asked to change their perspective: as something fundamentally foreign that cannot be experienced or relived intuitively or emotionally, or at least only to a very limited extent, but can only be deciphered analytically. It seems promising to research these strategies further. Similarly, a more detailed exploration of the above-mentioned neurodivergent specifics in dealing with different historical thinking operations can prove to be a fruitful avenue for future research. Taken together, such studies can be one way of taking the *Eigen-Sinn* of autistic thinking seriously.

¹¹ For example, I-1, 00:06:5, argues that segregation is ineffective.

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Ethical statement

The interviews were coordinated with the participants' psychologists and teachers. Participants gave informed consent to participate in the interviews. Participation was voluntary. In those cases where participants were minors, their parents also gave informed consent.

All names used in the paper are pseudonyms. Interview data is stored securely on a university server. Our institution does not require ethics approval for reporting individual cases or case series.

AI applications were not used either in the research process (data collection and analysis, interpretation of findings) or while writing the paper. DeepL was used to check the idiomatic nature of certain phrases.

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