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The pleasure of art as a matter of fact

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All other forms of perception divide a man, because they are exclusively based either on the sensuous or on the intellectual part of his being; only the perception of the Beautiful makes something whole of him, because both his natures must accord with it.

— Schiller, 1793–1795, *Letters on the Aesthetic Education of Man*, p. 138, Letter 27

Can art make us better people? Better members of society? In her recent article, ‘Pleasure junkies all around! Why it matters and why “the arts” might be the answer: a biopsychological perspective’, Christensen [1] claims that engaging with art can promote healthy choices, choices that balance short-term pleasure goals with long-term general well-being. She suggests that many modern life conveniences, such as social media, computer games or online shopping, have the potential to turn us into ‘pleasure junkies’ because they maximize short-term pleasures. But art, Christensen argues, is a safe choice and a means to remedy this unhealthy addiction to pleasure.

Christensen’s argument is grounded on three claims about the sort of pleasure we get from art. First, in contrast to *low-level pleasure*, which Christensen conceives as ‘a mere perceptual stimulation leading to a rewarding sensation (food, sex, etc.)’ ([1], p. 2), pleasure from art is presented as a kind of *higher-order pleasure* that engages ‘broader neural networks implied in the attribution of meaning’ (p. 2), presumably leading to ‘long-term maintenance of healthy bodily function’ (p. 2). Second, ‘the arts do not induce states of craving without fulfilment—as do activities with reinforcement schedules which are prone to create habits and addictions such as intermittent variable ratio or interval reinforcement schedules (e.g. social media, gambling, football, extreme sports, drugs)’ (p. 4). Third, ‘the arts do not search for a perceptual “Bliss point” [...]’. They do not just repeat over and over again a sensory stimulus that excites the senses and induces craving for more of a “pleasurable itch” (e.g. sugar, sexualized body displays, certain musical lyrics, tones; i.e. a perceptual “bliss point”)’ (p. 4).

The claim, in a nutshell, is that the pleasure induced by art is different to the pleasure induced by food, sex, sports or drugs, because it is related to the balanced activation of brain systems related to short-term pleasure and long-term wellbeing goals, because it does not induce craving, and because it is not aimed at a perceptual ‘bliss point’. This distinct sort of pleasure, according to Christensen, makes it possible for the arts to thwart the pernicious effects that the unhealthy urges and cravings licensed by ‘today’s mainstream acceptance of pleasure-seeking behaviour’ (p. 5) have on individuals’ lives and on societies. Such sweeping statements about art, food, sex, sports and society as a whole merit close examination.

Christensen’s primary claim that the pleasure induced by art is of a special kind, different to the pleasure induced by other activities is not supported by current understanding of what pleasure is. It is, moreover, contradicted by abundant empirical evidence. This evidence shows that pleasures, whatever their source, owe to activity in the same mesocorticolimbic circuit [2] and are encoded as a common neural currency [3]. As Kent Berridge and Morten Kringelbach put it: ‘the brain mechanisms involved in *fundamental* pleasures

(food and sexual pleasures) overlap with those for *higher-order pleasures* (e.g. monetary, artistic, musical, altruistic and transcendent pleasures) [...] From sensory pleasures and drugs of abuse [...] to monetary, aesthetic and musical delights, all pleasures seem to involve the same hedonic brain systems' ([4], p. 481). Thus, there is no evidence for specific brain regions or neural circuits related to the pleasure from art. Rather, the appreciation of art relies on brain mechanisms that evolved to appraise the value of biologically relevant objects in relation to internal homeostatic states [5]: 'Emotional reactions to music, further, activate the same cortical, subcortical and autonomic circuits, which are considered as the essential survival circuits of biological organisms in general' ([6], p. 6). In sum, the evidence shows that pleasure elicited by music and other art forms is no different in genesis and function to the pleasure induced by food, drugs and sex [7,8]. This is a matter of fact, not opinion.

What supports Christensen's argument if not empirical evidence? In our view, her argument for the distinctness of art-induced pleasure seems based upon an oversimplified and devaluing conception of the pleasures of sex, food and sports, and a very narrow notion of art and its function. Christensen presents food, sex and sports as meaningless low-level sources of pleasure, and the arts as privileged vehicles for meaningful experiences. It is the personal and meaningful engagement with art—Christensen suggests—that fosters a balanced activation of brain systems related to short-term pleasure and long-term well-being goals. However, rarely—if ever—are food, sex and sports meaningless rewarding sensations. Contrary to Christensen's definition on page 2 of her article, pleasure—even sensory pleasure—is not simply reward, and never simply a sensation [4]. Indulging in food, sex or sports are meaningful and personally significant experiences that are not a matter of mere physical sensation. The experience of pleasure from food and sex is shaped by context, knowledge, expectations, anticipations, attitudes and beliefs that bring meaning to them [9–11]. Sex can be meaningful because it signifies physical connection with one's loved one, because it is cheating on someone, or deemed a sin. Likewise, eating is not about obtaining *low-level* pleasure. What we eat, the way we eat, what we believe about what we eat, where and whom we eat with, imbue eating with individual and social meaning, and shape the actual pleasure of eating [12]. On the other hand, encounters with art are not necessarily meaningful [13,14]. Actually, there is nothing intrinsically meaningful about engaging with art. Many laypeople lack the knowledge schemata required to engage meaningfully with abstract, cubist or contemporary art [15,16]. There are plenty of artworks people do not find meaningful or pleasant. Meaning making is not a special feature of art; it is a general feature of our species's cognition [17,18]. We can endow virtually any aspect of reality with meaning: sex, food, sports, a urinal, the shape of a cloud, an averted glance, someone's absence.

Christensen's argument also rests on a historically and culturally narrow conception of art and its function. Art is presented as a circumscribed category of activities that elicit a unique sort of pleasant experiences:

— The arts are set of activities of a special kind that share certain defining features distinguishing them from other

activities: 'the arts push boundaries, surprise, reveal and excite both artist and spectator' ([1], p. 4).

- Art encounters are positive, leading to 'pleasurable chills' and pleasurable experiences of understanding: 'The moment of meaning-assignation, also called "mastering" or "understanding" an artwork, is therefore a pleasurable experience' ([1], p. 4).
- The pleasure elicited by art is special, because it does not involve craving for intense peaks: 'The arts do not search for a perceptual "bliss point" [...] They do not just repeat over and over a sensory stimulus that excites the senses and induces craving for more of a "pleasurable itch"' ([1], p. 4).

This characterization of *the arts* substantially overlaps with the notion of 'fine arts'. The core features of this characterization were instituted in the eighteenth century, after European intellectuals grouped certain activities into a distinct and autonomous collection, labelled 'fine arts'. To make sense of and promote this grouping, it became imperative to identify a common essence setting art apart from other activities [19,20,21]. One of the most popular proposals was that only art could produce a special sort of pleasure, sophisticated and polite [19,21]—a conception stemming not from any understanding of physiology, but from mere speculation. This limited historical and cultural scope renders this conception of the arts unfit for behavioural or neuroscientific research [19]. The category 'the arts' should not be mistaken for a natural kind. It is a historical convention, and has no direct biological correspondence. Moreover, this conception of art that Christensen espouses does not apply to art as practised in non-Western societies [19,22]. It does not even apply to Western art before the eighteenth century or after the nineteenth century [19,20,21]. First, art does not necessarily evoke pleasurable experiences. There are abundant artworks intended to arouse negative emotions [19,23], and to portray physical and moral ugliness [24]. Understanding art is not necessarily a pleasant experience: it can be an angering, disgusting or upsetting one [25]. Second, many artworks actually exploit repetition, bliss points and craving [26]. Repetition is a fundamental design feature of music and other performance arts [27]: In *Relation in Space* (1976) Marina Abramovic and Ulay ran into each other repeatedly for an hour; Ravel's *Bolero* is a 17 min-long instance of melodic and rhythmic repetitiveness. Anticipation and craving for bliss points are also essential to music [28]. In fact, the enjoyment of music is linked to intense feelings of anticipation and expectation caused by dopamine activity in the caudate nucleus (also involved in the rewarding aspect of food) [29,30], and peak pleasure states (bliss points) [31], caused by the release of dopamine and opioids in the brain's reward system (also involved in cocaine induced euphoria) [29,30]. Given the available evidence, therefore, there is no reason to believe that the pleasure from art is special or unique [32].

In sum, Christensen's claim for the distinctiveness of pleasure from art is contradicted by empirical evidence, and her argument for the beneficial effects of art rests upon disputed foundations. Art's capacity to promote healthier choices and make us better people that can contribute to a better society remains as unconfirmed today as it was when Schiller speculated on art's power to harmonize human's conflicting sensuous and formal impulses. Christensen's argument is problematic even if intended to highlight

hypothetical possibilities. Arguments about hypothetical possibilities should still rely on valid premises, and scientific hypotheses should be grounded on evidence, or at least in line with it. Otherwise, they are merely unfounded speculations.

Scientific aesthetics is only just finding its footing and its place within cognitive neuroscience [33,34]. If evidence is ignored or rejected because it does not fit preconceived notions about art and its function, scientific aesthetics will become only an arena to promote and legitimize personally appealing notions of art by applying a scientific gloss over them. A proper scientific study of art needs to be grounded on empirical evidence and strong arguments that follow

from solid premises [35,36]. Only then can scientific aesthetics provide reliable explanations for artistic and aesthetic behaviour, and thus make a significant contribution to the understanding of our human nature.

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