

The Art of Experiencing Art: On the Nature and the Origins of the Mode of Art eXperience (MAX)

Itay Goetz^{1,2,3} and Claus Christian Carbon^{1,2,3}

¹Department of General Psychology and Methodology, University of Bamberg, Bamberg, Bavaria, Germany ²Research Group EPÆG (Ergonomics, Psychological Aesthetics, Gestalt), Bamberg, Bavaria, Germany ³Bamberg Graduate School of Affective and Cognitive Sciences (BaGrACS), Bamberg, Bavaria, Germany
E-mail: ccc@experimental-psychology.com

Abstract. *Experiencing art calls for a unique processing mode – this premise has been repeatedly debated during the last 300 years. Despite that, we still lack a theoretical and empirical basis for understanding this mode essential to understanding experiencing of art. We begin this position paper by reviewing the literature related to this mode and revealing a wide diversity and hardly commensurable theoretical approaches. This might be an important reason for the thin empirical data regarding this theme, especially when looking for ecologically valid experimental studies. We propose the Mode of Art eXperience (MAX) concept to establish a coherent theoretical framework. We argue that even very established works often overlook the essence of more profound and so to say “true” art experience. We discuss MAX in relation to evolutionary psychology, art history, and other cognitive modes (play, religion, and the Everyday). We also propose that MAX is not the only extraordinary mode to process information specifically, but that for experiencing art, we evidently need a frame that enables MAX to unfold the full range of art-related phenomena which make art so culturally particular and essential for humankind. © 2023 Society for Imaging Science and Technology. [DOI: 10.2352/J.Percept.Imaging.2023.6.000403]*

Imagine that you are planning to visit a blockbuster art exhibition in a major museum. The exhibition is extremely popular, so the museum undertakes certain measures to maximize the number of visitors. First, all visitors are allocated a strict one-hour timeslot for their visit. Second, in order to make the short visit as efficient as possible, all visitors receive information about the exhibition, including images of all the artworks, their accompanying descriptions, and a compulsory order to view them in advance. Finally, in order to prevent visitors from thinking about artworks deeply or responding to them emotionally, which could create chaos and distract the flow of visitors in the exhibition, guards are placed next to potentially “problematic” artworks to ensure that visitors view them only for few seconds.

Surely, most art lovers will find a visit to such an exhibition unimaginable. This is because art is typically

and expectedly experienced in relatively quiet, relaxed and spacious environments, under no external time pressure [61, 67] and with psychological freedom to explore and engage with the artworks [see 24]. These together are important in enabling spectators to experience, interact and embrace art and, finally, appreciate art as art.

Importantly, art experiences are often the result of a mode of processing art that is different from the mode of processing ordinary objects. While the latter mode is directed at identifying and processing stimuli quickly and efficiently [7], the former focuses on experiencing material at a certain level of openness [100, 101] or surprise [99]. The hypothetical exhibition described above purposely violates the entrance into this mode, and thus stands in direct contrast to standard art exhibitions, which often embrace and facilitate it [61].

The assumption that beholders enter a specific mode prior to the interaction with art is drawn from a substantial proportion of scientific works, including some of the most influential models within Empirical Aesthetics (EA) research [e.g. 96, 107]. However, the evidence we currently possess seems insufficient to support the existence of this mode decisively. While many philosophically inspired concepts are difficult to test empirically [78], the inconsistency in describing this elusive mode seems to further challenge the understanding and the empirical study of it. It may be that we are facing a cyclical issue: We lack a thorough and cohesive conceptual understanding of this mode, which in turn limits our ability to explore it empirically, leading to unclear conclusions regarding its nature that further confine our ability to define this mode of mind effectively, and so on.

A brief overview of very different works from a variety of fields covering related questions illustrates this clearly (see Table I). Notably, certain common themes can be identified between these works: People approach art impractically (accounts number: 2, 3, 4, 5, 6, 7, 8, 11, 14, 16, 20, 22) through simulating perceptual information (2, 12, 19, 20, 21, 22), and remaining open to undergoing various emotional experiences (13, 15, 19, 20, 23, 26).

At the same time, some components are identified only by certain accounts. For example, being in a safe or relaxed atmosphere (9, 20) or expecting to feel pleasure

Received Nov. 29, 2022; accepted for publication Nov. 1, 2023; published online Jan. 8, 2024. Associate Editor: Pierre Dragicevic.

2575-8144/2023/6/000403/19/\$00.00

Table 1. Exemplary conceptualizations of the mode of experiencing art, chronologically ordered.

Concept	Authors	Short Description
1. Mimesis	Plato (375 BC)	Viewing objects represented by artworks in a dream-reality state. Acknowledging that the objects represented are appearances rather than real objects. Forming a mental representation of the depicted objects in mind by freely combining real outside-world and imaginative information.
2. Disinterested attention	Shaftesbury (1671–1713/1961)	Approaching objects identified as aesthetic solely for the sake of their perceptual experience. Devoting complete attention to them, with curiosity to what is foreign and external to oneself, and with no aim to fulfil self-interests through them. Not devoting any attention to our preconceptions of the world; these may limit our ability to make true, independent and free judgments of the objects.
3. Aesthetic attitude	Alison [1]	Attending to the object impractically and purposelessly, with no interest other than perceiving it. Being unoccupied by any other objects or thoughts so that one remains open to all the impressions the object they engage with can produce. Embracing these impressions through associative thinking.
4. Aesthetic judgment	Kant [81]	Approaching objects of nature or art purposively without purpose. That is, approaching objects with the intent to derive pleasure from them, but impractically, with no will to possess them, without developing any expectations regarding the experience or the use of them, and by applying only feelings (and not predefined criteria - concepts) to the evaluation of them. This enables the open-ended intuitive generation and linkage of associations, defined as the free harmonious interplay between imagination and understanding in the mind.
5. Non-relational attention	Schopenhauer [114]	Devoting complete attention to the art object, with no concern to its representation (the causal, spatial or temporal relation between its features), nor one's will (one's wishes or goals). The artwork becomes one's whole world and constitutes the only object of interest. It frees the individual, and it is itself a desirable end.
6. As-If, Make-Believe state	Husserl [80]	Approaching the artwork as a paradox. Experiencing it through our senses, as an embodied product of reality on the one hand, and as a window to a fantasy world on the other hand. Thus, treating the artwork as independent from physical reality and from any personal practical concerns.
7. Physical distance	Bullough [22]	Approaching art impractically, detached from the context of one's needs, and ends by relating to it "objectively". Interpreting one's "subjective" affections and feelings as characteristics of the artwork rather than one's internal world.
8. Art experience	Dewey [50]	Approaching art openly, with no set goal. Actively embracing resistances, tensions and diversions as processing proceeds towards an inclusive, fulfilling, undefined and self-expanding end.
9. Aura	Benjamin [13]	Approaching art easily and in relaxed conditions, but with certain honour and respect. Allowing it to absorb and permeate the self's state of being yet maintaining emotional and physical distance from it.
10. Aesthetic vision	Tomas [124]	Being absorbed in the artwork and unconsciously suspending disbelief. Thus, perceiving objects represented in a painting as worldly rather than the painted appearances.
11. Liminality	Turner [128]	Stepping out of practical and everyday social and cultural concerns. Viewing the artwork, oneself, and the world with unordinary thoughts and feelings, as in religious rituals.
12. Aesthetic point of view	Beardsley [10]	Actively seeking sources of value within an object by focusing primarily on its formal features. Searching for semantic values in the object and availing of them.
13. [Observer's] Set	Kreitler and Kreitler [86]	Being open to engaging with objects that vary in their definitiveness, correctness, and subjective value. Searching for personal and emotional resonance within these objects. Approaching them as distinct from other, day-to-day objects.
14. Flow	Csikszentmihalyi [37]	Employing one's skills to deal with the artwork and the challenge offered by the artist. Engaging with the artwork for its own sake (not for the sake of any external reward), being fully involved in the action and fully removed from the everyday world.
15. Thinking I, Being I	Cupchik [38, 40]	Approaching art on two complementary levels. Through one's ego: Instrumentally, analytically, and applying relevant knowledge to the stylistic features identified in the work (Thinking I). Through the self's identity: personally, emotionally, even unconsciously or transcendently, and through absorbing oneself in the artwork (Being I).
16. Unwilled Attention	Rowe [111]	Being passively and fully absorbed by the object. Not deliberately directing attention towards it, nor wishing or aiming to benefit from it.
17. State of Aesthetic experience	Marković [94]	Being in an exceptional state of mind that is qualitatively different from everyday mental states. Directing attentional resources primarily towards a single object while paying decreased attention to the surrounding environment, the self, and time.
18. Artistic Design Stance	Bullot and Reber [21]	Following the experience of disfluency in understanding an artwork, developing sensitivity to its historical context by inquiring into its means, authorship, and creation. This enables recall of autobiographical and contextual information that facilitates the reasoning about the artwork's origin, meaning, importance, and results in a better understanding of it.

Table I. Continued.

19. Esthetic mode of viewing	Tröndle et al. [126]	Exploring the objects' low-level features, which leads to the experience of increased intense physiological, emotional, and cognitive responses to the object compared to everyday objects.
20. Art Schema	Wagner et al. [135]	Being in a safe environment, not concerned with immediate pragmatic goals, ready to explore and elaborate the formal features of the work. Expecting to experience pleasure while being "open" to the experience of a range of emotions and feelings.
21. Aesthetic Attention	Nanay [103]	Focusing attention on one object but distributing it among its features. Freely wandering around the object's low-level features visually, without any practical concerns related to the object.
22. Information-craving mode	Fazekas [63]	Attention is focused on one object yet distributed across its features. There are no practical concerns or predefined goals involved. Attention consists of the rapid overt sequential reallocation of vision across many different low-level features of the object.
23. Genre Schema	Menninghaus et al. [96]	A more specific version of art schema (see above), in which spectators develop specific expectations regarding the art they are about to encounter based on its genre. This enables spectators to distance themselves from the artwork and more readily embrace its components, as well as their emotions, such as fear, disgust and sadness, freely (in the case of horror or similar genre).
24. Expecting the Unexpected	Muth et al. [101]	Being in an active mode of searching for meaning and self-extending. Embracing ambiguity and semantic instability (Selns), while defying straightforward information processing, familiarity and security.
25. Aesthetic Attitude	Westerman [137]	Focusing the attention solely on the artwork rather than on information external to it, such as historical or contextual information or one's personal experience, expectations or desires.
26. Aesthetic Mode	Pelowski et al. [107]	Preparing to engage with art by expecting to feel pleasure. Adopting a detached "aesthetic" focus on form or style without concerns about the object's meaning, relevance, or use. Being more tolerant of surprise, disgust, and ambiguity.
27. Ecological Art Experience	Carbon [27]	In an art setting (e.g., museum/gallery/fair), individuals attend to artwork openly, often repeatedly, and with physical distance, without searching for ultimate answers or "solutions" to artworks.

Note. Many definitions had not been presented as definitions per se and were extracted from the work.

(4, 20, 26). Furthermore, some views present contrary conceptualization. For instance, some suggest that art viewers are unoccupied by any other thoughts besides the work of art (3, 5) and do not apply any previously held knowledge to the processing of art (2, 4, 25), while others claim that individuals do refer to external information and their own knowledge (1, 15, 18) in order to make sense of the material they engage with. As covering these views in depth is beyond the scope of this paper, we would like to direct readers interested in the history of the development of these ideas to [120] and [110].

In light of the sheer amount of and numerous differences between these approaches, we propose the concept of Mode of Art eXperience (MAX). MAX stems from these highly varied accounts and aims to unify them. Thus, it mostly comprises of the widely shared properties between them. We believe that philosophically, this is essential to create a concept that is exclusive enough to encompass the majority of previous views and actual art experiences, but inclusive enough to remain art-specific. Empirically, MAX is important in that it offers a single, testable definition to a centuries-old, non-empirically-based concept. It is important to note that MAX too is not empirically tested yet. Instead, it represents the authors' theoretical position regarding the experience of art and aims to inspire research in this direction. We acknowledge and even hope that the concept itself will evolve based on future research.

1. WHAT IS MAX?

MAX (Mode of Art eXperience) is a cognitive-affective mode involving higher-order capabilities that differs qualitatively from other modes. People adopt MAX actively but often subconsciously, prior to or during their interaction with stimuli they identify as art due to the cultural significance and experienced ambiguity of art. While in MAX, individuals explore and focus heightened attention on incoming sensory information, detach themselves from practical concerns and default ways of processing information, and draw and link together associations intuitively without a clear goal. Individuals are more open to undergoing affective experiences, including peak and negative emotions.

For an overview of hypothesized processing differences between MAX and Everyday mode, see Figure 1. We define MAX as a cognitive-affective mode; this essentially means that engaging with art can potentially employ almost any component of the mind (APA mentions cognition, affection, and conation as the three traditionally identified components of the mind). It is arguable whether aesthetic appreciation involves all such components [31]; hence one of our main justifications is to define MAX as an art experiencing rather than an aesthetic experiencing mode. Our second main justification is that MAX particularly addresses the mode adopted during the experience of *art*; therefore using "art" describes it most clearly. This may sound obvious, but previous approaches often employed the term "aesthetics"

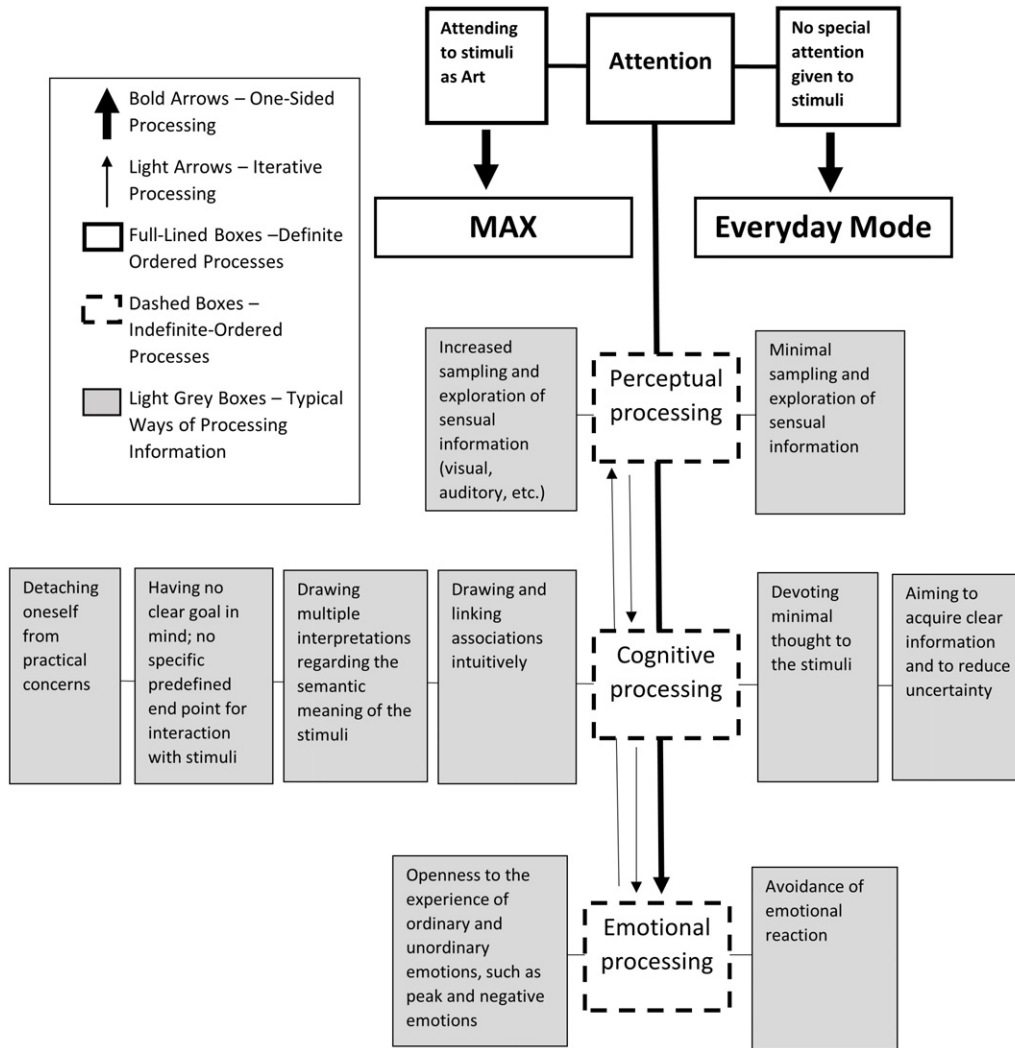


Figure 1. Predicted processing patterns in MAX versus everyday mode. *Note.* Fig. 1 illustrates predicted typical processing in Mode of Art eXperience (MAX) relative to Everyday mode. Processing proceeds in a semi-hierarchical fashion. That is, attending to stimuli (bold arrow; as either art or non-art) is a preconditioning decision, which determines the mode (MAX or Everyday), and the subsequent perceptual, cognitive and emotional processing of the stimuli. The rest of the processing occurs in an indefinite order (as indicated by dashed boxes). For instance, one may first react emotionally to an artwork (e.g., walking towards the Mona Lisa, feeling excited *before* actually seeing the painting), followed by the cognitive elaboration of it (on the way, thinking of the meaning of the Mona Lisa) and only then explore it perceptually (finally, seeing the Mona Lisa), and vice versa. In MAX, the processing is potentially iterative and/or simultaneous, as indicated by light arrows located only on the MAX side. For example, cognitive elaboration may lead to further perceptual exploration, which may take place simultaneously with emotional reaction, leading to further cognitive elaboration, and so on. Note that individuals do not need to explicitly categorize any object as art in order to adopt MAX. When walking around an art museum, for example, visitors are likely to assume that the presented objects are art, thus the categorization takes place collectively at an earlier stage. Also, note that attending to stimuli as art does not necessarily mean one adopts MAX (see What is MAX? section). We conceptualize the mode we propose as specific to the experience of art and not a more general mode of aesthetic experience.

to refer to art-specific phenomena (see Table 1), which unavoidably creates misunderstandings. Note that while discussing different definitions of art is beyond the scope of this paper, we do present Danto’s [43] definition, which we align with, in Part Two. Because we define MAX as a mode, people adopt while interacting with any stimuli *they themselves approach as art* rather than stimuli that are objectively art (if such stimuli exist) or are defined as art by curators, museum directors, gallerists or other “artworld” (to borrow Danto’s and Dickie’s term) specialists, defining art is not fully necessary for developing MAX.

According to APA, cognition is defined as “all forms of knowing and awareness, such as perceiving, conceiving, remembering, reasoning, judging, imagining, and problem-solving. . .” [2]. Affect is “any experience of feeling or emotion, ranging from suffering to elation, from the simplest to the most complex sensations of feeling, and from the most normal to the most pathological emotional reactions. . .” [2].

We define MAX as primarily a *cognitive mode*, for two reasons. First, in order to engage with anything as art and undergo an art experience, one firstly needs to *attend* to the stimulus as art. This view is reflected in both modern

Western [e.g. 11, 43, 53, 54] and cross-cultural historical [e.g. 62] definitions of art. This decision to attend to stimuli as art, a precondition to being in MAX (see Fig. 1), is cognitive. Second, the main differences between MAX and Everyday mode lie at the cognitive level, as illustrated in Fig. 1. Interestingly, notable philosophers have also defined art purely based on the intention to present a stimulus as art [54] or the intention give beholders an aesthetic experience [11]. Thus mere intention, either to experience a stimulus as art or to provide some artistic experience, seems to frame the art experience from the viewer and the artist side alike.

Importantly, some may argue that not all interactions with art involve a cognitive component. Sometimes, we encounter an artwork and before we think about it deeply and attempt to interpret or understand it, we react to it emotionally. However, we argue that we cannot overlook the cognitive decision to attend to the artifact as art even in such cases. This decision can take place subconsciously (rather than explicitly before engaging with each artwork) upon entering the art museum or gallery and assuming objects presented in it are art. Nevertheless, it must be taken in order to adopt MAX. Attending to objects as art then creates the conditions to respond to them with strong emotions or to undergo epiphanizing [26] experiences, but we cannot ignore the cognitive attentional underpinnings of such emotional reactions.

Mode is “a characteristic manner of behavior or way of doing things, as in a technique” [2]. Indeed, we believe MAX is basically a way of processing information. For some, MAX may act as a behavioral characteristic: They will enter MAX naturally as soon as they step into the museum, the concert hall, or even watch a film at home. They may easily maintain MAX over time and interpret ordinary objects intuitively and associatively, even after leaving the museum space. By contrast, others may relate to MAX as a technique: They may require practice and multiple museum visits to experience art through MAX. Even after entering MAX, they may jump out of it rapidly whenever their attention is interrupted by noise, their own thoughts or other distractors.

Importantly, entering MAX is not tied to any specific art, form, or presentation. We use the example of a museum exhibition because art museums seem to provide the most inviting atmosphere to enter MAX. Those museums are purposely designed to allow visitors to enter and optimize art-specific modes [67], and thus are areas where we typically expect to observe such modes. Additionally, research (us included) tends to focus on the forms of art typically presented in art museums, namely paintings. But we believe that it is certainly possible to enter MAX when watching a play or a dance performance in the theatre, a movie at the cinema, a popular TV series at home, while reading a novel or poetry, listening to music through different mediums, upon encountering a painting in the office, a public sculpture in the park, a piece of architecture in a bustling city square, and so on.

However, in some cases, the art experience will likely not involve all aspects of MAX. For example, while reading

poetry, individuals may not explore the material perceptually because the experience of poetry is based on language comprehension rather than sense perception. Additionally, the experience of music may not always incorporate aspects of associative thinking, which is central to other art forms (e.g., painting, sculpture, literature, film) [see 1, 106], because unlike these art forms, music is often less representative of readily identifiable themes [30]. Additionally, music relies on sound, to which people may react purely emotionally, rather than logically [114]. Thus, we believe that in its entirety, MAX describes most precisely, the experiences of visual art (paintings, sculpture, photography, performance, architecture, dance, theatre, film, etc.). However, it is by no means strictly limited to those.

Most importantly, we believe that MAX can accommodate an extensive range of experiences and cognitive styles, as people vary in their psychological needs and motivations to engage with art. Similarly, adopting MAX does not require any specific art knowledge or expertise. For example, some individuals are relatively practical, narrow-minded, and goal-oriented; they show a high need for closure in their daily lives, and have no interest in art whatsoever. They may engage with art quickly and by linking associations in a highly analytical way. Others are more open-minded and can easily let go and immerse themselves in art in search of nothing but an intuitive and affective experience of it. However, given that people in both scenarios pay (even slightly) a heightened degree of attention to incoming sensory information and detach themselves from practical concerns and default ways of processing (to the degree they can), they all appear to adopt MAX.

Essentially, we believe that being in MAX allows beholders to maximize their art experience. But rather than in utilitarian terms (as in the opening example), adopting MAX maximizes the art experience in that it enables beholders to de-automatize everyday processing, sustain judgment, explore meaning openly, consider different points of view, relate to art personally and affectively, imagine, extend their self and much more.

In the following sections, we evaluate the definition of MAX in relation to various fields of inquiry, popular concepts within Empirical Aesthetics (EA) research, and consider evidence supporting its existence. However, we begin by explaining why we believe MAX is vital for EA, by evaluating it in relation to some of the most influential works in EA in recent years. We hope this discussion will highlight the need for MAX not only as a crucial aspect of the art experience but as a framework for viewing the art experience in a more ecologically valid way and conducting studies that reflect this perspective.

2. PART ONE: WHY DO WE NEED MAX?

2.1 *Previous Key Works and the Current State of Research in Empirical Aesthetics*

In order to illustrate clearly the need for a concept like MAX to be developed, in this section, we consider a number of influential works in EA in recent years [i.e. 88, 107] and

highlight the main issues we identify with them. We do not have the slightest doubt that developing these works required a huge amount of meticulous thought and work, but we nevertheless believe that they do not accurately portray the experience of art as it really is. As these works had and still have a significant influence on EA since their publication, we find it essential to evaluate them here, in relation to MAX and before developing MAX further. We begin each subsection with an open question MAX addresses so that scholars, or anyone interested in EA, may wish to consider further. As we cannot explain each model in detail here, we wish to refer readers who wish to get a broader understanding of each model to the respective original paper.

2.2 *Are Scholars Interested in Art or Aesthetics?*

Whether or not the study of the psychological mechanisms governing the experience of art should be separated from the study of aesthetics is still an open question [85]. In fact, it seems that what exactly constitutes an aesthetic experience is not entirely agreed upon [31]. To date, EA comprises the study of art and aesthetics; scholars argue that it is important to draw clear lines between these topics of inquiry. For example, the model of aesthetic appreciation and aesthetic judgments [88] clearly states that it aims primarily to explain the process of evaluating paintings, specifically paintings from the Modern era. Therefore, the question arises as to why the model is presented as a model of *aesthetic* appreciation. Is the aesthetic experience akin to the art experience, and is the art experience, in general, akin to the experience of paintings and modern paintings in particular?

What is more, the term aesthetics is never defined in the paper. In parts, Leder et al. [88] incline (inexplicitly) towards Fechner's conceptualization of aesthetics as any pleasurable sensuous experience, while in others, they hint at Kant's [81] account of aesthetics as essentially the study of beauty (besides the sublime). By focusing on a single sense perception (vision), the paper overlooks the view of [9], who coined the term 'aesthetics' and defined it as any sensual experience. The lack of definition makes it hard to understand what kind of experience or evaluation the model aims to explain.

The question arises why a model should be termed "aesthetic" in a broad sense if it considers only one sense perception and focuses primarily on one form of art (paintings) from a specific era (Modern). A similar question may be applied to various relatively recent approaches aiming to explain the art-specific mode by terming it aesthetic (see Table I). By targeting the art experience specifically, we believe that MAX draws necessary and clear distinctions between the aesthetic and the art experience. It may help to guide the attention and resources of those interested in studying the art experience towards their phenomenon of interest.

2.3 *Why do People Engage with Art?*

Another main issue with the model proposed by Leder et al. [88] is the view of the art experience as governed

by knowledge, reason, and understanding. According to the model, this experience results in pleasure if and only if the viewer has successfully understood the artwork and solved the problems it had posed (most notable in the cognitive mastering stage). Similar tendencies are reflected in numerous studies focusing primarily on beauty, pleasure, and liking rates, as if those were the most fundamental variables of the art experience [for a critical reflection on these issues, see 26].

One may ask, why would a model of aesthetic processing describing perhaps the most revolutionary period in the history of Western art (whose complexity the model itself recognizes), that time and again broke all rules established in the preceding 400 years of art creation and that reacted to immense challenges, including perhaps the most brutal regimes and wars humanity has ever witnessed, if all they wish is to experience pleasure and beauty and to achieve easy understanding. Viewers who strive for easily understandable and pleasurable experiences seem more likely to engage with Kitsch objects [72, 105] than with Modern art.

Pelowski et al. [107] claim that this striving for understanding in art is rooted in human evolution: Humans aim to efficiently and fluently match incoming sensory information to previously acquired schema to feel safe [29]. However, this claim is incongruent with all evolutionary accounts of art creation and perception we are familiar with, and will be discussed in the next section.

Following these views, with MAX, we do not wish to imply that art viewers do not strive for any understanding whatsoever or that all viewers enjoy a challenge. We wish to suggest that people have different interests and drives to engage with art and that one-size-fits-all accounts are less representative of this myriad of interests. Given the elusive nature of art [for example, see 82], it seems that those who engage with it would likely embrace the challenges it offers rather than repeatedly trying to "solve" them.

2.4 *How Structured is the Experience of Art?*

The models proposed by Leder et al. [88] and Pelowski et al. [107] describe the interaction with art as a highly hierarchical process proceeding in a series of successive cognitive stages (although more flexibility is allowed in the latter).

Pelowski et al. [107] based their perceptual stages of the model largely on the findings of Nodine et al. [104], despite the multiple limitations of this study. In brief, Nodine et al. (2008) conducted two studies in which relatively small samples ($N = 29$ and $N = 15$) of individuals untrained in the arts saw digital reproductions of the same eight paintings (whose selection was somewhat arbitrary) in a predefined order, for 100 ms each in experiment one and unlimited time in experiment two. While the study may have merit, basing a model that attempts to describe the experience of art in real-life contexts on a single study with such low ecological validity [see 27] seems problematic at the outset.

What is more, the model contradicts some of the findings of Nodine et al. [104]. For instance, Leder et al. [88], Pelowski et al. [107] propose that when interacting with art,

viewers must first analyze the artwork's low-level features and integrate their memories in relation to it. Only then can they classify the artwork according to style and form and incorporate their own emotional response into its evaluation (at stage four of the model). By contrast, Nodine et al. [104] explicitly reported that classification and emotional reaction occurred rapidly and automatically at the earliest phase of interaction with the artworks (which correspond to stage one of the Pelowski model). These early processes provided the basis for participants' evaluations of the artworks. According to Nodine et al. [104], these findings illustrate that people tend to make rapid evaluations of artworks' content and appeal, which can explain why viewers may quickly choose to ignore certain artworks during their museum visits.

Thus, even under experimental conditions, the processing of art seems more diverse and dynamic than the models predict it to be in a real-life context. Considering the dynamics involved in an exhibition or a museum visit, rather than the processing of individual paintings in isolation [116], may further reveal that the experience of art defies clear structuring, as the queries and studies below further suggest.

Will the processing of the first painting in a museum visit always proceed in the same pattern as the processing of the 10th, 20th, or the last painting viewed by the visitor? Studies focusing on museum fatigue have shown that attention tends to decrease after 30–40 minutes, leading to significantly shorter viewing times and, most likely, different interactional patterns with the paintings [47]. Similar patterns of interactions have been documented in other contexts (e.g., zoos), suggesting that this is simply a human, not even an art-specific phenomenon [47].

Will the visitor similarly process paintings, regardless of the size of the exhibition/museum they attend? Studies have found decreased visitor interest in single paintings as the number of paintings within an exhibition increased [68] and a tendency to view paintings more than once in smaller exhibitions [24] which is less likely in larger ones [117].

Will visitors always process paintings in a similar way, regardless of whether they encounter them alone, with a single partner, or with their children? Again, Carbon [24] found that compared to viewing paintings alone, viewing as a group results in longer viewing times, while adults accompanied by small children engage with paintings for significantly shorter times, indicating different patterns of experience.

Will a given artwork always be processed similarly, regardless of where it is presented within an exhibition? Tröndle et al. [126] found that a painting's location within the same exhibition greatly affected whether visitors observed it closely or barely explored it at all.

Here we believe that the advantage of MAX lies in its recognition of the complex and highly varied nature of the art experience, which most likely cannot be captured by a series of preordered steps. Within its definition, MAX encompasses a broad spectrum and dynamics of perceptual, cognitive and emotional processes, as illustrated in Fig. 1.

2.5 *Is the Experience of Art Unique?*

With their model, Pelowski et al. [107] aimed to advance our understanding of the art experience beyond Leder et al. (2004) and other previous models. Pelowski et al. [107] incorporated top-down aspects into processing artwork-derived bottom-up visual features to represent the interaction with art more fully. This advancement seems vital; however, the incorporation of these top-down influences seems to seriously undermine the model's ability to grasp the diversity of art experiences realistically.

Pelowski et al. [107] applied the theory of the ideal self-image originally developed by Carver [32] as a framework that drives and explains our interaction with art. The ideal self-image theory aims to explain human cognitive processes and subsequent behavior using two clear assumptions: (a) Human behavior is mainly goal-oriented, and (b) human behavior is primarily directed toward supporting one's ideal self-image [32]. According to Carver [32], Individuals seek to experience high self-esteem by always minimizing the discrepancy between their self-image and reality through setting and completing relevant "Do" goals.

Pelowski et al. [107] transferred the ideal self-theory to art. They claimed that when experiencing art too, individuals set themselves different goals, such as "Do understand art", "Do visit and enjoy art museum", "Understand a particular artwork", "Identify the artist", "Respond appropriately" (p. 88), etc. Individuals either smoothly fulfill these goals or change them during the experience if they cannot readily attain them.

However, it is unclear, and indeed neither discussed nor justified in the paper, how and why the ideal self-image theory can account for the experience of art. In fact, an extensive range of past "classical" accounts (see Table I) have identified the art experience as unique explicitly because, unlike many other human experiences, it does not bear any relevance to the self (e.g., Shaftesbury, Schopenhauer, Husserl, Bullough), it is impractical, not goal-oriented (e.g., Shaftesbury, Alison, Kant, Schopenhauer, Husserl, Dewey), and it does not involve any expectations (e.g., Shaftesbury, Alison, Kant, Schopenhauer). Being classical does not necessarily make these views true, but regardless of them, it seems reasonable to expect a model with such wide breadth and aspirations as the discussed model to justify its basic premises. If we simply apply models from everyday processing to the experience of art, we may need to ask - what is unique about the experience of art? If the processing of art is not unique and different from everyday processing, then why do we need a specific model to describe it?

Employing the ideal self-image theory, Pelowski et al. [107] proposed that two top-down factors; namely congruency (between expectation and actual experience) and self-relevance (to art), determine the dynamics and outcome of the art experience. They viewed these factors dichotomously, assuming they are classified as either high or low. These decisions resulted in an unnuanced and inflexible portrayal of the art experience and its outcomes, which due to scope will not be discussed further.

In sum, applying models from everyday processing to the context of art may result in predictions that do not consider, let alone embrace, the unique nature of art. As shown in the next section, MAX stems from a rich and diverse base of numerous sources directly addressing different aspects of engaging with art. Hence, we believe that MAX is naturally more suitable to describe the experience of art and accompany the study of it.

2.6 Summary

The models discussed above may indeed be effective in explaining the experience of a single or a few artworks in the lab, where artworks are shown in a controlled and ordered fashion, one after the other, on a computer screen. However, considering the diversity, dynamicity and complexity of the art experience, it seems that models that aim to portray it as a hierarchical and structured process tend to reach highly speculative conclusions.

Science aims to generate testable (or falsifiable) predictions and significant results by breaking down complex processes and testing their parts in isolation [108]. Such approaches guided EA scholars before, who aimed to answer straightforward questions regarding color and shape preferences and the like by testing such low-level features in isolation and overlooking the principles of Gestalt [26, 41]. It seems that following the discussed models may lead us to a similar situation. By breaking down the art experience into separate parts, we are at risk of reducing it [37] and overlooking its significance as a complete, deep and long-lasting whole [26, 50]. We hope that highlighting the difference between such approaches and MAX clearly demonstrates the importance of considering MAX (and similar concepts) when attempting to study why and how people interact with art.

3. PART TWO: THE MODE OF EXPERIENCING ART IN CONTEXT

In the following section, we unpack and further explain the definition of Mode of Art eXperience (MAX). In turn, we discuss relevant evolutionary, art-historical, and cognitive aspects of experiencing art. We begin each sub-section by presenting a central premise extracted from the definition of MAX that we believe should be justified and proceed by discussing it in detail. We hope that these discussions will help to justify our definition of MAX and to explain *why* we should expect that individuals approach art with distinct kind of attention.

3.1 *The Mode of Experiencing Art from an Evolutionary Perspective*

Premise 1: The experience of art is unique because of its correspondence with evolved propensities in our neural system. MAX involves higher-order cognitive capabilities that are rooted in the human ability to imagine, socialize and think creatively.

The study of the cognitive processes involved in the experiencing of art from an evolutionary perspective can be

traced back to *The Descent of Man and Selection in Relation to Sex* by [46]. Darwin [46] explored the evolution of the mental power of humans, explicitly concerning art. Since then, various theories and findings have argued for the art's unique role in human evolutionary development [36].

Davies [48] argued that as stylistically designed artifacts over 100,000 years exist, and manifestations of art can be found in almost every society around the world today, art, or at least aesthetic tendencies, have been around throughout the lives of our early modern ancestors. Thus, the tendency to engage with art is universal [58, 92].

One view in evolutionary psychology is that art plays the role of adaptation, which assumes the closest possible relation between a trait and a species' development [48]. According to this view, human thought evolved through specific modules that issue specialized, automatic behavioral responses to environmental triggers, which assisted in survival and daily functioning [58]. While these modules were initially independent of each other, it is through the engagement with art and its nature of "floating intentionality" that the human brain developed the capacity to create links between these modules. This laid the grounds for developing other complex cognitive abilities, such as intellectual flexibility, imagination, and creativity (Rawn & Cross, 2008). The fact that active art behaviors, such as singing, dancing, or drawing, evolve spontaneously in the development of almost every individual supports this view. This pattern is characteristic of innate propensities, like language, that are regarded as forms of adaptation [121].

Another view is that if a trait plays the role of adaptation in a species' evolution, it should leave biological marks that signal its significant contribution [48]. Based on this condition, various studies found no specific brain areas exclusively responsible for the appreciation of art [49] rejected the view of art as being cognitively special. For example, the neural circuits activated during the experience of art were found to correlate with circuits activated during the experience of pleasurable "low-level" stimuli, such as food, drugs, or sex [15]. In light of these findings, some argue that the view of art as special is not rooted in empirical evidence but rather in an 18th-century conceptualization of art as a heightened, sophisticated [58, 92], and superior activity [102]. Nevertheless, such simplistic findings may result from simplistic approaches to brain imaging, and more nuanced models looking at the network level might very well find interesting patterns that could relate to a special cognitive mode.

These perspectives are relevant for better understanding all modes of experiencing art, as each may conceptualize this mindset in an entirely different way. According to the art-as-adaptation view, a specific mode of experiencing art may not only be a necessary condition for maximizing our experience of art but a mode that contributed vastly to our species' cognitive evolution and that from which many of the cognitive abilities we use daily have evolved. By contrast, based on the art-as-nonspecial view, one may conclude that if the experience of art itself is not unique and does not involve

any special cognitive processes, then beholders are unlikely to approach art with a specific cognitive mode.

Based on the lack of sufficient evidence for any of the above approaches, the art-as-by-product solution has been proposed [for an exhaustive discussion, see 48]. According to this view, the cognitive abilities involved in experiencing art did not provide the ground for but emerged from other higher cognitive abilities central to human nature [48]. Hence, even if engaging with art cannot be associated with any specific brain regions, the experience of art is unique because of its correspondence with evolved propensities in our neural system [49]. This means that the mode of experiencing art may not be the source of but involves higher-order cognitive abilities rooted in the human ability to imagine, socialize and think creatively [36].

3.2 The Mode of Experiencing Art Concerning Modern and Contemporary Art

Premise 2: The prevalent elusiveness, incoherence, and unpredictability of Modern and Contemporary art require viewers to approach art openly by detaching themselves from default ways of processing information and creating their own meaning through drawing and linking associations intuitively.

Danto [44] divided the history of Western art over the last 700 years into two main phases: (1) Medieval and (mostly) Classical art, in which the role of artists was to achieve technical improvements with the main aim to imitate reality more naturalistically. This period ended with the invention of the camera, which proved better in achieving this goal. (2) Modern art, in which artists' primary goal was to differentiate visual art from other forms of fine art and to acquire independence by "freeing" themselves from the chains of objectivity and imitation of nature or classical sources.

Although notable scholars such as Ernst Gombrich [e.g. 70] and Hans Belting [e.g. 12] may object to this view (both agreed that the story of art is that of individual artists who encounter and aim to solve various problems and, in the process, create new, unexpected problems for future artists to address), Danto's [44] idealized dichotomy seems nonetheless to capture the overarching shifts in Modern art coarsely. That is, towards art that is more abstract and less committed to any objective truth, which is most relevant to our discussion.

From the viewer's perspective, Modern art gradually became more challenging to comprehend [69]. This is probably most evident with the arrival of Impressionist art, as painters were committed to creating color combinations and contrasts that intensify the visual experience at the expense of creating realistic presentations of the world [86]. As such, Impressionism offered viewers an experience utterly alien to them [50]. With Cubism, the spectator's task was hardened, as through the engagement with the painting, the observer moves back and forth between phases of semantic stability and instability [98]—a principle [100] termed "SeIns" (Semantic Instability). That is, Cubist paintings offer cues for the presence of recognizable objects, but often from multiple perspectives, which makes the artwork unlikely to

be perceived and understood as one complete and good Gestalt [98]. Abstract art further enhanced the viewer's *challenge after meaning* [8], as even the small proportion or fragments of recognizable objects in Cubism disappeared, creating objects that consisted solely of shapes, often with no apparent reference to any real-world phenomena. Abstract Expressionism abandoned even the use of those shapes, devoting itself entirely to the exploration of pure color, texture, and action, which sometimes makes the engagement with art fully individual and experiential [123]. Some even question whether those artworks exist if no one interacts with them [35]. Finally, starting with Dada art, but also in Pop and Contemporary art, at times, the viewer can no longer distinguish between a work of art and an everyday object based solely on the objects' visual features [43, 125]. Therefore, the role of the observer is twofold: First, identifying the object as a work of art, and second, interpreting the seemingly ordinary everyday object in a meaningful way [75, 126].

Notably, as art becomes less defined and readily understandable, the beholder, who wishes to interact with it meaningfully, must abandon the role of the passive viewer and adopt the role of an active co-constructor of meaning in response to the stimuli provided by the artist [60]. This shift expands significantly the number of possible experiences that can take place during the interaction with art: From the emotional response to art to developing interest in it, acquiring insights into its meaning, merely enjoying its beauty, learning about the world or oneself, critically reflecting on society [71], being challenged, both cognitively and morally [40], feeling awe [65], being puzzled, moved or wholly drawn into the artwork [123], or relating to the artwork as a problem to be solved [109].

These dramatic changes forced the audience to re-evaluate their previously held conceptions of art and evidently led philosophers to attempt to redefine art repeatedly. We cannot offer a comprehensive review of art definitions here, but we would like to briefly present Danto's [43] definition of art, as presented in 'The Transfiguration of The Commonplace', as we believe that compared to other influential definitions [e.g. 11, 54] it is both inclusive enough to accommodate all works of art, and informative enough to facilitate our understanding of art. According to [43], an artifact is a work of art if it meets three criteria: It is *about* something, it *represents* something and it does so using some *expression*. Additionally, the artifact is connected to the art world in the sense that it refers to some history and thought about art. Thus, two objects can possess the same low-level features (they can look or sound precisely the same), but one will be a work of art while the other not. This is given that one addresses some topic, aims to represent some ideas, uses some expression, and refers to some "art world".

Linking this discussion to MAX, we argue that the elusive and unpredictable nature of art, specifically but not strictly limited to Modern and Contemporary art, combined with the assumption that artworks convey ideas and refer to some broader cultural-historical context, enable and possibly even require viewers who wish to interact with art

meaningfully to approach it with a mode that enables to do so.

3.3 *The Mode of Experiencing Art and the Cultural Significance of Art*

Premise 3: Processing art calls for a specific mode because of the cultural significance of art.

The relative ambiguity of art (particularly Modern and Contemporary Art) alone does not seem sufficient to fully explain why we may approach art with a specific mode. After all, we can think of other ambiguous situations for which multiple solutions exist that we do not approach with an art-specific mode, such as trying to find our way in an unknown city or completing an unfamiliar task at work. Additionally, oftentimes the ambiguity of art does not reside in the objects themselves, but rather in their presentation as art.

Duchamp's Fountain, for example, is not an ambiguous object in and of itself; what makes it ambiguous is our attempt to settle the dissonance between the visual and semantic insignificance of this everyday object and its presentation as art, which is culturally significant for us. Had we encountered the urinal in a bathroom or a furniture shop, we would most certainly not find it ambiguous at all, as we would not attempt to interpret its physical features in any significant semantic way. Referring back to Danto's definition of art [43], we would not assume that the urinal is about anything, or stands for any abstract ideas, or refers to any cultural history; hence we would not be so puzzled by it.

One notable attempt to explain the cultural significance of art was made by Benjamin [13] with his concept of *Aura* (see Table I). Benjamin [13] argued that art possesses an aura due to its critical role throughout human cultural development. As discussed above, engagement with art seems to be a universal feature of human culture [48]. Additionally, early art forms took the shape of religious and magical rituals, and in fact, until modernity, most art operated in the service of religion and thus was distinct from the realm of everyday life for the average person (Benjamin, 1935). Consequently, engaging with art came to be seen as a unique artifact of human culture—artworks came to possess an *aura*, defined by Benjamin as: "A strange tissue of space and time: The unique apparition of a distance, however near it may" [13, p. 23]. Importantly, this view of art as a practice whose experience is non-practical and bracketed out from the realm of ordinary life, is also reflected in Dutton's [62] cross-cultural definition of art and is likely not Western-specific.

In his seminal essay, "Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit" [The work of art in the age of mechanical reproduction], Benjamin [13] predicted that people's newly acquired ability to reproduce art for everyday consumption of the masses mechanically would lead art to lose the *Aura* it possessed for tens of thousands of years. However, Modern art, which was born out of and often reacted to these technological changes, has also brought new qualities and challenges to the way we experience art [60].

Judging by the approach many museums adopt today; it seems that art has retained its *Aura*, as museums invest tremendous resources in attempting to reduce the physical and emotional distance art's *Aura* naturally creates between artworks and viewers.

Museums try to maintain the atmosphere [16] resulting from the *Aura* and the possibility for aesthetic sublimation [93] of art while allowing for contemplation, deep inquiry, and direct experience of art. In other words, museums aim to enable the "utmost decrease of Distance without its disappearance" [22, p. 94]. These attempts can be nicely illustrated by the introduction to the "Feelings" exhibition (8 November 2019 to 4 October 2020) in the Pinakothek der Moderne art museum in Munich: "The exhibition 'feelings' is about the intuitive dialogue between you and art. This means that you will not find any information about the artwork, to begin with. Nothing to distract you. What does the contemplation of a work trigger within you? What are the feelings, experiences, and memories evoked in you?" The introduction to Yayoi Kusama's "Infinity Mirror Rooms" at the Tate Modern, London (18 May 2021–12 June 2022) seems to address similar goals: "... The dots surround you and engulf you, making it hard to tell where you end and where the rest of the room begins. Usually, when we experience art, there's a clear distinction between us and the artwork. But Kusama confuses it on purpose. To experience her mirror rooms, she asks us to become part of them".

To sum up, throughout human development and in most (if not all) human cultures, art fulfilled certain societal, cultural, ritualistic or religious roles. This resulted in art acquiring the status of a practice distinct from ordinary everyday experience, that beholders approach with certain respect and distance. Although, since the Modern era, art has become significantly more accessible to all (and through different mediums), it still carries significant cultural prominence, which museums today sometime aim to blur in order to further increase its accessibility. Thus, throughout history and cross-culturally, engagement with art seems to have consistently require specific and distinct attention.

3.4 *MAX, Play, Religious Practices and the Everyday*

Premise 4: MAX accounts for specific facets of the art experience, but it overlaps with other modes we are familiar with, such as play, religion, and even the Everyday. It is qualitatively but not distinctively different from these modes.

While we view MAX as an art-specific mode, we argue that it bears various similarities to other states of mind we are familiar with. This view is somewhat in accordance with Dewey [51], who suggested that the experience of art is a continuation or prolongation of other, simpler and more prevalent experiences rather than an experience categorically distinct from them. We believe that various issues with previous approaches that may explain our relatively little understanding of the art-specific mode is the lack of consideration of its similarities and differences to other modes, which we, therefore, address here. We

wish to illustrate that many of these modes share cognitive processes and experiential patterns. Importantly, we also analyze the differences between MAX and each of those modes to comprehensively highlight the specific features of experiencing art.

3.5 Play

This mode of experiencing art seems to highly resemble that of experiencing play, even in non-human mammals. Both art and play tend to be self-rewarding, non-functional, and experienced for their own sake [57]. At a cognitive level, the art experience resembles pretend play, defined by Weisberg (2015) as a non-instrumental activity involving some form of representation or acting “as-if”.

Engaging with art, like engaging with pretend play, involves the development and maintenance over time of “as-if” beliefs and the suspension of disbelief [20]. Additionally, engaging with both art and pretend play requires the use of metaphors in the sense that something is “seen as” or “stands for” something else. Lastly, both possibly require being in an imaginative world, distinguished from the “real” world [20]. These cognitive capabilities involved in art and play are based on the abilities to imagine, be creative, and think in abstract terms [20]. In light of these similarities, it is not surprising that some even assume that the ability of humans to appreciate and embrace art has developed from their ability to participate in play [55].

Notably, when cognitively demanding deductive reasoning tasks and counterfactual tasks (i.e., believing in facts that contradict their knowledge, like believing that fish can fly or that bears can speak) are presented in pretend context, children perform better at them, compared to when these tasks are presented in non-pretend context [52]. Such findings suggest that pretend scenarios can serve as a cognitive tool to foster abstract reasoning by prompting children to attend only to current information and detach it from their prior knowledge [52]. Thus, the cognitive mechanisms involved in pretend play may operate somewhat similarly to those involved in MAX in that both seem to be “activated” only in particular contexts.

The striking similarities in the cognitive processes involved when engaging in both art and pretend play seem to precisely illustrate our view that the differences between the cognitive modes are very subtle. We believe that the main difference between these cognitive modes is the heightened attention directed towards the recording and exploration of incoming sensory information, which characterizes the art experience but not necessarily pretend play. However, as our understanding of MAX is still limited, future research exploring similarities and differences between these modes could significantly improve our understanding.

3.6 Religious Practices

MAX also appears to resemble the state people may adopt during religious practices. In both cases, individuals adopt a state of consciousness outside their “normal”, day-to-day default mode [55, 56, 129]. This allows individuals to pay

greater attention to and identify symbols, interpret and process them with heightened respect and importance, and reflect on their life, the world, and society from a distanced, broader point of view [61]. Shaftesbury (1671–1713/1961), who revived the art-specific mode discussion over 300 years ago, applied the concept of disinterested attention to religious beliefs before linking it to art. According to Shaftesbury (1671–1713/1961), disinterested attention initially evolves when individuals learn to develop a love for God independent from their own good. Individuals who acquire this virtue and learn to love God regardless of their self-reward may develop it further and learn to enjoy aesthetic and artistic objects, regardless of the practical or egoistic needs these objects fulfill for them [119].

The similarities in approaching and processing art and religious practices should hardly be surprising; after all, for most of Western art history, art was in the service of religion, its main themes were religious, and beholders mostly encountered art within religious institutions (Benjamin, 1935).

Within the psychological study of religious experiences, trait absorption, defined as the tendency to get fully immersed in one’s experience [91] is a central concept. It has been found that besides religion, absorption predicts patterns of interaction with a range of stimuli, including art, literature, music, and natural beauty. Additionally, those who score higher on absorption tend to report greater interest in art [91]. Absorption also has imaginative components that resemble pretend play [91]. Moreover, many of the components we see as central to MAX have also been used to explain absorption; detachment from everyday practical concerns and the heightened attention directed to incoming sensory information. Absorption has also been found to partly correlate with openness to experience [91], which is often employed in EA research as a predictor for judgments of art, as both traits share similar components such as artistic sensitivity, awareness of emotional responses, willingness to try new activities, and intellectual curiosity [95].

In three field studies conducted in different churches with over 200 participants, individuals scoring higher on absorption were more likely to undergo spiritual experiences [132]. A series of studies conducted in the lab and a church (the Oude Kerk in Amsterdam) reported a positive correlation between self-reported absorption rates and experiences of awe in response to art [132]. Tellegen and Atkinson [122], who developed the first absorption scale, argued that although some individuals are naturally more easily absorbed than others, in order to be effectively absorbed, individuals may need to adopt a specific experiential mode of intrinsically motivated, effortless involvement. Therefore, physical, social, and cultural context is essential for absorption, as it is for MAX. Individuals are more likely to feel absorbed when present in a context that signals to them they could feel so [132].

Despite these similarities, it seems relatively easier to identify differences between art- and religious-state compared to art- and pretend-play-state. While we view

MAX as primarily cognitive, absorption seems to have a stronger affective component [91]. Thus, associative thinking, central to MAX, seems to play a lesser role within experiences of absorption, where processing is somewhat less “sensible”. Additionally, in MAX, the experience is centered around certain stimuli and their perceptual exploration. By contrast, during absorption, individuals are likely to feel immersed within their thoughts or feelings to the degree that they may report seeing or hearing things that do not exist in their immediate surroundings or even in reality (as far as we know) [132].

3.7 *Everyday Perception*

In contrast to the mindsets adopted during play, religion and the experience of art, Everyday mode often guides behavior in a largely automatic way, with minimal thoughts [7], and attention [103] involved with the aim of acquiring clear information [34] and to reduce uncertainty [14]. In Everyday mode, individuals are guided mainly by previous experiences and familiarity with the surrounding environment and are less likely to experience emotions resulting from unpredictable stimulations [139].

Ordinary perception has been described as hypotheses testing [73] or predictive coding [130]. Both concepts propose that incoming perceptual information does not consist simply of information the brain “objectively” records from the external environment. Rather, the brain function like a Bayesian machine: Based on previous experience, it develops expectations against which incoming sensory information is constantly tested to form cognition. Gestalt principles may account for similar processes: The brain simplifies incoming sensory information in order to make perception and action easier and faster for the individual [133].

Taken together, the above phenomena have clear advantages for the individual, as the cognitive processes that initiate and control behaviour come to be performed quickly, in parallel with other activities or thoughts, and with minimal attention. These allow for conserving regulatory strength for crucial decisions [139]. For a proposed overview of the differences in processing information between MAX and Everyday state, see Fig. 1.

3.8 *Distinctive or Related Modes?*

Dissanayake [57] suggested that what links the cognitive modes of art, play, and religion and differentiates these modes from Everyday mode is the tendency to “make special”. That is, to transform the ordinary into the extraordinary and treat daily objects as unique and detached from everyday concerns [57]. However, further delving into the nature of these modes may reveal a more nuanced picture.

First, the mode of “making special” seems to be adopted when we experience the external world in general. It may allow us to find significance and personal resonance in a large variety of objects, such as a wandering cloud, an old window, or a “lonely” tree.

In contrast, MAX is adopted while encountering objects we had initially identified as art, and that we often

assume had been intentionally charged with expressions and metaphors, were created to convey certain feelings or ideas, and carry some cultural significance [43, 45, 79]. Therefore, the nature of associations we draw while being in MAX is likely to differ markedly from the kind of associations we draw while in the mode of “making special”. For this reason, in contrast to most previous approaches, see Table I.

Second, it is often held that the mode we adopt during the interaction with art is categorically separable from the mode of everyday life [e.g. 103]. However, we argue that like the relation between MAX and the mode of “making special”, MAX and the mode of the Everyday are not definitively different, as we can identify some shared mechanisms between them. For example, in art, like in everyday life, we are likely to (even unintentionally) use contextual cues in order to predict and more efficiently perceive objects in the environment [17, 69]. When individuals viewed degraded objects in isolation, they failed to recognize them, but when the objects were presented within a painting (e.g., a boat in the sea), expectations derived from scene information were used to shape explicit representations of these objects, which were also readily identified [17]. Thus, the concept of predictive coding, derived from everyday cognition, is relevant to and even seen by some as fundamental in explaining our appetite for art [49].

Similarly, the abilities to imagine and understand symbols and metaphors, which are so central to the experience of art, are utilized even in most daily situations. Banknotes, for example, would not have any significant objective worth unless we agreed to imagine that these pieces of (highly used) paper metaphorically symbolize or represent (in the sense that an object stands for another idea) some of our most sought-after values [125]. Thus, although numerous significant differences undoubtedly exist between MAX and Everyday modes of processing, some of the cognitive processes that govern our thoughts and behavior in both modes may not be as distinct as often assumed. While we by no means wish to suggest that MAX is merely an extension of everyday processing (we believe that it differs from it in almost any respect), we believe that understanding the similarities between these modes is fundamental to truly understanding the nature of MAX.

We thus propose that instead of portraying the discussed cognitive modes as categorically distinct from each other, we may view them as a spectrum. In art, we engage with objects openly and associatively, guided by the rhetorical tools the artwork is charged with. In a “making special” mode, we view ordinary objects as unique and experience them intuitively and creatively. When being in the Everyday mode, we constantly make sense of the external world, but often subconsciously and through paying minimal attention to the environment. At the same time, some of the cognitive mechanisms underlying information processing are shared between all these cognitive modes. Therefore, MAX is qualitatively, but not categorically different from these modes.

3.9 Cultural Differences

Importantly, some may argue that the distinction we propose here between the impractical, open-ended art state, and the utilitarian, goal-oriented Everyday mode is Western-specific [112]. Similarly, maintaining that a certain degree of physical distance must exist between a person and an object for a person to interact with the object meaningfully is an assumption that does not necessarily apply in non-Western cultures [112]. Saito [113] argues that everyday practices such as gift packaging or lunchbox meal presentation constitute important forms of communication in Japanese culture. Through choices of package material and design, or even vegetable presentation within a lunchbox, senders may communicate moral messages to recipients. Great care is devoted to choices of folding techniques and wrapping materials, implying that recipients are often required to engage with the object physically (unwrap it) to grasp its deep, full meaning [113].

However, Saito [113] herself noted that the ideas conveyed through everyday object design in Japanese culture are limited to moral ideas of thoughtfulness and care. By contrast, art constitutes a much more varied and complex form of communication, whereby moral ideas, as well as emotions, ideologies, or religious feelings can be conveyed [113]. Despite that, Saito [112, 113] nicely demonstrates that art-specific modes are not altogether distinct from Everyday modes. Her detailed analysis highlights the potential of cross-cultural research to reveal the fascinating differences in patterns of experience of both art and everyday objects in different cultures.

3.10 Summary

While our concept of MAX draws inspiration from past philosophical and psychological accounts (see Table I), we believe that basing the concept solely on these perspectives is insufficient, as many accounts themselves seem to focus on a narrow subset of the processes involved in interacting with art or to highlight only certain aspects of art-specific attention. Thus, a concept should acknowledge and consider the immense number of processes and developments that feed into art creation and experience in order to offer an exhaustive and profound art-specific mode, and to explain *why* individuals may approach art with such mode. Whether empirical data will support the definition of MAX proposed here is still to be seen, but we hope that, in the least, our discussion in part two grounds and contextualizes the definition and demonstrates the importance of considering this large spectrum of influences.

4. PART THREE: MAX AND CURRENT RESEARCH

Having discussed the definition and nature of Mode of Art eXperience (MAX) in part two, we now situate MAX more specifically within current trends in research by reviewing it in relation to commonly referred to concepts in Empirical Aesthetics (EA) literature. We divide these concepts into two fundamentally different groups, depending on how they depict the art experience. Concepts in the first group, within

which we situate MAX, refer to the experience of art as open-ended, driven by the desire to explore and the will to be left confused. Concepts in the second group refer to the experience of art as close-ended, ideally fluent, and driven by the motivation to arrive at clear answers.

4.1 Concepts in Line with MAX

Being in MAX, we believe, enables spectators to increase their tolerance of uncertainty, inhibit their need for closure, and embrace the sense-making challenge provided by the artwork. The concepts of *SeIns* (semantic instability) [100], *Tension and Relief* [86], and *Aesthetic Aha* [97] view the experience of art as dynamic, unnecessarily fluent, and not directed towards a certain endpoint, and therefore provide the ground for our proposal of MAX. *SeIns* views art experiences as an interplay between phases of understanding and misunderstanding, in which spectators derive satisfaction from obtaining balance, especially when the artworks as a whole challenge them [100]. Similarly, the concept of *Tension and Relief* describes the experience of art as dynamic, in which spectators move between states of understanding and misunderstanding or feel emotionally calm after feeling emotionally uptight. These dynamics create tensions, relief, and, ultimately, satisfaction, even without arriving at an end “solution” to the artwork [86]. *Aesthetic Aha* relates to the above concepts—it accounts for moments in which spectators derive pleasure from acquiring insights into the artwork, even without achieving a complete understanding [97].

These concepts align with Pepperell [108], who viewed states of order and disorder as accompanying each other and even dependent on one another rather than as opposing or competing phases. If anything, the state of order, or complete understanding, defies further exploration and characterizes unmemorable experiences [108].

Stemming from these concepts, we believe that being in MAX is manifested in spectators’ tendency to explore the meanings of artworks openly and freely replacing one frame of reference for another. Spectators have a reduced need to arrive at an end solution to artworks. The concepts of *Multileveledness* [86], *ambiguity* [140], *breaking visual habits* [23] and *slow-looking* [33] capture these notions precisely, as they highlight the will to elaborate on the various meaning of an artwork and to draw associations regarding the semantic meaning of it freely. *Multileveledness* describes the capacity of a work of art to be grasped and elaborated on various related or autonomous levels of meaning, each of which is potentially comprehensive, clear, and complete [86]. Likewise, Zeki’s [140] neurological definition of ambiguity suggests that ambiguity is the certainty of the brain of many equally plausible solutions, with each interpretation being as valid and plausible as the others. *SeIns* extends this view by demonstrating empirically how this dynamic unfolds as individuals experiencing art move through consecutive phases of understanding and misunderstanding within a given period [100]. These concepts are also in line with Fechner’s view that each object must offer a multiplicity of

points to attack [64], meaning that each aesthetic object can be understood in different ways and on different levels; there is no one ultimate “solution” to it.

The idea of *slow looking* extends those views as it describes, and even encourages, lingering experiences of art that may last for significantly more extended periods than the (approximately) 30-second time-frames spectators typically allow for the experience of a single artwork in a museum (the time-frames recorded by different research groups are remarkably similar, ranging from 27 s [117] to 32 s [24]). It aims to inspire individuals to engage with fewer artworks during their museum visits but to freely and patiently explore each artwork and their feelings, thoughts, and emotions towards it without a clear goal [33]. We claim that being in MAX is likely to allow individuals to undergo such experiences. *Breaking visual habits* describes a broader process by which, over time and repeated exposure, individuals become more tolerant and open to appreciating initially challenging stimuli. Due to the ever-changing nature of our world, this process is ever-evolving and has no end point [23].

Lastly, *Kunsterlebnis (Experience of Art)* [28], *Pleasures of the mind* [87] and *art epiphanizing* [26] provide an overall groundwork for our view of MAX. *Kunsterlebnis* states the seemingly obvious but often overlooked point that interacting with art is reflecting a process, an unfolding experience, and not a one-off judgment, as (at least implicitly) proposed in numerous studies. The concept of *Pleasures of the mind* addresses the cognitive underpinnings of such experiences. It refers to ongoing cognitive experiences that result in a succession of different emotions. Those experiences can stem from various stimulations and are considered against pleasures of the body, which are experiences that consist of sensual gratifications that do not result in a succession of emotions and that tend to be shorter in time [87]. According to this outline, tasting wine, for instance, is seen as a pleasure for the body. Although it is a multilevel, complex ongoing experience, it elicits different sensual rather than affective responses in the individual. By contrast, dinner with relatives has greater potential to become a pleasure of the mind, as it is a prolonged experience that evokes a succession of cognitive and affective responses within oneself [87].

Similarly, according to the concept of *art epiphanizing* [26], interacting with art is an experience signified by involvement, attention, meaning-making, and awareness. As such, the experience can even result in long-term alterations to how one perceives and relates to oneself or one’s environment [26]. As discussed above, engaging with art while in MAX makes spectators highly likely to initiate experiences that involve an extensive range of thoughts, feelings and emotions, which makes MAX a great manifestation of the *pleasures of the mind* and *art epiphanizing* concepts.

What is more, the succession of emotions and processes that characterize *pleasures of the mind* and *art epiphanizing*, respectively, and MAX is likely to ultimately lead to the experience of unordinary emotions, as described in *Aesthetic*

Trinity Theory (ATT) [84]. *ATT* sketches the three peak emotions within art experience: Thrills, being moved, and awe. Thrills are physiological responses to aesthetic objects, most common among the three peak emotions. The experience of being moved involves more personal feelings in response to deeply moving, possibly modest objects (a poem or a drawing), while awe involves the most extreme emotions felt in response to human-made or natural phenomena recognized as sublime [84]. Importantly, *ATT* acknowledges that for these peak emotions to be felt, individuals must enter a specific state of mind prior to exposure to the stimuli, potentially, like with MAX.

4.2 Concepts in Opposition to MAX

In contrast to these perspectives, the concepts of *Processing Fluency* [109], *Reduction of Uncertainty* [59], *Problem-Solving* [88] and *Cognitive Mastering* [88, 107] assume that the experience of art spectators aspire to is solution-oriented, ideally fluent, and non-challenging. While this may indeed be the case for some interactions with art, ease of understanding, fluency of processing, and lack of challenges seem to be more characteristic of the experience of Kitsch objects than are considered art-relevant and specific [72, 105].

Processing fluency shaped numerous mainstream theories regarding aesthetic pleasure, suggesting that the more fluently people can process an artwork, the more likely they are to derive pleasure from the artwork. This principle applies to the low-level features of the artwork, such as its goodness of form, symmetry, and figure-ground contrast, but also its semantic meaning; how easily understood, psychologically and cognitively, the artwork is. *Reduction of Uncertainty* [59], stemming from the tradition of problem-solving literature, shares with processing fluency the idea that the interaction with art is directed towards understanding and inhibition of ambiguity. It further adds that the experience of art is compatible with a problem-solving task; it is highly analytical, governed by reason, and oriented towards an end solution. Lastly, *problem-solving* (most eminently represented by Leder et al. [88] states that due to the vast amount of varieties in styles within Modern art (as discussed above), the aesthetic experience can be understood as a perceptual problem-solving process. The perceiver must invest great effort to extract meaning from the artwork, and they feel pleasure when they achieve the understanding of it [88].

Taken together, the above concepts contradict the basic notions of MAX. More importantly, they contradict historical trends within aesthetics philosophy. Considering both groups of concepts in relation to Table 1, it is evident that concepts in the former group seem to naturally follow from those historical accounts, while those in the latter represent a sharp shift from them (we focus on the rather historical accounts as views by more recent authors appearing both in Table I and in this section). Recurring themes within these historical accounts are that engaging with art allows individuals to detach themselves

from concerns regarding the self (i.e., Shaftesbury, 1671–1713/1961), the use of the object or their experience of it [i.e. 81]. Individuals approach art for its own sake and with curiosity (i.e., Shaftesbury, 1671–1713/1961). They may fantasize [80], imagine, explore their feelings [81] and think associatively [1] while embracing resistances and tensions [50]. Essentially, art provides the psychological freedom for exploration and discovery, within which the concepts in line with MAX can unfold and manifest. The concept in opposition to MAX, by contrast, seems more in line with principles of Everyday processing, as presented in Fig. 1.

4.3 Evidence Supporting the Existence of MAX

As mentioned above, MAX is not yet an empirically tested concept. In this subsection, we review previous results that point to the existence of components relevant for MAX. First, numerous lab-based studies have provided evidence for the influence of art classification on art evaluation. For example, studies exposed participants to the same artworks [83] or artworks and non-art pictures [42]. These studies recorded activation in different brain areas when the artworks were presented as art (e.g., as belonging to a gallery collection) compared to non-art (e.g., as computer-generated). Similarly, studies found that participants appreciate the same artworks or non-art pictures more highly when these are presented as art, compared to as non-art [5, 75, 83, 131]. It has also been found that participants evaluate typically aversive feelings such as sadness [77], disgust [135], or negative content in general [66] more positively when these are presented in the context of art.

Taken together, these studies strongly suggest that people approach stimuli differently when they view them as art, which consequently affects their cognitive evaluation and emotional response to the stimuli. However, two main limitations exist that seem to limit our ability to generalize these results to the actual experience of art decisively: The focus on liking and pleasure rates of artworks [25] and that studies are predominantly conducted in laboratories [27]. In the context of MAX, we can speculate whether such study designs offer an experience and a relationship with art to participants at all [see 28], and thus whether these studies concern the art experience or only art evaluation.

Notably, more naturalistically designed studies do exist. Muth et al. [101] found that when video works were viewed in a gallery, they were more highly appreciated and were seen as less unstable than when the same works were viewed in the lab. Grüner et al. [74] reported similar effects of context on interestedness rates of paintings. Wagner et al. [134] illustrated how individuals experienced the same anger-evoking situation as less aversive when it was presented to them as part of a theatre show rather than as a real-life incident.

Spence [118] reported various sources indicating that people are even more likely to embrace aversive odours such as sweat and urine when these are inspected in a museum or a gallery exhibition. Lastly, Tröndle et al. [126] found that visitors to an art museum were less likely to pay attention and

show interest in a painting hanging just outside the exhibition hall than when the same painting was presented as part of the exhibition. All these studies illustrate the strong effect of art context on the experience of art. They suggest that a special mode with which spectators approach art and transform their experience into a more open, accepting, and rich one might exist.

4.4 A Framework for Future Research

As mentioned above, we believe that MAX can offer not only a concept but also a framework to study the experience of art. We hope our discussion of MAX will encourage scholars to view the interaction with art as, first and foremost, an *experience* (rather than a mere set of judgments). Such acknowledgment is likely to lead to developing questions that embrace, rather than reduce the unique nature of art [26].

If we recognize the experience of art as one that is multileveled [86] and that invites deep cognitive and emotional involvement [26], we cannot base our studies on pleasure and liking rates. Those reflect the original interest of EA in studying sensuous pleasures [26, 41] rather than Gestalt experiences. In order to sufficiently capture the complex nature of experiencing art and advance our understanding of it, we need to employ tools that have the capacity to do so [25]. For instance, we can employ scales such as the Art Reception Survey (ARS) [76]. The ARS consists of statements covering various aspects of the art experience, such as cognitive stimulation, expertise, negative emotionality, and positive attraction. Studies can also obtain data that do not rely on self-reports and can provide a more direct understanding of experiencing art, as suggested by Carbon [26] and demonstrated by, for example, [24, 117]. Similarly, qualitative methods, which currently seem sparsely employed, can significantly enrich our understanding by offering deep and direct first account insights into different cognitive and emotional transferred facets of the art experience [37].

Last but not least, we must recognize that the complexity of the art experience often stems from the space in which this experience takes place and the dynamics this space triggers and enables [24, 126], and even from the broader cultural context and the *Zeitgeist* [28], which are not easily reproducible in the lab [18]. We would like to direct readers to [26] for issues related to capturing the deep involvement with art.

4.5 Summary

In part two we aimed to demonstrate how considering the evolutionary, historical and cultural aspects of art experiencing and processing is paramount to proposing concepts that reflect and highlight the uniqueness of art. We believe that part three nicely demonstrates this argument. Notably, the discussed concepts in line with MAX seem to naturally stem from the discussion of the nature of art in part two. By contrast, the concepts in opposition to MAX seem relatively uninspired by such considerations hence they are more representative of everyday cognitive processes than

art-specific facets. Importantly, such concepts create certain discourse and shape future research. Hence we hope that besides a concept, MAX could encourage ecologically valid studies regarding the art experience.

5. PART FOUR: FURTHER QUESTIONS

As our empirical understanding of the Mode of Art eXperience (MAX) concept is still limited, we would like to raise several questions for future research regarding the role of MAX within the art experience. We hope that these questions will help to develop MAX further.

5.1 Open Questions

In their highly influential book, Kreitler and Kreitler [86] speculated whether individuals can interact with art without being in the appropriate set (see Table I). Aiming to prove the “aesthetic attitude” (p.13) as a myth, Dickie (1974) provided a possible answer to this query. He described a music student who is purposefully listening to a piece of music to master any tone and note in order to perform the piece at a crucial upcoming exam perfectly. Therefore, the student engages with art without adopting an aesthetic attitude. This, according to Dickie (1974), shows that aesthetic attitude does not exist; an aesthetic attitude is simply an ordinary attitude directed toward an art object. More recently, Carroll [31] argued that the student from Dickie’s example and a person who engages with the same piece of music for no specific reason would undergo *precisely* the same experience.

However, with this example, Dickie (1974) seems to prove the concept he aims to disprove. He illustrates Kant’s [81] argument (and one of our main MAX’s principles) that what determines the type of experience *is* the mode one adopts and not the object itself. Dickie’s (Dickie (1974)) student does not wish to adopt an art-specific mode, as she does not approach the piece of music disinterestedly. Thus, she engages with art, but practically rather than impractically, and with a clear predefined goal in mind.

Additionally, Carroll’s [31] argument that attentional mechanisms will have no effect on the two individuals’ perception is highly speculative and clearly contradicts research findings [see 6, 89, 90]. Similarly, it seems highly improbable that the two individuals will undergo *exactly* the same experience, given that they attend to the information differently [see 19, 115]. This seems akin to arguing that two football fans watching the same match but supporting opposite teams will have precisely the same experience simply because they watch the same match; the spectators will *attend* to the information differently and thus process it differently.

Following Kreitler and Kreitler [86], the question we wish to raise is not whether one can generally engage with art without being in MAX (that certainly seems possible), but whether one can engage with art *openly* and *freely* without being in MAX. Importantly, Wolterstorff [138] argued that the philosophy of aesthetics has long prioritized the rather elitist study of disinterested experiences of art, that do not involve expectations or personal concerns from the side of the beholder. According to Wolterstorff [138],

such experiences are seen as superior to art experiences that bear personal relevance to observers, such as liturgies, memorials, or ceremonies commemorating specific events. In accordance with Wolterstorff [138], we believe that individuals can experience art meaningfully and deeply without adopting MAX, and such experience is by no means inferior. However, we still maintain the question of whether such engagements will consist of the cognitive qualities we see as central to MAX.

5.2 Issues Related to Being in MAX

Bullough [22] and Cupchik [39] raised a fundamental issue related to experiencing art with an art-specific cognitive mode. Given that when we adopt such a mode, we detach ourselves from everyday concerns and view art from a certain distance, would it be morally wrong to engage with art that addresses delicate societal issues (as art certainly does today)? Considering that we may over-distance ourselves from what we view [22], could adopting MAX mean engaging with sensitive topics with an unempathetic attitude?

Additionally, Bullough [22] argued that the art state has a negative inhibitory side; separating from the practical side of things and our practical approach to them. Finally, Dewey [50] expressed his worries that the experience of art, which once was a practice shared by ordinary people and central to their lives, may become separated from the experience of everyday life, through theories that perpetuate this divide.

However, we believe that these queries, for which solutions have been suggested by Bullough [22] and Cupchik [40] themselves, can point to the essential importance of MAX (or the states discussed by these authors). Through detachment from everyday and practical concerns, MAX allows beholders to de-automatize and de-familiarize everyday perceptual patterns [7]. These, in turn, enable beholders to raise questions, engage with topics and empathize with individuals and views they may otherwise feel indifferent or readily oppose to Cupchik [40]. Thus, through art, beholders can become aware of rich insights and feel connected to concerns that normally do not cross the threshold of their attention [22], and from such a perspective, they may not consider while being in a goal-directed day-to-day mode [40]. Therefore, impracticality and detachment are essential advantages rather than drawbacks of adopting MAX.

Similarly, the worries expressed by Dewey [50] regarding the cut out of the experience of art from everyday experience are undoubtedly justified. However, we believe that a beneficial attempt to reduce the gap may be to apply components from MAX to Everyday processing rather than to avoid developing such concepts in the first place. For example, Bullough [22] described how, when experiencing a fog from a practical daily point of view, one may feel disturbed by the acute unpleasantness and physical annoyance of the fog and discomfort caused by resulting transportation delays. However, suppose one could successfully detach oneself from experience. In that case, one may appreciate the natural magic of the fog, the visual fascination it causes through blurring the lines, and the unordinary experience it offers

while dealing with daily life concerns and rushing between tasks [22]. As history shows, more acute problems may arise when art abruptly penetrates the realm of day-to-day life, and individuals experience it without the needed respect and distance [13] than when individuals apply art-specific processing mechanisms to everyday experiences.

5.3 Conclusion

Empirical Aesthetics (EA) faces various challenges as an emerging field of research. It appears that answers to fundamental questions (e.g., why are people interested in art, how do people experience and appreciate art, how can we study the experience of art) have been put forward without sufficient empirical evidence or knowledge from related, more established fields of inquiry have been sufficiently considered. At the same time, the concept of an art-specific mode of processing has been discussed repeatedly for over 300 years. However, the limitations that currently characterize EA inhibit it from offering an insightful perspective to the study of this phenomenon.

In this paper, we presented the concept of Mode of Art eXperience (MAX), which we deeply hope could contribute to both endeavors. First, the unification of various theoretical approaches and drawing a single, justifiable, and testable concept. Furthermore, by acknowledging that the interaction with art is first an experience and second a complex and dynamic one. Lastly, by proposing a framework to study such a deep experience of art in a more ecologically valid way.

REFERENCES

- 1 A. Alison, *Essays on the Nature and Principles of Taste* (Harper, London, 1790/1858).
- 2 American Psychological Association. (Retrieved August 13, 2023). Affect. In *APA Dictionary of Psychology*.
- 3 American Psychological Association. (Retrieved August 13, 2023). Cognition. In *APA Dictionary of Psychology*.
- 4 American Psychological Association. (Retrieved August 14, 2023). Mode. In *APA Dictionary of Psychology*.
- 5 S. Arai and H. Kawabata, "Appreciation contexts modulate aesthetic evaluation and perceived duration of pictures," *Art Percept.* **4**, 225–239 (2016).
- 6 E. Balçetis, D. Dunning, and Y. Granot, "Subjective value determines initial dominance in binocular rivalry," *J. Exp. Soc. Psychol.* **48**, 122–129 (2012).
- 7 J. A. Bargh and M. J. Ferguson, "Beyond behaviorism: On the automaticity of higher mental processes," *Psychol. Bull.* **126**, 925 (2000).
- 8 F. C. Bartlett and F. C. Bartlett, *Remembering: A Study in Experimental and Social Psychology* (Cambridge University Press, Cambridge, 1932/1995).
- 9 A. G. Baumgarten, *Aesthetica Scriptisit Alexander Gottlieb Baumgarten* (G Olms, Hildesheim, 1750/2014).
- 10 M. C. Beardsley, "The aesthetic point of view," *Metaphilosophy* **1**, 39–58 (1970).
- 11 M. C. Beardsley, "An aesthetic definition of art," in *What is Art?*, edited by H. Curtler (Haven Publications, Tualatin, OR, 1983), pp. 15–29.
- 12 H. Belting, *The End of the History of Art?* (University of Chicago Press, Chicago, 1987).
- 13 W. Benjamin, "The work of art in the age of mechanical reproduction," in *Historical Perspectives in The Conservation of Works of Art on Paper*, edited by M. Holben Ellis (Getty Conservation Institute, Los Angeles, CA, 1936).
- 14 T. C. Blanchard, B. Y. Hayden, and E. S. Bromberg-Martin, "Orbitofrontal cortex uses distinct codes for different choice attributes in decisions motivated by curiosity," *Neuron* **85**, 602–614 (2015).
- 15 A. J. Blood and R. J. Zatorre, "Intensely pleasurable responses to music correlate with activity in brain regions implicated in reward and emotion," *Proc. Natl. Acad. Sci.* **98**, 11818–11823 (2001).
- 16 G. Böhme, "Atmosphere as the fundamental concept of a new aesthetics," *Thesis Eleven* **36**, 113–126 (1993).
- 17 T. Brandman and M. V. Peelen, "Interaction between scene and object processing revealed by human fMRI and MEG decoding," *J. Neurosci.* **37**, 7700–7710 (2017).
- 18 D. Brieber, M. Nadal, and H. Leder, "In the white cube: Museum context enhances the valuation and memory of art," *Acta Psychol.* **154**, 36–42 (2015).
- 19 E. S. Bromberg-Martin and T. Sharot, "The value of beliefs," *Neuron* **106**, 561–565 (2020).
- 20 S. Brown and M. A. Eberle, "A closer look at play," in *Play and Creativity in Psychotherapy*, edited by T. Marks-Tarlow, M. Solomon, and D. J. Siegel (WW Norton, New York, NY, 2018), pp. 21–38.
- 21 N. J. Bullot and R. Reber, "A psycho-historical research program for the integrative science of art," *Behav. Brain Sci.* **36**, 163–180 (2013).
- 22 E. Bullough, "Psychical distance as a factor in art and an aesthetic principle," *Br. J. Psychol.* **5**, 87–118 (1912).
- 23 C.-C. Carbon, "Dynamics of aesthetic appreciation," *Proc. SPIE* **8291**, 82911A (2012).
- 24 C.-C. Carbon, "Art perception in the museum: How we spend time and space in art exhibitions," *i-Perception* **8** (2017).
- 25 C.-C. Carbon, "Empirical aesthetics: In quest of a clear terminology and valid methodology," *Exploring Transdisciplinarity in Art and Sciences* (Springer, Cham, 2018), pp. 107–119.
- 26 C.-C. Carbon, "Empirical approaches to studying art experience," *J. Percept. Imaging* **2**, 10501–10507 (2019).
- 27 C.-C. Carbon, "Ecological art experience: How we can gain experimental control while preserving ecologically valid settings and contexts," *Front. Psychol.* **11**, 800 (2020).
- 28 C.-C. Carbon, "About the need for a more adequate way to get an understanding of the experiencing of aesthetic items," *Behav. Sci.* **13** (2023).
- 29 C. C. Carbon, S. J. Faerber, G. Gerger, M. Forster, and H. Leder, "Innovation is appreciated when we feel safe: On the situational dependence of the appreciation of innovation," *Int. J. Des.* **7**, 43–51 (2013).
- 30 N. Carroll, *Philosophy of Art: A Contemporary Introduction* (Routledge, Oxfordshire, 1999).
- 31 N. Carroll, "Recent approaches to aesthetic experience," *J. Aesthet. Art Crit.* **70**, 165–177 (2012).
- 32 C. S. Carver, "Cognitive interference and the structure of behavior," in *Cognitive Interference; Theories, Methods, and Findings*, edited by I. G. Sarason, G. R. Pierce, and B. R. Sarason (Lawrence Erlbaum Associates, Mahwah, NJ, 1996), pp. 25–46.
- 33 R. Chamberlain and R. Pepperell, "Slow looking at slow art: The work of Pierre Bonnard," *Leonardo* (2020).
- 34 C. J. Charpentier, E. S. Bromberg-Martin, and T. Sharot, "Valuation of knowledge and ignorance in mesolimbic reward circuitry," *Proc. Natl. Acad. Sci.* **115**, E7255–E7264 (2018).
- 35 R. Christensen, "Mark Rothko: Art as an experience: The significance of interaction between painting and viewer in the Rothko chapel," *RIHA J.* **2017** (2017).
- 36 G. Consoli, "A cognitive theory of the aesthetic experience," *Contemp. Aesthetics (Journal)* **10**, 6 (2012).
- 37 M. Csikszentmihalyi and R. E. Robinson, *The Art of Seeing: An Interpretation of the Aesthetic Encounter* (Getty Publications, 1990).
- 38 G. C. Cupchik, "The thinking-I and the being-I in psychology of the arts," *Creat. Res. J.* **12**, 165–173 (1999).
- 39 G. C. Cupchik, "The evolution of psychical distance as an aesthetic concept," *Cult. Psychol.* **8**, 155–187 (2002).
- 40 G. C. Cupchik, "IV. I am, therefore I think, act, and express both in life and in art," *Conscious. Literature Arts* **32**, 67–91 (2013).
- 41 G. C. Cupchik, "One hundred and fifty years after Fechner: A view from the middle of the storm," *Psychol. Aesthet. Creat. Arts* **16**, 544–552 (2022).
- 42 G. C. Cupchik, O. Vartanian, A. Crawley, and D. J. Mikulis, "Viewing artworks: Contributions of cognitive control and perceptual facilitation to aesthetic experience," *Brain Cogn.* **70**, 84–91 (2009).

- 43 A. C. Danto, *The Transfiguration of the Commonplace: A Philosophy of Art* (Harvard University Press, Cambridge, MA, 1981).
- 44 A. C. Danto, "The end of art," *The Philosophical Disenfranchisement of Art* 4, 171–189 (1984).
- 45 A. C. Danto, *The Abuse of Beauty: Aesthetics and the Concept of Art* (Open Court Publishing, Chicago, IL, 2003).
- 46 C. Darwin, *The Descent of Man and Selection in Relation to Sex: Volume 1. BoD—Books on Demand* (1879/2020).
- 47 G. Davey, "What is museum fatigue," *Visit. Stud. Today* 8, 17–21 (2005).
- 48 S. Davies, *The Artful Species: Aesthetics, Art, and Evolution* (OUP, Oxford, 2012).
- 49 J. De Smedt and H. De Cruz, "Toward an integrative approach of cognitive neuroscientific and evolutionary psychological studies of art," *Evol. Psychol.* 8 (2010).
- 50 J. Dewey, *Art as Experience* (Penguin, London, 1934/2005).
- 51 J. Dewey, "Aesthetic experience as a primary phase and as an artistic development," *J. Aesthet. Art Crit.* 9, 56–58 (1950).
- 52 M. D. G. Dias and P. L. Harris, "The effect of make-believe play on deductive reasoning," *Br. J. Dev. Psychol.* 6, 207–221 (1988).
- 53 G. Dickie, (1969) "Defining art," *Am. Phil. Q.* 6, 253–256.
- 54 G. Dickie, "The new institutional theory of art," *Proc. 8th Wittgenstein Symposium* (1983), Vol. 10, pp. 57–64.
- 55 E. Dissanayake, "A hypothesis of the evolution of art from play," *Leonardo* 7, 211–217 (1974).
- 56 E. Dissanayake, "An ethological view of ritual and art in human evolutionary history," *Leonardo* 12, 27–31 (1979).
- 57 E. Dissanayake, "Genesis and development of «Making Special»: Is the concept relevant to aesthetic philosophy?," *Riv. Estet.* 54, 83–98 (2013).
- 58 M. Donald, "Art and cognitive evolution," *The Artful Mind: Cognitive Science and the Riddle of Human Creativity* (Oxford University Press, Oxford, 2006), pp. 3–20.
- 59 D. Dörner and W. Vehrs, "Aesthetical appreciation and reduction of uncertainty," *Psychol. Res. Psychologische Forschung* 37, 321–334 (1975).
- 60 M. Duchamp and M. Dachy, *The Creative Act* (Sub Rosa, Amsterdam, 1994).
- 61 C. Duncan, *Civilizing Rituals: Inside Public Art Museums* (Routledge, Oxfordshire, 2005).
- 62 D. Dutton, "But they don't have our concept of art," in *Theories of Art Today*, edited by N. Carroll (University of Wisconsin Press, Madison, WI, 2000), pp. 217–238.
- 63 P. Fazekas, "Attention and aesthetic experience," *J. Consciousness Stud.* 23, 66–87 (2016).
- 64 G. T. Fechner, *Vorschule der Aesthetik* (Breitkopf and Härtel, Leipzig, 1876).
- 65 J. Fingerhut and J. J. Prinz, "Wonder, appreciation, and the value of art," *Prog. Brain Res.* 237, 107–128 (2018).
- 66 G. Gerger, H. Leder, and A. Kremer, "Context effects on emotional and aesthetic evaluations of artworks and IAPS pictures," *Acta Psychol.* 151, 174–183 (2014).
- 67 M. Gieselhausen, "Museum architecture: A brief history," in *A Companion to Museum Studies*, edited by S. Macdonald (Blackwell, Malden, MA, 2006), pp. 223–244.
- 68 B. I. Gilman, "Museum fatigue," *Sci. Mon.* 2, 62–74 (1916).
- 69 E. H. Gombrich, *Art and Illusion: A Study in the Psychology of Pictorial Representation* (Pantheon Books, New York, NY, 1961).
- 70 E. H. Gombrich, *The Story of Art* (Phaidon, London, 1995), Vol. 12.
- 71 G. Graham, *Philosophy of the Arts: An Introduction to Aesthetics* (Routledge, Oxfordshire, 2005).
- 72 C. Greenberg, "Avantgarde und Kitsch," *Art and Culture. Critical Essays* (Beacon Press, Boston, 1939).
- 73 R. L. Gregory, "Perceptions as hypotheses," *Phil. Trans. R. Soc. B, Biol. Sci.* 290, 181–197 (1980).
- 74 S. Grüner, E. Specker, and H. Leder, "Effects of context and genuineness in the experience of art," *Empir. Stud. Arts* 37, 138–152 (2019).
- 75 M. Haertel and C.-C. Carbon, "Is this a 'Fettecke' or just a 'greasy corner'? About the capability of laypersons to differentiate between art and non-art via object's originality," *i-Perception* 5, 602–610 (2014).
- 76 M. Hager, D. Hagemann, D. Danner, and A. Schankin, "Assessing aesthetic appreciation of visual artworks—the construction of the art reception survey (ARS)," *Psychol. Aesthet. Creat. Arts* 6, 320 (2012).
- 77 J. Hanich, V. Wagner, M. Shah, T. Jacobsen, and W. Menninghaus, "Why we like to watch sad films. The pleasure of being moved in aesthetic experiences," *Psychol. Aesthet. Creat. Arts* 8, 130 (2014).
- 78 G. U. Hayn-Leichsenring and A. Chatterjee, "Colliding terminological systems—immanuel kant and contemporary empirical aesthetics," *Empir. Stud. Arts* 37, 197–219 (2019).
- 79 G. W. Hegel, "Philosophy of right," *History of Economic Thought Books* (1820).
- 80 E. Husserl, *Ideas: General Introduction to Pure Phenomenology* (Routledge, Oxfordshire, 1913/2012).
- 81 I. Kant, *Critique of Judgment* (Hackett Publishing, Cambridge, MA, 1790/1951).
- 82 W. Kemp, "The work of art and its beholder," *The Methodology of the Aesthetics of Reception* (1998).
- 83 U. Kirk, M. Skov, O. Hulme, M. S. Christensen, and S. Zeki, "Modulation of aesthetic value by semantic context: An fMRI study," *Neuroimage* 44, 1125–1132 (2009).
- 84 V. J. Konečni, "Aesthetic trinity theory and the sublime," *Phil. Today* 55, 64–73 (2011).
- 85 A. Kranjec and M. Skov, "Visualizing aesthetics across two centuries," *Empir. Stud. Arts* 39, 78–100 (2021).
- 86 H. Kreidler and S. Kreidler, *Psychology of the Arts* (Duke University Press Durham, NC, 1972), Vol. 14.
- 87 M. Kubovy, "On the pleasures of the mind," *Well-being: The Foundations of Hedonic Psychology* (1999), Vol. 1999, pp. 134–154.
- 88 H. Leder, B. Belke, A. Oeberst, and D. Augustin, "A model of aesthetic appreciation and aesthetic judgments," *Br. J. Psychol.* 95, 489–508 (2004).
- 89 Y. C. Leong, R. Dziembaj, and M. D'Esposito, "Pupil-linked arousal biases evidence accumulation toward desirable percepts during perceptual decision-making," *Psychol. Sci.* 32, 1494–1509 (2021).
- 90 Y. C. Leong, B. L. Hughes, Y. Wang, and J. Zaki, "Neurocomputational mechanisms underlying motivated seeing," *Nat. Hum. Behav.* 3, 962–973 (2019).
- 91 M. Lifshitz, M. Elk, and T. Luhrmann, "Absorption and spiritual experience: A review of evidence and potential mechanisms," *Conscious. Cogn.* 73 (2019).
- 92 C. J. Mac Donald, "Creative dance in elementary schools: A theoretical and practical justification," *Can. J. Educ./Revue canadienne de l'éducation* 434–441 (1991).
- 93 H. Marcuse, *The Aesthetic Dimension: Toward a Critique of Marxist Aesthetics* (Beacon Press, Boston, MA, 1979), Vol. 595.
- 94 S. Marković, "Components of aesthetic experience: aesthetic fascination, aesthetic appraisal, and aesthetic emotion," *i-Perception* 3, 1–17 (2012).
- 95 R. R. McCrae and P. T. Costa, "Joint factors in self-reports and ratings: Neuroticism, extraversion and openness to experience," *Pers. Individ. Differ.* 4, 245–255 (1983).
- 96 W. Menninghaus, V. Wagner, J. Hanich, E. Wassiliwizky, T. Jacobsen, and S. Koelsch, "The distancing-embracing model of the enjoyment of negative emotions in art reception," *Behav. Brain Sci.* 40 (2017).
- 97 C. Muth and C.-C. Carbon, "The aesthetic aha: On the pleasure of having insights into Gestalt," *Acta Psychol.* 144, 25–30 (2013).
- 98 C. Muth, R. Pepperell, and C.-C. Carbon, "Give me Gestalt! Preference for cubist artworks revealing high detectability of objects," *Leonardo* 46, 488–489 (2013).
- 99 C. Muth, M. H. Raab, and C.-C. Carbon, "The stream of experience when watching artistic movies. Dynamic aesthetic effects revealed by the Continuous Evaluation Procedure (CEP)," *Front. Psychol.* 6, 365 (2015).
- 100 C. Muth, M. H. Raab, and C.-C. Carbon, "Semantic stability is more pleasurable in unstable episodic contexts. On the relevance of perceptual challenge in art appreciation," *Front. Human Neurosci.* 10, 43 (2016).
- 101 C. Muth, M. H. Raab, and C.-C. Carbon, "Expecting the unexpected: How gallery visitors experience semantic instability in art," *Art Percept.* 5, 121–142 (2017).
- 102 M. Nadal and M. Skov, "The pleasure of art as a matter of fact," *Proc. R. Soc. B: Biol. Sci.* 285, 20172252 (2018).
- 103 B. Nanay, "Aesthetic attention," *J. Conscious. Stud.* 22, 96–118 (2015).
- 104 C. Nodine, C. Mello-Thoms, E. Krupinski, and P. Locher, "Visual interest in pictorial art during an aesthetic experience," *Spatial Vis.* 21, 55–77 (2008).

- ¹⁰⁵ S. A. Ortlieb and C.-C. Carbon, "A functional model of kitsch and art: Linking aesthetic appreciation to the dynamics of social motivation," *Front. Psychol.* **9**, 2437 (2019).
- ¹⁰⁶ S. A. Ortlieb, W. A. Kügel, and C.-C. Carbon, "Fechner (1866): The aesthetic association principle—A commented translation," *i-Perception* **11**, 2041669520920309 (2020).
- ¹⁰⁷ M. Pelowski, P. S. Markey, M. Forster, G. Gerger, and H. Leder, "Move me, astonish me... delight my eyes and brain: The Vienna integrated model of top-down and bottom-up processes in art perception (VIMAP) and corresponding affective, evaluative, and neurophysiological correlates," *Phys. Life Rev.* **21**, 80–125 (2017).
- ¹⁰⁸ R. Pepperell, *The Post-human Condition* (Intellect books, Bristol, 1995).
- ¹⁰⁹ R. Reber, N. Schwarz, and P. Winkielman, "Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience?," *Pers. Soc. Psychol. Rev.* **8**, 364–382 (2004).
- ¹¹⁰ M. Rind, "The concept of disinterestedness in eighteenth-century British aesthetics," *J. Hist. Phil.* **40**, 67–87 (2002).
- ¹¹¹ M. W. Rowe, "Literature, knowledge, and the aesthetic attitude," *Ratio* **22**, 375–397 (2009).
- ¹¹² Y. Saito, "Everyday aesthetics," *Phil. Literature* **25**, 87–95 (2001).
- ¹¹³ Y. Saito, "The moral dimension of Japanese aesthetics," *J. Aesthet. Art Crit.* **65**, 85–97 (2008).
- ¹¹⁴ A. Schopenhauer, *The World as Will and Idea* (Library of Alexandria, Alexandria, 1851/2020), Vol. 1.
- ¹¹⁵ T. Sharot and N. Garrett, "Forming beliefs: Why valence matters," *Trends Cogn. Sci.* **20**, 25–33 (2016).
- ¹¹⁶ J. K. Smith, *The Museum Effect: How Museums, Libraries, and Cultural Institutions Educate and Civilize Society* (Rowman and Littlefield, Lanham, MD, 2014).
- ¹¹⁷ J. K. Smith and L. F. Smith, "Spending time on art," *Empir. Stud. Arts* **19**, 229–236 (2001).
- ¹¹⁸ C. Spence, "Scenting the anosmic cube: On the use of ambient scent in the context of the art gallery or museum," *i-Perception* **11**, 2041669520966628 (2020).
- ¹¹⁹ J. Stolnitz, "On the origins of 'aesthetic disinterestedness,'" *J. Aesthet. Art Crit.* **20**, 131–143 (1961).
- ¹²⁰ J. Stolnitz, "'The aesthetic attitude' in the rise of modern aesthetics," *J. Aesthet. Art Crit.* **36**, 409–422 (1978).
- ¹²¹ L. M. Straffon, "Evolution and the origins of visual art: An archaeological perspective," *Handbook of Evolutionary Research in Archaeology* (Springer, Cham, 2019), pp. 407–435.
- ¹²² A. Tellegen and G. Atkinson, "Openness to absorbing and self-altering experiences ('absorption'), a trait related to hypnotic susceptibility," *J. Abnorm. Psychol.* **83**, 268–277 (1974).
- ¹²³ M. Thomas, (2002) "An abstraction of feeling: Mark Rothko and the subject of aesthetic judgement," *Aust. New Zealand J. Art* **3**, 96–115.
- ¹²⁴ V. Tomas, "Aesthetic vision," *Philos. Rev.* **68**, 52–67 (1959).
- ¹²⁵ R. Tomii, "State v.(anti-) art: Model 1,000-yen note incident by Akasegawa Genpei and Company," *Positions: East Asia Cultures Critique* **10**, 141–172 (2002).
- ¹²⁶ M. Tröndle, S. Greenwood, K. Bitterli, and K. van den Berg, "The effects of curatorial arrangements," *Mus. Manag. Curatorsh.* **29**, 140–173 (2014).
- ¹²⁷ M. Tröndle, V. Kirchberg, and W. Tschacher, "Is this art? An experimental study on visitors' judgement of contemporary art," *Cult. Sociol.* **8**, 310–332 (2014).
- ¹²⁸ V. Turner, "Liminality and communitas," *The Ritual Process: Structure and Anti-structure* **94**, 125–130 (1969).
- ¹²⁹ V. Turner, "Liminal to liminoid, in play, flow, and ritual: An essay in comparative symbology," *Rice Institute Pamphlet-Rice University Studies* **60** (1974).
- ¹³⁰ S. Van de Cruys and J. Wagemans, "Putting reward in art: A tentative prediction error account of visual art," *i-Perception* **2**, 1035–1062 (2011).
- ¹³¹ N. N. Van Dongen, J. W. Van Strien, and K. Dijkstra, "Implicit emotion regulation in the context of viewing artworks: ERP evidence in response to pleasant and unpleasant pictures," *Brain Cogn.* **107**, 48–54 (2016).
- ¹³² M. Van Elk, A. Karinen, E. Specker, E. Stamkou, and M. Baas, "'Standing in awe': The effects of awe on body perception and the relation with absorption," *Collabra* **2** (2016).
- ¹³³ J. Wagemans, J. H. Elder, M. Kubovy, S. E. Palmer, M. A. Peterson, M. Singh, and R. von der Heydt, "A century of Gestalt psychology in visual perception: I. Perceptual grouping and figure-ground organization," *Psychol. Bull.* **138** (1172).
- ¹³⁴ V. Wagner, J. Klein, J. Hanich, M. Shah, W. Menninghaus, and T. Jacobsen, "Anger framed: A field study on emotion, pleasure, and art," *Psychol. Aesthet. Creat. Arts* **10**, 134–146 (2016).
- ¹³⁵ V. Wagner, W. Menninghaus, J. Hanich, and T. Jacobsen, "Art schema effects on affective experience: The case of disgusting images," *Psychol. Aesthet. Creat. Arts* **8**, 120 (2014).
- ¹³⁶ D. S. Weisberg, "Pretend play," *Wiley Interdisciplinary Reviews. Cognitive Science* **6**, 249–261 (2015).
- ¹³⁷ R. Westerman, "Intentionality and the Aesthetic Attitude," *Br. J. Aesthet.* **58**, 287–302 (2018).
- ¹³⁸ N. Wolterstorff, (2003) "Why philosophy of art cannot handle kissing, touching, and crying," *J. Aesthet. Art Crit.* **61**, 17–27.
- ¹³⁹ W. Wood, J. M. Quinn, and D. A. Kashy, "Habits in everyday life: Thought, emotion, and action," *J. Pers. Soc. Psychol.* **83**, 1281 (2002).
- ¹⁴⁰ S. Zeki, "The neurology of ambiguity," *Conscious. Cogn.* **13**, 173–196 (2004).