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Emotional abilities and art experience in autism spectrum disorder

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Abstract
In contrast to mainstream accounts which explain the aesthetic experience of people with autism spectrum disorder (ASD) in terms of cognitive abilities, this paper suggests as an alternative explanation the "emotional abilities approach". We present an example of a person with ASD who is able to exercise a variety of emotional abilities in aesthetic contexts but who has difficulties exhibiting their equivalents in interpersonal relations. Using an autobiographical account, we demonstrate first that there is at least one precedent where a person with ASD can exercise a series of emotional abilities when engaging with art works. Second, we offer also an explanation about why aesthetic contexts might enable this person to exercise emotional abilities which in interpersonal contexts seem to be blocked.

Keywords Autism · Emotional abilities · Empathy · Aesthetic experience · Phenomenological description · Thematic analysis

1 Introduction

In his short story 'Prodigies', Sacks (1995) presents the case of Stephen Wiltshire, an artist diagnosed with Autism Spectrum Disorder (ASD). He was capable of drawing entire cities from a short glance on a helicopter trip or producing a piece of

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music full of passion. Despite these remarkable abilities, Stephen remained hugely compromised in the interaction and communication with people, in particular with regard to the expression of emotions. However, his artistic production shows individuality and originality and elicits emotions in spectators. Stephen's artworks reveal that he does not only possess abilities as a creator but also that he is not emotionally disengaged from the world surrounding him. This case intrigued Sacks to the point of posing the question which motivates this paper: How can someone be affectively touched by art, i.e., have emotional aesthetic experiences,[1] without being able to exhibit a variety of emotions in everyday interpersonal contexts?

ASD is a neurodevelopmental disorder characterized by interaction and communication difficulties as well as by repetitive patterns of behavior (American Psychiatric Association, 2013). Moreover, High Functioning Autism (HFA) and Asperger Syndrome (AS), now classified as mild forms of Autism in the Autism Spectrum Disorder continuum (DMS-V), preserve normal or high IQ (Gillet, 2014). People with ASD have been characterized as having limited emotional interactions, mostly referred to as a lack of empathy (Baron-Cohen et al., 2009), although this view is less and less consensual (Milton, 2012). Damien Milton (2012) defends the idea that troubles in empathy are not exclusive for 'autistic people'.[2] In particular, an issue he calls the double empathy problem is that 'non-AS people' have difficulties empathizing with 'autistic people' on their part. This mismatch is not purely an expression of neurological differences, but also very much a social and cultural phenomenon. According to this view, often people with ASD can empathize better with other individuals with ASD but less with people without ASD, just as the latter can empathize less with them.

To get back to the initial question, the received view assumes that people with ASD access aesthetic objects in virtue of some of their *cognitive* abilities, i.e., pure reasoning skills with no emotions involved (Mazza et al., 2020; Park et al., 2018). This assumption is based on a second received view, namely that people with ASD have difficulties recognizing individual emotions, particularly with respect to human faces and bodily gestures (Leung et al., 2022; Yeung, 2022), which has led to the claim that people with ASD have impairments in empathy and make use of cognitive skills to cope with that (Baron-Cohen et al., 2009; Masataka, 2017; Mazza et al., 2020; Park et al., 2018). This paper provides a counterexample to the first assumption. It focuses on the aesthetic experiences of a person with ASD, Edgar Schneider, which involve a variety of *emotional* responses towards art objects,[3] especially towards literature and operas. We

[1] We understand and use the concept of "aesthetic experience" as distinct from similar concepts such as "aesthetic judgment", "aesthetic appreciation" and "aesthetic evaluation". Though often the notion of aesthetic experience is used as synonymous for these other forms of engagement with art, only the former refers directly to the experience of artworks, while the latter expressions refer to forms of judgment, appraisal and evaluation (we draw here on a distinction put forward by Todd, forthcoming).

[2] In accordance with "other autistic self-advocates", Milton (2012) uses the term "autistic people" instead of "people with ASD" in favor of a framework of diversity. Generally, we use the latter expression which is the standard form in scientific literature.

[3] We will be concerned with classical examples of art objects such as paintings, literature and music, but do not discuss abstract art.

will argue that his aesthetic experiences can be explained in terms of a variety of emotional abilities (for details, see Section 4). Herein, we follow other researchers (Leung et al., 2022) who in a recent review on emotion recognition and autism across visual and auditory modalities have stated that recognition of musical emotions seems unimpaired in ASD. Since current findings are disproportionately influenced by studies on human faces, they underline that further research on the recognition of prosodic, musical, and nonhuman facial emotions is required. Drawing on this line of research, this paper presents the "emotional abilities approach" according to which emotional abilities are preserved in (at least some) people with ASD and particularly exercised when they engage with art.

We will be concerned with two hypotheses in this paper. The first states that there are at least some people with ASD who have aesthetic experiences in virtue of exercising emotional abilities instead of purely cognitive ones. In arguing for this hypothesis, we present Schneider's case, whose emotional abilities come mainly to the fore in aesthetic contexts. But what distinguishes aesthetic contexts from everyday contexts with regard to the exercise of emotional abilities? Why is Schneider able to activate his emotional abilities while reading literature and listening to operas? To make intelligible why aesthetic contexts might enable persons with ASD to experience emotions they are not able to experience in everyday contexts we suggest a second hypothesis, according to which aesthetic contexts have four features that distinguish them significantly from everyday contexts in the sense that these features can account for the possibility of experiencing emotions in aesthetic contexts. While interpersonal everyday contexts require perceiving the other's emotional states and understanding them in highly dynamic interactions, the aesthetic context provides artefacts with features made salient and prepared by their authors to elicit specific responses.

To begin with, we present the method used to extract evidence for our claims from Schneider's autobiography (Section 2). After that, we introduce and reject the traditional view on aesthetic experience in people with ASD according to which it can be explained solely in terms of cognitive abilities (Section 3). In Section 4, we introduce a variety of emotional abilities that are relevant for explaining engagements with art of a person with ASD. Next, in Section 5, we examine Edgar Schneider's experience of art. He struck our attention as a person with ASD deeply interested in art, who is able to exercise a variety of emotional abilities in an aesthetic context though not in interpersonal contexts. In a further step, in Section 6, we offer an explanation of why in aesthetic contexts people with ASD might be able to exercise emotional abilities which in non-aesthetic contexts remain underdeveloped or masked. Finally, we discuss the limitations of this work (Section 7). In the conclusion, we summarize the findings and extract their implications for further research on people with ASD (Section 8).

2 Method

This article draws upon data collected from an autobiography of a person with ASD, Edgar Schneider. Our aim is to understand how persons with ASD experiences their engagement with art objects and to shed light on the structure of their behavior. To

better understand such an experience, we adopted a descriptive phenomenological approach as it is used in psychology to analyze case studies.[4] In particular, we analyzed Schneider's case by recurring to a qualitative method called *Thematic Analysis* (TA), which is based on descriptive phenomenology (Sundler et al., 2019), and performed TA by following Braun and Clarke (2006). TA is a method for identifying the features (here: of Schneider's life) that answer to a research question and cluster them according to patterns, which are organized in themes and subthemes. The research question that guided our analysis is how Schneider engages with art. By carefully examining his autobiography we could distinguish three themes and several subthemes that refer to patterns of his behavior in aesthetic and everyday contexts. The way he describes, e.g., his emotional responses to art objects and his restricted ability to communicate feelings in interpersonal everyday contexts illustrate how much richer Schneider's emotional life is in aesthetic contexts than in interpersonal everyday contexts.

The choice of TA over similar methods, such as *Content Analysis*, *Interpretative Phenomenological Analysis*, *Grounded Theory* and *Discourse Analysis* is based on the goal and the context of this investigation. While TA has the advantage of combining descriptive phenomenology with a theoretical framework that allows to synthetically generate themes and subthemes in a comprehensive way (Braun & Clarke, 2020), Discourse Analysis focuses primarily on the effects and details of linguistic interactions, which is not the target of this study. Content Analysis is an essentially descriptive method and does not provide a theoretical framework as TA does. In contrast, Grounded Theory focuses on social processes and tries to develop a social theory, but does not try to find patterns in subjective experiences. Finally, Interpretative Phenomenological Analysis (IPA) differs from TA in the process of coding (Smith et al., 1999). While IPA generates for each statement first an interpretative description, which is later compared with other interpretative descriptions to generate themes and superordinate themes, TA does not require interpretative descriptions. It starts coding once the researcher has all the statements at hand that are relevant for the specific topic. In a word, IPA is more interpretative and subjective and TA is more descriptive and objective (Langdridge, 2007).

Our treatment of Schneider presents a single case study. Schneider is a person with ASD who is able to engage with art by emotional abilities. Currently, we are not in the position to decide whether it is an intrinsic or an instrumental case study, only future can tell. According to Stake (1995) a case study is intrinsic if it represents a peculiar situation that does not exemplify a group; it is instrumental if it attempts to illustrate a specific feature of a group by representing that feature through one of its members. Although we would like to encourage further investigations of the art experiences of people with ASD, the conclusions we draw from this case study cannot be generalized.

Case studies have several merits. They allow studying the objects of investigation in their natural environment, and not in an experimental – and thus rather artificial

[4] Phenomenology, of course, comprises various traditions (Embree, 1997). In psychology, it is adopted and further developed as descriptive phenomenology (Giorgi, 2009; Neubauer et al., 2019).

– setting. Moreover, case studies facilitate the observation of an object in greater complexity than quantitative studies normally allow for, being able to capture details of behaviors which are unnoticeable in the latter. Nevertheless, case studies also face challenges. They are accused of a lack of rigor and of having difficulties to come to general conclusions (Yin, 1984; Zainal, 2017). According to Crowe et al. (2011), there are ways to counter these challenges, namely through transparency, that is, through detailing the steps involved in the process of investigation and being explicit about the interpretation of the results, which is what we will do in Section 5.

Before we develop in detail what is special about Schneider's case and juxtapose it with the received view, we present the traditional cognitive approach to art experiences of people with ASD.

3 The traditional approach: aesthetic experience in ASD as a result of cognitive abilities

Recent research on the aesthetic experience of people with ASD seems to support the importance of cognitive abilities, rather than emotional abilities. A case–control study (Park et al., 2018) with patients with ASD and controls scanned participants while performing an aesthetic judgment task on two kinds of artwork. Participants had to rate how beautiful they find landscape images and fractal images. Participants with ASD experience rated both kinds of images as less beautiful than the controls. The tendency to experience the images as less beautiful was associated with lower scores in emotional skills, measured by empathy scales. Additional investigations showed that the brain activation patterns associated with aesthetic experiences in patients with ASD differ from non-AS individuals. The brain areas responsible for the visuospatial analysis of the artwork are more active in persons with ASD, suggesting that more cognitive resources are recruited, possibly as a compensation to poorer emotional skills mobilized in an empathic experience. Another study (Mazza et al., 2020) presented participants both canonical and modified sculptures and inquired whether they find the images beautiful, whether they like them and whether they find them proportional. Subjects with ASD "had lower ability to judge as objectively beautiful and subjectively pleasing (aesthetic judgements) both canonical and modified sculptures" (Mazza et al., 2020, p. 7) compared to the control group, and this was related to poor emotional abilities, measured by an empathy assessment. Nevertheless, their judgement of proportionality did not differ and this task was not connected to emotion capabilities. Finally, other research showed that children with ASD seemed more capable of having a fruitful experience with atonal music, which is perceptually more demanding, than non-ASD children (Masataka, 2017). Notably, some of these children possessed extraordinary musical memory.

In the studies mentioned above, the aesthetic perception in people with ASD does not seem to be fostered by emotions felt in empathic experiences. This finding appears to confirm the view that interpersonal emotions don't play a chief role in aesthetic experiences of people with ASD.

However, these studies are marked by three limitations. First of all, the questionnaires frequently take empathy in interpersonal experiences as a point of departure,

which assesses the contact with people in everyday contexts, and not the aesthetic experience in response to fictional characters.

Second, two of the studies (Mazza et al., 2020; Park et al., 2018) use the Empathy Quotient measure, which is an instrument that assesses, through different subscales, social skills, perspective taking and the emotional dimension. However, the results of the instrument present a global punctuation of the EQ but don't discriminate between the three subscales, which assess different aspects of empathy, which are not clearly differentiated. This problem is aggravated by the fact that perspective taking is usually taken to be a decidedly *cognitive* capacity and should thus not be intermingled with empathy in contexts in which what is at issue is precisely how much is accomplished cognitively vs. emotionally.

Third, close to empathy, there are several other emotional abilities involved in aesthetic experiences, which are not mentioned in the studies. Probably this is because the findings from everyday contexts made it seem natural to assume that people with ASD compensate cognitively anyhow, where NT (neurotypical persons) use emotional abilities such as empathy.

Although studies recognize that people with ASD are capable of aesthetic perceptions, they tend to explain these by appeal to cognitive abilities. The role of emotional abilities was neglected by previous research because people with ASD are thought to have only a restricted set of emotional abilities, which is also reported by other people with ASD (Coelho et al., 2022, pp. 9–10). Due to observing their emotions mainly in interpersonal contexts, and not in aesthetic contexts, it is commonly, and perhaps falsely, assumed that their emotional life is not rich enough to account for aesthetic experiences.

4 Emotional abilities in the aesthetic experience

The possibility that emotional abilities are at play in the aesthetic experience of persons with ASD is typically not taken into account. With this article, we aim to fill this lacuna. We start by creating a list of emotional abilities at work in aesthetic experiences and proceed in the next section to analyze these abilities in Schneider's case.

We will use the expression "emotional abilities" that has rarely been used thus far to refer to quite different forms of emotional engagement with works of art, i.e., a series of skills in which emotions are involved.[5] Without seeking to be exhaustive, we present seven emotional abilities which are of relevance to explain Schneider's autobiographical account of his engagement with art. Our focus will be on those emotional abilities that enable the art recipient to *participate* in, *engage* with and *respond* to the work of art.

[5] See, for a recent publication on emotional abilities: Landweer (2022). In contrast to our broad use of the concept, Landweer employs it to refer to the set of attitudes a subject can implicitly or explicitly adopt towards her own emotions.

4.1 Imagining scenarios in which emotions are involved

An important ability necessary for several aesthetic experiences is that we are able to imagine scenarios in which emotions are involved. According to the idea that imaginings might or might not have a central point of view (Wollheim, 1984), it can be distinguished between scenarios in which the emotions can be related to specific fictional characters on the one hand, and scenarios in which the emotions concern situations on the other hand. The former is the case when we imagine that a character is sad, angry, or cheerful. The latter occurs in cases in which we imagine a certain situation such as the sadness of a funeral, the cheerfulness of a forest, etc. without adopting a specific perspective within it.

Since the content of our imagining is an emotion, we consider the use of an imagination as an emotional ability. Moreover, and this is crucial for understanding why this is an emotional rather than a cognitive ability, in order to imagine an object, we have to know at least to a certain degree what is to be imagined. While we do not necessarily endorse the view that imagining something presupposes that we have already experienced it (Sartre, 1940/2010), it is certainly true that in order to imagine it, we have to be familiar with some of its aspects or elements. As Kind (2020) has argued, by means of a process of "imaginative scaffolding" in which we combine, vary and add new elements to what is already known, we are able to imagine things which are novel to us. Put otherwise, in order to imagine an emotion, we need to be familiar with certain aspects of it. For instance, it might be the case that we have never experienced humiliation but on the basis of being acquainted with experiences in which we have been diminished in worth, we are able to imagine how humiliation feels.

4.2 Self- and other-oriented affective perspective-taking

Perspective-taking presupposes the ability to imagine the other's mental states such as her perceptions, thoughts, desires, emotions, etc. and to adopt the other's perspective (Gaut, 2010). When perspective-taking targets specifically the other's affective states (e.g., emotions, moods, sentiments, feelings, etc.), we can speak of "affective perspective-taking".

Affective perspective-taking takes place in two forms (Coplan, 2011). First, we can imagine how it would be *for us* to be in the other's situation (self-oriented perspective taking). This form of perspective-taking is known as "putting oneself in the other's shoes". This is the case when I imagine what it would be like for us (for instance, researchers from the twenty-first century) to be another person (for instance, the fictional character of Anna Karenina). The second form presupposes a stronger degree of involvement since we imagine how it is not for us, but *for the other* to be in a certain situation (other-oriented perspective taking). This view presupposes that we gather as much information as possible about the other whose perspective we imagine (for instance, when we imagine what it is for Anna Karenina to be Anna Karenina).

Affective perspective-taking, i.e., the kind of perspective-taking that targets the other's affective states, can be regarded as a form of emotional ability. In the debate about empathy, affective perspective-taking has been regarded by some authors as a necessary condition for empathy or at least for certain forms of empathy (Gibson, 2016).[6] Here we will distinguish between self- and other-oriented perspective-taking on the one hand, and empathy as a form of apprehending the other's mental states on the other hand. In this context, affective perspective taking differs from empathy in the sense that it is the understanding of other minds through a particular use of imagination (Stietz et al., 2019), while empathy is the apprehension of other's minds, as will be seen in the next subsection.

4.3 Empathy with the target's emotions

A further ability often at work in an aesthetic experience consists in apprehending the target's emotions and resonating with them. We refer to this ability as empathy.[7] Empathy in this narrow sense of the word occurs when we "see" the other's sadness and apprehend what it means living it through. Though current research strongly disagrees on how to define it, we will adopt here the view that for empathy the following four conditions are necessary.

First, in empathy we apprehend or grasp the target's mental states (apprehension condition). Regarding this apprehension, we adopt a pluralist view according to which we can apprehend the other's mental states through different mechanisms. That is, it can happen by means of the immediate perception of the other's states, the simulation of the other's experiences or the elaboration of a theory about what the other is going through.[8] However, in the specific context of aesthetic experiences, empathy requires the use of imagination which allows us to simulate what the entity with whom we empathize is living through. Indeed, the possibility to directly perceive what the other is going through is not always possible in an aesthetic context: the other might be a literary character absent to sense perception, it might be a film character embodied by an actor who is not really in the emotional state she embodies, etc.

Second, empathy must be directed towards the target's (including artefacts, animals, persons, and states of affairs) affective states, i.e., it targets the object's emotions, sentiments, moods, feelings, etc. (affectivity condition).[9]

Third, empathy requires not only that we apprehend the target's affective states, but also that we resonate with them by experiencing something qualitatively similar (similarity condition) (Coplan, 2011).

[6] See for a view against this idea: Walton (2015).

[7] Empathy is a complex construct which has received many definitions across the years (see Batson, 2009).

[8] Adopting pluralism avoids the contentious question of how the other's emotions are apprehended. The three main models are: simulation (Goldman, 2006; Stueber, 2006), theory-theory (Carruthers & Smith, 1996), direct perception (Zahavi, 2011). See for an overview: Schmetkamp and Vendrell Ferran (2020).

[9] Some authors use the concept of "cognitive empathy". According to our view, cognitive empathy is a complex form of mindreading. Thus, we employ the term empathy here only for the grasping of an other's emotional state.

Finally, empathy must preserve the self-other differentiation (self-other differentiation condition). In empathy, the target's mental states are given to us as belonging to her experiential horizon. If this distinction between the empathizer's and the target's mental states is not preserved, then we have a case of emotional contagion but not of empathy.

4.4 Feeling into atmospheres embodied by artworks

Aesthetic experiences often involve our ability to "feel into" the emotional atmospheres of artworks.[10] For instance, we are able to feel into the sadness of the music, into the cheerfulness of a painting, etc. Though we refer to atmospheres by employing the same terms that we employ for moods, atmospheres are properties of objects, while moods are affective states of sentient beings. More precisely, atmospheres are affective properties which are dependent and founded on other properties of the object. In this respect, atmospheres supervene on these other properties of objects. However, for the music to be sad, the painting to be cheerful, etc. it must fulfill certain conditions such as having a particular structure, form, color, etc., and if these conditions are modified considerably, the atmosphere which supervenes on them might also change.

The apprehension of an atmosphere cannot be described in terms of sensory perception or a cognitive evaluation alone. Rather, this apprehension is affective in nature. In apprehending an atmosphere, we are moved and affected. Reality appears not neutral, but tinctured with the coloration of the atmosphere. The apprehension of an atmosphere can be understood as a form of affective participation in the atmosphere as such. This kind of feeling can be regarded as a manifestation of an emotional ability which as such can be trained and refined.

4.5 Feeling infected by emotions and atmospheres present in art

Aesthetic experiences often presuppose that we feel infected, i.e., touched by the emotions and atmospheres present in the artwork. We can feel infected by the depressive mood of a novel, by the sadness of a piece of music, etc. Emotional infection has often been described as coming to experience an affective state which is similar to the apprehended emotion or atmosphere without being aware of the reasons why we are feeling this way (Krebs, 2017). However, the kind of infection that we have here in mind is not a blind form of emotional contagion in which we end up experiencing the other's emotion as if it were ours. Rather, we use this term to refer

[10] The German word for empathy, "Einfühlung", means literally "feeling into" and was employed to refer to an aesthetic experience with an inanimate object as well as to an interpersonal experience with another living being (Ganczarek et al., 2018; Vischer, 1873).

to the emotional ability to loosening the borders between self and other and let the emotions and atmospheres affect us.

4.6 Responding emotionally towards aesthetic objects

A further ability involved in aesthetic experiences consists in responding emotionally towards aesthetic objects. These are cases in which we not only imagine that the figure experiences a certain emotion, but also respond emotionally towards it.

Emotional responses come in many kinds. A great part of our emotional reactions towards aesthetic objects might be sympathetic or antipathetic in nature (Wollheim, 1984). For instance, we can respond with concern or pity towards a character which is depicted as sad or with antipathy and ill-will. Emotional responses might also be elicited by an aesthetic object without implying a concern for it. Thus, we might respond with fear towards a character depicted as angry.

4.7 Adopting a stance towards one's own emotional responses

A final ability to be mentioned here consists in adopting a stance towards our own emotional responses when engaging with an art object. When an art object demands a particular emotional response there are three possible stances. First, we can remain neutral, for instance, we can grasp the sadness of a situation but remain untouched by it. Second, we can adopt an analytical stance by analyzing our perception of sadness but not being affected by it. Finally, we can let the perception of sadness affect and move us so that we can feel sad ourselves. As noted in classical phenomenology, this stance need not be consciously adopted (Geiger, 1911; Haas, 1910). It is this stance that determines whether or not an emotional experience will unfold in response to an act of imagination towards an aesthetic object.

5 Hypothesis I: aesthetic experience in ASD – a result of emotional abilities

In the following section, we dive into Schneider's autobiography to support the hypothesis that there are persons with ASD who gain aesthetic experiences in virtue of being able to exercise emotional abilities (instead of exercising cognitive abilities). The second section deals with two objections to this account.

5.1 Emotional abilities in aesthetic experience with ASD: An Analysis of Schneider's Case

A *Thematic Analysis* of Schneider's autobiography led to three themes that are important to Schneider's experience of emotions in interpersonal and aesthetic contexts: (a) the restricted experience and communication of interpersonal emotions, (b) the richer experience of emotions in aesthetic contexts, and (c) the intellectualization of feelings in interpersonal contexts. In the following, we present instructive

passages corresponding to the three themes that together support the first hypothesis. By proceeding to a phenomenological description, we refer to the different emotional abilities at work in aesthetic contexts (as introduced in Section 4) Schneider exercises while engaging with art. We comment on these abilities particularly in the second subsection to illustrate how rich Schneider's emotional life is in aesthetic contexts.

a. *Restricted experience and communication of interpersonal emotions*

The first theme relates to Schneider's experience of emotions in interpersonal contexts in everyday situations. He does not comment on whether other autistic persons or non-AS persons are involved in these everyday situations; we assume that he usually interacts with non-AS persons. He acknowledges feeling a strictly limited range of emotions, namely 'fear' and anger', and being unable to connect with other people's emotions:

> We are not automata, totally devoid of all feeling. What we lack are emotions to 'connect' with the emotions of the other people. I do find myself as having experienced what I call 'survival' emotions: fear and anger. The fact that autism takes away the social, connective emotions, but leaves the survival emotions, sometimes rendering one asocial, could be considered as one of the Mother Nature's sick jokes. (Schneider, 1999, p. 25)

As a consequence, Schneider claims to be less able to empathize and recognize others' emotions. He adds to be unable to express and communicate feelings in interpersonal contexts:

> I refer back to being able to express feelings through art and literature (opera libretti included), but not in direct communication with other people's feelings (I still cannot fathom how the NT manage to do that). It is not that I am totally unfeeling, but that I just cannot 'read other people's signals'. I have no built in sign decoder. (p. 26)

In this regard, Schneider's self-perception is backed by a great variety of empirical lab studies (cf. Leung et al., 2022; Yeung, 2022) that confirm that people with ASD face problems in recognizing the emotions in other subjects; it is also acknowledged by the self-reports of other persons with ASD (Coelho et al., p. 9–10).

b. *Richer experience of emotions in aesthetic contexts*

The second theme relates to Schneider's ability to experience emotions in aesthetic contexts with much greater intensity than in interpersonal contexts, as is already exemplified in the following two quotes:

> The irony of this is that I can get all weepy at the tear-jerker endings of operas such as La Traviata, La Bohème or Madame Butterfly, or novelas as Dracula (yes, I actually have read the book). Yet, as noted above, I feel

> nothing in real-life emotional situations. This is connected with that topic of feeling 'emotion' only through art. (p. 52)
> They were playing Siegfried's Funeral Music from Wagner's Opera *Die Götterdämmerung*. I was filled by an euphoria unlike anything I have ever before experienced. (p. 32)

This suggests the possession of the ability to *respond emotionally towards aesthetic objects*, as presented in Section 4.6. For instance, as is illustrated in the first quote, while listening to operas such as La Traviata or reading novels such as Dracula, Schneider reacts with grief to the sadness of the characters and their tragic fate. In contrast, he mentions throughout the book not feeling grief in interpersonal contexts.

There is another passage that shows that Schneider reacts emotionally to aesthetic objects when he reports experiencing contradictory feelings while attending operas. He comments that a distasteful character can inhibit the power of beautiful music.

> I discussed music before, but, in the case of opera, there are plots and characters involved, so it can be discussed as literature. I should first like to mention two operas, each of which contains a leading character that I find so distasteful, that he or she negates the effect of whatever good music the composer created. (p. 37)

Going through internal conflicts, such as when hearing pleasant music and knowing the composer's character is quite the opposite, may reflect another aesthetic ability: the sense of being infected by the music's emotions:

> [T]heir music was quite opposite of the kind of men they were.
> One was Richard Wagner. His music dramas bristle with lofty, idealistic principles and tender, caring emotions. Yet in my view he was a totally unprincipled wretch (…)
> Another is Anton Bruckner. His music is so huge and so powerful as to appear to want to envelop the entire universe. One would think that he had to be a man with an enormous ego with appetites to match. Very much to the contrary. (p. 29)

As this passage is illustrating, Schneider is able to *feel infected by emotions and atmospheres present in art* (see Section 4.5). He is deeply moved by the power of the music of great composers, although he knows the composers' character fails to match the content of their composition.

Another emotional ability Schneider claims to possess in aesthetic contexts is *affective perspective taking* (as presented in Section 4.2), and again he confesses that he would not be able to exercise this ability in everyday-life. He is capable of imagining what it would be like to have certain emotions after seeing tragic life episodes of opera characters, as illustrated by the following quotes:

> A beautiful application of mitleid [pity] is given in Wagner's opera Parsifal (…)

> When such a one shows up in the knights' realm, he witnesses the king's agony, but is unmoved. It is only later, when he actually feels the king's pain in his own flesh that he gains this wisdom and enlightenment. He returns to redeem the king from his curse and heal his wound.
> Again, I can deeply appreciate all of this as I listen to this opera, but not in my day-to-day life with people. I must rely on that intellectual appreciation (p. 49)

Or, with regard to dramas:

> I should like to close this chapter by stating that I often find myself in sympathy with characters that the author, I have to admit, did not intend to portray as sympathetic (…)
> In Shakespeare's King Lear, I developed an immediate fondness for Edmund, the illegitimate son of the Duke of Gloucester, after hearing, at the beginning, his father's conversation about him with Earl of Kent. Later in the play, when Edmund has his father's eyes gouged out, I could not, in spite of the gruesomeness of it, get over the feeling that the old man had it coming. (p. 39)

In both passages, Schneider adopts the character's affective perspective, wondering what it would be for the other to be in such a situation (other-oriented perspective taking). That act of imagination is visible both when Schneider sympathizes with Parsifal's pity or when he appreciates Edmund's situation.

According to Schneider, the emotional experiences he has while engaging with an aesthetic object are different from those he experiences when interacting with persons in everyday situations. Interestingly, he appears to feel more closely affected by the characters of artwork than by other persons. Thus, we suggest he masters another emotional ability. He is able to grasp characters' emotions, that is he is able to exercise *empathy with the target's emotions* (see Section 4.3), being capable of feeling into the aesthetic event. The next passage where he admits feeling able to grasp, express and communicate emotions through art but not in direct communication with people conveys this idea:

> This is a good place to reiterate that these emotions, as expressed through arts, consists of sights, sounds, and words. They register on the intellectual and aesthetic sensibilities. Real-life emotions appear to me to consist of things felt in an unexpressed manner of sympathetic vibrations at resonant frequency.
> There is, in the third act of Puccini's opera Turandot a beautiful phrase of unexpressed feelings, when the slave girl Liù before her suicide, sings about 'so much love, secret and unconfessed (p. 52)

The identification Schneider establishes between himself and the slave Liù suggests that he is reminded of himself when having unexpressed feelings. However, there is a manifest difference between Liù's self, who is near the suicide, and Schneider's self, who is in a healthy situation. At last, the target of Schneider's affective stage is Liù's 'love, secret and unconfessed'. To sum up, the passage shows that Schneider fulfills the four requirements to empathize or to grasp the emotions of an imaginary character.

The fact that Schneider also possesses the ability to elicit emotions in other people through art, being capable to transmit, for instance, the sadness of an opera or the passion of a history, shows that he also has the emotional ability to *feel the emotional qualities embodied by artworks* (as presented in Section 4.4). The following passage illustrates this point:

> [M]y wife has often heard me relate classic love stories to others (Orpheus and Euridice, Dido and Eneias, Francesca da Rimini and Paolo, Tristan and Isolde, etc., the last being my favorite). Those who have heard me were invariably moved by the way I told these tales (I have been told that I am a very good storyteller.) My wife would ask me why I could not express such emotions in connection with real people. (p. 27)

We can also observe that while Schneider is able to experience events emotionally, he can also choose to abstain himself from certain experiences. He thus possesses the emotional ability to *adopt a stance towards one's own emotional responses* (as presented in Section 4.7). For instance, when confronted with music he finds beautiful while not resonating with the libretto, he chooses to enjoy the music and to not pay attention to the text, as is illustrated in the next passage:

> In spite of the title character, the music that Massenet wrote for Werther makes listening to that opera an enjoyable experience. There are some other cases for which the greatness of music overcomes texts that range from the laughable to objectionable. (p. 38)

Finally, another emotional ability Schneider arguably possesses concerns *imagining scenarios in which emotions are involved* (see Section 4.1). For example, he reports being able to imagine a woman as an aesthetic object and to feel the loving feelings that an imagined erotic situation creates. As the following quotations show, he even professes to feel sexual arousal in the presence of an aesthetic object but not in the presence of a real person:

> The only way I have ever felt sexual arousal is through fantasy. The only attraction I feel for an actual woman is an aesthetic object, not hormonally sexual one. (pp. 42-43)
> The only amusement I got out of that [seeing a woman with a short dress where I could see everything] was in seeing something I was not supposed to see. I felt no arousal, in the sense of any desire to have sexual relations with her or even to approach her. On the other hand, at any time since then, when I have thought about that incident I have felt sexual aroused (…)
> The best thing I have ever had to accompany an ejaculation is what I called a "neurological jolt' which is invariably followed by an immediate letdown. I use the modifier 'physical' because I have had experiences that I consider must be equivalent of such sensation. However, there are only of two types. One is aesthetic (such as from a superb performance of a great piece of music, a great work of art, or a beautiful written passage in literature). The other is intellectual (such as coming across the expression of an idea – my own or someone else's – that ties together a bunch of loose ends). (…)

> This is not to say that I have never had a pleasurable experience with a real woman I have found to be attractive, in the sense I have described above. It is just that, as I now recall, in order for the experience to be pleasurable, I have to invent a rather interesting mechanism, in other words, aesthetic fantasizing about her during that time. (p. 44)

Remarkably, when Schneider wants to elicit certain types of erotic feelings, he imagines a female body not as a real body but as an aesthetic object. Thus, only when he puts the body in an aesthetic context, even if it is imaginary, he is capable of a physically pleasant sensation. In other words, he imagines and creates an aesthetic atmosphere and context, which induces a physical sensation that accompanies an emotion.

Although the quotations refer to a form of physical arousal, which in itself is not an emotion, they illustrate an important point: The sensations felt in an aesthetic context are felt as entirely real. Since the experience of sexual arousal often accompanies the emotion of love, the examples seem to support the idea that emotions felt in an aesthetic context are real and not pure imaginings. In fact, Schneider is sexually aroused not when he sees physical bodies but when he imagines them. Despite this statement, he confesses that in order to have a pleasant sexual experience with his wife he forces himself to fantasize with her body and, thus, his imaginings are subject to his will.

If we separate the sexual feelings, which are affective states but not emotions, from feelings of love, which are emotions, we are left with another question. To imagine something such as love requires that we know what to imagine. However, since Schneider does not know these feelings from his interpersonal experiences, it is difficult to envision how he knows what to imagine. Having strong cultural interests since he was young, it is possible that he picked up information about love and other feelings from circulating narratives instead of his own social life.

To sum up, having listed and illustrated seven emotional abilities in the aesthetic domain, we are led to the conclusion that Schneider is able to exercise a wide range of emotional abilities in aesthetic contexts. In these, his emotions are vivid and intense, while in interpersonal contexts they are hardly instantiated at all.

c. *Intellectualization of feelings in interpersonal contexts*

The third theme presents Schneider as being able to discuss feelings intellectually in terms of thoughts and ideas if they are conceptualized in words, as the following quotation shows:

> Does being unable to 'feel' preclude my discussing his or her feelings with an NT person? Absolutely not if the other person can accurately describe those feelings in words, they become thoughts or ideas, and those I can deal with very well. (p. 27)

He confesses bonding only with other people through intellectual interests:

> [The autistic person does] not seek or enjoy close relationships, including being part of a family: This sort of thing requires bonding on an emotional

> basis. The autistic person has no emotions with which to bond. […] Almost always chooses solitary activities: The autistic person is self-sufficient, and enjoys those activities, joining in group activities only when there is a great personal interest (any bonding is strictly intellectual or aesthetic). (p. 96)

In contrast to the affective exchange promoted by the aesthetic environment, the act of discussing ideas comes more like an experience of detachment rather than a relation of proximity. The artistic language of an aesthetic context translates emotions into the five senses, which, in turn, elicit emotions in the spectator. In contrast, in the intellectual domain, emotions are converted into words and hence into thoughts and ideas but they don't elicit emotions in a spectator.

The upshot of our analysis is that it presents a counterexample to the assumption that people with ASD appreciate art mainly through cognitive abilities. The case-study of Edgar Schneider shows that at least one person with ASD is capable of appreciating art by exercising a variety of emotional abilities. Schneider even claims to feel emotions in an aesthetic experience that he does not feel in interpersonal contexts. The examples provided clearly show that the emotions Schneider refers to are elicited by art objects (music, art, literature, opera).

The three themes discussed in this section support our first hypothesis according to which (at least one) person with ASD has aesthetic experiences because he is able to exercise certain emotional abilities. In addition, Schneider's case provides a counterexample to the cognitive abilities approach and encourages further investigation of the emotional abilities approach. In the first theme, *restricted experience and communication of interpersonal emotions*, Schneider admits feeling a limited range of emotional experiences in real life contexts. Conversely, when Schneider is approaching art objects, his emotional life turns out to be richer. The aesthetic context seems to bolster emotional phenomena not experienced by Schneider in the situations of interpersonal relations, such as internal feelings, contradictory feelings and emotions felt through empathic experience. The second theme, *richer experience of emotions in an aesthetic context*, portrays Schneider as having several emotional responses motivated by the presence of real or imaginary art objects. The quotations provided in the second theme show that Schneider has all emotional abilities referred to in Section 4, that is, Schneider imagines scenarios in which emotions are involved, he is capable of empathy, he is able to feel into atmospheres embodied by artwork, he is infected by emotions represented in art, displays emotions towards aesthetic objects and is able to take a stance towards his own emotional responses. Finally, the third theme, *intellectualization of feelings*, indicates that Schneider feels more distant from people in interpersonal contexts than from imagined characters pictured by fiction. To recap, we see our first hypothesis confirmed.

5.2 Possible objections to the alternative approach

In the previous section, we demonstrated that the aesthetic experience of at least one person with ASD can be explained in terms of emotional abilities rather than in terms of purely cognitive abilities. In so doing, we confirmed our first

hypothesis. Before turning to the second hypothesis, we discuss two possible objections to this alternative account.

a. *Quasi-Emotions*

The first objection is based on the idea that emotional responses towards art are not real emotions but "quasi-emotions" (Walton, 1990). According to Walton, quasi-emotions are phenomenologically similar to real emotions. The "what it is like" of quasi-fear, i.e., fear towards a fictional object, is similar to fear towards an everyday object. Yet, he assumes that there are two main differences between both. First, while for Walton emotions towards everyday objects are based on beliefs, quasi-emotions are based on make-believe. Second, while for him emotions towards everyday objects motivate actions, quasi-emotions do not.

Walton's account of quasi-emotions could motivate an argument against the emotional abilities approach. More precisely, it could be argued that Schneider is not really experiencing emotions towards aesthetic objects but rather quasi-emotions, i.e., states which resemble emotions in their qualitative feel, but which lack other features essential for emotional experiences. From this perspective, given that Schneider's emotions are not based on beliefs but on a game of make-believe or pretense, and given that he does not feel motivated to act, he is not exercising emotional abilities when he engages with art, but just pretending to do so.

There are two responses to this objection. First, we reject the very idea of quasi-emotions. In fact, Walton's account according to which our emotional responses to artworks are quasi-emotions has been widely rejected in current research for being based on too narrow a view of emotions, namely that all emotions are based on beliefs and motivate actions (see, for instance Moyal-Sharrock, 2009). To begin with, it has been argued that not all emotions are based on beliefs, since also perceptions, memories, suppositions, imaginings, etc. might work as cognitive bases of emotions (Goldie, 2003; Griffiths & Scarantino, 2009). Think, for instance, of a sudden disgust based on the perception of a smell, or consider the fear resulting from imagining that something terrible is going to happen. Moreover, emotions do not necessarily motivate actions. Not each time that we pity someone, we undertake an action to alleviate her suffering. Conversely, it is possible that emotions experienced towards art objects exhibit motivational powers. Indeed, after reading a novel about injustice, you can feel motivated to donate for a fair cause (Matravers, 2006; Moran, 1994).

Second, even if the concept of a quasi-emotion would be conceptually plausible, what Schneider experiences does not really fit into the definition of a quasi-emotion. His emotions might be based on beliefs, i.e., he might believe that an aesthetic object embodies a certain property such as being sad. Moreover, he might even be motivated to act in certain ways. For instance, on certain occasions, he adopts an aesthetic attitude toward the target of his thoughts treating it as an aesthetic object because he is aware that in so doing he will get sexually aroused. Finally, Walton's theory posits that quasi-emotions and everyday emotions are qualitatively similar, i.e., that there are no substantial differences

between a quasi-emotion and a real emotion regarding their phenomenal qualities. However, several quotes from Schneider contradict this. He experiences emotions in an aesthetic context as real and more intense and vivid than emotions in everyday contexts. In short, from the cognitive, motivational and phenomenological point of view, what Schneider experiences cannot be subsumed under the concept of quasi-emotion. What he experiences are full-fledged emotions.

b. *Imagined Emotions*

According to a second objection, what Schneider is experiencing are not emotions but a particular kind of imaginings. Indeed, it could be objected that he is experiencing what some authors called "sham emotions" (as translation of the German term *Scheingefühle* widely employed in the aesthetics of the 19th Century) and which in today's literature has been considered as imaginative counterparts of emotions towards everyday objects. The idea is that in a similar sense that some mental states such as perceptions and beliefs can have imaginative counterparts (Currie & Ravenscroft, 2002), emotions allow for this possibility as well (Goldie, 2005).[11] Sham emotions, i.e., the imaginative counterpart of an emotion, are in fact not emotions but imaginings with an affective component. As such they are subjected to the will and easy to disconnect when we want to stop experiencing them. This is the reason why they are experienced as having a different phenomenology, i.e., as being distant and as having less weight on us (Lange, 1901). According to the objection at issue, Schneider does not experience emotions but merely imagines experiencing them. The fact that in order to get sexually aroused Schneider forces himself to imagine aesthetic objects might seem to entail that there is some empirical evidence in support of this objection.

In response it can be argued that, as mentioned above, in order to imagine something, we need to know at least to some extent what is to be imagined, i.e., we need to be familiar with some aspect of what is to be imagined. This implies that in order to imagine feeling an emotion, we need to have some phenomenal knowledge of this emotion. In Schneider's case, he cannot have this knowledge from everyday life, because in his interpersonal interactions he does not experience these emotions. Thus, it cannot be the case that in the aesthetic context Schneider is imagining counterparts of emotions he experiences in interpersonal contexts. Even in the case that Schneider is familiar with descriptions of certain emotions (for instance, love) from narratives found in operas and novels and is able to imagine them taking these sources as a point of departure, it remains open why he does not 'also' use such imaginings in interpersonal contexts. In addition, he describes the aesthetic experience of listening to a piece of music as being more intense and vivid than his experiences in everyday interpersonal contexts. Moreover, as the case of sexual arousal demonstrates, when Schneider imagines a body as an aesthetic object, he has sensory feelings accompanying his emotions. These sensory feelings are real and

[11] Currie and Ravenscroft (2002) argue that emotions cannot have imaginative counterparts, while Goldie (2005) offers arguments to the contrary.

not merely imagined. This suggests that the emotions experienced towards aesthetic objects are more than mere imaginings. They are in fact real emotions.

We might be challenged by a follow-up objection that does not accept our responses against the views that Schneider has nothing but quasi-emotions or imagined emotions, respectively, along the following lines: If Schneider were able to experience real emotions in aesthetic contexts, one might object, then he should be able to experience them in everyday contexts as well. Since the latter is not the case, he doesn't experience real emotions in aesthetic contexts. This, objection, however, rests on a false assumption. According to our second hypothesis, the manifestation of certain abilities might strongly depend on the situational context. In the next section, we list four features with regard to which aesthetic contexts differ from interpersonal everyday contexts. Thus, Schneider might be able to experience a rich emotional life in aesthetic contexts while being emotionally quite restricted in everyday contexts.

6 Hypothesis II: emotional abilities supported by the aesthetic context

In the previous sections we have presented an alternative approach that explains the aesthetic experience of people with ASD in terms of emotional abilities. We employed the term "ability" in a folk-psychological sense as the disposition to respond with appropriate affective states. So far, we have demonstrated that the "emotional abilities approach" can explain Schneider's case. Therefore, at least for this case of a person with ASD aesthetic experiences can be explained by the exercise of emotional abilities instead of cognitive abilities. This result should have some impact on current research which still is mainly focused on cognitive abilities. Yet, in this section, our aim is to examine our second hypothesis according to which Schneider is able to exercise emotional abilities because of the instantiation (or non-instantiation) of certain features in aesthetic contexts that are not present (or present, respectively) in everyday contexts.[12] Our hypothesis is that the context created by the presence of an aesthetic object can itself invoke the exercise of certain emotional abilities which otherwise don't (or hardly) show up. Therefore, the emotional abilities exercised by Schneider are to a certain degree "context-specific", they can be exercised in a much richer way in aesthetic contexts.

What are the features that distinguish aesthetic contexts from everyday contexts in a way that for Schneider (and: possibly for other persons with ASD) emotions are experienceable to a greater degree? In particular, there are four aspects of aesthetic contexts that might together enable Schneider to exercise emotional abilities which otherwise remain blocked.

[12] A full development of this hypothesis would require entering the philosophical and psychological debate on abilities which we cannot enter here. However, the concept of ability at work in this paper is dispositional in nature, i.e., we understand abilities as dispositions to realize an activity successfully (for an overview on dispositional accounts of abilities, see Vetter & Jaster, 2017).

First of all, many art objects are artefacts which are created with the explicit aim to elicit different forms of affective participation. Most aesthetic objects exhibit salient features, are structured in a specific manner and invite us to adopt a range of emotional responses. Though they might be sophisticated and complex, they are not comparable to the richness and complexity of interpersonal interactions in which such features are less easy to identify or more difficult to process. In this respect, it is possible that an aesthetic environment creates a context with salient elements that invite specific emotional responses in which it turns out to be feasible for a person with ASD to exercise emotional abilities. As is well-known, most people with ASD are hypersensitive to sensory features in interpersonal relations, such as loud voices or bright lights, leading them to retraction and to repetitive patterns of behavior (Schulz & Stevenson, 2019). In addition, sensory issues in people with ASD also complicate the process of identifying and labelling emotions (South & Rodgers, 2017). Sculptures usually follow rules of proportion and music is usually composed upon harmonic tones. Therefore, many dissonant elements that a person with ASD encounters in social life are not found in the aesthetic world, facilitating the process of emotional identification.

Second, emotional responses to aesthetic objects are experienced as having a different phenomenological quality from those experienced in interpersonal encounters; unlike the latter, the former do not involve the emoting subject in all respects. Given that it is possible to respond with fear to an aesthetic situation while at the same time enjoying it, we have good reasons for assuming that this fear is not congruent with the rest of our psychological economy which is in fact dominated by aesthetic pleasure. It is in this sense that the aesthetic context offers to people with ASD an opportunity to exercise an emotional ability without engaging completely with the situation. While face-to-face encounters with people in everyday contexts are experienced as threatening (Tanaka & Sung, 2016), people with ASD feel much more comfortable in imagined environments in which they feel a safety distance. As Schneider puts it: “through the arts, emotions are translated into sights, sounds, and words” (p. 52). For instance, in opera, sadness may be transmitted by a beautiful aria.

Third, the aesthetic object affects us in a different manner than a real person. The aesthetic object neither exhibits nor requires the level of bodily communication that we have when we interact with another human being. Therefore, information coming from an aesthetic object would be easier to deal with than information coming from interpersonal encounters. This makes the processing of information for a person with ASD easier. Sensory information conveyed by a direct contact with a human body is extremely difficult to process for a person with ASD (Leung et al., 2022), who is constantly overwhelmed and manifests their anxiety and difficulties in social communication, e.g., with the avoidance of eye contact (Tanaka & Sung, 2016). The object of an aesthetic experience is a piece of artwork (Ganczarek et al., 2018) and the role of a person who is approaching artwork is one of a spectator who is observing but is not observed. That veil of invisibility is not there when the object of the experience is another human being in interpersonal relations. Here the person is observing and being observed, and the latter can be overwhelming to a person with ASD.

Fourth, and perhaps most importantly, emotions occurring in everyday social interactions do not remain unchanged for some time. They are not static phenomena, but unfold dynamically. Their stimuli are other persons' behaviors or emotions, which are themselves subject to ongoing change (Griffiths & Scarantino, 2009). Often, as Wilutzky (2015) has argued, "the temporal dynamics of social interactions and emotions transpire on the scale of milliseconds, so that an immediate uptake of information is crucial." The impairments of emotion recognition concerning human faces and body gestures in people with ASD (Leung et al., 2022) severely undermine their capacity of being attuned to their social concomitants' emotions and thereby prohibit important emotional mechanisms in social conduct, such as empathy (Wilutzky, 2015, p. 7). In contrast, most aesthetic contexts do not require a similar dynamic involvement of the audience. They provide slowly developing, nearly static stimuli, for example the rendering of an aria, in which a certain emotion is presented for several minutes without any task of immediate interaction.

In short, we think that social interactions might hinder the exercise of certain emotional abilities of people with ASD which can show up in aesthetic contexts due to the four differing features detailed above.

7 Limitations

The use of one single case is clearly a limitation of this study. A larger sample size would offer more support for the ideas developed. However, even a single case has strengths of its own. For one thing, it has the advantage of presenting a case in more depth and detail than a larger sample size would permit. More importantly, even a single case can constitute a counterexample that defies an established theory (cf. Searle, 1999), and this is what Schneider's case does. Although the findings of his case cannot be generalized (Hayes, 2000; Searle, 1999), they present, as far as we know, insights that have not been described before. These should be explored in further investigations with larger sample sizes to test for generalizations, i.e., to see whether other people with ASD employ emotional abilities when experiencing art as well (Guba & Lincoln, 1989).

A second limitation is potentially the credibility of Schneider. Critics may claim that he refers to emotions he imagines he has but in fact does not have. However, we have argued that there is reason to believe that Schneider in fact experiences these emotions. As described in his book, Schneider was diagnosed later in his life, having suffered a process of several misdiagnoses. It was Schneider himself who firstly had the intuition he suffered from ASD, after reading a newspaper article, a guess his doctor later confirmed (Schneider, 1999, p. 22). This indicates that Schneider has quite an adequate understanding of his condition. Therefore, we think it reasonable to also give him credit about his reports concerning his emotional experiences. Doing otherwise could be regarded as a form of epistemic injustice, in particular a form of testimonial injustice.

Finally, it may be argued that *Thematic Analysis* is not the best method to be used in analyzing Schneider's case. In fact, using TA in case studies is controversial (Braun & Clarke, 2020). However, we have used TA, as other academics have done

as well (e.g., Cedervall & Åberg, 2010), because of its flexible adaptability to a case study. Compared to other methods (mentioned in Section 2), TA allows to highlight central features of a person's life by ordering them into themes and subthemes, and thus making them particularly transparent to the user (Braun & Clarke, 2006).

8 Conclusion

In this paper, we have argued that aesthetic experiences of people with ASD can – at least sometimes – be explained in terms of emotional abilities (the first hypothesis). By presenting and defending the "emotional abilities approach" we suggest a change of paradigm in current research which has been dominated by cognitive approaches thus far. In addition, we claim that the exercise of emotional abilities is particularly supported by features of the aesthetic context (the second hypothesis). The preceding sections not only confirmed both hypotheses but also showed why they are intimately linked to each other: The second hypothesis offers an explanation why a person with ASD might be able to exercise emotional abilities in aesthetic, but not in everyday contexts. We have demonstrated that at least for Schneider's case, the aesthetic experience of a person with ASD can be explained in terms of emotional abilities. Moreover, we have argued that these abilities are context-specific, meaning that a manifestation of Schneider's emotional abilities is rather limited outside aesthetic contexts. We argued that some features of the aesthetic context enabled Schneider the exercise of these abilities that otherwise would have remained hidden. Our approach resonates in this respect with recent externalist views of people with ASD, which acknowledge the role of the surrounding environment as beneficial or detrimental for the pathology. In Schneider's case, the aesthetic environment functions as a facilitator of his emotional life.

Only further investigation can reveal whether Schneider's case is intrinsic or instrumental. If it is intrinsic, there is a strong diversity among people diagnosed with ASD. If it turns out to be instrumental, extrapolating from Schneider's case, we suggest that art can act as a scaffold for people with ASD that allows them to manifest emotional abilities they can hardly bring to bear in interpersonal contexts (Coninx & Stephan, 2021). In fact, close social partners of persons with ASD might in these cases even be encouraged to express their emotional attitudes more slowly and in a more salient way – as in art performances – to give the person with ASD a better chance to comprehend their feelings and interact more appropriately. Art may as well serve in therapeutic settings to bring to light the hidden emotional abilities of persons with ASD (Krueger & Maiese, 2018; Roberts et al., 2019), and, thus, facilitating the communication between people with and without ASD.

As a corollary and in line with recent research by Smith (2009), Milton (2012) and Leung et al. (2022), our paper suggests that people with ASD do not, in principle, lack emotional abilities. Rather, in the aesthetic domain, these abilities are instantiated to a larger extent than in everyday contexts. However, our work might differ partly from Milton's work who states that persons with ASD and persons without ASD experience difficulties to understand each other due to a different way of empathizing. In contrast, we think that people with ASD share emotional abilities

with people without ASD, which they can exercise at least in aesthetic contexts – a fact that might also facilitate mutual communication in that domain.

Our results urge to substantially modify how the relationship between emotional experience and aesthetic experience is investigated in the future. In particular, further studies should use instruments that assess emotions experienced by people with ASD felt during their aesthetic encounters and differentiate them from experiences of empathy. Previously used instruments, such as the Empathy Quotient, focused merely on interpersonal social relations, which in most cases were marked by an experience of detachment. They did not examine, to the best of our knowledge, emotional abilities in aesthetic contexts.

A topic we did not approach is Schneider's relationship to nature. We suppose that Schneider experiences some emotions when dealing with the non-social natural world (landscapes, animals and plants), which is a realm outside of the artistic domain. We found hints for that in a passage of his book where he seems to cope well in taking care of his daughter's cat (Schneider, 1999, pp. 51–52). The emotional relations between people with ASD and nature could be a theme to explore in further works.

Another point to explore in future works are emotional abilities in aesthetic contexts that involve interpersonal relations. Therapeutic settings such as music therapy has been shown to help enhancing and ameliorating emotional expression for people with ASD (Geretsegger et al., 2014). Schneider refers to himself mainly as a spectator, although once he mentions how enthusiastic he was to be part of a choir. It would be an interesting topic to explore such triangulations of an aesthetic context, emotional abilities and interpersonal relations. But this goes beyond the scope of this paper, mainly due to a lack of information.

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Declarations

Conflicts of interest No conflicts of interest exist.

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